Weber State University
Annual Assessment of Evidence of Learning

Department/Program: Department of Psychology
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Assessment Committee: Eric Amsel, Todd Baird, Aaron Ashley
Report author: Eric Amsel

Contact Information:
Phone: 801 626-6658
Email: emasel@weber.edu

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A. Brief Introductory Statement:

The Psychology department is committed to excellence in undergraduate training in the science of psychology. We do so by offering students not only the highest caliber of classroom instruction but also extensive opportunities for professionally-authentic experiences in research (see list of 2012-2013 conference presentations by WSU Psychology students) and community engagement. We are dedicated to training students to be psychologically literate citizens who can engage in scientifically- and ethically-informed judgments, decision-making, and actions. As such, our curriculum emphasizes students acquiring knowledge about the discipline, applying that knowledge to real world situations, adopting scientific and ethical values, attitudes, and beliefs, and gaining interpersonal and communication skills.

Students report having very positive experiences in their psychology classes and psychology majors report being extremely satisfied with the quality and breadth of their instruction. WSU psychology students have had next step success in graduate school in the discipline (with recent acceptances to graduate programs at Harvard, Michigan, Texas A&M, University of Kentucky, University of Utah, and Utah State University, among many others), related disciplines (Social Work, Education, Marriage and Family Studies, and Criminal Justice) and other professional schools (Medicine, Law, Business, and Pharmacy). Psychology students are hired in a wide range of employment positions and do so at rate above the employment rate for the state.

Psychology faculty members are actively engaged in the discipline, the community, the university, and the department. Counted among them are a number award-winning teachers and researchers. They were early adopters and continue to be leaders of the university initiative for undergraduate research and community-based scholarship. They are also involved in a variety of interdisciplinary initiatives on campus, including Neuroscience, Linguistics, and Women’s Studies. The faculty members are excellent campus and community citizens serving in leadership positions both on campus and off. The recent reviews of the department by outside experts have been extremely positive¹ and department members continue to aspire to become a model for the university and the discipline of innovative and effective undergraduate training in psychology.


B. Mission Statement

_Through excellence in training in the science of psychology, the mission of the Department of Psychology at Weber State University is to facilitate students’ career aspirations and academic goals in the context of an undergraduate, Liberal Arts University, and a department which values teaching and research._ (Adopted: Spring 2008)

Psychology first appeared in the curriculum of Weber Academy (which later became Weber State University) in 1892, with its role to enhance the skills of prospective schoolteachers. Psychology became an autonomous department in the 1950s and quickly grew in size and popularity, constituting 4% of the total SCHs for the entire institution. Today, the Psychology Department remains an important part of the academic life of Weber State University and the College of Social and Behavioral Sciences.

The mission of the Psychology Department is consistent with the department's long tradition of valuing excellence in teaching. The mission statement was last reviewed and approved by the department in the spring of 2008. The statement centrally specifies undergraduates generally (not specifically majors) as those served by the Department and excellence in training students as the goal of the program. The word "training" was meant to convey an approach to our mission, which goes beyond mere classroom teaching to include student engagement in research, supervised Practicum, and related activities. In this sense, the department faculty members expect that students acquire not only discipline-specific content knowledge (i.e., definitions, theories, research findings), but also discipline-appropriate ways of thinking (i.e., the scientific attitudes and skills to analyze, interpret, and understand human behavior). Training in discipline-related content and ways of thinking are strongly believed to be effective in promoting students’ career aspirations and academic goals, whether or not they continue in the discipline.

Additionally, the department recognizes its role within the university in providing training in the Liberal Arts tradition. This adds another level of responsibility to prepare students to live in the 21st century as responsible, ethical, and engaged citizens who can synthesize and integrate information and make informed decisions. The final feature of the mission statement addresses the influences of the departmental focus on teaching and research. This context emphasizes a consensus among the faculty of the value of teaching and research in the training of students. All faculty members are committed to the importance of student experiences inside and outside the classroom, including research, for them to effectively internalize the values and skills of an education in the discipline in the liberal arts tradition, and to be well prepared for any career path, whether that is a job, professional school, or graduate school.

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C. Student Learning Outcomes

The Psychology department created a set of departmental goals for student learning outcomes that were limited in number, integrated but somewhat orthogonal to each other, and broadly associated with a different mode of interaction between faculty and students. We arrived at 4 goals. The first goal is student acquisition of content knowledge of the discipline (Knowledge), which is largely realized through traditional, relatively impersonal, instructional modes of interaction. The second goal is for students learning the use of their disciplinary knowledge to understand themselves, others, and real-life situations (Application). Such a goal involves modes of faculty-student interactions that promote reflective thinking in students, with higher levels of student self-disclosure, engagement, and assessments focusing on concrete situations. The third goal of student adoption of scientific and ethical values (Values/Ethics) goes beyond mere instructional forms of interaction to faculty socializing students into the discipline by serving as models and mentors/tutors. The fourth goal of developing student skills for interpersonal interactions and communications (Interpersonal Relations and Communication) involves faculty serving as supervisors, facilitators, and directors of students who provide feedback, advice, comments, direction, and guidance.

For each learning goal specified by the department there are two specific student learning outcomes (SLOs) and the behavioral measures used to assess those goals. These SLOs are more specific and concrete than the learning goals which are aspirational, and the behavior measures by which the SLOs are measured are written to apply in different ways to each course in the curriculum.

1. Knowledge: Students will understand psychology as a scientific discipline. Essential to this, students will understand a core set of statistical and methodological knowledge regarding how psychologists critically evaluate, creatively test, and scientifically defend psychological claims. They will also understand a core set of content knowledge addressing the biological, cognitive/behavioral, social/personality, and developmental aspects of behavior and their integration.

1.1. Characterize the nature of the science of psychology and grasp the foundations of the science for consuming and producing psychological claims.

Students will be able to generally characterize psychology as a science, distinguishing its assumptions and methods with those of other disciplines, and specifically describe the strengths and limits of different research methods and the validity of conclusions derived from the research when consuming or producing psychological claims.

1.2. Demonstrate knowledge, understanding, and synthesis of the breadth and depth of psychological science.

Students will be able to demonstrate theory and research representing different content areas (biological, developmental, abnormal, experimental, and individual differences) and approaches (e.g., behavioral, biological, cognitive, evolutionary,
humanistic, psychodynamic, and socio-cultural) of the discipline and appreciate the interactions at the different levels of analysis synthesizing them into comprehensive and multifaceted bio-psycho-social explanations human nature.

2. Application: Students will be able to critically apply psychological principles and research to explain social issues, inform public policy, solve problems, understand themselves, and achieve career goals.

2.1. Students will be able to transfer their knowledge of psychological science to understanding and improving society.

Students will be able to describe the ways that psychological science has applications to social issues, processes, and domains (mental health, law, military, business, and education) and demonstrate ways that disciplinary knowledge can be used to inform social policy, solve social problems, and improve human functioning.

2.2. Students will be able to transfer their knowledge of psychological science to understanding and improving themselves and planning their future.

Students will be able to use knowledge of psychology science to promote their personal development and career planning by gaining insight into their behavior, mental processes, interests, and talents to develop self-management, self-improvement, and self-assessment strategies necessary to reach their personal and professional goals.

