

Annual Departmental Assessment Report

Department or Program: Psychology

Academic Year of Report: AY 2018-19

Department Contact Person for Assessment: Sanjay Srivastava, Chair, Undergraduate Education Committee

Section 1: Learning Objectives Assessed for this Report

Our statement of objectives learning goals for our undergraduate majors is available on our department website, <http://psychology.uoregon.edu/undergraduate/academics/>

Upon completing their training, UO psychology majors should have a broad knowledge of psychology, including basic statistical techniques and ethical issues, and be skilled at reading, evaluating, and communicating about the primary scientific literature in psychology. More specifically, they should be able to:

- 1. Identify major theories, research findings, and methodological approaches in a variety of key content areas including, for example, cognition, neuroscience, development, social behavior, personality, and psychopathology and mental health; and apply research findings to human behavior in everyday life.*
- 2. Find relevant articles in the primary psychological literature on a given topic, identify key research questions and hypotheses in scientific articles, and critically evaluate the research design and the quality of evidence presented.*
- 3. Choose appropriate basic statistical analysis techniques for a specific research question and set of data, complete basic data analyses, and summarize the results in an APA-style report.*
- 4. Communicate clearly and effectively about psychological topics, including methodological and ethical issues in psychology, based on an understanding of both the strengths and limitations of empirical evidence.*

Section 2: Assessment Activities

Historically, the department has encouraged graduating seniors to complete an “exit survey” when they register for graduation. Self-report questions measure student achievement of skills and knowledge that we would ideally like all our graduates to have acquired. They reported on their perceived knowledge of the areas identified in Goal 1, on the statistical and methodological components of Goals 2 & 3, and on their skill in communicating effectively about psychology (Goal 4). The survey is optional but strongly promoted in all communications with students preparing to graduate.

In the Spring of 2017, we began administering a Knowledge Test consisting of 15 content specific multiple-choice questions to assess Goals 2 and 3. This assessment was developed by two experienced career teaching faculty members who have taught our undergraduate methods and statistics classes, in consultation with other instructors. These questions directly test the following skills:

(Goal 2) identify key research questions and hypotheses in scientific articles, and critically evaluate the research design and the quality of evidence presented. Example questions:

Please read the following research abstract (from McLoughlin & Over, 2017): We investigated whether young children were more likely to spontaneously attribute mental states to members of their own social group than to members of an out-group. We asked 5- and 6-year-old children to describe the actions of interacting geometric shapes and manipulated whether the children believed these shapes represented their own group or another group. Children of both ages spontaneously used mental-state words more often in their description of in-group members compared with out-group members. Furthermore, 6-year-olds produced a greater diversity of mental-state terms when talking about their own social group. These effects held across

two different social categories (based on gender and geographic location). This research has important implications for understanding a broad range of social phenomena, including dehumanization, intergroup bias, and theory of mind.

1. What is an independent variable in this study?
 - A. The children
 - B. Spontaneous attributions of mental state
 - C. Number of mental-state words produced
 - D. Group membership of the shapes (correct answer)

2. What is the research question?
 - A. Do young children attribute any mental states to geometric shapes?
 - B. Does group membership influence young children's mental state attributions? (correct answer)
 - C. Do young children prefer geometric shapes that they believe represent their own group?
 - D. Does group membership predict young children's attributions of geographic location?

