

Whitman College

Psychology Majors'
Handbook

2009-2010

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Introduction

Welcome to the Whitman College Psychology Department!

This handbook was designed to communicate a range of information that we hope will help you maximize your growth in our program. You will find information about our curriculum, writing and grading, senior theses, finding careers, and applying to graduate schools. It is an attempt to answer psychology students' most frequently asked questions about our requirements, goals, and procedures. We hope you find this information useful.

Each year we revise this handbook, taking into account the ideas, suggestions, and questions that arise from psychology majors. We welcome your feedback on this document. Just send any of us in the department a note or email at any time, and we'll take your comments into consideration in our next revision.

Current copies of the handbook can be found on the department's web page:

www.whitman.edu/psychology

The Psychology Major: Structure and Goals

The goals of the Psychology Department are as follows:

(Adapted from the American Psychological Association's 2002 Report on Undergraduate Psychology Major Learning Goals and Outcomes)

1. Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Students will understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.
3. Students will respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.
4. Students will understand and apply psychological principles to personal, social, and organizational issues.
5. Students will be able to weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline.
6. Students will demonstrate information competence and the ability to use computers and other technology for many purposes.
7. Students will be able to communicate effectively in a variety of formats.
8. Students will recognize, understand, and respect sociocultural and international diversity.
9. Students will develop insight into their own and others' behavior and mental processes.
10. Students will emerge from the major with realistic ideas about how to implement their psychological knowledge, skills, and values in occupational pursuits in a variety of settings.

Our department emphasizes psychology as a basic and applied science. The discipline is taught from a basic science standpoint inasmuch as students learn to answer questions about behavior and mental life via behavioral research methods, analyze data quantitatively and qualitatively, and weigh evidence against various theoretical perspectives. The discipline is taught from an applied science perspective inasmuch as students learn how scientific results are extended to address real-world problems or to improve the quality of the human condition. By presenting psychology as a basic and applied science, we promote a method of inquiry into human nature that fosters skepticism, analytical reasoning, ethical decision making, and intellectual creativity. Moreover, by teaching psychology from this perspective, we promote capacities to analyze, interpret, criticize, communicate, and engage — all of which are abilities described in Whitman College's mission statement.

The Department's major requirements attempt to provide a well-rounded education in Psychology, with the above goals specifically in mind. There are several ways students can fulfill the major requirements, thus allowing for students to tailor a plan to their specific interests. However, the requirements in place also ensure that each of the goals outlined above are part of the curriculum. In particular, Psychology Majors must complete the following:

- *Psychology 110* (Introduction to Psychology). Contributes to goal #1 and also sets up the remaining goals.
- *Psychology 210* (Psychological Statistics). Contributes in particular to goals 3 and 6.
- *Psychology 220* (Research Methods in Psychology). Contributes to goals 2, 3, 5, 6, and 7.
- *Psychology 420* (Contemporary and Historical Issues in Psychology). This senior capstone course contributes to goals 4, 5, 7, 8, and 9. It is also part of the Senior Assessment (below)
- *Psychology 495 and 496/8* (Thesis). Thesis is the culmination of the major, and contributes to goals 2, 6, 7 and 10. It is also part of the Senior Assessment (below)
- *One seminar course* (Courses 300-349). Seminar courses emphasize interactive discussion, and contribute to goals 1, 3, 4, 5, 7, 8, and 9.
- *One lab course* (Courses 350-399). Lab courses emphasize hands-on application of Psychological principles and the scientific method. They contribute in particular to goals 1, 2, 3, and 6.

- *27 total credits in Psychology* (including requirements enumerated above). Additional courses allow students to explore the breadth of the field. This contributes to goal 1 (and others, depending on the specific classes elected).
- *3 credits each in Sociology (or Anthropology), Biology, and Philosophy*. The external requirements allow students to explore the academic disciplines that are most closely related to psychology, placing their major into a richer intellectual context. This contributes to goals 5 and 8.

Finally, the Senior Assessment for the Major (SAM) provides students with opportunities to demonstrate mastery of the above goals during their senior year. The SAM involves several components:

1. *The capstone course, Psychology 420: Contemporary and Historical Issues in Psychology*. As part of the course, students complete assignments in which they are required to explore and write about the fundamental unifying themes that tie the major together. Successful completion of Psychology 420 reflects goals 4, 5, 7, 8, 9 above.
2. *The Major Field Test (MFT)*. The MFT is a standardized assessment instrument published by ETS. The questions on the test are drawn from courses of study most commonly offered in undergraduate Psychology programs. Students take the MFT in January (typically after they have completed PSYC 420). The MFT provides a quantitative measure of goal #1 above, that can be measured relative to a national sample.
3. *The senior thesis (Psychology 495, 496/8)*. The thesis is usually an empirical project, in which the student designs and conducts an experiment, and then analyzes the results and produces a complete research article. Through their thesis, students pursue some of the major questions and issues in the field that are related to their specific thesis topic, and write a thorough literature review where they broadly connect the field to their current research question. Successful completion of the senior thesis is especially relevant to goals 2, 6, 7 and 10.
4. *An oral defense of the senior thesis*. Orals consist of an hour-long interrogative session with 3 faculty members. Questions primarily focus on the student's senior thesis, but may extend into general themes in Psychology. Students are asked to make specific connections between their thesis project and the history, major themes, and important figures in their discipline. They may also be asked to connect their thesis topic to ideas in related disciplines other than psychology. The oral defense places particular emphasis on goals 3 and 7.

A Brief History of Psychology at Whitman

Courses in psychology were offered at Whitman College as far back as 1882, only three years after Wilhelm Wundt established the first psychological laboratory in Leipzig, Germany. Psychology courses were initially taught by the early presidents of the college (A. J. Anderson and later, Stephen Penrose), and were regular fare within the department of philosophy until 1920. Until that time no more than two courses in psychology were available. For instance, the 1894-1895 college catalog lists "Psychology" and "Physiological Psychology" as the complete set of psychology courses that a student could take at Whitman.

Psychology merged with education in the 1920-1921 school year, and the two-man Department of Education and Psychology (Profs. Keezel and Penrose) offered courses designed primarily to lead to teacher certification. Keezel, however, was the first to teach psychology as its own discipline rather than as part of the field of education. When Penrose discontinued his teaching activities, William Hunter joined the college toward the end of the Great Depression (1939). With Hunter, Whitman now had its first professor trained specifically in psychology (in an interview conducted in the late 1970s, Chester Maxey described that "real psychology" began at Whitman with William Hunter). Eleven different courses soon became available to students, including General Psychology, Applied Psychology, Mental Hygiene and Personality, Industrial Psychology, and Genetic Psychology. Psychology continued to gain popularity with the addition of Max Bown, a talented psychologist and educator who taught at Whitman during this time.

The 1950s was associated with two major changes to the Department of Education and Psychology. First, in 1952 psychology and education split into separate departments. Second, the number of professors in psychology was increased from one and a half (one full-time and one part-time) to two and a half. By the end of the 1950s, Professors Jerry Fogarty, Richard Suinn, and Merle Meyer were regularly teaching courses in social, abnormal, physiological, and child psychology, with statistics and experimental courses rounding out the course offerings.

During the 1960s, resignations and subsequent vacancies that were left unfilled did not encourage growth in the Department of Psychology. Nevertheless, a young professor named Jay Eacker joined the staff in 1965, soon assumed a leading role within the department, and became instrumental in hiring several new colleagues. Jack Metzger was hired in 1969 and Stephen Rubin joined the College in 1971. With the addition of Deborah DuNann Winter in 1974, this four-person department enjoyed an incredible 25 years of stability together. During that time the department moved out of the old Billings Hall that it had called home for several decades, resided briefly in Reynolds Hall (now Olin), then moved into the third floor of the newly-built Maxey Hall in 1977.

The Department of Psychology recently underwent rapid change as the "fabulous four" retired. Matthew Prull joined the staff in 1999, Walter Herbranson took up residence in 2000, Melissa Clearfield was hired in 2001, Deborah Wiese joined in 2004, and Brooke Vick graced our halls beginning in 2006. New labs focusing on cognitive, social, comparative, counseling, and developmental aspects of psychology have been created in recent years, and a strong research orientation emerged in the department. This year we welcome Pavel Blagov as a new assistant professor specializing in personality, and we re-welcome Rich Jacks (Director of Counseling) who will provide his teaching and advising expertise.

Despite these changes, certain aspects of the major have remained constant. Psychology continues to be taught from the same empirical perspective that was established in the late 1800s. The department also continues to require a senior thesis of its majors, as it has done for over 100 years. Students can still take Physiological Psychology, which was first offered by Stephen Penrose in the late 1800s.

These are exciting times in the department of psychology, and we invite you to participate in our "making of history" in psychology at Whitman!

Whitman College Psychology Department Faculty, 2008-2009

Dates in parentheses indicate initial appointment to Whitman College and appointment to present rank, respectively.

Pavel Blagov, Assistant Professor of Psychology (2009; 2009)

B.A. Connecticut College; Ph.D. Emory University

Email blagovp at whitman dot edu

Phone: 527-5123

Location: Maxey 319

Having grown up in the green capital of Bulgaria, I attended a Russian language school and the American College of Sofia. My interests in human biology and philosophy of mind turned into the fascination with psychology that took me to Connecticut College, where I worked on research of personality's linkages to autobiographical memories. I embraced the values of liberal arts education and empirical science, majored in psychology and neuroscience/neurochemistry, and planned to become a psychologist. At York University in Toronto, I worked on psychotherapy research and fell in love with Canada. My research goals, however, took me to Emory University in Atlanta, where I studied emotion-driven reasoning, the classification of personality pathology, certain forms of mild personality dysfunction, and such severe disorders as borderline personality and psychopathy. I also trained in pedagogy and psychological assessment and therapy, and I completed my predoctoral internship at Columbia University Medical Center in Manhattan. I came to Whitman College because of its congenial atmosphere, balance between teaching and research, and tradition of student-faculty research.

My teaching interests include personality, psychological measurement and testing, and courses about the classification and treatment of psychopathology. I also teach research methods, research on sexual orientation, and forensic psychology, and I am versed in basic neuroscience and psychopharmacology. My research will likely continue to address the classification of personality disorders, the ability of psychopathy subtypes to predict outcomes in inmates, and, more generally, the incremental validity of personality over other kinds of variables in predicting psychological adjustment. I am highly interested in working on research projects with students who are curious about personality, mental illness, psychological adjustment, relational functioning, the effects of emotions and motivation on decision making, and sexual orientation.

In addition to teaching and research, I see clients at the Counseling Center, where I treat adjustment problems, anxiety and mood disorders, and difficulties with self-esteem, identity, and relationships. I work from an integrative psychodynamic-interpersonal/cognitive-behavioral framework with an emphasis on insight, problem solving, and emotion regulation. Besides clinical work, I like NPR and the New York Times, good science-fiction, baroque music and musical parodies, Facebook and Wikipedia, strong coffee, cocktails, and engaging conversations.

Melissa Clearfield, Associate Professor of Psychology (2001; 2007)

B.A. Middlebury College, Ph.D., Indiana University

Email: clearfmw at whitman dot edu

Phone: 522-4427

Locations: Maxey 320 (office), Maxey 329 (lab)

I was born and raised in New Jersey, the land of malls, Camaros, and big hair. After high school I escaped to Middlebury College in Vermont, where I learned that nature is more than just a tree in the middle of a parking lot. I also learned that psychology is cool. After college, I started my journey west by going to graduate school at Indiana University in Bloomington. I earned my Ph.D., and then came to Whitman in the summer of 2001.

I am a firm believer in Dynamic Systems Theory, which states that knowledge and other forms of cognition are inextricably linked to perception and movement. My research focuses on how these factors interact to produce behavior in infants. I am currently exploring these relations with respect to socioeconomic status (SES). In particular, I am investigating whether some of the cognitive and social delays that we know school-age children in poverty experience can be seen in very young infants. I am also exploring whether cultural isolation impacts the extent of delay in low-SES families. Eventually, the goal of this line of research is to help design effective interventions that mitigate the long-term effects of growing up in poverty.