3. Values/Ethics: Students will share key values adopted by psychologists, which include (but are not limited to) skepticism and intellectual curiosity, tolerance of ambiguity, respect for human diversity, appreciation of their civic, social, and global responsibilities, and humility regarding the limits of their psychological knowledge and skills. Students will also grasp the spirit of the APA Code of Ethics, follow its guidelines, and recognize the necessity of ethical behavior in all aspects of the science and practice of psychology.

3.1. Students will understand and adopt key attitudes beliefs, values, and responsibilities consistent with being a student of psychological science

Students will make strides in adopting key assumptions (e.g., monism), beliefs (e.g., determinism), attitudes (skepticism and intellectual curiosity, tolerance of ambiguity) values (humility regarding their knowledge and skills), and responsibilities (e.g., interpersonal, civic, social, and global responsibilities) of being a student of psychological science.

3.2. Students will understand and uphold the ethical standards which guide their interpersonal, professional and scientific behavior

Students will learn and behave in a manner consistent with the APA ethical code regarding their research, professional, and interpersonal activities.
4. Interpersonal Relations and Communication: Students will exhibit skills to professionally communicate their understanding of terms, concepts, research, and theories of the discipline to others via written and oral formats. Students will also have interpersonal and collaborative skills necessary to effectively work in groups with others who hold diverse opinions, beliefs, and attitudes.

4.1. Students will acquire skills to communicate professionally to others in various formats following disciplinary practices and conventions (e.g., APA style)

*Students’ written, oral, and visual communication in formal and informal contexts will demonstrate an adequate level technical competence (grammar, structure, and style) and use of professional conventions (e.g., APA style and other professional conventions) to express, defend, or critique psychological claims ideas in a disciplinary appropriate manner.*

4.2. Students will demonstrate competence to work effectively in groups (projects, research, etc.)

*Student will learn to effectively work with others in group settings, which includes demonstrating skills to listen, communicate, and collaborate in unbiased, non-prejudicial ways.*
The curriculum grid is an accounting of how program goals and the corresponding SLO are instantiated in the curriculum. Groups of faculty members who teach each general education, core general, core content, and high impact (research and service learning) courses compared and contrasted their classes in light of the program goals, the number of assessments dedicated to each program goal, and the weighting or importance of assessments in the calculation of final grade in the course. They then rated each course on a 1 (low) to 4 (high) scale, which indexes the emphasis given to each program goal in the class. For more details of the justifications of the ratings given for any class, go to the department assessment web site (http://www.weber.edu/psychology/DepartmentalAssessment.html) and click on the EOL curriculum map for the corresponding course number.

The curriculum grid is organized by course type (Gen Ed courses, Core Content courses, Core General courses, and High Impact courses. Gen Ed courses are designed to enhance students’ understanding not only of psychology, but the social sciences in general. Core Content courses include the courses serving as the breadth requirement in the curriculum, so that psychology students are exposed to a range of ways psychologists conceived of and study human nature – as a biological system, a developing system, as a system which breaks down, as a system with elements such as learning and information processing that are considered universal, and a system with elements that are different for different people depending on their social context or personalities. Core General courses are those which highlight the statistical, computational, and methodological tools used by psychologists in how they study human nature and include Statistics, Stats Lab, and Research Methods in Psychology. These courses are designed to promote in students the skills to think like psychologists. Finally, High Impact courses are those which allow students to apply the breadth of their knowledge, and skills to think like a psychologist to academic or community research projects, including directed readings, projects and research, practicum, and capstone research project.

### D1. General Education Classes

<table>
<thead>
<tr>
<th>Course</th>
<th>Program Goals</th>
<th>Relations and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Title</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Psy 1010</td>
<td>Introductory Psychology</td>
<td>4</td>
</tr>
<tr>
<td>Psy 2000</td>
<td>Interpersonal Relationships</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Introductory Psychology is also a Core General course and is a prerequisite for most other courses in the curriculum.

Both Introductory Psychology (PSY 1010) and Interpersonal Relationships (PSY 2000) are General Education classes that must fulfill additional university-based general
education goals which are assessed according to different student outcomes than those identified by the program. Introductory Psychology and Interpersonal Relations are weighted most strongly on the Knowledge goal as most of the assessments and most highly weighted assessments address the content knowledge. Interpersonal Relations and Communication is also related strongly for PSY 2000, but less so for PSY 1010 because of the focus of the course. Application was highly rated in both courses, reflecting an emphasis to help students appreciate the real world implications of the material discussed in the classes. Ethics/Values remain important, but because of the enrollments and resources this goal is most challenging to achieve in these classes.

D2. Core Content Classes

<table>
<thead>
<tr>
<th>Area</th>
<th>Number</th>
<th>Title</th>
<th>Knowledge</th>
<th>Application</th>
<th>Ethics/Values</th>
<th>Interpersonal Relations and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td>Psy 2730</td>
<td>Biological Psychology</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Neur 2050</td>
<td>Introduction to Neuroscience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area B</td>
<td>Psy 3000</td>
<td>Child Psychology</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Psy 3140</td>
<td>Adolescent Psychology</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Area C</td>
<td>Psy 3010</td>
<td>Abnormal Psychology</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Area D</td>
<td>Psy 3250</td>
<td>Conditioning &amp; Learning</td>
<td>4</td>
<td>4</td>
<td>3.5</td>
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<tr>
<td></td>
<td>Psy 3500</td>
<td>Cognitive Psychology</td>
<td>4</td>
<td>3.5</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>Area E</td>
<td>Psy 3430</td>
<td>Theories of Personality</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Psy 3460</td>
<td>Social Psychology</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Psychology majors are required to take one course in each area.

Knowledge is the most strongly weighted goal for core content courses, which are designed to ensure that students receive a common understanding of the breadth of the discipline. The next highest rated goal, Application, emphasizes the significance of the material for understanding a variety of real world phenomena. The final 2 goals, Ethics/Values and Interpersonal Relations and Communication, are each rated less highly because of the challenges in resources, time, and class size to emphasize these goals as well.

3 See http://www.weber.edu/psychology/DepartmentalAssessment.html, click on General Education Reauthorization Documents.
D3. Core General Classes

<table>
<thead>
<tr>
<th>Course</th>
<th>Program Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Title</td>
</tr>
<tr>
<td>Psy 3600</td>
<td>Psychological Statistics</td>
</tr>
<tr>
<td>Psy 3605</td>
<td>Statistics Laboratory</td>
</tr>
<tr>
<td>Psy 3610</td>
<td>Research Methods</td>
</tr>
</tbody>
</table>

NOTE: Statistics is a prerequisite for Research Methods and Statistics Lab is a co-requisite for Research Methods.

For the Psychological Statistics and Research Methods class, Knowledge is weighted most strongly, reflecting the importance of the information students are learning in the class. Research Methods also strongly emphasizes Interpersonal Relations and Communication, largely because students work in groups, make oral presentations, and complete a research project, which is written using APA style. Psychological Statistics and Statistics Lab most strongly weight Application as students in both classes learn how to apply statistical principles to actual data. Ethics/Values are highly weighted in all of these core general courses, as they are critical in understanding and adopting the beliefs, values, and attitudes of psychological scientists. More than any other core course in the curriculum, students in these classes are apprentices who are learning the discipline in small and intimate classes. To ensure class environments that promote opportunities for the forms of interaction necessary to inculcate students with scientific beliefs, attitudes, and values, enrollments in Psychological Statistics and Statistics Lab are limited to 20 and 25 respectively, and to 15 in Research Methods.

