

PROGRAM ASSESSMENT REPORT

Unit: Psychology
Program: Experimental Research Program (Graduate)
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Introduction

The Experimental Research Program (ERP) in psychology emphasizes basic and applied research skills, to be developed through an individually-tailored program of study that includes both core (required) and elective courses and culminates in the completion of a thesis. The general objectives of the program, as stated in the university bulletin, are for students to develop skills in research design and analysis; broad knowledge of substantive areas of psychological research; and expertise in one research area. The program goals (#1 - #7) articulated below specify, at a behavioral level, what students in this program are expected to achieve.

Every student is expected to become involved in research when he or she begins the program and to continue this involvement during his or her course of study. Ideally, every student participates

this domain, the student demonstrates expertise by completing a thesis (with the advice and supervision of that faculty member).

Formulation of Goals; External Factors Influencing Program

The objectives of the program were formulated when the program was first developed. However, the particular articulation and enumeration of the program goals described in this report (and in previous annual assessment reports) were formulated in October, 2002, by the Experimental Research Program Committee, which consists of core faculty in the Experimental Research Program. These program goals have not been reviewed or modified since Fall, 2002, although discussions by program faculty about the structure of the curriculum have implications for Goal #2 (see below). The outcome measures used to assess whether the goals are being accomplished were specified during Fall, 2002; a subsequent modification involved eliminating one outcome measure.

During the 2008-2009 academic year, the activities of the Experimental Program included offering a series of Grand Rounds presentations for students and faculty, thesis-advising, offering several courses, and reviewing applications and admitting students for the Fall, 2009, term.

As we have noted in several previous reports, during the 2004-2005 academic year, one faculty member whose primary affiliation had been with the Experimental Program died after an extended illness, and, at the end of that year, two faculty members whose primary affiliation was

with the Program left Cleveland State University. Given the number of professional leaves of absence that were planned for 2005-2006, the program faculty seriously considered not admitting students for the Fall, 2005, semester. Ultimately, students were admitted, but not recruited, and only one student entered the program. In Fall, 2006, six students entered the program, and three faculty members actively involved in the program joined the Psychology Department. In Fall, 2007, eight students entered the program, although two decided almost immediately to pursue alternative plans, leaving the program with six new students. In Fall, 2008, six students entered the program.¹ Thus, we have now completed a third year of rebuilding this program.

We noted in our May, 2008, program assessment report that, in spite of rebuilding, three additional factors left the Program somewhat in flux, and several of these factors continue to affect the potential direction of the program. First, at the end of the 2007-2008 academic year, two faculty members affiliated with the Program retired. Although these two faculty members taught courses during 2008-2009 and will likely continue to teach courses during the next several years, their retirements may affect our course offerings at the graduate level. Second, the Psychology department has just undergone program review, and the implementation of findings from this review may lead to certain structural changes in psychology graduate programs. Third, the Psychology Department, in collaboration with the Psychology Department at the University of Akron, has developed a doctoral program in Adult Development and Aging, has admitted its first interface with the new doctoral program have not yet been worked out, the existence of the doctoral program will affect curricular opportunities (and perhaps curricular requirements) for students. There is considerable overlap between faculty involved in the Experimental Research Program and faculty involved in the doctoral program, and we anticipate that at least some students in the Experimental Research Program will aspire to move into the doctoral program.² In the last program assessment report, we expected that program faculty would reevaluate the program goals during the 2008-2009 academic year; we did not do so, but must do so now that the doctoral program is a reality.

We expect that at least six students will enter the Experimental Research Program in Fall, 2009. Faculty members who reviewed applications were highly impressed by the caliber of students who have been admitted for Fall, 2008.

Program Goals, Goal-specific Outcome Measures, Research, and Findings

Goal #1: Students will demonstrate the ability to carry out and interpret statistical analyses of psychological (and other) data, describe studied samples, make inferences, and make statements about limitations on inference.