Wally Herbranson, Associate Professor of Psychology & Department Chair (2000; 2006)

B.A., Carleton College; M.S., Ph.D., University of Utah

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Phone: 240-8178

Locations: Maxey 325 (office), Maxey 309, 317 (lab)

Wally Herbranson grew up in the icy plains of the Northern Midwest. After earning a B.A. in Psychology and Cognitive Studies at Carleton College in Northfield, Minnesota, he immediately headed for the desert and earned Masters and Ph.D. degrees from the University of Utah in Salt Lake City. Wally's primary area of academic interest is cognitive neuroscience, an exciting and rapidly expanding branch of Psychology concerned with the relationships between brain function and cognition. In addition to organizing a comparative cognition lab in Maxey Hall, Wally teaches several courses, including Physiology of Behavior, Psychological Statistics, and Introductory Psychology. Walla Walla and Whitman College have thus far proven to be wonderful settings for his intellectual and recreational pursuits. Outside of the classroom, he can be found rock climbing, hiking, jogging, and creatively managing his schedule around a chronic baseball addiction.

Richard N. Jacks, Associate Dean of Students (Health and Wellness) & Associate Professor of Psychology (1979; 1979)

B.A., M.Ed., Eastern Washington State College; Ph.D., Stanford University

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Location: Memorial 111 (Counseling Center)

I've been in college for almost 50 years, and have been at Whitman for over 25 years. Just when it seems like I've seen it all, I am presented with a new challenge. This constant process of challenge and renewal is partly why I love my job. Currently I am Director of Counseling and Health Services and an Associate Professor of Psychology. Before Whitman I was at Stanford where I was the Director of training in their counseling center and a part-time faculty member. I received my Ph.D. in Counseling Psychology from Stanford in 1972. After hours, my life is filled with my wife, three children, skiing, and sailing. Ask me about any of these and I will talk forever.

Matthew W. Prull, Associate Professor of Psychology (1999; 2005)

B.A., San Jose State University; M.A., Ph.D., Claremont Graduate University

Email: prullmw at whitman dot edu

Phone: 527-5890

Locations: Maxey 315A (office), Maxey 304, 305, 306 (lab)

I grew up in San Jose, California, a sprawling world of entrepreneurship, technology, and silicon. My interest in psychology was initially piqued by taking a high school course. In college, after trying to pursue a wild career in the music industry (in vain, obviously), I decided to return to psychology and have

never looked back. My academic interests include cognitive psychology, adult development and aging, and human neuropsychology. My research interests focus on understanding age-related patterns of change and stability in cognitive abilities such as memory, language, and the use of general knowledge. I teach courses in cognitive psychology and psychology of aging, as well as courses in statistics, experimental psychology, and principles of psychology. Away from Whitman, I enjoy cooking, genealogy, guitar, spending time with my wife (Vanessa) and two daughters (Emily and Rachel), destroying my house in creative ways using power tools, and generally honing my idiosyncrasies.

Brooke Vick, Assistant Professor of Psychology (2006; 2006)

B.A. Colorado College; M.A., Ph.D. University of California, Santa Barbara

Email: vickb at whitman dot edu

Phone: 527-5216

Locations: Maxey 324 (office); Maxey 321, 322, 323 (lab)

Although not born there, I spent most of my youth in and around the suburbs of Denver, Colorado, complete with a daily view of the Denver city skyline and the snow-capped Rocky Mountains. Finding Mt. Vernon, Iowa a bit too flat relative to my home, I ended a brief stint at Cornell College in Mt. Vernon, Iowa to return to the foothills of Colorado where I completed my Bachelor's degree in psychology at Colorado College. After spending a couple of years as an Assistant Director of Admission at Colorado College, my interest in psychology kicked up again. Always a fan of beautiful places, I traded the Rocky Mountains for the beaches of the Pacific Ocean, earning a Masters and Ph.D. from the University of California, Santa Barbara in social psychology.

My research focus within social psychology concerns the psychology of prejudice and social stigma with a particular emphasis on how targets of prejudice perceive their identities and cope with the threat of being socially devalued. Some of my current research projects investigate (1) the psychology of weight stigma and (2) whether or not one can effectively advocate on behalf of targets of prejudice who have faced discrimination. I am also interested in research that concerns self and group identity, stereotype threat, and ideological moderators of group-based biases. Many of these interests are represented in the upper-division courses that I teach on Stereotyping & Prejudice, and Social Stigma.

When I'm not working, I have managed to cultivate some other interests. Growing up in Denver, one might imagine that I have an avid love for mountain-based recreation and am a diehard fan of Denver sports teams, the Denver Broncos in particular. Well, one out of two ain't bad. I am a huge sports fan, as evidenced by the Denver Broncos throw pillows that decorate my office couch, the Denver Nuggets calendar that lives on my office bulletin board, and the fantasy football league that I coordinate and even win on occasion. I tend to be happiest when I am watching football with my husband Matt, my son Brady (born 2008—already a fan!), and my 120 lb. Newfoundland (dog) Sasha.

Deborah Wiese, Assistant Professor of Psychology (2004; 2005)

B.A., St. Olaf College; M.S., Indiana University; Ph.D. University of Wisconsin

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Phone: 527-5750

Location: Maxey 319 (office), Maxey 307 (lab)

Deborah Wiese originally comes from Tokyo, Japan. She completed her undergraduate degree at St. Olaf College (Northfield, MN), developing a self-designed major in cross-cultural education and psychology that included six months intensive study in Turkey, Egypt, Israel, and Morocco. After college, she returned to Japan to participate in gender and race activism and develop support-services for expatriate women. These experiences led her to come to the US again for graduate school, where she received a masters in counseling from Indiana University (Bloomington, IN) in 1996 and a Ph.D. in

counseling psychology with a focus on multicultural issues from the University of Wisconsin-Madison in 2004.

Deborah teaches clinical courses, cross-cultural psychology, and various required classes in the department. She brings a multicultural perspective into all of her classes, encouraging students to consider how issues of diversity and culture impact various aspects of psychology. Her research interests include psychological well-being in international relocation as well as the development of racial/ethnic awareness and cultural competence. Students wanting to be a part of her research team must demonstrate a strong work ethic and a willingness to commit to several semesters of participation.

As a psychologist, Deborah's clinical experience ranges from in-patient psychiatric hospitals to university counseling centers and outpatient clinics. In addition to individual, group, and career counseling with adults, she has led adolescent anger management groups and conducted mediations between juvenile offenders and their victims. Specific clinical areas of interest include multicultural competence, interpersonal process groups, and supervision of counselors. In various counseling settings, Deborah has served as a resource for clients and other therapists on LGBT, international, and immigrant issues.

When not working, Deborah enjoys being active (hiking, camping, sailing, swimming, biking, skiing, kayaking), spending time with friends and family, and learning more about other cultures. She has a very devoted dog (Tyler), who provided positive distraction during her graduate school years and continues to make sure she takes walks at least twice a day.

General Recommendations from Whitman Psychology Majors

In preparing this handbook, we asked our Psychology Majors to give advice to new majors. Here's what they said:

- When you declare, make a schedule of courses you would like to take each semester.
- Finish as many additional required courses before your senior year so you can focus on your thesis.
- Challenge yourself in new ways by taking classes like Physiology of Behavior and Applied Psychology. As stated by one senior psych major, "Branch out from the areas of psych that you think are easiest and challenge yourself some . . . take physio!"
- Take advantage of Independent Study: find an area that interests you and work out an arrangement with a professor for 1-3 credits.
- Talk with a professor about designing a research project and then apply for a Perry or Abshire Grant.
- Do your reading *before* class and you'll get 10 times more out of the lecture.
- Use your summers and breaks to gain additional experience and knowledge
 - If you are eligible for work-study, work out an arrangement with a professor to do research and get paid for it (NOTE that summer work study applications are due in March, so you need to plan ahead for summer work).
 - If you aren't eligible for work-study, volunteer over summer/winter vacations.
 - Use the Career Center to locate alumni in your field of interest, to polish your resume and cover letters, and to learn how to market yourself.
 - Research organizations in which you are interested over winter break.
 - Search the Internet and telephone book for organizations that interest you.
 - Contact psych departments at local colleges and universities; contact local Department of Social and Health Services.
 - Call those organizations and ask them to send you more information.
 - Arrange for interviews over Spring Break.
 - Consider job shadowing.
- Get to know all of the professors in the department.
- Go abroad! You'll get a break and get a new perspective.
- Present your thesis results at Conferences (Whitman pays for travel expenses) — graduate schools like this!
- Attend psychological conferences such as WPA (Western Psychological Association).
- Become a student affiliate of the APA (American Psychological Association) or APS (American Psychological Society) to help yourself stay current on issues in psychology. The membership dues are tiny for students—it's the best deal you'll ever see in professional dues.
- Browse the web page: www.whitman.edu/psychology

Department Policies

PDF Policy for Majors (2/28/03): The department's policy is that courses taken within the major cannot be PDF'ed. This policy includes all courses with a PSYC designation as well as the "external" required courses in biology, anthropology/sociology, and philosophy.

Guidelines for Writing

Writing is easy; all you do is sit staring in front of your keyboard or a blank sheet of paper until little drops of blood form on your forehead.

— attributed to both Gene Fowler and Red Smith

It's easier if you believe in God, but not impossible if you don't. If you believe, then this God of yours might be capable of relieving you of some of [your] perfectionism. Still, one of the most annoying things about God is that he never just touches you with his magic wand, like Glinda the Good, and gives you what you want. Like it would be so much skin off his nose. But he might give you the courage or the stamina to write lots and lots of terrible first drafts, and then you'd learn that good second drafts can spring from these, and you'd see that big sloppy imperfect messes have value.

— Anne Lamont, *Bird by Bird*

The Whitman College Psychology Department is committed to teaching and expecting good writing. Writing is often hard work, but it is also richly rewarding and greatly empowering. Below are the Department's guidelines for defining good writing. In addition, each faculty member has particular goals and strategies for specific papers and assignments. Our Department guidelines apply to all courses in psychology, but we designed them so that professors can supplement them for particular assignments.

General Principles

1. Unless otherwise notified, use APA format in accordance with the *Publication Manual of the American Psychological Association* (5th Edition, Washington DC: American Psychological Association, 2001). APA style is explicitly taught in Psychology 220 and 420, but is also expected in all other courses, especially the Senior Thesis.
2. Good writing is continuous with good thinking. Ideas are inseparable from the language used to express them. It is simply not true that your ideas are clear if your writing is not. As your thinking gets clearer, so will your writing.
3. Good writing is actually good re-writing. As John Updike said "Writing and rewriting are a constant search for what it is one is saying." Very few people can put out a good first draft. Most of us have to get our ideas down and then cut, paste, restructure, elaborate, drop, reorganize, and rewrite several times before a draft is really strong.

Common Errors to Avoid

1. Do not use sexist (and other forms of discriminatory) language. See pp. 61-76 in the APA manual. Use [sic] to indicate the problem when quoting, as in "Man [sic] and Nature". In general, avoid sexist referents by switching to plural forms. For example, avoid "A scientist should be aware of his assumptions". Although "A scientist should be aware of his or her assumptions" is technically correct, a more elegant phrasing is "Scientists should be aware of their assumptions."
2. Watch agreement problems such as "one should argue their own ideas." By the way, "data" is the plural form of "datum". To say "the data is good" is an agreement problem.
3. Get the distinction between *it's* (a contraction of it and is) vs. *its* (possessive) and don't use an apostrophe for the possessive.
4. Get the distinction between *affect* and *effect*. As nouns, affect is a feeling, effect is the result of a cause. As verbs, to affect is to partially influence and to effect is to create.

