

Annual Departmental Assessment Report

Department or Program: Psychology

Academic Year of Report: AY 2020-21

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.

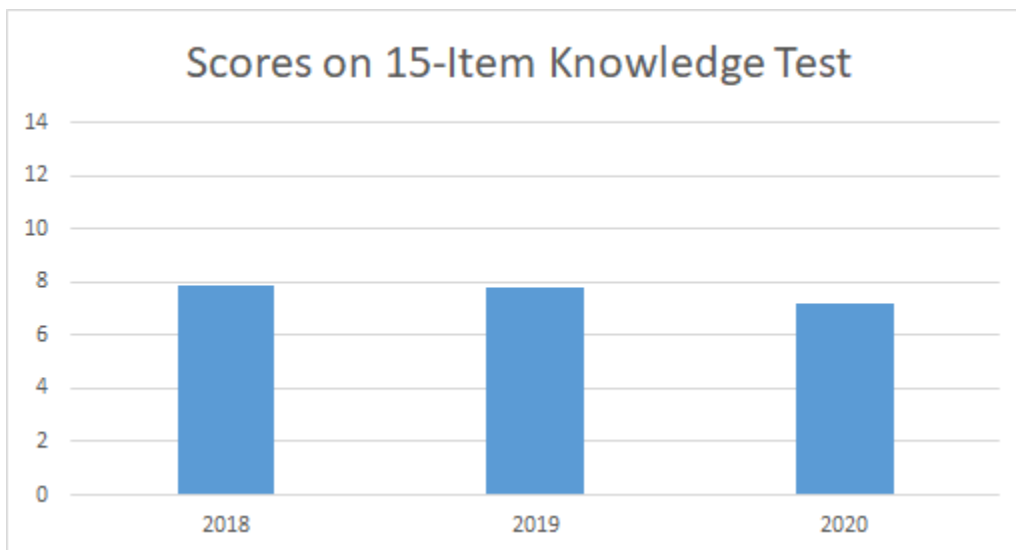
1. What is an independent variable in this study?
 - A. The children
 - B. Spontaneous attributions of mental state
 - C. Number of mental-state words produced
 - D. Group membership of the shapes (correct answer)
2. What is the research question?
 - A. Do young children attribute any mental states to 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:

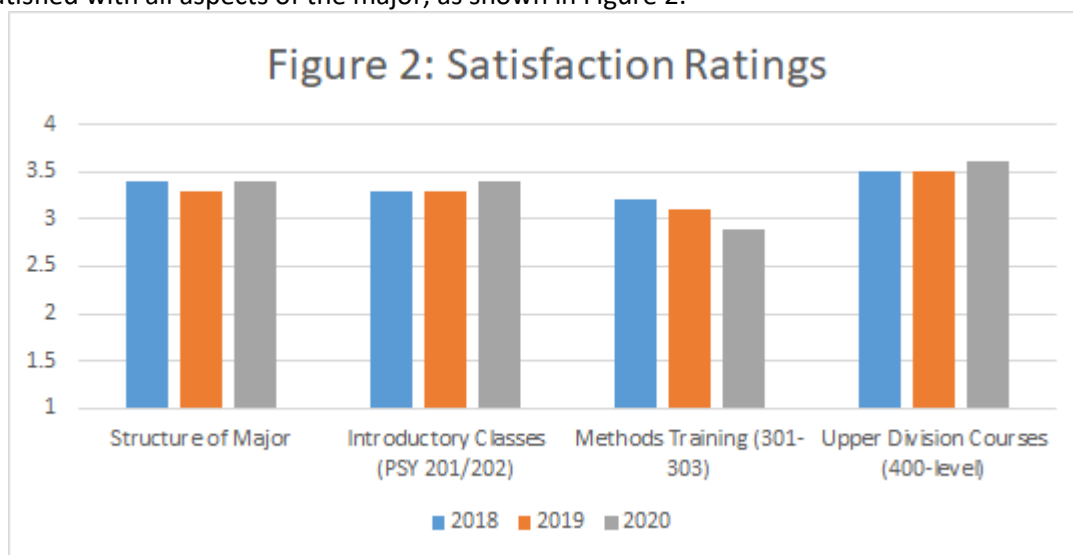
1. Pick the correct statistical test. A researcher is interested in whether amount of time someone is kept waiting in line is related to aggression.
 - a. one sample t test
 - b. related samples t test
 - c. independent samples t test
 - d. correlation (correct answer)
 - e. one-way ANOVA
 - f. two-way 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 first 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 2018 ($n = 105$), Spring 2019 ($n = 104$), and Spring 2020 ($n = 140$) exit surveys.