D4. High Impact Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Program Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Title</td>
</tr>
<tr>
<td>Psy 4380</td>
<td>Practicum</td>
</tr>
<tr>
<td>Psy 4800</td>
<td>Projects and Research</td>
</tr>
<tr>
<td>Psy 4830</td>
<td>Directed Readings</td>
</tr>
<tr>
<td>Psy 4910</td>
<td>Senior Capstone</td>
</tr>
</tbody>
</table>

Note: These courses are not required for Majors, although many junior and senior students enroll in them (see Table 1). These courses may also become the core of a senior capstone requirement.

The research-oriented high impact courses (PSY 4800, 4830, and 4910) most strongly weight Knowledge, which in these courses corresponds to knowledge of the research domain.
under study. Both **Applications** and **Interpersonal Relations and Communication** are also strongly weighted. The latter goal reflects the demand that students interact with their supervisor and employ professional ways of formally and informally communicating their work with their supervisor and others. The former goal emphasizes students’ use of their background knowledge in the discipline to critically evaluate existing and/or creatively produce new knowledge of the research domain. Finally and also relatively highly weighted in the research course, is the **Ethics/Values** goal which reflects students not only knowing, but also acting consistent with the beliefs, attitudes, and values of psychological science, including the importance of following APA ethical rules in treating participants.

Practicum highlights the importance of **Application** and **Ethics/Values** goals as students use their general background, and specific knowledge of the issues addressed in Practicum, to understand and act in the field as a quasi-professional who recognizes their roles and professional responsibilities. The other goals are deemphasized in order to focus on **Application** and **Ethics/Values**.
E. Class Assessment Plan

The assessment program of the Psychology department has two components. The first is an ongoing research program into how psychology students learn the discipline. These student assessments are largely *indirect*, meaning they are based on non-classroom measures of and changes in students’ disciplinary attitudes, beliefs, values, knowledge, skills, etc. This work is ongoing each year. The second component includes *direct* assessments which assure the alignment of courses in the psychology curriculum to the general program goals of the department which flow from our mission statement. This involves taking the general program goals and the specific student learning outcomes those goals identify overall and applying them to each individual class. The plan for this second direct assessment component of our assessment program is outlined below.

The direct assessment plan is for a four year rotation of courses. The four year rotation is designed to minimize the burden on faculty for the number of courses they are reviewing in a given year and to ensure that as many faculty members as possible are involved in the review each year. Each year of the four year rotation, a set of courses will be reviewed which are taught by almost all full time regular faculty members. The plan will involve the two-step processes beginning in the fall and ending in the spring. During the Fall semester, faculty will engage in the systematic review of their classes, including a) revisiting student learning outcomes (SLOs) defined for their course and assessing whether that class’ assessments and grading rubrics are optimally aligned to those outcomes, b) tracking students’ performance on selective assessments which aligned best to the outcomes, and c) retaining (where necessary) examples of student performance on targeted assessments which span the grade range.

The process of revisiting SLOs and assessing the optimality of their alignment to class assessments will occur early in the fall semester for a course that is being reviewed. This serves as a final check of a process, completed in 2011-2012 (see Regents Review 2011), in which learning outcomes were applied to individual classes. The tweaking of a course’s SLOs and assessments may result in a revision of the course evaluation in the curriculum grid above. Faculty may make some editorial changes in the SLOs for the classes they are reviewing so that they can be better align to assessments and may alter their assessments to better align them to the

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Amsel, E., Baird, T., & Ashley, A. (2011). *Misconceptions and conceptual change in undergraduate students learning psychology.* Psychology Learning and Teaching, 10, 3-10

SLOs for the class. We consider this tweaking a key part of the continual assessment philosophy.

The process of tracking students’ performance on selective assessments which aligned best to the outcomes was instituted by the department to address concerns that coding assessments is a laborious and unreliable effort. The more assessments coded, the more room there is for unreliable assessments and the entrance of error into the assessment process. To minimize the workload and maximize the reliability, faculty members were asked to code only a subset of items which they believe are the best exemplars of a given SLO learning outcome. An ideal set of assessments to code would be a) at least 10 multiple choice items per specific student learning outcome from Chi Tester or Canvas tests which students were given over the course of a semester, b) multiple graded written assignments across the various different written exam questions (essay or short answer), online discussions, homework, or papers which students completed over the course of a semester, and c) other graded assessments (e.g., in-class group work, discussions, etc.) which tap additional SLOs not otherwise covered.

Finally, for each class reviewed, faculty will retain examples of student performance on assessments (likely of the b category above). Ideally, the assessments selected will be illustrative and representative of the grade range of the class. Student information will be redacted and the assessment will serve as artifacts available to those evaluating the department assessment.

E1. Schedule of Class Assessments

<table>
<thead>
<tr>
<th>Core General Courses</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
<th>15-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1010 Introductory Psychology</td>
<td>x</td>
<td></td>
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<tr>
<td>PSY 3600 Psychological Statistics</td>
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<tr>
<td>PSY 3605 Statistics Laboratory</td>
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<tr>
<td>PSY 3610 Research Methods</td>
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<td>x</td>
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<table>
<thead>
<tr>
<th>Biology Core Content Courses</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
<th>15-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2730 Biopsychology</td>
<td></td>
<td>x</td>
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<tr>
<td>NEU 2200 Intro Neuroscience</td>
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<thead>
<tr>
<th>Developmental Core Content Courses</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
<th>15-16</th>
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<tbody>
<tr>
<td>PSY 3000 Child Psychology</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>PSY 3140 Adolescence Psychology</td>
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<td>x</td>
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<table>
<thead>
<tr>
<th>Abnormal Core Content Courses</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
<th>15-16</th>
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</thead>
<tbody>
<tr>
<td>PSY 3010 Abnormal Psychology</td>
<td></td>
<td>x</td>
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<thead>
<tr>
<th>Experimental Core Content Courses</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
<th>15-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3500 Human Cognition</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>PSY 3250 Conditioning and Learning</td>
<td></td>
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<td>x</td>
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<table>
<thead>
<tr>
<th>Personality / Social Core Content Courses</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
<th>15-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3430 Theories of Personality</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>PSY 3460 Social Psychology</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Option</td>
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<td>PSY 2000</td>
<td>Interpersonal Relations</td>
<td>x</td>
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<tr>
<td>PSY 2370</td>
<td>Psychology of Women and Gender</td>
<td>x</td>
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<td>PSY 3020</td>
<td>Child &amp; Adolescent Psychopath.</td>
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<td>PSY 3100</td>
<td>Psychology of Diversity</td>
<td>x</td>
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<tr>
<td>PSY 3200</td>
<td>Psych of Sport (HPHP x-listed)</td>
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<tr>
<td>PSY 3270</td>
<td>Motivation and Emotion</td>
<td>INF</td>
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<tr>
<td>PSY 3300</td>
<td>Applied Behavior Intervention</td>
<td>INF</td>
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<td>PSY 3550</td>
<td>Psychology of Consciousness</td>
<td>NLO</td>
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<td>PSY 3560</td>
<td>Group Dynamics</td>
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<td>PSY 3710</td>
<td>Physiological Psychology</td>
<td>INF</td>
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<td>PSY 3730</td>
<td>Perception</td>
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<tr>
<td>PSY 3740</td>
<td>Drugs and Behavior</td>
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<tr>
<td>PSY 4000</td>
<td>Advanced General</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4050</td>
<td>Evolutionary Psychology</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4090</td>
<td>History and Systems of Psychology</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4310</td>
<td>Intro to Counseling Theories</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4340</td>
<td>Skills &amp; Techniques of Counseling</td>
<td>NLO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4510</td>
<td>Industrial &amp; Organiz. Behavior</td>
<td>INF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4760</td>
<td>Tests &amp; Measurements</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4900</td>
<td>Selected Topics in Psychology</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4990</td>
<td>Seminar</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>NLO/INF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1050</td>
<td>Careers in Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1540</td>
<td>Psychology of Adjustment</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 2010</td>
<td>Psych as a Science/Profession</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 2800</td>
<td>Projects and Research</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 2830</td>
<td>Directed Readings</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 2890</td>
<td>Cooperative Work Experience</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4380/90</td>
<td>Practicum</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4800</td>
<td>Projects and Research</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4830</td>
<td>Directed Readings</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4890</td>
<td>Cooperative Work Experience</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4910</td>
<td>Senior Capstone Research</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4920</td>
<td>Conferences and Workshops</td>
<td>NLO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** NLO designates a class that we have no plans at the present time to teach so are considered to be classes that are no longer offered. INF designates classes that are infrequently taught and may not be given in the year that we are assessing that class. Arrangements will be made to assess INF classes when they are being taught.
F. Report of Assessment Results for 2012-2013