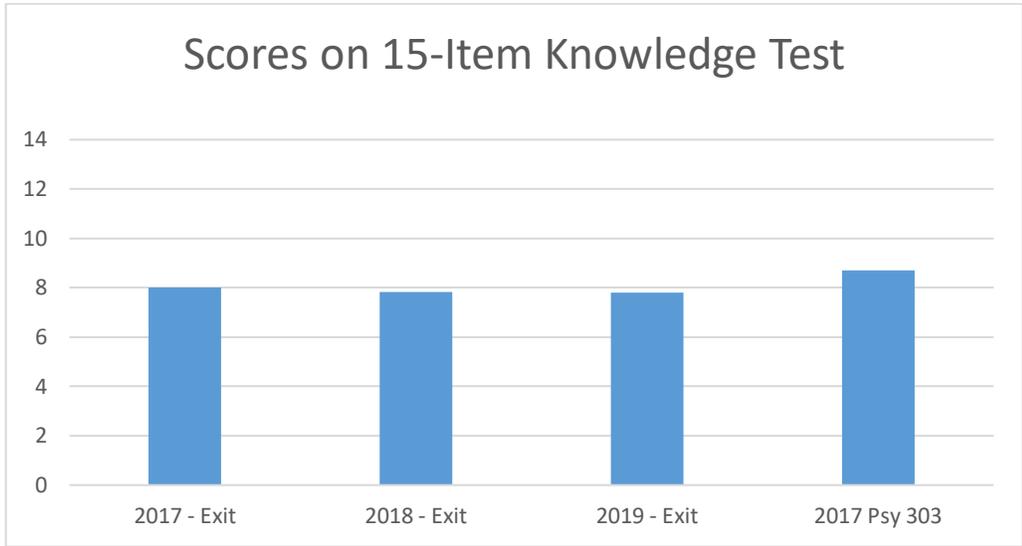
(Goal 3) Choose appropriate basic statistical analysis techniques for a specific research question and set of data... summarize the results in an APA-style report. Example questions:

1. Pick the correct statistical test. A researcher is interested in whether amount of time someone is kept waiting in line is related to aggression.
 - a. one sample t test
 - b. related samples t test
 - c. independent samples t test
 - d. correlation (correct answer)
 - e. one-way ANOVA
 - f. two-way ANOVA (Factorial)

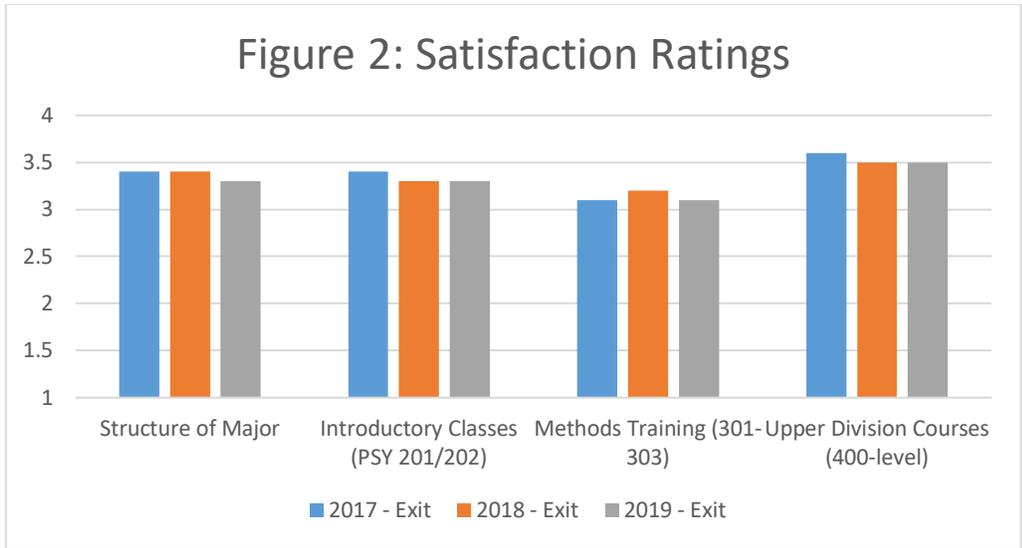
2. Even if a treatment has an effect it is still possible to obtain a sample mean that is very similar to the general population mean of people who did not receive the treatment. What outcome is likely if this happens?
 - a. reject H_0 and make a Type I error
 - b. correctly reject H_0
 - c. fail to reject H_0 and make a Type II error (correct answer)
 - d. correctly fail to reject H_0

In addition to measuring students during the department exit survey, the 15-item methods and statistics Knowledge Test was administered at the end of the final course in our new 3-course methods sequence (PSY 303), in Spring 2017. See Figure 1 below for the average scores of the Spring 2017 ($n = 93$), Spring 2018 ($n = 105$), and Spring 2019 ($n = 104$) exit surveys as well as the Spring 2017 PSY 303 survey ($n = 75$).

Students' scores on the Knowledge Test during the exit surveys in all three years were significantly correlated with perceptions of their research evaluation and statistical abilities (Goals 2 and 3), $r_{(299)} = .20, p < .001$. Additionally, the Knowledge Test scores correlated with the students self-assessed ability to apply and articulate, $r_{(299)} = .23, p < .001$; critically evaluate, $r_{(299)} = .22, p < .001$; and communicate, $r_{(299)} = .19, p = .001$ about psychological research (Goal 4).