¹ An additional student who had intended to enroll withdrew for family reasons prior to the beginning of the Fall semester.

² In fact, one of the two students admitted to the doctoral program has just completed her first year of the Experimental master's program.

Outcome Measure #1: Students must complete courses in Univariate Statistics and Experimental Methodology and Advanced Data Analysis and Computer Applications (PSY 511,

Research completed: Evaluation of student transcripts.

Findings: Of the 22 students who began the program between Fall, 2002, and Fall, 2006, 17 achieved this criterion. Of the 5 who did not, 3 left the program, and two took the step recommended to them to demonstrate the required ability.

Of the six students who entered the program in Fall, 2006, all achieved a modification of this criterion. (Because PSY 611 was not offered, they took COM 531.) Of the five students who entered the program in Fall, 2007, all achieved this criterion. Of the six students who entered the program in Fall, 2008, all achieved this criterion.³

Outcome Measure #2: Students must complete an empirically based thesis which is evaluated by three faculty experts on the basis of standard thesis requirements (development of testable hypotheses; review of relevant literature; development of appropriate methodology; collection and analysis of data; drawing appropriate conclusions).

Research completed: Evaluation of student transcripts.

Findings: To complete the program, each student must complete a thesis. Four students completed theses during the 2004-2005 academic year. Three students completed theses during the 2005-2006 academic year. Five students completed theses during the 2006-2007 academic year. Two students completed theses during the 2007-2008 academic year; notably, each of these had entered the program in Fall, 2006. Seven students completed theses during the 2008-2009 academic year.

Outcome Measure #3: Students will be required to pass a data analysis exercise. Proficiency will be determined by two faculty with expertise in methodology and statistics.

Research completed: During Spring, 2005, one of the course requirements of Psychology 611 (the second course in the two-term sequence of data analysis courses) was to complete a small data analysis project. Students were provided with a data set and asked to carry out appropriate analyses and to draw conclusions. These projects were evaluated by the course instructor, but were not evaluated by a second faculty member.

Findings: The Spring, 2005, iteration of this outcome measure was a pilot test of this measure. It should be implemented as a free-standing exercise for students beginning their second year of the program, and evaluated by at least one additional faculty member. This step was not taken during 2005-2006 since we had no new second-year students who had not participated in the pilot project, nor was it taken during 2006-2007 because we had just one second year student. We planned to implement this in Fall, 2007, and were encouraged to do so by the reviewers of our previous reports, but have

³ One student had completed PSY 511 as an undergraduate.

not, due to competing demands on faculty time. We expect to implement this in Fall, 2009, as part of Experimental Psychology Grand Rounds.

Goal #2: Students will demonstrate advanced knowledge in at least three domains of the field of experimental psychology and/or cognate areas.

Outcome Measure #1: Completion of a minimum of five psychology content-based graduate-level courses with at least a B average.

Research completed: Evaluation of transcripts of students who apply for graduation.

Findings: All students who completed the program during the 2005-2006, 2006-2007, 2007-2008, and 2008-2009 academic years completed appropriate coursework approved by the Experimental Psychology program committee, with the required grade average.

Outcome Measure #2: Students completing graduate courses will display significantly more

Research completed: Beginning of course vs. end of course comparisons of student knowledge have been made in some courses. During 2007-2008, such comparisons were made in two courses (Social Psychology and Learning, Memory, and Cognition).

Findings: Data collected during Spring, 2008, in program specific courses, show that students, on average, manifested substantial gains in knowledge between the beginning of the courses and the ends of the courses.

Goal #3: Students will acquire specialized knowledge in at least one area of experimental psychology.

Outcome Measure #1: Satisfactory completion of thesis prospectus. Three faculty experts serve on thesis committee.

Research completed: Evaluation of student files. Students may not register for thesis credit until they have successfully completed a prospectus.