This section includes all the assessments performed last year (2012-2013). The data address direct and indirect measures of our two Gen Ed Classes, including Psy 1010 and Psy 2000. The direct measure include performance on various exams and indirect measures collected, including questionnaire performance, address each of the four general goals for the program overall, Gen Ed courses, and High Impact courses.

F1. Evidence of Learning: Program Outcomes

F1.a Measures of Psychological Literacy

Although the program-level SLOs are specific and distinct, there is an important sense that they all are related to a common goal. Numerous scholars have argued that psychological literacy should be an outcome goal of undergraduate education in psychology because it is an important characteristic of citizens in a democratic society. The notion of psychological literacy has been defined as the integrated set of psychology knowledge, values, and skills which psychologically literate citizens adaptively use to solve real world problems in their lives and communities. Although we consider psychological literacy as an overarching goal in Psychology, it probably best fits as an indirect measure of program-related SLO.

There are no standardized assessments of Psychological Literacy, although the WSU Psychology Department has embarked on a long-range plan to development such an assessment as part of its involvement on the TICE program and commitment to careful and complete student assessment. Our initial assessments of psychological literacy (See Assessment Report 2012-2013) examine three aspects of including psychology knowledge, misconceptions, and scientific attitudes. This initial assessment has expanded to include 6 questionnaires described below and detailed in Appendix B:

5 See the following papers:

6 See the following presentations:
PAS (Psychology as a Science): 15-item assessment of the attitudes, beliefs, and values consistent with scientific psychology.


PR (Psychology Research): 10-item MC assessment of students’ understanding of research and statistical issues

PAC (Psychology Applications & Careers): 12-item MC assessment of student knowledge about the professional opportunities and applications in the discipline.

Each questionnaire assessed multiple goals and each goal is assessed by multiple questionnaires. For example knowledge is assessed by 4 of the 6 questionnaires (PK, PAS, PR, PAC and the knowledge questionnaire (PK) assesses 3 of the 4 SLOs\(^7\). There are two reasons for this. First, multiple questionnaires are required because SLOs are complex taping a variety of different knowledge, attitudes, beliefs, and skills. Second, it is likely that the SLOs are conceptually connected as in case of Application SLOs requiring SLOs related to knowledge of psychology.

To assess program-related SLOs, 306 undergraduate psychology students (61% female, \(M\) Age = 24.37 years, \(sd = 7.3\) years) complete all 6 questionnaires in the Fall 2012 semester. A total of 42% of the participants were freshman, 19% were sophomores, 18% were juniors, and 21% were seniors, with 41% of participants actual or anticipated Psychology majors or minors, and 59% of the participants in an introductory course. On average, participants had taken 3.21 previous psychology courses (\(sd = 3.0\)).

Responses on the PAS were coded on a scale from 1 to 7, with a higher score reflecting a stronger belief in Psychology being a science. The other questionnaires had items that could be coded as correct or incorrect, allowing for a percent correct score to be calculated for each participant on each questionnaire (see Appendix B for coding instructions). The average scores on the questionnaires are presented in Table below.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Average</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS</td>
<td>315</td>
<td>3.73</td>
<td>7.00</td>
<td>5.0394</td>
<td>.72</td>
</tr>
<tr>
<td>PK</td>
<td>310</td>
<td>.00</td>
<td>1.00</td>
<td>.4606</td>
<td>.17</td>
</tr>
<tr>
<td>PM</td>
<td>320</td>
<td>.19</td>
<td>.81</td>
<td>.5002</td>
<td>.11</td>
</tr>
<tr>
<td>PR</td>
<td>316</td>
<td>.00</td>
<td>1.00</td>
<td>.4668</td>
<td>.21</td>
</tr>
<tr>
<td>PE</td>
<td>316</td>
<td>.07</td>
<td>.80</td>
<td>.4203</td>
<td>.14</td>
</tr>
<tr>
<td>PAC</td>
<td>310</td>
<td>.08</td>
<td>.92</td>
<td>.5922</td>
<td>.17</td>
</tr>
</tbody>
</table>

Average scores, Range, and Standard Deviations for each questionnaire.

\(^7\) SLOs: Knowledge is assessed by PK, PAS, PR, PAC. Applications by PK, PAC, PR) Values and Ethics (PAS, PE, PR), and Interpersonal Relations & Communications (PAC, PK, PE)
To assess whether students' psychological knowledge, values, and skills were related to each other, correlations were run between performances on all questionnaires. Each correlation coefficient was found to be positive and significant, with the strongest correlations being between performance on the general knowledge (PK) and most other assessments, suggesting a central role that general knowledge about psychological plays in all other assessments.

<table>
<thead>
<tr>
<th></th>
<th>PK</th>
<th>PM</th>
<th>PE</th>
<th>PAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS</td>
<td>Pearson Cor</td>
<td>.434**</td>
<td>.175**</td>
<td>.305**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.002</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>306</td>
<td>311</td>
<td>311</td>
</tr>
<tr>
<td>PK</td>
<td>Pearson Cor</td>
<td>.231**</td>
<td>.434**</td>
<td>.434**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>308</td>
<td>308</td>
<td>309</td>
</tr>
<tr>
<td>PM</td>
<td>Pearson Cor</td>
<td>.190**</td>
<td>.216**</td>
<td>.174**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td>.000</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>310</td>
<td>313</td>
<td>310</td>
</tr>
<tr>
<td>PR</td>
<td>Pearson Cor</td>
<td>.324**</td>
<td>.355**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>309</td>
<td>306</td>
<td></td>
</tr>
<tr>
<td>PE</td>
<td>Pearson Cor</td>
<td>.355**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>308</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlations between Measures.** **Correlation significant at the 0.01 level (2-tailed).**

Performance on the six questionnaires formed a single dimension in a factor analysis accounting for 44% of the data. The factor weightings of the individual questionnaires (i.e., how much each contributes to the general factor) are presented in the table below, with the weakest contributor being assessment of psychological misconception (PM), despite claims of the importance of overcoming misconceptions in learning of the discipline.  