The exit survey asks graduating seniors about their satisfaction with the structure of the major, with the introductory courses (PSY 201 and 202), the methods sequence (PSY 301 to 303), and upper division courses on a 4-level Likert-type scale, ranging from 1 – Very Dissatisfied to 4 – Very Satisfied. Overall students were satisfied with all aspects of the major, as shown in Figure 2. There were no significant differences on satisfaction across the three years ($p > .24$)



Section 3: Actions Taken Based on Assessment Analysis

Continuing Outcomes Assessment. Going forward, testing these skills at two time points (right after completing the methods sequence, and just before graduation) will also indicate how well these skills are retained over time using the two versions of the Knowledge Test. Assessment schedule:

Learning objective (LO)	AY 18-19	AY 19-20	AY 19-20	AY 20-21
LO 1 (content)	Exit survey	Exit survey	Exit survey	Exit survey
LO 2 (methods)	Exit + end 303	Exit survey	Exit survey	Exit survey
LO 3 (stats)	Exit + end 303	Exit survey	Exit survey	Exit survey
LO 4 (comm)	Exit survey	Exit survey	Exit survey	Exit survey

Evaluation of Redesigned Methods Sequence. As seen in Figure 2, evaluation of the methods sequence indicated that some changes were needed to improve the last class in our 3-course methods sequence. Over the spring and summer of 2019 the instructors of PSY 302 – Statistics course met and made significant changes to the course including adoption of free textbooks and free statistical analysis software. The availability of the software (jamovi) that students could install on their own computers would allow more practice with completing statistical analyses without going into the lab. Additionally, the move to the free textbook meant that the homework package (Aplia) previously bundled with the textbook needed to be replaced. Faculty and graduate students developed and tested online Canvas quizzes to replace Aplia.

An additional concern was the number of assignments and speed of feedback in the PSY 301 – Scientific Methods course. The UEC Chair made a number of changes to the syllabus in the Spring which aligned them more closely with the learning objectives and developed rubrics to allow quicker and more detailed feedback to students.

Section 4: Other Efforts to Improve the Student Educational Experience

Improvements for the student educational experience focused on academic support, co-curricular engagement, targeted advising for student groups, and integrated advising with campus partners.

Academic support. Two tutoring programs, statistics and research writing, continue to support students in our challenging methods sequence courses. The research writing program was expanded to give more students opportunities to develop editing and tutoring skills, as well as more support for majors needing help with research writing.

Co-curricular engagement. We increased programming for research experience and our undergraduate practicum. We added 2 additional internship sites in 2018-2019, which will help increase student participation in addition to outreach. Practicum course requirements were updated to integrate career advising with experiential learning. We organized faculty and professional panel discussions each term to help psychology students prepare for various graduate programs and careers related to psychology.

Targeted advising outreach and academic planning workshops. As before, advising efforts continued to be focused on *helping students succeed as majors* as well as *develop competencies that help them prepare for graduate school and careers* after graduation. We continued all targeting advising campaigns for psychology majors to ensure early intervention and help with academic support and academic planning, especially for at-risk students, over 2018-2019. In addition, we instituted orientation workshops for onboarding new majors. In addition to developing individualized academic plans for students transitioning

from other programs, these holistic advising workshops increase students' awareness of curricular considerations, experiential learning programs and leadership opportunities.

Integrated advising with campus partners. We set up training for and collaborations with Tykeson Hall advisors to ensure wrap-around advising for psychology majors.

Section 5: Plans for Next Year

As noted under Section 3, evaluation of the methods sequence indicated that some changes were needed to improve our 3-course methods sequence. Over the next year members of the UEC will teach these three courses and evaluate the responses of students to the changes and reevaluate the process over the summer, making changes as needed.

Budgetary implications: Teaching 2 sections of 303 and supervising the other GE-taught sections is now treated as a unit worth 2 undergraduate teaching credits for TTF or career teaching faculty. With adequate grading support by other GEs, this assignment has become an attractive assignment for our core faculty. Recent additions to our TTF make this likely. Closer supervision and support of the GE instructors is also a contribution to improving graduate training in teaching.