5. Avoid weak beginnings to sentences that often begin with the word “it.” Language such as “It is thought that. . .” (what’s “it”? You? Someone else?) can be improved upon. Often phrases such as “it is thought that,” “it is assumed,” etc. can simply be deleted.
6. Be careful about semi-colons vs. colons: use colons to introduce an oncoming phrase; semi-colons to separate two complete thoughts.
7. Avoid non-sequiturs, which we will often denote with “NS”. A non sequitur occurs when a thought doesn’t follow logically from another. An example would be “*Because psychology is becoming more diversified, it has always embraced science.*” The thought about science doesn’t follow logically from the thought about diversification.
8. Be careful about starting sentences with “This.” Always clarify what “this” refers to by adding a noun clause such as “This quality, or “This increasing trend” or “This new idea”. Add clarity to your prose by either avoiding “this” altogether, or immediately clarifying what “this” refers to by adding a noun immediately after the referent.
9. In general, avoid using second person pronoun as in “Psychology makes *you* aware of complicated environments”. Second person works well when giving instructions, as in this manual. If you want to make more general statements, a better construction is “Psychology makes one aware . . .” or “Psychology makes me aware . . .”

More Tips on Producing Lucid Prose

1. Use as few words as possible (as Mark Twain once said, “eschew surplusage”). Achieve lucidity by dropping unnecessary words from subsequent drafts.
2. Find transitional phrases and connecting thoughts between ideas. Your thinking ought to proceed logically from one idea to the next. Avoid lists. Avoid the phrases *another point*, and *also relevant* which make your thinking read like a grocery list, rather than a coherent discussion.
3. Avoid repeating words and phrases, especially in the same paragraph.
4. Don’t tell the reader what you are going to tell the reader. Just say it!
5. Don’t use the word *feel* when you mean *think*, *believe*, or *assume*. Incorrect use of the word *feel* is very common, and promotes confusion between thoughts and feelings.
6. In general, avoid paragraphs of less than two sentences and more than a page.
7. Proofread your paper several times before submitting it and always have someone else (preferably in the class) do so as well. Trading papers is a good way to improve your effectiveness as a writer because you get help on your paper, as well as become sensitized to the role of the reader.

Requests for Formatting

1. Always number your pages at the top right corner, and make sure you staple them in correct order.
2. Use ragged right margins (i.e., do not justify lines).
3. Always retain a computer or photocopy of whatever you turn in. Remember, we have many papers coming in at many times during the semester and, if one ever gets lost, your backup copy will be a real lifesaver.

4. Use good paper and make sure your printer has sufficient toner.
5. If possible, print your paper on recycled paper, using both sides of the sheet.

Recommended Reading

- Bem, D. M. (2003). Writing the empirical journal article. In J. M. Darley, M. P. Zanna, & H. L. Roediger III (Eds.), *The compleat academic: A career guide* (2nd ed.). Washington, DC: American Psychological Association.
- Cronin, T. E. (1993). *The write stuff: Writing as a performing and political art* (2nd ed.) Englewood Cliffs, N.J.: Prentice Hall.
- Lamott, A. (1994). *Bird by bird: Some instruction on writing and life*. New York: Bantam.
- Parrott, L. (1999). *How to write psychology papers* (2nd ed.) New York: Longman.
- Sternberg, R. J. (2003). *The psychologist's companion: A guide to scientific writing for students and researchers* (4th ed.). Cambridge: Cambridge University Press.
- Strunk, W., & White, E. B. (1979). *The elements of style*. New York: Macmillan.

Appendix: Suggestions from the Education Department on Writing

Prewriting and Revision:

The following is a writing and revision checklist assembled from various sources. These are simply suggestions, of course. In the process of learning to write, you need to develop your own writing "voice" and style of working.

Prewriting:

Think. Talk about the subject. Begin to formulate your thesis. Jot down notes, a few sentences here and there. Make an outline.

First Step: Start writing.

Use any technique (free writing, rough notes). Get the ideas on paper regardless of form. This is the time to explore, experiment, test ideas. Mechanical considerations are not important at this stage.

Second Step: Organize.

Outline. Shape. Cut and paste and restructure the first draft ideas in an order that makes sense. Keep strong ideas and drop dead ends and false starts. Rewrite so that the best evidence supports your thesis.

Third Step: Write.

Write the introduction and conclusion, if appropriate. Make final judgments on paragraph order. Proofread and edit. Think about tone, language, fairness, counter-arguments, and point of view. Now, outline what you've written. Can you? If so, you are ready to let someone else read it.

Subsequent Drafts: Refine the thematic and mechanical elements of your paper. Address points made in critiques. Reorganize and restructure if necessary. Clarify ambiguous points and wording.

Grading Guidelines

Our aim is to give you feedback that enables you to become a stronger, more effective writer. We have high expectations, and we offer help and support as you learn to meet them. Although it should go without saying, we expect all of your writing for classes to be your best quality. It is simply not acceptable to turn in sloppy prose, mechanical errors, poor organization of ideas, etc. unless your professor explicitly tells you not to worry about writing quality. As college students you are expected to be literate and serious about your work. Please don't embarrass yourself or insult us with anything less than your best.

Here are some general guidelines for grades: (talk to individual professors for guidelines relating to grading of specific assignments)

A: Superior work in terms of both content and form

- Virtually no mechanical errors (spelling, typos, grammar, syntax)
- Ideas are clear and well organized
- Understanding of material is impressive
- Claims are backed up with references and quotations where appropriate
- Insightful and thoughtful; goes beyond the given assumptions
- Exceptional performance on all dimensions

B: Competent, acceptable work

- Weak on either form or content, or average on both
- Substantive, but not insightful
- Understanding of material is adequate
- Some, but not much thought beyond the given assumptions
- Some, but not much referencing of ideas

C: Weak, barely acceptable work

- Frequent mechanical problems
- Poorly written
- Ideas not clearly presented
- Understanding of material is minimal or inaccurate
- Sloppy organization

D: Poor, unacceptable work

- Poor writing, mechanics, or organization make ideas difficult to decipher
- Submitted work misses major expectations of assignment

F: Unacceptable work

- Submitted work does not reflect expectations of assignment
- No work submitted

Just as we expect your best, as your professors we do our best to help you reach your potential. We will spend enormous energy and time reading and commenting on your papers, and we expect you to seriously consider and address our comments in your subsequent papers. Our goal is to give you feedback that will help you improve your writing. If you do not understand what we are telling you, or feel harshly or unfairly treated, please come in and talk with us.

Good writing is specific to a discourse community. Writing that works well in the humanities may be problematic in psychology. Learning to write well is like learning to speak a foreign language. Applying certain rules will help, but like language and culture, writing involves many tacit understandings and experience. Consequently, it is not possible to provide you with a template for a "perfect" paper, although often we can suggest how to remedy particular problems as you develop in your writing ability. Please do not feel insulted or disempowered by our suggestions. Because individual feedback is crucial for the learning process, we work hard at grading papers in order to assist your growth as a scholar. Learning to

write well, and learning to teach others to write well, is a long-term process, which we look forward to sharing with you.

Major Exam Requirements

The Psychology Department requires that students pass the psychology Major Field Test (MFT) administered by ETS as the written exam for graduation. The cost of the test is about \$30, which is prepaid, and the exam is typically taken in January of the student's graduating year. The MFT is modeled on the development of the Graduate Record Examination (GRE) Subject Tests and is designed to assess the basic knowledge and understanding achieved by senior undergraduates. The test is a two-hour long multiple-choice test, which is administered at Whitman College. Student scores are reported on a scale of 120-200; sub-scores are reported on a scale of 20-100. In the past, we have used scores at or above the 70th percentile as "pass," and scores at or above the 95th percentile as meeting the written requirement for Honors in Major Study (these cutoffs apply to the overall score, not the subscores).

Students who do not pass the MFT may take a second exam not less than two weeks later. Failure to pass the re-take may result in a third attempt not less than three months after the re-take.

Students can also take the Psychology GRE in lieu of the MFT exam. If you elect to take the Psychology GRE, please arrange to have ETS send two official copies of your scores, one to the Registrar's office and one to the psychology department chair.

It is important to prepare for the MFT to ensure that you score as high as you can. You can study for the MFT in the same manner as you would for the GRE psychology subject test, but keep in mind the tests are not exactly the same. Buy one of the review books for the GRE and develop a systematic plan that will enable you to brush up on your knowledge of the field of psychology. Also plan on rereading your introductory psychology textbook. Don't try to "cram" the week before the test — you will simply need more time if you are serious about doing well.

Your preparation should also include examining the ETS web page on the Psychology MFT. There you will find a test description, sample questions, and a sample score report. The page is: www.ets.org/portal/site/ets/menuitem.1488512ecfd5b8849a77b13bc3921509/?vgnextoid=f349af5e44df4010VgnVCM10000022f95190RCRD&vgnnextchannel=86f346f1674f4010VgnVCM10000022f95190RCRD

In addition to passing the written MFT exam, each psychology major is required to pass an oral exam defending the thesis. Preparation for the oral exam is described elsewhere in this handbook.

The Senior Thesis

In keeping with our emphasis on the observational and theoretical analyses of behavior, the Psychology Department has adopted three types of thesis that can be written by senior majors. They are empirical, theoretical, and qualitative.

An **empirical thesis** can involve many different kinds of research design and statistical analyses, but central to this kind of thesis is testing a hypothesis derived from a theoretical or experimental source by observing and analyzing behavioral data using standard statistical techniques. An article published in, for example, the *Journal of Experimental Psychology* can serve as a model for an empirical thesis.

A **theoretical thesis** is also a possibility and is particularly suitable for those who are considering honors in major study. A theoretical thesis states a hypothesis, problem, or position about a domain of psychology and attempts to resolve it or defend it based on some theory or body of research in psychology. However, it is not simply a review of the literature. Rather, it makes a particular statement, arrived at by the student with the help of his or her adviser, and then develops a defense of the statement based on theory or research. An article published in *American Psychologist* or *Psychological Bulletin* can be used as a model (see D. J. Bem's 1995 article, "Writing a review article for *Psychological Bulletin*" in *Psychological Bulletin*, vol. 118, pp. 172-177).

A **qualitative thesis** is a thesis that involves data collection but whose findings and conclusions are not derived from statistical or other quantitative analysis procedures. Such theses can involve descriptive analyses of verbal transcripts from interviews or other spoken or written sources; they can also involve participant observation, case studies of a unique individual, and/or descriptive analyses of small-N studies. Sometimes empirical theses are converted to qualitative theses in midstream due to the difficulty in gathering data from a sufficient number of participants. See Camic, Rhodes, and Yardley's 2003 text *Qualitative Research in Psychology: Expanding Perspectives in Methodology and Design* (Washington, DC: American Psychological Association) for details on how to conduct qualitative research.

All theses must be written in APA style.

The Psychology Department keeps a file of completed theses that are catalogued by topic. They are located in Maxey 314, so ask a faculty member to let you in. Take a look at what other students have done and get an idea of the scope and detail expected, as well as methods which have been successful. In addition, Penrose Library houses all the Honors Theses that have been written for the Psychology Department.

How to Find Tests and Measures

If you are wondering how to obtain specific surveys, questionnaires, or other test instruments to learn about them and/or implement them for empirical projects, you should know that the process of locating tests involves a fair bit of time and detective work. Sometimes you will find exactly what you need right away, other times you'll slowly pore over computer screens and journals en route to finding the "right" measure.

Two tools that are especially helpful are the Directory of Unpublished Experimental Mental Measures (DUEMM) and the ETS Test Collection. The DUEMM is available at Penrose library and in the Counseling Center on Boyer Avenue. It lists noncommercial psychological tests and measures from multiple fields (e.g., psychology, education, sociology) that have been created and published in any of several dozen top journals. While the DUEMM doesn't supply the measures themselves, it will refer you to the exact journal title and issue in which the measures can be found. The ETS Test Collection is a searchable database online (www.ets.org/testcoll), that allows users to enter descriptor terms (e.g., "job satisfaction"), or test titles, or test authors, etc. The database will return a list of potential survey titles that fit the general description as well as provide information about how to obtain the surveys.