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Factor Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS</td>
<td>.677</td>
</tr>
<tr>
<td>PK</td>
<td>.776</td>
</tr>
<tr>
<td>PM</td>
<td>.413</td>
</tr>
<tr>
<td>PR</td>
<td>.668</td>
</tr>
<tr>
<td>PE</td>
<td>.687</td>
</tr>
<tr>
<td>PAC</td>
<td>.686</td>
</tr>
</tbody>
</table>

**Factors scores of each Questionnaire**

The factors scores ($M = 0$, $sd = 1.00$), representing the common source of variance among the questionnaires, were computed for each participant (range = -2.67 to 3.37) and defined the measure of Psychological Literacy. The new measure of Psychological Literacy was used as the

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dependent variable in an assessment of whether it is influenced by students’ exposure and engagement in psychology. These variables were defined as respectively as Year in School (Freshman to Senior) and Major Status (Actual or Anticipated Major, Minor, or Neither). Major Status, $F(2, 291) = 17.15, p < .001$ was significant and Year in School $F(3, 291) = 2.49, p < .06$ approached significance. The interaction effect also approached significance $F(6, 291) = 1.80, p < .08$. The results were replicated using covariates of Age and Sex which were confounded with Major Status and Year in School. Follow up analyses showed that both exposure and engagement plays a critical role in promoting psychological literacy but only for Psychology Majors.

![Chart](chart.png)

**Factor scores representing psychological literacy by Year in School and Major Status.**

Together these findings suggest that rather than acquiring distinct and independent knowledge attitudes, beliefs, skills in distinct areas, these components seems to be interrelated. The concept of Psychological Literacy captures such a singular but interrelated set of components and includes many, if not all, of the program-level SLO outcomes. Psychology literacy was shown to increase with exposure to and engagement in the discipline, and to be predicted by a combination of variables.

The results confirm the results of previous indirect program assessment of psychology which demonstrate the growth of Psychological Literacy, notably among majors. The present findings underscore the curricular implications of the previous of the need for as capstone class for graduating seniors to further help the students to integrate the wide range of material learned in the major and to further promote their psychology literacy.

**F2. Evidence of Learning: High Impact Courses**

The curriculum of the psychology department emphasizes engaging students in authentic activities such as senior seminars which involve small classes and highlighting recent research on selected topics in the discipline. A total of 42 students were enrolled in 10 advanced seminars offered over last year (Psy 4900 or Psy 4990). Another way the curriculum emphasizes
engaging students in authentic activities is through individualized instruction such as projects and research, directed readings, and practicum. Forty-eight students were enrolled in Projects and Research, 22 in Directed Readings, and 20 students were enrolled in practicum. These enrollment numbers decreased from the previous year due to the department being down a faculty member (1 FTE), granting sabbaticals (1.5 FTE) and having other faculty on administrative reassigned time (1 FTE), leaving us at 70% of our faculty strength.

<table>
<thead>
<tr>
<th>Year</th>
<th>Projects &amp; Research</th>
<th>Directed Readings</th>
<th>Practicum</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>08-09</td>
<td>32</td>
<td>16</td>
<td>10</td>
<td>58</td>
</tr>
<tr>
<td>09-10</td>
<td>36</td>
<td>20</td>
<td>21</td>
<td>77</td>
</tr>
<tr>
<td>10-11</td>
<td>20</td>
<td>28</td>
<td>24</td>
<td>72</td>
</tr>
<tr>
<td>11-12</td>
<td>44</td>
<td>36</td>
<td>40</td>
<td>120</td>
</tr>
<tr>
<td>12-13</td>
<td>29</td>
<td>19</td>
<td>21</td>
<td>69</td>
</tr>
<tr>
<td>TOTAL</td>
<td>161</td>
<td>119</td>
<td>116</td>
<td>396</td>
</tr>
</tbody>
</table>

The enrollment of students in various individualized instruction classes

One consequence of these activities and an authentic measure of their effectiveness is that students are having opportunities to present research at conferences, obtain grants for their research, and work in the community. Appendix D documents the success students are having in all three areas. We particularly note that 41 different students presented 22 unique posters, supervised 9 faculty members, at 10 conferences. Similarly, 27 different students worked at 6 community sites supervised by 6 faculty members. Requiring these courses, along with senior seminars and labs is currently a topic of discussion in the curriculum committee as part of the general consideration of a capstone requirement. Finally 12 students received OUR research or travel grants sponsored by 4 faculty members. The represents the best work of the department in promoting the all 8 program SLOs – from knowledge, application, ethics/values, and interpersonal interaction and communication.

F3. Evidence of Learning: General Education Courses

The department’s two Gen Ed courses (PSY 1010 and PSY 2000) were reviewed last year as part of the assessment schedule and the year before as part of the Gen Ed renewal process. Those data were reported in the assessment report from 2011-2012. This year’s report includes new direct (classroom performance) and indirect (independent assessment) data assessing the SLOs for these critical courses.

F2.1 PSY 1010: Introductory Psychology

Below, we review evidence addressing whether Introductory Psychology achieves each of the Psychology Program and Social Science General Education SLOs (see table below for a Program and Gen Ed SLOs for Psy 1010 and a mapping between them).
PROGRAM RELATED SLOs FOR PSYCHOLOGY 1010  
(Key outcomes highlighted)

1. Knowledge.
   1.1 Methodological/statistical concepts
   1.2 Theory and research in content areas
   1.3 Theoretical approaches to the disciplines

2. Applications
   2.1 Overcome psychological misconceptions
   2.2 Application of psychology to self and others
   2.3 Career options available to psychology students

3. Values and Ethics
   3.1 Adopt “scientist of behavior” attitudes (skepticism)
   3.2 Adopt “scientist of behavior” values (monism)
   3.3 Adopt “scientist of behavior” ethics (APA)

4. Interpersonal Relations & Communications
   4.1 Define key terms
   4.2 Write short answers
   4.3 Work collaboratively

SOCIAL SCIENCE LEARNING OUTCOMES IN PSYCHOLOGY

All courses proposed for inclusion in the social science breadth category must address at least two of the skill criteria listed below. (Mark all that apply.)

___ Written, oral, or graphic communication
___x_ Abstract logic or reasoning (Correspond to Psy 1010 Goal 1.1, 3.1, 3.2)
___ Use of information technology
___ Use of library or other research sources
___x_ Critical thinking, cognitive learning, and individual or group problem solving
   (Correspond to Psy 1010 Goals 1.2, 2.1, 3.1, 3.2)
___ Collaborative group problem solving.

A student completing a social science general education course should be able to accomplish three of the following five outcomes. (Mark all that apply.)

___x_ Describe a social science approach to studying and understanding human behavior.
   (Corresponds to Psy 1010 Goals 1.1, 1.2, 1.3, 2.2, 4.1)
___x_ Describe basic assumptions about humans and their behaviors from a social science perspective. (Corresponds to Psy 1010 Goals 3.1, 3.2)
___ Explain the basic elements and operation of a sociocultural system.
___x_ Explain the interactions between individuals and their sociocultural and/or natural environments. (Corresponds to Psy 1010 Goals 1.2, 1.3)
___ Apply a social science perspective to a particular issue and identify factors impacting change (past or present).
The direct evidence for SLO achievement is based spring 2013 sections of Introductory Psychology (N = 17) taught by 10 faculty members (full-time and adjunct). All faculty members were asked to code their Chitester tests and other assignments to identify items which directly assess 12 program-related SLOs for the course, which map into the 5 Gen Ed SLOs. Seven faculty members (70% of the faculty teaching Psy 1010 that semester) in 10 sections (59% of the courses) coded items from 31 quizzes and exams, mostly from early in the semester (19) than later. No artifacts were collect or coding as we were given no instructions about how to code students’ activities in canvas. The data from these assessment activities are presented below.