Findings: During 2005-2006, three students successfully completed a prospectus. During 2006-2007, one student successfully completed a prospectus. During 2007-2008, four students successfully completed a prospectus. During 2008-2009, six students successfully completed a prospectus.

Outcome Measure #2: Satisfactory completion of thesis. Evaluated by three faculty experts on basis of standard thesis requirements.

Research completed: Evaluation of student transcripts.

Findings: During 2005-2006, three students satisfactorily completed theses. During 2006-2007, five students successfully completed theses. During 2007-2008, two students completed theses. Notably, each of these students had entered the program in Fall, 2006. During the 2008-2009 academic year, seven students completed theses.

Goal #4: Students will be able to design and carry out a research project on a problem in experimental psychology that has the potential to augment psychological knowledge.

Outcome Measure #1: Satisfactory defense of thesis prospectus. Three faculty experts serve on thesis committee.

Research completed: Evaluation of student files. Students may not register for thesis credit until they have successfully completed a prospectus.

Findings: During 2005-2006, three students successfully completed a prospectus. During 2006-2007, one student successfully completed a prospectus. During 2007-2008, four students successfully completed a prospectus. During 2008-2009, six students completed a prospectus.

Outcome Measure #2: Satisfactory defense of thesis. Evaluated by three faculty experts on basis of standard thesis requirements.

Research completed: Evaluation of student transcripts.

Findings: During 2005-2006, three students successfully completed theses. During 2006-2007, five students successfully completed theses. During 2007-2008, two students successfully completed a thesis. During 2008-2009, seven students completed a thesis.

Goal #5: Students will demonstrate the ability to present psychological research to others.

Outcome Measure #1: Satisfactory defense of thesis prospectus to thesis committee.

Research completed: Evaluation of student transcripts.

Findings: During 2005-2006, three students satisfactorily defended a prospectus. During 2006-2007, one student satisfactorily defended a prospectus. During 2007-2008, four students successfully completed a prospectus. During 2008-2009, six students completed a prospectus.

Outcome Measure #2: Satisfactory defense of thesis to thesis committee.

Research completed: Evaluation of student transcripts.

Research completed: Incoming students in Fall, 2004, were instructed to maintain portfolios. These instructions were reiterated to students who entered the program in and subsequent to Fall, 2006.

Findings: In 2006, one article with a student co-author was published.⁴ During the past year, a student who graduated from the program in August, 2006, and immediately entered a doctoral program published, as senior author, an article based on his CSU master s thesis. (His CSU advisor was a co-author.)

Goal #6: Graduates will develop skills and knowledge that will allow them to be successful in getting into post-MA training programs and/or getting jobs related to their training or to better fulfill the responsibilities of their current employment.

Outcome Measure #1: Graduates will obtain employment related to the field of experimental psychology or will be accepted into post-MA training programs.

Research completed: In 2004, surveys were sent to recent MA graduates to determine their employment status and/or success in getting into post-MA graduate training programs. Subsequently, post-graduation activities of MA earners have been tracked.

Findings: The majority of graduates responding to the survey indicated that they have research-related jobs or have been accepted into post-MA graduate training programs. Of the 14 students who earned MA degrees between August, 2002, and May, 2008, 10 were in post-MA educational programs, in jobs related to their MA training, or are better fulfilling the responsibilities of employment that they had while in the Experimental program.

Of the two students who completed the program in 2008, one entered a doctoral program in psychology at SUNY-Albany. The other was employed in a research administration position at the CWRU Medical School while seeking a permanent position in research.

Information about students who completed the program during 2008-2009 has not yet been compiled.

One student who graduated in August, 2006, and entered a doctoral program in health psychology competed successfully for a Fulbright Award and will spend part of 2009-2010 conducting research in Switzerland.

Outcome Measure #2: -term goals.

Research completed: In the 2004 survey, students were asked if coursework they had completed was relevant to their long-term educational goals. At the end Spring, 2007, students completing their first year were asked to describe their progress and to comment on the curriculum.