The surveys that are reproduced in journals are in the public domain and are free for use, but others are proprietary and cost \$ (in some cases, \$\$\$). Therefore, some tests can only be acquired by ordering them from test publishing companies, and even then one must have certain credentials (e.g., Ph.D.) before the companies will sell you the instrument. If there is a test out there that is relatively expensive, for which there is no less expensive alternative, and is one that you simply can't live without, consider discussing the matter with one of us in the department. Although we cannot guarantee it in every instance, it is possible that the department can purchase the test, or at least part of it.

There are some additional strategies that you might consider adopting. The psychology department already has several standardized tests and measures that you may be able to use. Check the list below and contact the appropriate individual if you would like to use a particular test. For a particularly hard-to-find measure, another method that you might consider is to email the author of the measure in question and ask how to acquire the test. Often the author will be a professor of psychology and they may be willing to send you the test if it's a noncommercial item.

If you are interested in using an instrument listed below, please contact the appropriate individual.

UPDATED 9/07.

Test	Publication Year	Construct Measured	Location
Allport-Vernon-Lindzey Study of Values	1960	Values	Counseling Center
Alternative Uses	1978	Creativity	Counseling Center
Bayley Scales of Infant Development, 2 nd ed. (BSID-II)	1993	Cognitive/Motor Development	Clearfield's Office
Beck Depression Inventory-II	1996	Depression	Counseling Center
Bem Sex Role Inventory (BSRI)	1978	Personality	Counseling Center
California Psychological Inventory	1956		Counseling Center
California Verbal Learning Test (CVLT)		Memory	Pull's Office
Character Assessment Scale	1980	Character	Counseling Center
Children's Depression Inventory	1992	Depression	Counseling Center
Controlled Oral Word Association (COWA, or "FAS" test)		Cognition, Frontal Lobe Functioning	Pull's Office
Coopersmith Inventory	1967	Self-Esteem	Counseling Center
Coping Resources Inventory	1988	Coping	Counseling Center
Couples Therapy Workbook	1987	Relationships	Counseling Center

Depression Adjective Checklists		Depression	Counseling Center
Depression Index		Depression	Counseling Center
Edwards Personal Preferences Schedule	1959	Personal Needs	Counseling Center
Eysenck Personality Inventory	1968	Personality	Counseling Center
Fundamental Interpersonal Relations Schedule	1967		Counseling Center
Geriatric Depression Scale (GDS)	1983	Depression	Prull's Office
Gray's Oral Reading Test	1955		Counseling Center
Hassles and Uplifts Scale	1989	Coping	Counseling Center
Holland's Six Personality Types		Personality	Counseling Center
Incomplete Sentences	1950		Counseling Center
Inventory for Counseling and Development	1987		Counseling Center
		Learning	
Kaufman Assessment Battery for Children	1983	Disabilities	Counseling Center
Kuder DD Occupational Interest Survey	1968	Interests	Counseling Center
Maslach Burnout Inventory	1981	Burnout	Counseling Center
Learning and Study Strategies Inventory	1987	Study Patterns	Counseling Center
Marriage and Pre-Marriage Inventories			Counseling Center
Mini-Mental State Exam (MMSE)	1987	Dementia	Prull's Office
Minnesota Multiphasic Personality Inventory	1943	Personality	Counseling Center
Minnesota Teacher Attitude Inventory	1951	Attitudes	Counseling Center
Mountain State University Health Questionnaire	1977	Health	Counseling Center
Myers-Briggs Type Indicator	1991	Personality	Counseling Center
NEO Personality Inventory	1991	Personality	Counseling Center
Omnibus Personality Inventory	1968	Personality	Counseling Center
Parent-Adolescent Communications Inventory	1969	Communication	Counseling Center
Partner Relationship Inventory	1988	Relationships	Counseling Center
Profile of Mood States	1981	Moods	Counseling Center
Reid-Ware 3 Factor Locus of Control Scale			Counseling Center
Religious Attitudes Inventory	1964	Religious Attitudes	Counseling Center
Rey Osterreith Complex Figure		Visual Memory	Prull's Office
Rorschach Method of Personality Diagnosis	1942	Personality	Counseling Center
Resident Assistant Stress Inventory	1981	Stress	Counseling Center
Rosenzweig Picture Frustration Study	1948	Aggression	Counseling Center
Schultz Measures	1982	Awareness	Counseling Center
Sex Knowledge Inventory Test	1967	Sex Knowledge	Counseling Center
Sexual Attitudes Survey	1976	Sexual Attitudes	Counseling Center
16PF	1978	Personality	Counseling Center
Social Competence Inventory	1952	Social Competence	Counseling Center
Stanford Sentence Completion Test			Counseling Center
Stanford Sleepiness Scale		Sleepiness	Counseling Center
		Hypnotic	
Stanford Hypnotic Susceptibility Scale	1959	Susceptibility	Counseling Center
State-Trait Anxiety Inventory	1983	Anxiety	Counseling Center
Strong-Campbell Interest Inventory	1981	Interests	Counseling Center
Student Development Task Inventory	1981		Counseling Center
Suicide Probability Scale		Suicide Risk	Counseling Center
Symbol Digit Modalities Test (SDMT)	1991	Perceptual Speed	Prull's Office
Time Questionnaire Assessing Suicide Potential		Suicide Risk	Counseling Center
Tennessee Self-Concept Scale	1964	Self-Esteem	Counseling Center
University Residence Environment Scale	1974		Counseling Center

Ways of Coping Questionnaire	1988	Coping	Counseling Center
Wechsler Adult Intelligence Scale (WAIS)	1955	Intelligence	Counseling Center
Wechsler Adult Intelligence Scale, 3rd edition (WAIS-III)	1997	Intelligence	Prull's Office
Wisconsin Card Sorting Test (WCST)	1987	Cognition/Frontal Lobe Functioning	Prull's Office
WMS-III Memory Scale 3rd edition	1987	Memory	Prull's Office
Wonderlic Personnel Test	1981		Counseling Center
Woodcock-Johnson III Tests of Cognitive Abilities	2001	Intelligence	Counseling Center

Preparation for Thesis Research

In general, the earlier you start, the better. Although students do occasionally devise and execute their thesis within the last 3–4 months of the academic year, they are almost universally associated with a very high level of anxiety and the rush to finish heightens the probability of making numerical errors and mistakes in reasoning. Obviously, we don't recommend that approach. The best theses are conducted over the course of an entire academic year, with the workload spread out evenly throughout that year. Ideally, you should do as much as you can early in the process to even out the workload. It is easy to underestimate the amount of time that is involved to do the thesis right (multiply your initial time estimate by three and, believe it or not, you'll probably be more accurate in your prediction). It is not uncommon to start the process in your junior year by generating ideas and doing preliminary literature reviews, although it is certainly possible to conduct a very high-quality thesis — even an honors thesis — from start to finish in your senior year.

These suggestions are echoed in some of the recommendations that seniors from previous classes have made. A senior psych major recommended, "Do the literature review during the summer before senior year. It will make the whole year much easier and less stressful. Plus, it makes it easier to recruit participants because you will have no competition and can finish data collection first semester."

If you are a first-year student, a sophomore, or junior, you can get a sense for what's involved your senior year by (a) sitting in on Senior Thesis seminar meetings in the spring of your junior year, and/or (b) helping a senior with his or her thesis project. This will give you a better sense for time involvement and can help determine whether you want to start the summer before your senior year.

Other words of advice:

Choose a thesis advisor at the end of your junior year or at the beginning of your senior year.

- The thesis advisor can be the same person as your major advisor, although you are free to select another individual in the department to serve as thesis advisor.
- Make sure you know your advisor well.
- Talk to seniors about their experiences with their advisors.
- Make sure that you and your advisor are compatible and have similar goals for your thesis; some advisers will push you more than others.

The summer before your senior year:

- Study an introductory psych text, which simultaneously prepares you for the MFT and GRE subject test. The former test comprises the written exam aspect of the major and is usually taken in mid-January. The latter test is required for admission to some graduate schools (see the section on graduate school admission).
- Look through journals and find research that interests you.
- When you can, begin a literature review on PsycINFO.
- Look at past theses in Maxey 314.
- If you complete your research early enough, you will have enough time to present it at a conference during your senior year (when Whitman pays for it — you can always present your thesis at a conference after you graduate, but alas, Whitman will not pay for the costs!).

Remember to choose a topic that will keep your interest for the whole year.

Especially important: Remember that before you collect data, you must obtain formal approval to do so. In several cases when the thesis involves sensitive issues or raises ethical concerns, approval MUST come from the Institutional Review Board (IRB). Although we and the IRB recognize that a quick turnaround is ideal, the review process does take time and you will need to factor that time in to your thesis timeline. Plan ahead for this.

Although most students choose to do an experimental thesis, if you're eligible you also have the option of completing a theoretical or qualitative thesis. Talk with your thesis and academic advisors about your ideas.

You will also have a "design consultant" who will provide a second opinion on design questions in the fall semester. This person will also be a part of your orals committee in the spring.

Honors Theses

Conducting an Honors Thesis is part of the requirements for acquiring Honors in Major Study at graduation. To attain honors at graduation, you must: (a) complete a thesis that is deemed to be of honors quality by the department, (b) earn an A- or higher on the completed Honors Thesis, (c) present the work publicly, preferably at a professional or student conference, (d) pass the MFTs with honors, which typically is performance at the 95th percentile nationally (passing is 70th percentile), (e) pass the oral exam with distinction, (f) acquire a GPA of at least 3.300 GPA overall, and (g) acquire a GPA of at least 3.500 in all psychology courses. Note that the GPA requirements apply at the time of graduation, not at the beginning of your senior year, so even if your GPAs fall short of these levels in September, if you're "within range" you may still have the potential of earning honors by the time you graduate. The 3.500 requirement for psychology courses applies only to courses with a designation of PSYC on your transcript; it does not include the nine units in biology, anthropology/sociology, and philosophy that are part of the major. The 3.500 requirement also does not include transfer credits. If you are thinking of going for honors, discuss it with your thesis adviser no later than the beginning of your senior year.

Guidelines for Writing the Senior Thesis

All theses are to be written in APA style, regardless of whether they are experimental, theoretical, or qualitative in nature. In addition, the following suggestions for writing the senior thesis may be helpful. They are based on the most recurrent problems that students have encountered when preparing their work; they are illustrative and by no means exhaustive.

1. The entire thesis needs to be construed as a logical argument. Your thesis needs to make clear how the hypotheses that were selected are related to, and logically follow from, the review of the literature on which they were based. In addition, the procedure should follow from the hypotheses and the conclusions from the data.
2. The discussion section can devote space to the exploration of plausible alternative explanations for the data that might not have been suggested by the original hypotheses.
3. Be mindful of verb tense, syntax, and sentence structure.
4. Data presented in the form of tables and figures usually require description, not interpretation, in the text of the results section. Tables and figures do not speak for themselves. The additional description may be needed to inform the reader of how to read them.
5. The abstract provides an outline of the entire thesis, including a statement of the problem, method, major findings, and conclusions; be sure your adviser sees it before the final draft.
6. Pilot work is advisable and pilot data may be included or mentioned in the procedure or discussion section as appropriate.
7. Thesis completion is a decision made by the student and not by the adviser. However, premature judgments of completion may be reflected in the final grade.
8. Present the complete thesis to other members of the examining committee well ahead of the scheduled oral examination. The examining committee ordinarily consists of the thesis adviser, design consultant, and one other department member; the third member can be someone from outside the department if the thesis topic is relevant to another discipline.
9. The department arranges the date and time for the oral examination. The student provides each member of the committee with a final copy of the thesis at least one week prior to that examination date.

The Oral Examination and Beyond

Once you have completed a final draft of your thesis, the department will set up an hour-long time slot for your oral examination. Three people will be on your orals committee. Your thesis advisor and design consultant will comprise two members, and a third person will be chosen either from within the department or outside of the department. Solicit input and advice from your thesis advisor about who to ask to be your third committee member. Invite potential candidates to be third members no later than the end of March, and inform your thesis advisor once you've established an agreement with someone. You also need to get the third person's schedule so that the department can arrange an orals date and time that's mutually convenient for everyone.