<table>
<thead>
<tr>
<th></th>
<th>N Correct (All Tests)</th>
<th>% Correct (All Tests)</th>
<th>Included Results</th>
<th>Included Questions</th>
<th>&gt; 70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>21814</td>
<td>76.78%</td>
<td>2209</td>
<td>284</td>
<td>67%</td>
</tr>
<tr>
<td>1.2</td>
<td>107541</td>
<td>78.52%</td>
<td>3295</td>
<td>1785</td>
<td>68%</td>
</tr>
<tr>
<td>1.3</td>
<td>17906</td>
<td>75.71%</td>
<td>2930</td>
<td>278</td>
<td>60%</td>
</tr>
<tr>
<td>2.1</td>
<td>52357</td>
<td>78.89%</td>
<td>2893</td>
<td>892</td>
<td>76%</td>
</tr>
<tr>
<td>2.2</td>
<td>14328</td>
<td>76.25%</td>
<td>2161</td>
<td>344</td>
<td>71%</td>
</tr>
<tr>
<td>2.3</td>
<td>1956</td>
<td>80.83%</td>
<td>1282</td>
<td>19</td>
<td>72%</td>
</tr>
<tr>
<td>3.1</td>
<td>6256</td>
<td>77.85%</td>
<td>1770</td>
<td>65</td>
<td>71%</td>
</tr>
<tr>
<td>3.2</td>
<td>11725</td>
<td>79.99%</td>
<td>1276</td>
<td>107</td>
<td>76%</td>
</tr>
<tr>
<td>3.3</td>
<td>2193</td>
<td>80.04%</td>
<td>1181</td>
<td>39</td>
<td>79%</td>
</tr>
<tr>
<td>4.1</td>
<td>4942</td>
<td>75.76%</td>
<td>939</td>
<td>52</td>
<td>61%</td>
</tr>
<tr>
<td>4.2</td>
<td>134</td>
<td>88.16%</td>
<td>183</td>
<td>6</td>
<td>93%</td>
</tr>
<tr>
<td>4.3</td>
<td>60</td>
<td>98.36%</td>
<td>61</td>
<td>1</td>
<td>98%</td>
</tr>
</tbody>
</table>

The number of assessment items coded conformed to the curriculum grid, which emphasizes Knowledge (61% of questions) as a more significant goal than Application (32% of questions), Application as a more significant goal than Values/Ethic (6% of questions), and Values/Ethics as a more significant goal than Interpersonal Relations and Communication (2% of questions).

The overall percent correct (% Correct All Tests) performance were in the 70% - 80% range for all standards. But, more concerning, was the percentage of students who earned less than 70% on the items. Notably, goals 1.2, 1.3 and 4.1, which are considered key outcomes for the class, were between 60% - 70%.

Two indirect assessments were also completed on Psychology 1010 students, which involve assessing changes in Psychological Literacy scores of Psych 1010 students. The
questionnaires assessing Psychology Literacy tap most of the class SLOs, as the table below demonstrated.

1. **Knowledge.**
   1.1. Methodological/statistical concepts PK, PR, PAS, PAC
   1.2. Theory and research in content areas PK, PM, PAC
   1.3. Theoretical approaches to the discipline PK, PAC,

2. **Applications**
   2.1. Overcome psychological misconceptions PAC, PK,
   2.2. Application of psychology to self and others PAC PK, PE
   2.3. Career options available to psychology students PAC, PK,

3. **Values and Ethics**
   3.1. Adopt “scientist of behavior” attitudes (skepticism) PK, PAS, PR
   3.2. Adopt “scientist of behavior” values (monism) PK, PAS,
   3.3. Adopt “scientist of behavior” ethics (APA) PE, PAS

4. **Interpersonal Relations & Communications**
   4.1. Define key terms PK, PR
   4.2. Write short answers
   4.3. Work collaboratively PE

Study 1 involved 176 Psy 1010 students (65% female, 86% Freshmen or Sophomores, \( M = 21 \) years, \( sd = 4.9 \) years). Participants completed electronically delivered (Qualtrics) Psychology Literacy questionnaires at the beginning \( (N = 36) \) or end \( (N = 140) \) of the semester as part of their subject pool requirement. Only participants who completed one or the other assessment were included. The 6 questionnaires were positively correlated and formed a single dimension in a factor analysis with factor weightings that matched previous research. A pretest/post-test ANOVA analysis of factor scores representing PL \( (M = 0, sd = 1) \) was suggestive of an improvement, but it was not significant \( (Pretest M = -.16 \), \( sd = .19 \); Post-test \( M = .034 \), \( sd = .08 \)), \( F(1, 155) = .85, ns \). A strong limitation of the study was that there may have been substantial differences between students who are motivated to complete the questionnaires at the beginning than the end of the semester.

The second study fixed this limitation by an analysis of the 112 Psych 1010 students \( (67\% \) female, 93% freshmen or sophomores, \( M = 21.5 \) years, \( sd = 6.4 \) years) who completed the questionnaires at the beginning and end of the semester. Psychological Literacy scores were completed using the same factor loadings from Study 1.\(^9\) A t-test for correlated samples on pretest/post-test found that PL composite scores were significant higher at the end than the beginning of the semester \( (Pretest M = .34 \), \( sd = .06 \); Post-test \( M = .35 \), \( sd = .07 \)), \( t(96) = 2.04, p < .05 \).

Correlations were run between final grades from the class with initial (PL Time 1) and final (PL Time 2) PL scores and change scores (PL Change scores). Both assessments of Psych Literacy were correlated with the final grade, although change scores were not. The change scores were negatively correlated with PL Time 1 scores, suggesting that the lower

\(^9\) PAS scores were converted to a proportion out of 7 to equate it with other measures. Then each proportion was multiplied by the factor weighting and summed to derive a PL score at the pretest and at the post-test.
the initial PL scores, the greater the increase in PL scores. In contrast, change scores were positively correlated with PL Time 2 scores, suggesting that higher PL Time 2 was related to greater increase in PL scores. Finally a multiple regression using demographic (age, sex, year in school) and engagement (major status, Time 1 anticipated grade), and psychological literacy (PL Time 1, PL Time 2, and PL Change scores) were run on final grades. The results of the regression indicated the two predictors explained 32.8% of the variance, $R^2 = .32, F(2, 88) = 10.51, p < .01$. PL Time 1 ($\beta = -.40, p < .001$) and initial anticipated grade ($\beta = .35, p < .001$) predicted actual final grades. The data suggest that Introductory Psychology performance is tied to students’ psychology literacy in that those entering introductory psychology with higher PL scores perform better than others in the course, irrespective of their background, courses, or interest in the discipline. Moreover, the course impacted students’ PL scores in expected ways: The course was associated in improvements in PL scores who those whose scores were initially low and improvements in PL scores was associated with those completed with higher PL scores.