Students' scores on the Knowledge Test during the exit survey in Spring 2020 were significantly correlated with perceptions of their research evaluation and statistical abilities (Goals 2 and 3), $r_{(138)} = .30$, $p < .001$. Additionally, the Knowledge Test scores correlated with the students self-assessed ability to apply and articulate, $r_{(138)} = .22$, $p < .009$; and communicate, $r_{(138)} = .23$, $p = .006$ 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.



Section 3: Actions Taken Based on Assessment Analysis

Continuing Outcomes Assessment. Going forward, testing these skills at just before graduation will indicate how well these skills are retained over time. Assessment schedule:

Learning objective (LO)	AY 20-21	AY 21-22	AY 22-23	AY 23-24
LO 1 (content)	Exit survey	Exit survey	Exit survey	Exit survey
LO 2 (methods)	Exit survey	Exit survey	Exit survey	Exit survey
LO 3 (stats)	Exit survey	Exit survey	Exit survey	Exit survey
LO 4 (comm)	Exit survey	Exit survey	Exit survey	Exit survey

Evaluation of changes to PSY 302 (Statistics). Instructors of PSY 302 made a number of significant changes in 2019, including adoption of free textbooks and free statistical analysis software. We have continued to use these new materials and refine their integration into our curriculum. These changes have had a number of benefits for our students: they keep costs down since they are free, and students are not required to come in to a campus lab to do their homework, as was the case when we were using proprietary software. These changes have had two notable benefits. First, during the pandemic disruption, it was much easier to transition to remote teaching. Second, they have helped one of our career instructors, Ted Bell, in developing a fully asynchronous version of PSY 302. Nevertheless, instructors have observed that there are distinct benefits to holding lab sections in a campus computer lab rather than remotely; labs are highly interactive, and a lot of the work involves looking together at screens, pairing students to work together, etc. Therefore, we view the move to free software as one that opens up new opportunities for students but not something that renders campus computing labs unnecessary.

Section 4: Other Efforts to Improve the Student Educational Experience

The extraordinary disruption caused by the pandemic and the subsequent move to remote teaching meant that we have spent considerable effort adapting to these changes and supporting students over the past year.

Peer support for instructors. Because so many of us were facing similar challenges, we created a department Slack workspace for instructors, GEs, and staff to share resources, ask for or give advice, and offer support and community. The Slack workspace has been highly active over the past year, and we plan to keep it in place into the indefinite future.

Emphasis on equity, inclusion, and access. A priority for many instructors during the COVID disruption was to try to minimize inequitable impacts on students with limited technology availability, work and caregiving obligations, disabilities, and other challenges. The national movement for racial justice galvanized many members of our department as well. Several members of the department attended workshops on equity and access and shared resources and lessons learned with other instructors.

Academic support. Two tutoring programs, statistics and research writing, continue to support students in our challenging methods sequence courses. Both tutoring programs transitioned to remote successfully and continue to help students succeed.

Online course development. Two faculty members, Jagdeep Bala and Jordan Pennefather, served as faculty fellows for the campuswide online course development initiative. Members of the department have created online versions of PSY 302 and PSY 308.

Commencement. Commencement is an important milestone for students, and it was important not to let the pandemic completely erase that. Members of the department worked hard in both 2020 and 2021 to create a meaningful online experience for graduating seniors.

Section 5: Plans for Next Year

Continued improvement and assessment of student learning in methods courses. Based on earlier assessment and evaluation of the methods sequence, one faculty coordinator is now teaching research methods each term alongside grad instructors. The research methods (PSY303) instructional team of two faculty members and grad instructors who regularly teach this course, reflected on outcomes and worked on updating the course objectives and assignments in spring of 2021. Most significant updates include giving students exposure and insights into preregistration as a practice in scientific research and the open science initiative. We will continue to collect instructor reflections and student feedback to assess the course plan and student learning.

Integrating and embedding career readiness in our classes: We will continue efforts to help students develop career related competencies, and more importantly, see connections between their education and preparation for careers related to psychology. The UEC will engage department faculty in conversations about career competencies students develop in their courses and develop actionable plans to articulate them in course syllabi and assignments. Future assessment plans will include review of the changes implemented.

Focus on equity and access: The UEC will evaluate the possibility of increasing use of open education resources for our courses through department wide discussion and review.