If you ask someone from outside of the department, they should have special knowledge and/or experience relating to your topic. In the past, professors in the education department have been included on the orals committee when the thesis concerns education issues, and varsity coaches have been included when the thesis concerns athletics. Again, talk to your advisor about who would be most appropriate.

Once you've established your committee, each committee member should receive a final draft of your thesis at least a week before the exam. This time period will give everyone a chance to read your thesis carefully and prepare thoughtful questions for you.

Of all the requirements for senior psych majors, orals should be the least stressful. By the time you turn in a final draft, you should be an expert on your topic. Thus, your oral exam is a time for you to demonstrate your knowledge to your committee. If you have prepared well, you will most likely find the oral exam stimulating and enjoyable since everyone in the room is familiar with your work and wants to discuss it with you.

We use a discussion format for the oral exam. Professors often start the exam by asking you how and why you got interested in your topic. From there they usually ask specific questions about your thesis. Be prepared to discuss why you ran particular statistical tests and why you interpreted the results the way you did. Be comfortable and familiar with your data, and be prepared to graph expected and actual results. Some students prepare posters for their orals, although this is not required (however, if you have a lot of complicated results and believe that predesigned graphs, tables, etc. will help you communicate better, by all means do prepare these). Also be prepared to discuss the strengths as well as the limitations of your study, which you should have discussed in your thesis.

The oral exam is an opportunity for you and the faculty to discuss the larger implications of your research. Demonstrate your enthusiasm for your project and your confidence in what you did. Remember that you have the power to guide and direct the discussion. Many psych majors are surprised at how "laid back" the oral exam is. The professors are often not so much interested in grilling you as in enabling you to demonstrate your knowledge. And since your advisor has spent all year working with you, he or she is your greatest ally. Although some apprehensiveness is probably unavoidable, try to relax as much as possible and enjoy the experience.

After your orals are finished, you will be asked to leave the room for a few minutes while the members of your orals committee confer. During this time, your orals committee will decide whether you have passed, passed with distinction, or did not pass the oral exam (a retake may be provided if the oral exam is not passed). Those pursuing honors must pass the oral exam with distinction, those not going for honors can still receive distinction on the oral exam. Your committee will also make suggestions to your thesis advisor for a tentative grade on the final draft of the thesis. When the conference is finished you'll be invited back into the room and your advisor will communicate the oral exam result and the preliminary thesis grade to you.

After the Oral Exam

In the happy event that you have passed your oral exam and have received your preliminary thesis grade, you still have a few more steps in order to wrap up your thesis. First, you may accept the preliminary grade (which then becomes the final grade for spring semester Senior Thesis), and your thesis experience will be complete. However, if you have taken orals early enough, you will have the opportunity to raise your preliminary grade by revising your thesis into a “final-final draft.” Revise the thesis once more by taking into account the suggestions for improvement your orals committee communicated to you. Give yourself some time since you’ll have three sets of suggestions to digest. Remember that those who are pursuing honors must receive a grade of no less than A- for the thesis (either the “final” draft or the “final-final” draft).

Although we try to schedule orals so that everyone has an opportunity to submit a “final-final” draft, a few students, for a variety of personal reasons, opt to take orals very late in the semester. If that’s the case you won’t have time to “revise and resubmit,” in which case the preliminary grade becomes your final grade for spring semester Senior Thesis and the draft that you distributed to your committee effectively becomes the final-final draft.

If you are pursuing honors, you should turn in your final-final draft at least a week before the library deposit deadline (usually around late April). The department will need to find time to read and confer on all the theses that are submitted for honors consideration.

Regardless of whether you accept the tentative grade or proceed with a final-final revision, when the thesis is complete you must print out two clean copies (one for your advisor and one for the department). If you’re going for honors (and if the department has designated your thesis as an honors thesis), print out four (one for your advisor, one for the department, and two copies for Penrose library). Don’t delay on this because, again, we need time to read and reassess the preliminary grade, and there are library deadlines for honors theses.

Presenting at Conferences and Publishing Your Research

One of the best ways to distinguish yourself as an undergraduate is to present your research at a conference. Those psychology majors writing an honors thesis are required to present at a conference and those writing a regular thesis are strongly encouraged to do so. Western Psychological Association meets in April or early May with a proposal deadline in mid-November. The timing of this conference is especially well suited for seniors because by March you should have your data and be able to write a reasonable abstract. Ask your advisor to help you, and visit the WPA on the Internet at www.westernpsych.org for application forms and deadlines. Whitman students have had a very high success rate for getting papers accepted, and the President's office has often funded travel costs (in 2001 fifteen psych seniors and five faculty members presented their work under the balmy tropical skies of Maui — all travel and lodging expenses paid!).

Another way to present your research is to present it at the Western Psychology Conference for Undergraduate Research, which is held in Santa Clara, California each year around April (see www.scu.edu/psychology for details).

Our own Whitman Undergraduate Conference is yet another opportunity for you to present your research. It is conveniently located and allows you to share your research with your peers outside of psychology. This conference takes place in April. Students who are preparing to present at WPA might consider “practicing” their communication skills by first presenting their thesis at the Undergraduate Conference.

It is also possible to publish your work in a professional journal. Some journals specialize in undergraduate research (e.g., *Psi Chi: Journal of Undergraduate Research*, see www.psichi.org/pubs/journal/home.asp for information), but you need not limit yourself to such journals. Some of our psych majors have been first authors on papers that have been published in non-undergraduate, peer-reviewed scientific journals (e.g., Heugel, Parks, Christie, Pulito, Zegzula, & Kemalyan [2002], “Treatment of the Exposed Achilles Tendon Using Negative Pressure Wound Therapy: A Case Report,” *Journal of Burn Care and Rehabilitation*, vol. 23, 167-171). You can do it too, although you will need to work closely with your advisor in this process.

Books on Employment and Careers for Psychology Majors

These are well-known publications that are available in the department, in Penrose library, in the career center, and/or the counseling center. Ask about these if you're interested.

American Psychological Association (2003). *Psychology: Scientific problem solvers — Careers for the 21st Century*. Washington, D.C.: Author.

This 40-page booklet is downloadable from www.apa.org/students/brochure. It contains basic information about different types of psychologists and prospects for employment in coming decades. A fourteen-minute companion video is available. This and other APA publications (including *Is Psychology the Major for You?* and *Getting In: A Step-by-Step Guide to Gaining Admission to Graduate School in Psychology and Graduate Study in Psychology and Related Fields*) can be ordered directly from the APA.

American Psychological Association (n.d.) *Interesting Careers in Psychology*, available online at www.apa.org/science/nonacad_careers.html

Appleby, D. (1997). *The handbook of psychology*. Reading, MA: Longman.

This 118-page paperback offers many helpful suggestions for developing critical thinking skills, getting a job with a bachelor's degree in psychology, and being a successful applicant to graduate school programs.

DeGalan, J., & Lambert, S. (2000). *Great jobs for psychology majors (2nd ed.)*. New York: McGraw-Hill.

If you're one of those psychology majors who is asking, "What can I do with a bachelor's degree in psychology?," this book will be of interest to you. In the first part of the book, the authors discuss a variety of work-related topics including self-assessment, researching careers, networking, resumes, interviewing. The second part of the book is devoted to detailed descriptions of four career paths open to psychology majors: residential care, community and social service, human resources (business), and preprofessional therapy. Teaching is also discussed as a fifth career path, but it is an option only for those with at least a master's degree.

Kennedy, J. L., & Laramore, D. (1993). *Joyce Lain Kennedy's career book*. Lincolnwood, IL: VGM Career Horizons.

This comprehensive book covers career- and employment-related topics such as decision-making, goal-setting, information-gathering, risk-taking, self-awareness, demographic trends, jobs of the future, and life-long career management. Embedded in each section are numerous exercises and questionnaires designed to motivate readers to apply information to their own situations. This is a book that you might want to consider purchasing for your own library.

Sternberg, R. J. (1997). *Career paths in psychology: Where your degree can take you*. Washington, DC: American Psychological Association.

Super, C. M., & Super, D. E. (1994). *Opportunities in psychology careers*. Lincolnwood, IL: VGM Career Horizons.

This 150-page paperback surveys a number of important topics that will be of interest to those interested in a career as a psychologist. It is directed at PhD-level careers, and so will be of greatest interest to those who are thinking about graduate school. Chapter topics include, "The Field of Psychology," "The Rewards of Psychologists," "The Psychologist's Education and Training," and "Scientific and Professional Organizations in Psychology."

U.S. Bureau of Labor Statistics (latest edition). *Occupational outlook handbook*. Washington, D.C.: U.S. Government Printing Office.

This government document is a comprehensive guide to occupations published every two years by the U.S. Department of Labor Statistics. Reading the OOH can give you lots of information about a wide range of jobs in a short time with relatively little expenditure of effort. It includes job descriptions, education and training requirements, advancement possibilities, salaries, and employment outlooks for 250 occupations. In addition, it describes other sources of career education, training, and financial aid information as well as resources for special groups such as youth, the handicapped, veterans, women, and minorities.

Woods, P. J., & Wilkinson, C. S. (Eds.) (1987). *Is psychology the major for you? Planning for your undergraduate years*. Washington, D.C.: American Psychological Association.

This book consists of 22 brief articles arranged into six sections: (1) is psychology the major for you?, (2) psychology and career preparation, (3) psychology majors in the workplace: traditional and unconventional careers, (4) presenting yourself to employers, (5) beyond the bachelor's degree, and (6) issues of interest to special groups. Articles in sections 1-4 will be especially helpful, as well as the introduction, "What are 40,000 psychology majors going to do next year?"

Getting in to Graduate School: Preparation and Time Use

If you're thinking about graduate school in psychology, that means that you are serious about your studies and have begun to give serious thought to your future plans in psychology. That's great! All of us in the psychology department had the times of our lives in graduate school and we would do it all over again if given the chance. However, you should know that admission to psychology graduate schools can be very competitive. Admission to these programs can be so competitive that, for example, while University of Chicago accepts about 1 out of every 4 applicants for its excellent MBA program, and while Stanford accepts about 1 out of 10 applicants for its prestigious law school, top-ranked University of Oregon accepts less than 1 out of 70+ applicants for its Ph.D. program in clinical psychology. This is not an exception but rather the rule for most clinical psychology programs. Other areas of psychology (such as developmental or cognitive), and other degree programs (e.g., master's degrees) are less competitive, but still, the odds can be very stiff. These statistics are not meant to discourage you but rather to give you a very real understanding that you will have to work aggressively to gain admission to graduate school. At a minimum, getting into the program you want will require a lot of effort and determination. To balance the scales somewhat, it's only fair to mention that many students apply to several programs at once, which inflates the numbers of applicants. Because of this inflation, the numbers are not quite as much against you as a first glance might suggest.

The first step in this process should be to decide realistically what kind of career in psychology you would like to have. This is really very crucial. Lacking a career goal is like driving from Walla Walla to New York without a road map — if you do get there, it would only be by sheer luck. It is much better to control where you are going than trust your future to capricious fate. So right now, start to decide what psychological work you would like to be doing. Consider your likes and dislikes, and your own personal strengths and weaknesses. Taken together, these produce the beginnings of your "road map" pointing toward a general long-term goal. For example, if you don't like the sight of blood, it wouldn't make sense to pursue a career as an emergency room physician. Each career area in psychology requires unique qualifications and aptitudes. As an example, if you aspire to do clinical and counseling work, you must have the patience (no pun intended) and stamina to deal with the frustrating and stubborn difficulties your future clients will present. Without these specific traits, you'll get frustrated quickly with clinical work.