<table>
<thead>
<tr>
<th>Final Grade</th>
<th>PL Time 1 Pearson Correlation</th>
<th>PL Time 2 Pearson Correlation</th>
<th>PL Change Pearson Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>- .422</td>
<td>- .413</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>94</td>
<td>103</td>
</tr>
<tr>
<td>PL Time 1</td>
<td>Pearson Correlation</td>
<td>.702</td>
<td>-.273</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.007</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>PL Time 2</td>
<td>Pearson Correlation</td>
<td>.494</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

These data were presented a department meeting and faculty members were invited to discuss various outcomes. In particular they were asked three discussion questions:

**To review the direct (class-based) and indirect (non-class-based) evidence for Psy 1010 and decide whether they were satisfied with data collected and decide whether the curriculum grid is appropriate given pattern of assessment.**

Faculty members were reasonably satisfied with participation rates in the assessment process. The chair made clear that the activity of assessment was a central responsibility of all faculty members and the success of the process was really tied to full participation. To that end, some faculty members went back over the summer to additionally code Intro Psychology Chi-tester tests for this semester SLOs, thereby increasing participation rate. Also, a strong complaint was made by faculty members about the management of artifacts in Canvas, as faculty had not learned how to provide program-related outcomes for those assignments. That complaint was addressed this past semester when canvas coding for assessments was explained to faculty.
The pattern of assessment and curricular emphasis which heavily weighs knowledge-related over other SLOs was seen as problematic but indicative of the challenge in teaching the course. There was a feeling that so much time was needed to fulfill the knowledge-based SOLs, the SOLs addressing application, values/ethics, and interpersonal relations and communication could not be taken up during class. There was not a strong sense to change the curriculum grid, as much as there was a wish to better address the other goals.

This concern was raised with regard to the indirect evidence for which knowledge was one of six contributors to the measure of psychological literacy. It was felt that the psychological literacy increases could have been stronger if other SLO were more directly and deeply addressed.

One idea we are pursuing is to create a stand-alone module in Canvas to present Introductory-Psychology-related content that promotes SOLs addressing application-, values/ethics, and interpersonal relations and communication. For example, how the discipline is applied in such areas as schools, government, industry, clinics, hospitals, etc. can be used to promote application knowledge and career possibilities, better addressing goals 2.2 and 2.3. The module can provide an opportunity for students to reflect on and discuss their subject pool experiences, promoting their knowledge of the research process (1.1) and their understanding of the attitudes, values, ethics of researchers (3.1, 3.2, and 3.3). Some of module requirements could be collaborative written responses to questions which are peer-evaluated (4.2, 4.3).

To interpret student performance data and decided whether the performance meets an acceptable level of performance.

Faculty members were pleased that the indirect data revealed significant change in students’ psychological literacy, although, as noted above, they were dissatisfied with the extent of change. They adopted a 70% standard for acceptable performance for the direct measures, largely on the basis as the course is a service one in which many students enroll in order to fulfill their Gen Ed Social Science requirement. By that standard, the faculty members were satisfied with the percent correct responses to items associated with each SOL, which averaged 81%, with each SOL above the 70% standard.

However, there was less satisfaction with the percentage of students achieving the 70% mark. On average, 80% of the students scored 70% or higher on SOLs. However, for three critical goals (1.2, 1.3, 4.1), central to not only program-related class SLOs, but to Social Science General Education SLOs as well, the averages were between 60% to 70% of the students performing at standard. There was a feeling that this failure reflects the challenge of keeping students in classrooms of 88 students (the modal size of introductory psychology classes) engaged or even motivated to come to class. All faculty members lamented the UWs grades assigned to 10% or 20% of students in their class, the poor class attendance record, and the poor assignment completion record.
Various ways of engaging and motivating students were considered and good ideas were shared. One idea which generated much resonance was a peer-tutoring system, in which more advanced students could serve as TAs for face-to-face and online courses. It was felt that students would be more likely to listen to, be motivated by, and ask for help from other students than faculty and this might increase students attendance, motivation, and engagement in the class.

**To make an action plan for using the results focusing on assessment, pedagogy, curriculum etc.**

Both the Psych 1010 module and Student TA ideas are being explored with an eye to implementing them in the not too distance future. With regard to the student TA idea, the Psychology Department has hired extra student tutors in conjunction with Student Affairs and has moved them from the tutoring center to an office on the Psychology Department floor. We felt that this would increase their visibility and accessibility. We have also been advertising their presence and will be extending their tutoring services to online Psy 1010 students in the spring. In addition, we developed a student TA practicum option for advanced psychology students. Students will be expected to work 10 hours a week not only attending lectures and holding office hours (like the tutors), but also preparing study sessions and other activities in conjunction with targeted Psy 1010 faculty members. In addition, they will be reading the literature on the teaching or psychology.

With regard to the student module idea, a group of faculty members are considering putting together a grant application to create the module to the new Creative and Innovative Teaching competition. The idea will be to create a module with minimal demands on faculty time but maximize the teaching of key elements often missing in lectures. As a self-contained unit, the module could be used by all Psych 1010 online and face-to-face classes including those taught by regular faculty and adjuncts and [potentially used in other classes in the department and out.}
F2.2 PSY 2000: Interpersonal Relations

Below, we review evidence addressing whether Interpersonal Relations (Psy 2000) achieves class and Social Science General Education SLOs (see table below for a Program and Gen Ed SLOs for Psy 1010 and a mapping between them).

<table>
<thead>
<tr>
<th>PROGRAM RELATED SLOs FOR PSYCHOLOGY 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Knowledge.</strong></td>
</tr>
<tr>
<td>1.A Conceptual/Theoretical knowledge</td>
</tr>
<tr>
<td>1.B Research knowledge</td>
</tr>
<tr>
<td>1.C Methodological knowledge</td>
</tr>
<tr>
<td><strong>2. Applications</strong></td>
</tr>
<tr>
<td>2.A Explanations of self or others</td>
</tr>
<tr>
<td>2.B Improvement of self or others</td>
</tr>
<tr>
<td><strong>3. Values and Ethics</strong></td>
</tr>
<tr>
<td>3.A Adopt “scientist of behavior” attitudes (skepticism)</td>
</tr>
<tr>
<td>3.B recognize and appreciate diversity in relationships</td>
</tr>
<tr>
<td><strong>4. Interpersonal Relations &amp; Communications</strong></td>
</tr>
<tr>
<td>4.A Define Terms</td>
</tr>
<tr>
<td>4.B Write short answers</td>
</tr>
<tr>
<td>4.C Work collaboratively</td>
</tr>
</tbody>
</table>

SOCIAL SCIENCE LEARNING OUTCOMES IN PSYCHOLOGY

All courses proposed for inclusion in the social science breadth category must address at least **two** of the skill criteria listed below. (Mark all that apply.)

- _Written, oral, or graphic communication_
- _x_ Abstract logic or reasoning (Correspond to Psy 2000 Goal 1.B, 1.C 3.A)
- _Use of information technology_
- _Use of library or other research sources_
- _Critical thinking, cognitive learning, and individual or group problem solving_

A student completing a social science general education course should be able to accomplish **three** of the following five outcomes. (Mark all that apply.)