⁴ This fact was omitted from previous program assessment reports.

Findings: Some graduates suggested that more flexibility in their coursework would have enhanced their obtaining desired goals.

In the Spring, 2007, students expressed dissatisfaction with the limited course offerings in experimental psychology, but satisfaction with their opportunities to engage in research.

Goal #7: Graduates will be satisfied that their training was successful in meeting their educational needs.

Outcome Measure #1: Expression by graduates of satisfaction with educational experience.

Research completed: In 2004, surveys were sent to recent MA graduates to determine their views on their educational experience, e.g., challenge of the coursework, satisfaction with their experience, faculty meeting their educational needs, preparation for employment or further graduate work, etc.

Findings: The majority of graduates responding to the survey reported that their coursework was moderately challenging, that their experience was satisfactory, that the faculty fulfilled their needs, and that their training prepared them appropriately for employment or further graduate training.

Review and Actions

Review. The ERP Committee reviewed assessment data and student progress during meetings and email discussions November, 2004, and March, 2005. The ERP Committee reviewed the Spring, 2007, comments by students in August, 2007.

Actions. The content of PSY 611, *Advanced Data Analysis with Computer Applications*, was modified: Rather than emphasizing multivariate data analysis, the ERP decided in November, 2004, that students might be better served by a continuation course that covered experimental design more fully than is possible in PSY 511, that integrated this with fuller coverage of analysis of variance than is possible in 511, and that covered multiple regression in a way that clarified its relationship to analysis of variance. This content was included in PSY 611 during Spring, 2005. Because only one student entered the program in Fall, 2005, PSY 611 was not offered in 2005-2006 or in 2006-2007, so this experiment was not continued.

Action for 2007-2008. In Spring, 2008, PSY 611 was offered as multivariate statistics, and ERP students took this course. This course was offered for students in several different psychology graduate programs. Program faculty will have to determine whether students need additional training in experimental design beyond what they get in PSY 511 and, if so, will consider adding another statistics/methods course. We expect that the feasibility of this will be improved when the doctoral program in Adult Development and Aging is operational.

During Spring, 2005, ERP began to implement a cultural shift to publicize thesis defenses to all department faculty (regardless of whether those faculty consider themselves to be affiliated with

ERP). The cultural norm in this department has been for students and their committees to organize a thesis defense that is not publicized. The ERP views completion of a thesis as being the most significant demonstration that a student has acquired knowledge and skills in the program, and intended that all thesis defenses be publicized by Fall, 2005. This norm is continuing to take hold, but has not yet taken hold.

Program faculty have expressed concern about the preparation of students in writing and thesis preparation, so we will consider adding some writing workshops to our Grand Rounds.

Program faculty discussed, but have not yet resolved, the relative merits of individualized courses of study for students and a common core curriculum. (In practice, most students take most of the few courses that are offered by program faculty, while at the same time we encourage them to individualize their programs to their own interests.) The faculty are sensitive to student concerns about the limited availability of courses, but the limited number of students with widely varying interests, combined with the limited number of faculty, make it difficult to offer a larger number of courses that would achieve sufficient enrollment.

Actions not yet taken. For some of our outcome measures, we rely on course grades and the facts of satisfactory prospectus defense and thesis defense. We have been advised course grades and thesis defense work to actual student learning assessment of th have not yet done this, and hope to seek advice from the Director of Assessment on what might be meant by this.⁵ We did not develop rubrics for assessment of portfolios, and are no longer certain what we originally intended by this. We are satisfied with these as collections of the work of our students. We are aware that some of our students, following graduation, seek employment as research coordinators at the Cleveland Clinic and University Hospitals and plan to meet, during the summer of 2009, with former students in these positions to discuss what might better prepare students who want to seek such positions to compete for them.

⁵ Our efforts have been somewhat slowed by having an Interim Program Director who is also Interim Chair.