We suggest that you determine your generalized career goals as early as possible and then "test" how well that goal suits you. Test your goal by gaining actual experience in the type of work that you have decided may be your career. How do you do that? Volunteer! If you're considering delivering psychological services to geriatric or gerontological populations (a rapidly growing demographic segment), volunteer locally with the Odd Fellows Home or with Walla Walla Community Hospice. If counseling is your aim, try securing an internship at the Juvenile Justice Center near downtown Walla Walla, or try working as a telephone counselor for a crisis hotline service (there may be additional volunteer opportunities in your home town during the summer months). If you find that the work is enjoyable and you seem good at it, you have not only confirmed the realistic nature of your career but have also improved your graduate school application because graduate programs like to see related experience.

Hopefully, as you have finished reading the above, you have begun to sketch out, at least generally, the kind of career path you would like to follow. Hopefully you will gain some experience in your selected path and will research what it takes to reach that career goal. Figure out what credentials are needed to do the work you have chosen. If you have decided to enter private or public clinical practice, you should be aware that it is not mandatory to have a Ph.D. in clinical psychology to administer psychological services in Washington or in most other states. For instance, a Master's degree can enable you to be a Marriage and Family Therapist or similar. To be a *licensed psychologist* in Washington state, however, you need to earn a doctoral degree from an accredited institution (Ph.D. or Psy.D.), complete no fewer than 2 years of supervised experience (at least one of which is subsequent to the awarding of the doctorate degree), and pass the written and oral examinations that are given by the Washington State Examining Board of Psychology (more details about this can be obtained from the Division of Professional Licensing, Examining Board of Psychology, P.O. Box 9649, Olympia, WA 98405 (tel: 360-236-4928).

The single best resource on graduate programs themselves, their requirements, and characteristics, is the book *Graduate Study in Psychology*. This guide is published by the American Psychological Association (APA) and is updated annually. The psychology department has recent copies but if you are serious about applying to graduate programs it's best to purchase your own copy (available directly from APA for about \$20: <http://books.apa.org/books.cfm?id=4270092>). This handy guide offers vital statistics for every program in the USA and Canada. You can find out how many applications a certain program receives, the number of openings they anticipate, the average GPA and GRE scores of those applicants who were admitted, and a little information about the program itself (including financial support). Give special attention to the section that describes specific factors that each program uses to select applicants and the relative weight they give to each of these factors. Get additional information about faculty and their interests from the web (an extremely handy site for this purpose is www.psychwww.com/resource/deptlist.htm). The information that you gather will help greatly in narrowing your program choices as well as program your curriculum in your final semesters at Whitman.

Another important decision to make is to decide whether you want to attend a university or a professional school. While university Ph.D. programs are very competitive and are typically research-focused, they will often provide financial support for your graduate years, and completing a university program can open up the possibility of an academic career. The many excellent professional schools are geared primarily for those interested in clinical practice rather than research, and typically differentiate their program's emphasis by awarding the Psy.D. degree (Doctor of Psychology) rather than the Ph.D. (Doctor of Philosophy). One example of a professional school is the California School of Professional Psychology (in various locations throughout California, see www.alliant.edu/cspp). Financial aid at professional schools is often limited but they are often fully accredited by the APA (this is important!) and admission is generally much less competitive. Again, which direction you take will depend on your career goals. Both types of program are detailed in *Graduate Study in Psychology*.¹

The rest of this section is concerned primarily with university Ph.D. programs, although most of the points also pertain to the professional schools and Masters programs.

As noted earlier, a Masters program can lead to licensure as a Counselor or Therapist and can lead to other career directions, including a teaching career in the Washington community colleges. Most Ph.D. programs will accept those with Masters degrees although the M.A. or M.S. degree usually does not grant any edge to the applicant. A Masters program will allow you to sharpen your career goals, obtain more research experience (which helps a Ph.D. program application immensely), and prepare you more fully for the rigors of a Ph.D. program. One drawback, however, is that Masters programs usually do not provide financial aid. A general rule of thumb is that, if you are fairly sure about your career directions, if your grades and GREs are strong, and if your personal and emotional life is stable, then apply to the Ph.D. programs. That way you will leave more options available to you. Many Ph.D. programs do grant Master's degrees en route to the Ph.D.

If your grades are not as good as they could be, if your GREs are weak, or if you're just not sure what aspects of psychology you'd like to focus on in your career, then a Master's program may be a good idea. It will give you the time to improve grades and GPA as well as offer you the time and experience to sharpen your career focus. Many students have followed this path into Ph.D. programs and on to very successful careers.

¹ There are additional specialized compendia for graduate programs that may be relevant to your goals. These include the *Directory of Graduate Programs in Applied Sport Psychology*, which contains practical information about graduate programs in sport psychology throughout the USA and Canada (see www.aaasponline.org/publications for purchasing information); the guide *Graduate Training Programs in Industrial/Organizational Psychology and Related Fields*, which provides useful information about many doctoral-level programs in I/O psychology as well as graduate programs in human resource management, organizational behavior, and industrial and labor relations (available for free from www.siop.org/GTP); the *Insider's Guide to Graduate Programs in Clinical and Counseling Psychology* (about \$20 through www.amazon.com); and the guide *Summary Information on Master of Social Work Programs*, which gives information on more than 100 graduate programs in social work: Degrees, concentrations (clinical, gerontology, families, etc.), application deadlines, tuition costs, etc. (order through the Council on Social Work Education, www.cswe.org). You may also be able to access some of these directories through the library.

As you read and browse through program information, weed out those programs that seem incompatible with you or your goals. Be sure to look carefully at the faculty research interests (more on this later) and note that many schools lack specific programs. Harvard and Stanford, for instance, do not have clinical programs yet both still receive a sizeable number of applications for clinical admission (Stanford, however, does have a counseling program in the Department of Education).

Besides the APA guide, another valuable source of information, particularly for those considering an academic career, is the National Research Council rankings for Ph.D. graduate programs (online at www.socialpsychology.org/ranking.htm). This is important because your goal should be to get into the best program that your brain and stomach can handle. Of course, a Ph.D. from a top 20 school does not *guarantee* a good career, but it will allow you more flexibility and choice than what you would gain from a lower-ranked program. Although some caution should be exercised when using these rankings (in part because they may not be updated regularly) the NRC rankings will give you some idea of the academic pecking order and a clearer perspective on the academic world.

We believe it is also important that you understand how schools go about selecting their future graduate students so that you can see how all of the parts of your application go together.

The Selection Process

This is the most confusing and difficult aspect of graduate admissions. It sure is confusing on your side of the table as an applicant, but it is equally so on the side of the admissions committees who have to make difficult choices among many very excellent applications. Many of us in the psychology department can relate our experiences going through this application process — in general, it doesn't feel good to know that you are at the mercies of a process with so many variants and aberrations. There is no sure, scientific way to select the best applicants (although some programs have tried). Some schools have attempted to take some of the guesswork out of the system. There is no guarantee that a program's selection procedures will conform to the system outlined below, but many do.

The number of available slots in a particular program is often dependent on how much financial support, physical space, and faculty time is available. Applications are usually received and reviewed by one or two people (often administrative assistants) who cull out the applications that do not meet certain minimum objective criteria (e.g., GPAs, GREs, etc.). The surviving applications are then reviewed by a faculty committee (which often includes some graduate students) or by individual faculty with research interests that match those interests expressed by the applicant. In some programs the applications are rated by several reviewers and in other programs, each segment of the application — from GREs to letters of recommendation — is assigned a numerical score. It is important to note that items like the GREs and GPA are “qualifiers,” and as long as they're above some preset cutoff (like, say, 3.50), then a GPA of 3.65 rather than 3.70 will not make or break an application. However, note that if your scores on these criteria are far from those of the average candidate that the program accepts, then those aspects of your application that make you a special and interesting person (such as your personal statement) will never be reviewed. This is a rather harsh and discouraging reality, but when programs like UCLA, Minnesota, and Oregon receive literally hundreds of applications per year, these selection procedures become necessary. Nonetheless, other Whitman students have done it, and have been admitted into some of the world's finest psychology graduate programs. You can do it too! However, be realistic about where you apply if for no other reason that it can cost you about \$50-60 per application. Fortunately, many schools will waive application fees if you can demonstrate financial need.

Individual faculty, with openings and adequate research or trainee funds to support students, usually determine which applicants are offered admission. Therefore, they will select those applicants who list research interests that most closely coincide with their own. This is an extremely important point to which we will return shortly.

The main selection factors include grades and courses, GREs, letters of recommendation, research experience, personal statements, and occasionally interviews. Let's consider each of these in depth.

Grades and Courses

Of course, you know that grades are very important, but what about the courses themselves? Each graduate program has its own distinctive flavor and its course requirements follow that inclination. For example, UCLA likes students with a strong background in physical science, Oregon prefers a strong background in math as well as science, while UC Berkeley prefers a more well rounded program. Almost universally, the schools like to see coursework in statistics (and it's a good idea to get all of the statistics you can — once you're in, you'll need that experience!), experimental psychology, abnormal and physiological psychology (although again, not having taken one of the latter two courses will probably not break an application). Statistics and experimental psychology are highly important *even for clinical and counseling programs*, so it's important to do well in these courses no matter what career direction you're considering. Both the APA guide and material from the schools themselves will outline each program's specific requirements. Those courses that are specifically required should at least be in progress, if not completed, by the time you submit your application.

If one of your liabilities is a weak GPA in your early years of college, this may not be a huge problem. Different programs consider different aspects of GPA. Some programs use only the last two years of undergraduate studies while others consider only the psychology GPA. Again, check the APA guide and the program materials for specific policies. Many programs, however, do consider grades *the* key indicator. If you have a weak GPA, it may be a good argument for considering Masters programs. A lackluster GPA can be offset by high GREs and a lot of research experience. A 3.40 is generally considered a minimum GPA for university Ph.D. programs, and GPAs higher than this are preferred.

The Graduate Record Exam (GREs)

The GRE general test is required by the vast majority of doctorate-level graduate psychology programs (the major exception being the professional schools). The general test includes verbal, quantitative, and analytical subsections. A few programs (about one-fourth) also require the GRE subject test in psychology, although the number of these programs seems to be diminishing steadily over the years. The general test is scored on a standardized scale identical to the SATs. That is, scores for each subsection range from 200 to 800. In addition to the standardized score, each subsection is assigned a percentile value. For example, a standardized score of 500 might be at, say, the 57th percentile for the verbal section, the 38th percentile for quantitative, and the 48th percentile for analytical. The subject test has a similar scale but usually also has one or two subscales for specific areas such as experimental psychology. Please note, however, that some schools do not use the analytic portion of the general test in their admissions deliberations, and many do not require the subject test at all.

The general exam takes a little more than two hours to complete. The verbal portion of the test lasts 30 minutes, the quantitative section lasts 45 minutes, and the analytical section takes 60 minutes. It can be administered by computer or by the traditional pencil-and-paper method. Unfortunately, the test is not administered at Whitman, so you will probably have to take the exam in a nearby city. Check out the GRE web site (www.gre.org), and call Margo Scribner, Director of Testing (x5758), to get more information about how and where to take the test. Margo Scribner recommends registering for the test online, then traveling to a designated computer testing center such as those in Ellensburg or Spokane on your assigned test date to take the test. If you're taking the test during the summer (recommended), you may be residing elsewhere and need only travel a short distance to get to a computer testing center that administers the GRE general exam. Again, check the GRE web site for details.

By all means, do prepare for this test. Preparation can raise your score as much as 200 points, so give yourself ample time to do it right. Break your preparation time into little daily segments (i.e., 15 min per day on word roots, etc.) and plan to take the general test as far from the date you take the subject test as you can. Don't take multiple tests on the same day, as this can be a real killer! Consider taking the necessary tests during the summer so that school pressures are not distractions to your preparation. Also, if you feel that you really screwed up taking a test, you can always cancel the test and it will not be scored.

A very helpful booklet that you can download is the *GRE Information Bulletin* (see www.gre.org/code1st.html for this and additional downloadable documents). The Information Bulletin contains a sample test (which is an actual previous test). The very first item in your prep program should be to sit down and take this test in one sitting. This will give you a good sense of where you are already competent and where you will need additional prep work. The results of this test will then be your guide in allocating preparation time and effort.

There are courses offered to help you prepare for the test but they are expensive. For the money, however, several additional previous tests (which you can order from Educational Testing Services) and a good guide like *Barron's* will be more valuable. As for the subject test, preparation should be quite detailed and can be best accomplished by planning your coursework so that you take as many classes in the key subject areas as close to the test date as possible. The key areas are *experimental/natural science* (which consists of questions about learning, cognition, sensation/perception, comparative, and physiological psych), and *social science* (which covers clinical, abnormal, personality, and social areas). About 80% of the questions come from these domains (equally divided between the experimental science and social science areas). The remainder of the test, known as *general psychology*, contains questions about history, applied psychology, measurement, research design, and statistics.

Such course planning is valuable because many of the test questions don't ask for specific detail but rather for a broad theoretical understanding of the area. However, you may not always have the opportunity to tailor your curriculum this way, due to study abroad or to limitations in course availability. If this is the case you can prepare by carefully reviewing a good introductory psychology book prior to taking the GRE subject test (good texts include those written by Gleitman, Myers, Atkinson, Zimbardo, Gray, and many others — the one you used in your Introductory class is perfectly suitable). Doing this review over the summer between your junior and senior year will simultaneously prepare you for taking the Major Field Exam (MFTs), the required comprehensive written exam taken in January of the senior year.

Yet another way of reviewing your introductory psychology knowledge is to submit an application at the beginning of each academic year for a "Principles tutor" position. Talk to the Chair of the department about this little known and underutilized possibility of helping out in our introductory courses. A tutoring position can help you and other Whitman students learn (and re-learn) principles of psychology. Everyone benefits, and you get paid for it!

Occasionally, programs require tests in addition to the GREs. For instance, a few programs require the Miller Analogies Test (MAT), and University of Minnesota has required the Minnesota Multiphasic Personality Inventory (MMPI). Check the APA Guide for each program's requirements and contact Margo Scribner to work out testing arrangements if you need to complete these tests.

Letters of Recommendation

So far we have been discussing the objective and quantitative aspects of your application — GPAs, GREs, etc. Letters of recommendation, however, are an important exception. Admissions committees use these letters to learn about all the qualities that would make you an outstanding graduate student that are not revealed by objective data such as GPA. Letters of recommendation may therefore touch on the following qualitative aspects of potential interest to graduate admissions committees:

- How good are your research skills?
- Do you offer thoughtful contributions to class discussions?
- Do you have good interpersonal skills that enable you to get along with faculty and other students?
- Do you exhibit strong leadership skills?
- Have you contributed to the various extracurricular activities of the Department such as assisted in labs, proctored, helped with visiting scholars, etc.?

By mentioning subjects like these, letters of recommendation can provide the "big picture" of your overall promise and potential, something not necessarily revealed by test scores, but every bit as important for predicting success in a graduate program. Admissions committees know this, and they read letters carefully. A substantive and detailed letter from an informed letter-writer can be very persuasive to graduate admissions committees.

As always, preparation is important. The professors whom you select to provide letters should, at the very least, have had you in one of their courses. The single most important element in a letter of recommendation is the depth of knowledge of you that it demonstrates. You can help your recommenders by providing each of them with the items listed below (neatness and organization is obviously very important — imagine what your letter writer will think of your organizational skills if these items are put together sloppily!). You can also help yourself by taking the time to let your professors get to know you. Here is the information your letter writers will need:

- A clear list of deadlines for each letter requested
- A description of your professional goals
- A transcript of your undergraduate work
- A list of the courses you took from that professor, including any skills, talents, accomplishments, etc., you demonstrated to him or her that you believe are relevant to your application
- *Details* about your senior thesis
- Your minor, if you have one
- The titles and abstracts of any conference presentations which you have authored or research papers to which you have contributed
- Honor societies to which you belong
- Awards that you have won
- Extracurricular activities in which you have participated (and any offices held)
- Work experience
- Service activities such as volunteer work
- A statement of why you believe *this* particular program will be a good match for your skills, interests, and experiences.
- Any other information which you believe can strengthen your case

You should know that virtually every applicant has good letters, so the real difference is in the depth. The deeper the apparent knowledge of the applicant that is portrayed in the letter, the more credibility the letter has. Give your selected professors plenty of notice (2 weeks minimum but more time is better — we are all willing to spend a great deal of time writing good letters for you but you must give us opportunities to find blocks of time to do so), and present them with a neat, organized package of recommendation forms (most programs have their own forms) and envelopes. Under almost every circumstance, you should waive your right to read these letters. If you do not, their value and credibility declines a great deal. Generally, it is better to have these letters returned to you so that you are able to send every part of the application to the program in a single, completed package. This gives you more control over the process and assures you that everything is completed on time. Most schools will ask for three letters but it is not a bad idea to send four. Again, the real key is to help your recommenders know you well, and a very good way of accomplishing that is to assist them in their research. These letters are really very important, so be sure they're good!

Research Experience

This is a very crucial area. The more research experience you have, the better. There is simply no such thing as too much research. At a minimum, you should try to assist a professor on a research project. Not only will this training be of great help when you're in graduate school, but it will really help you get there. Plan on adding a sheet of paper to your application that details your research experience. This can include experiments that you have done in the required classes (such as Research Methods), in independent study projects, or in Research Experience (Psyc 358). You should also consider adding

details about your thesis project, even if it's still in progress. Virtually all graduate programs — even the counseling ones — like to see how you've engaged in research.

Another strategy tip, if you have selected one program that especially interests you, would be to carefully read their faculty's research interests. Look up each faculty member's web page, if they have one, and look up their entries in the current *Directory of the American Psychological Association* (available through the library). Look up the works of specific individuals on PsycINFO (search by author rather than by key word) and read some of their publications. Write or email them with questions or to request any in-press articles they may have. Don't be shy — faculty members are often quite happy to receive such inquiries (even flattered!) and are more than willing to answer questions. This not only makes you a known quantity but can also help a great deal in gaining admission to their program (remember, individual faculty members often determine who gets admitted). Thus, if the faculty member has an opening and he or she sees your application (and recognizes it as someone already interested and involved in his or her area of research), what would be more natural than for the faculty member to select you?

In addition to research, you can show a high level of interest in psychology by becoming a student affiliate of various regional and national professional organizations. These include Western Psychological Association (WPA), American Psychological Association (APA) and American Psychological Society (APS). The yearly fees to be a student affiliate with any of these organizations are often ridiculously low, and you get discounts on various publications and products. You can also present research at WPA's annual meeting and at our own Whitman Undergraduate Conference. Graduate programs look very favorably on such involvement.

Applications and Personal Statement

The applications are generally quite straightforward. Be sure to type and proofread your applications carefully. Plan to add an outline of your research (if it is substantial) and, if available, a sample of your writing such as a paper or, even better, a completed experimental report.

Your personal statement should be brief rather than long (remember that *many* statements are being read; 2-3 pages is sufficient), simple and direct rather than elaborate. Avoid platitudinous statements like "I'm really interested in psychology" or "I want to work with people" (would you be applying for graduate school if you didn't feel that way?). Your statement should also reflect the flavor of the program to which you are applying. If you are applying to Claremont, for example, you should indicate an interest in applied aspects of psychology to reflect that program's orientation. State your research interests clearly (and make sure that they coincide with at least two professors on the current faculty — mention these faculty members by name). Mention your senior thesis — most undergraduate psychology programs do not require a senior thesis so describing this aspect of your psychology experience at Whitman will help you stand out. If you're applying to clinical or counseling programs, describe your volunteer experiences as well as the work you did in Applied Psychology & Practicum, if you have taken that class.

Have several people proofread your statement (an English professor would be great). Do not take chances. Be neutral rather than wild and elaborate. Allude to your research experience and state your career goals strongly and unequivocally. These programs are looking for people who know what they want to do, who see graduate school as a means to an end rather than as an end in itself. Keep in mind that most universities *do not* want to train practicing clinicians and that they consider an expressed desire to practice a negative. They are generally looking for future researchers and teachers. Use a clean font, and don't make the font size too small (10 point minimum).

It is helpful to gather all of the items that comprise the total application and send them together in one package. These include transcripts (unless the school wants them sent independently — many do not) which the Registrar's office will furnish to you in about two weeks in sealed envelopes so that they are official, letters of recommendation, photocopies of your GRE scores (as well as having ETS send official reports because the copies will help your file be considered more quickly as well as guard against any errors committed by ETS in getting the official reports out), writing samples, and your personal statement. Again, this gives you much more control than having to depend on three or four professors, ETS, and the

Registrar's office to submit everything in a timely fashion. By following this approach, you can be sure that it is done right and completed in time.

Consider having your applications delivered by UPS or Fed-Ex — you'll get faster and better service. Enclose in each application a self-addressed, postage-paid postcard for the school to return to you to confirm that they received your package (if they do not provide you with one). Follow up quickly if something seems awry and prevent a stupid mistake from disqualifying you. Mail at least three weeks before the deadline to allow for problems and call the school if you have not gotten your postcard back and the deadline is less than a week or two away.

You should apply to a range of schools. If you meet, exceed, or are within a reasonable range of the objective criteria for the program in which you are most interested, then apply but don't stop there! You need at least one fallback program. This is a program that you believe will most certainly accept you. For example, if you are interested in clinical programs, apply to personality and social programs as well as other clinical programs as backups. Apply to a range of programs in between your top choice and your fallback. If getting into a university program is important to you, apply to many programs (less with the professional schools since they are less competitive). Applying to five should be a minimum and don't ever think that you have anything locked up until the school has made a formal offer to you. Some years the quality of the applicant pool is better than others, making the situation more or less competitive. Surprises, both good and bad, happen all too often.

Interviews

Interviews are usually not required and those programs that do invite you out for an interview will usually provide an alternative, such as a telephone interview. In all cases, when you are interested in a program and they request that you come for an interview, go. It can be expensive (the school will often help you find a place to stay, most often with a graduate student, but that's usually it — you pay the rest), but it allows you to get to know the people, the program, and the surroundings. After all, you may be spending 4-6 years of your life at this place so it's a good investment in an informed decision. Many programs say it does not hurt your application if you can't interview, but the old cliché "out of sight, out of mind" really applies here. So GO, if you can!²

Preparing for your interview or visit is important. Here are a few tips to help you get ready.

- Ask for the names of current graduate students and call them. Ask them to "level" with you about specific programs, courses, and professors. Graduate students are a great source of advice because they've been in your shoes before and know how it feels.
- Research the program thoroughly by studying their printed and online materials. Talk with faculty members who studied at that program (or contact faculty members at Walla Walla College, WSU, University of Washington, etc. who may have studied there). Do read at least one publication authored by key professors with whom you want to work. Do look up each professor's web page or his or her entry in the *Directory of the American Psychological Association*. This will tell you which schools they attended, their special interests, their age, etc.
- Get to the location a day early, if you can. Walk around the campus and absorb the flavor of the program and university (probably best to do so incognito). This will also help in overcoming jet lag if the program is far away.
- Do prepare some intelligent and informed questions about the program and the interests of each faculty member you'll meet. This shows interest and effort. Then, enjoy the interviews — remember, you're evaluating them as well.

² You may want to take the time to look up the journal article "Expectations and Impressions in the Graduate Selection Interview" by Peter Herriot and Carol Rothwell, in *Journal of Occupational Psychology*, 1983, vol. 56, 303-314. If Penrose library doesn't have the journal, you can order it through interlibrary loan.

A final caution. When you talk with first-year students, you may find them tired and discouraged. Remember, you are talking with them in the middle of their first year, a difficult and grueling time! Don't let this discourage you. When you talk with third and fourth year students, you'll find them much more relaxed.

Summing Up

That pretty much covers the application process and, by now, you probably know that most programs have deadlines in January and begin the weeding process in early February. It is not uncommon to hear from schools in early March. If you have not heard from a program by March 15th or are really nervous about your status, call the department administrative assistants and inquire about your application status. It can't hurt and they may be able to offer you substantive information.

If you have applied to several schools and have received an offer, you have until April 15th to formally accept it. If you accept an offer over the phone, follow up with a written note. You can rescind an acceptance if you do so before April 15th but again, be sure to do so in writing. After that date, it becomes much more difficult to rescind (check the APA Guide on this matter). Most programs will make their offers over the phone and then will establish a list of alternates. If any student turns down an initial offer, the opening will then be offered to an alternate. This actually happens quite frequently so if you are an alternate, there is still a chance that you will receive an offer. This is the primary reason why you should turn down a less attractive offer quickly, if you receive more than one. Your thoughtfulness will benefit both the programs in their selection process and the alternates who may be holding their breath.

One final but important suggestion would be to approach this process with as much organization as possible. Make a chart of each program showing all the categories of "to do" items and dates by which those items need to be accomplished. Place the information about each program and copies of your application materials, in a folder and keep it by the phone. Some programs may call to ask you for additional information and having "instant recall" of your statement and their faculty is helpful (and impressive).

Lastly, let's review the steps in the process and their sequence:

1. Determine at least a generalized career direction.
2. Research and identify those programs that will get you to those goals.
3. Contact all programs that look interesting to get their information and materials.
4. Review program information and get involved in research.
5. Prepare for and take GREs in the summer between junior and senior year.
6. Contact professors for letters (September-October).
7. Request transcripts and order GRE reports from ETS (October-November).
8. Personal statement completed, reviewed, and final selection of programs.
9. Applications completed and Fed-Exed (November-December)
10. Visits, interviews, and waiting (January-March).

That's it — the whole, frustrating, exhausting ordeal. If you've gained admission to a program, CONGRATULATIONS. You have qualified for 4-6 years of hard work! Here again, a little planning can help smooth out any bumps that you might experience during the adjustment.

Preparation for Graduate School

After graduation, take a good long vacation — you have most certainly deserved it! Then begin to get ready for your graduate program. In most university programs the first year consists of an intense statistics and research methods sequence, and can be as hellish as being on a diet and being locked overnight in a Godiva chocolate shop. To offset the future struggle somewhat, review these areas if you feel relatively weak in them. Continue reading articles written by your future faculty (at this level most professors teach their own specialized research areas, not just generalized courses). You may even be able to contact your new professors and get first year syllabi early. Try to get a couple of weeks ahead of the program and you'll sail through. It also helps to get to your new location early (e.g., early August) so you can move into your new residence, get your car registered, figure out where the grocery store is, etc. rather than having to cope with these while you're fighting the good fight in graduate school.

Finally, just before courses start, try to give yourself 1-2 weeks to relax. If you're in a new location, get to know it and enjoy it while the weather is still warm. This short vacation will also pay dividends.

Applying Now or Applying Later

Many students think that they should apply to graduate school immediately after they finish their undergraduate work. If you think you will lose steam after taking a year or two off, then consider applying now. However, from the admissions point of view, it's not crucial that you apply immediately. If you take a year or two off to work, to get some experience in psychology in order to build funds for graduate school, that could look good in the eyes of the graduate program. They like motivated, determined people, and if you have been involved in psychology in your work experience, that could actually help your application. But if you amble about with no rhyme or reason, or don't work at all, that might convey to a graduate admissions committee that you're unmotivated and lack self-direction. The bottom line is that if you do choose to take "time off" from academics and work for a while, go for it, but try as much as possible to get work or volunteer experience that relates to psychology in some way.

Older students who have been working a number of years or have been raising a family may think they are in a disadvantaged position. Again, this is not necessarily true. If there is evidence that you are a conscientious and motivated person, then that works to your advantage. In fact, some counseling and clinical psychology programs prefer older students because they believe such students are more mature, responsible, and have more "life experience" than younger students who have just graduated from college. Many counseling psychology programs are, in fact, specifically designed for older people who may be working full time and/or have families.

Final Words

You have a great resource in the Whitman psychology faculty. Use them to help you clarify your goals and your process of attaining those goals. If you're a junior or a sophomore, start working on this now. If you're a senior, start working yesterday. You can accomplish what you wish, but only if you're willing to do the work. Only you can make it happen.

One more thing. For all of us in the psychology department, graduate school represented a period of great excitement, personal growth, challenge, and accomplishment. We'd do it all again if given the chance. Graduate school was worth all the work and frustration because the rewards were to be

immersed in a subject of great interest, to have an opportunity to contribute to a vibrant, exciting field, and to learn and grow in good company. There is really no pleasure in life quite like that. GOOD LUCK!³

Specialties in Psychology

The psychology major provides its students with both a liberal arts education and the opportunity to explore specific areas of psychology. Graduate education is a process of further refinement during which students become increasingly more proficient and knowledgeable in an area of psychological specialization. Following are descriptions of 10 specialty areas in psychology that require graduate education. (See also APA's *Careers in Psychology*.) Remember that there are now 53 divisions of the APA, so this is a small sampling of a sprawling and multifaceted field.

Unless otherwise noted, training for these specialty areas is generally obtained in Psychology Departments in Schools of Arts and Sciences.

Biopsychology/Behavioral Neuroscience: For the student more interested in biological research, investigating the workings of the brain and hormonal systems, and the influence of the brain on behavior, programs in biopsychology and neuroscience may be appropriate. Research areas include learning, psychopharmacology, memory, emotion, and motivation.

Clinical Psychology: Clinical psychologists assess and treat people with psychological problems. They may act as therapists for people experiencing normal psychological crises (e.g., grief) or for individuals suffering from chronic psychiatric disorders. Some clinical psychologists are generalists who work with a wide variety of populations, while others work with specific groups like children, the elderly, or those with specific disorders (e.g., schizophrenia). They are trained in universities or professional schools of psychology (free-standing clinical training units, independent of university departments of psychology that may award the Ph.D. or PsyD). In a PsyD (Doctor of Psychology) Program, emphasis is placed on the skills necessary for the delivery of psychological services. A Masters thesis is not required, nor is a research oriented dissertation, although a written, doctoral-level report of professional quality is usually required for the PsyD. Clinical psychologists may be found working in academic settings, hospitals, community health centers, or private practice. (See also *Counseling Psychology*.)

Clinical Social Work: A Masters degree in social work (M.S.W.) is a popular clinical alternative. Several advantages of this option are a higher rate of admission to M.S.W. programs, lack of GREs as a requirement for admission, fewer research requirements, an emphasis on professional training, and completion of degree in less than half the time necessary to obtain a psychology Ph.D. With legal regulation in all 50 states and third-party vendor status (insurance reimbursement) in 35 states, social workers are increasingly achieving autonomy and respect, including increased opportunities for independent practice. The major disadvantages lie in the less comprehensive nature of the training, which is reflected in a lower pay scale as compared to clinical psychologists. Not becoming a "doctor" and not being able to conduct psychological testing also prove troublesome for some.

Cognitive Psychology: Cognitive psychology concentrates on the identification and characterization of human thought processes. Major areas include language, memory, perception, attention, problem solving, and judgment/decision-making. Most cognitive psychologists are employed in academic settings, although people with a more applied perspective can acquire interesting and productive careers in industry (computer companies such as Microsoft, consulting firms, and aerospace companies such as NASA all employ cognitive psychologists). Recent trends in cognitive psychology include computational modeling of thought processes and identifying biological correlates of cognition.

³ There are several great books on the market that describe the application process, offer tips and strategies, and outline other degree possibilities, in much more detail. The two best ones are the *Complete Guide to Graduate School Admission: Psychology, Counseling, and Related Professions* (by Patricia Keith-Spiegel and Michael W. Wiederman, 2000; available through Amazon for about \$25), and *Getting In: A Step-By-Step Plan for Gaining Admission to Graduate School in Psychology* (available from APA or from Amazon for about \$12). The department has copies of these books (just ask), but if you're serious about graduate school you should get your own copies.

Community Psychology: Community Psychology applies psychological principles to the understanding of individual and social problems, the prevention of behavioral dysfunction, and the creation of lasting social change. Community Psychologists believe that human behavior develops out of interactions between people and all aspects of their environment--physical, social, political, and economic. This idea requires that efforts to alleviate individual and social problems must entail changes in both the environmental settings and individual competencies.

Counseling Psychology: Counseling psychologists do many of the same things that clinical psychologists do. However, counseling psychologists tend to focus more on persons with adjustment problems rather than on persons suffering from severe psychological disorders. They may be trained in Psychology Departments or in Schools of Education. Counseling psychologists are employed in academic settings, community mental health centers, and private practice. (See also Clinical Psychology).

Developmental Psychology: Developmental psychologists study how we develop intellectually, behaviorally, and emotionally over the lifespan. Some focus on just one period of life (e.g., childhood or adolescence). Developmental psychologists usually do research and teach in academic settings, but many act as consultants to daycare centers, schools, or social service agencies. Research on aging, identity, and problem-solving abilities are popular areas within developmental psychology. Geropsychology, or the psychology of the aging, has become a popular specialty in this area, as the increasing elderly population in this country presents special needs that currently are insufficiently addressed.

Educational Psychology: Educational psychologists are concerned with the study of human learning. They attempt to understand the basic aspects of learning and then develop materials and strategies for enhancing the learning process. For example, an educational psychologist might study reading and then develop a new technique to teach reading. They are typically trained in Schools of Education and employed in academic settings. (See also School Psychology.)

Experimental Psychology: This area includes a diverse group of psychologists who do research in the most basic areas of psychology (e.g., learning, memory, cognition, perception, motivation, and language). Their research may be conducted with animals instead of humans. Most of these psychologists work in academic settings.

Health Psychology: Health psychologists are concerned with psychology's contributions to the promotion and maintenance of good health and the prevention and treatment of illness. They may design and conduct programs to help individuals stop smoking, lose weight, manage stress, and stay physically fit. They are employed in hospitals, medical schools, rehabilitation centers, public health agencies, academic settings, and private practice.

Industrial/Organizational Psychology: Industrial/organizational ("I/O") psychologists are primarily concerned with the relationships between people and their work environments. They may develop new ways to increase productivity or be involved in personnel selection. They are employed in business, government agencies, and academic settings. A Ph.D. in this area often leads to a job in industry or self-employment as a consultant. Industrial/organizational psychologists earn among the highest median salaries compared to other areas of psychology. The Society for Industrial and Organizational Psychology produces a useful book entitled *Graduate Training Programs in Industrial/Organizational Psychology and Related Fields*, which describes most of the "I/O" programs in the United States.

Marriage And Family Therapy: Marriage and family therapists work with individuals and couples, as well as children and families. The specialty of marriage and family therapy then, is less about whether we treat individuals, or families and groups than it is about a way of thinking about treatment and treatment styles. The field of family therapy itself is comprised of many different theoretical perspectives. The different perspectives within the field of family therapy have in common, however, a way of thinking about the individual interacting in a dynamic system. Thus, marriage and family therapy is described as a "systemic" approach to therapy.

Physiological Psychology: Physiological psychologists study the physiological correlates of behavior. They study both very basic processes (e.g., how brain cells function) and more readily observable phenomena (e.g., behavioral changes as a function of drug use or the biological/genetic roots of psychiatric disorders). Most are employed in academic settings.

School Psychology: School psychologists are involved in enhancing the development of children in educational settings. They assess children's psychoeducational abilities and recommend actions to facilitate student learning. They are typically trained in Schools of Education and work in public school systems, acting as consultants to parents, teachers, and administrators to optimize the learning environments of specific students. (See also Educational Psychology). Admission into the few Boulder model programs with a child clinical specialty is particularly competitive. A doctorate in school psychology is much more accessible, with two or three times the acceptance rate of clinical psychology programs. The APA (1994) has accredited 43 of these programs, which provide doctoral-level training in clinical work with children in school settings.

Social Psychology: Social psychologists study how other persons affect our beliefs, feelings, and behaviors. Some topics of interest are attitude formation and change, aggression, prejudice, and interpersonal attraction. Most social psychologists work in academic settings, but some work in federal agencies and businesses doing applied research.