- _Describe basic assumptions about humans and their behaviors from a social science perspective._
- _Explain the basic elements and operation of a sociocultural system._
- _x_ Explain the interactions between individuals and their sociocultural and/or natural environments. (Corresponds to Program Goals 1.B, 1.C)
- _x_ Apply a social science perspective to a particular issue and identify factors impacting change (past or present). (Corresponds to Program Goals 2.A, 2.B)
A total of 6 sections of Psy 2000 were taught in the 2012 – 2013 academic year and 3 more summer and fall 2013. Seven sections were taught by three different long-term adjuncts typically at satellite campuses (Davis, Davis HS) and two by two full-time faculty members also at satellite campuses. The class is not required in the curriculum and often not the preferred Gen Ed class for students, which is Introductory Psychology. The class has small enrollments but an eclectic mix of students which include psychology majors and minors who are picking up an extra course to complete graduation requirements, NUAMES high school students (at Davis), or students looking for a more experiential class in psychology. The analysis focuses on the two sections of the two regular faculty as it is not clear that the there is a shared vision for the course among regular faculty and adjuncts. The analysis would be used as a springboard to discuss SOLs with the adjuncts in order to better align the courses. One of the two classes was given in the summer and the other in the fall.

The direct evidence bearing on the Psy 2000 course was based on Chi-tester results and other artifacts collected from the two sections. The Chi-tester results were derived by faculty coding 10 or so good examples of each goal equally sampled across all their exams. This instruction is unlike that given to Intro Instructors who were asked to code as many items as possible. For the 2 sections there were 7 exams and 113 items coded. Most of the items were in Knowledge (58%) followed by Application (22%) and Values/Ethics (17%), and Communication and Interpersonal Relations (3%). This pattern of testing corresponds to the curriculum grid which emphasized Knowledge (4) over Application (3) and Values/Ethics (2). However, Interpersonal Relations & Communications was rated highly (4) in the curriculum grid. However, it was assessed largely by in-class activities addressing SLO 4.B write short answers and 4.C, work collaboratively. These artifacts were not collected and so the analysis is incomplete.

<table>
<thead>
<tr>
<th></th>
<th>N Correct (All Tests)</th>
<th>% Correct (All Tests)</th>
<th>Included Results</th>
<th>Included Questions</th>
<th>&gt; 70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>807</td>
<td>78.12%</td>
<td>423</td>
<td>18</td>
<td>68%</td>
</tr>
<tr>
<td>1.2</td>
<td>1338</td>
<td>80.70%</td>
<td>278</td>
<td>26</td>
<td>82%</td>
</tr>
<tr>
<td>1.3</td>
<td>1006</td>
<td>65.75%</td>
<td>214</td>
<td>22</td>
<td>48%</td>
</tr>
<tr>
<td>2.1</td>
<td>978</td>
<td>75.17%</td>
<td>297</td>
<td>16</td>
<td>63%</td>
</tr>
<tr>
<td>2.2</td>
<td>573</td>
<td>72.26%</td>
<td>265</td>
<td>9</td>
<td>66%</td>
</tr>
<tr>
<td>3.1</td>
<td>712</td>
<td>84.26%</td>
<td>265</td>
<td>7</td>
<td>79%</td>
</tr>
<tr>
<td>3.2</td>
<td>693</td>
<td>65.32%</td>
<td>297</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>4.1</td>
<td>74</td>
<td>77.08%</td>
<td>32</td>
<td>3</td>
<td>49%</td>
</tr>
</tbody>
</table>

The patterns of results reveal a class that needs some attention. Although the percentage correct across SLO assessments averaged 74%, above the 70% standard, only an average 63% scored 70% or above across SOLs. Such an outcome was below the 70%
standard. SLOs below the 70% overall standard include 1.C, 2.A, 2.B, 3.B, 4A which are central in the Gen Ed assessment of the course.

An indirect analysis of the Psy 2000 summer class involved presenting the Psychology Literacy questionnaires to students at the beginning and end of the class. Of the 24 students in the class, only 10 had taken both questionnaires. The small sample size precludes definitive conclusions, but the means for the pretest \( M = .34, sd = .08 \) and posttest \( M = .35, sd = .09 \) match those for the Psych 1010 classes. However, the difference between the means was not significant.

Actual class grades were collected and found to be positively correlated to the increases in PL scores, independently of the number of psychology courses taken \( (r = .53, p = .069, 1\text{-tail}) \). The results suggest that students are assessed in the course for the content that was associated with increased in their general psychological literacy, a key outcome of the program and an assessment tied to program SLOs.

A discussion with the two faculty members teaching Psy 2000 addressed the data for the course. A number of issues were discussed and summarized by three points:

1. **The class is fundamentally sound**

   The direct and indirect evidence suggests that the course provide a solid foundation in psychology to most students. The course promotes a range of skills central to the discipline and in a format that is of particular relevance to students – their interpersonal relationships.

2. **Critical outcomes not reaching a minority of students**

   Too many critical SLOs have the percentage of students performing below the 70% standard. These SOLs seem to be ones requiring effortful and deep learning on the part of the students – understanding research, appreciating diversity, and applying know to self and others. Faculty agreed to consider new ideas for the course to promote such learning in students, including new assignments, guest lecturers, and independent modules.

3. **Artifacts must be collected**

   Faculty members have agreed to collect a range of artifacts in the course to provide a broader picture of student performance.
### G. Summary of Artifact Collection Procedure

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Learning Outcome Measured</th>
<th>When/ How Collected?</th>
<th>Where Stored?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psy 1010 Chi Tester Items</td>
<td>All</td>
<td>Faculty coded items and they were compiled in Chi-tester</td>
<td>On Chitester.</td>
</tr>
<tr>
<td>Psy 2000 Chi Tester Items</td>
<td>All</td>
<td>Faculty coded items and they were compiled in Chi-tester</td>
<td>On Chitester.</td>
</tr>
</tbody>
</table>
H. Please respond to the following questions.

1) Reflecting on this year’s assessment(s), how does the evidence of student learning impact your faculty’s confidence in the program being reviewed; how does that analysis change when compared with previous assessment evidence? To answer this question, compare evidence from prior years to the evidence from the current year. Discuss trends of evidence that increases your confidence in the strengths of the program. Also discuss trends of concern (e.g. students struggling to achieve particular student outcomes).

   I reiterate last year’s response to this question. Faculty members were encouraged to hear that the multi-dimensional assessments of SLOs, including all forms of disciplinary knowledge, values and skills, seem to be interrelated and form a single dimension which is affected by students’ exposure to and engagement in the discipline. This finding is consistent with faculty members’ overall impression of their impact on students, which can be summarized as helping them to think as “scientists of behavior.” That is, they believed that their impact is broad and deep on students, despite the assessments being narrow and somewhat superficial. So they have become more confident about their role and impact on students particularly the success we feel we have had in students’ scholarship, outreach, and grantsmanship documented in Appendix C.

   Moreover, the measure of Psychological Literacy was shown to be related to students exposure to (year in school) engagement by (major status) the discipline, a process made easier by engaging in authentic activities (research, practicum, etc.). Faculty members are more convinced than ever of the importance of their out-of-class work with students and have recommitted to a curriculum that promotes students engaging in serious application of disciplinary knowledge in research and community service. This confidence faculty have about their role, impact, and the curriculum has been made stronger from the results of this assessment.

   The concern about student performance in Psy 1010 is being addressed by two initiatives documents in the report: Student Tutors and a psychology Module. Also, faculty members are now armed to collect artifacts of their students’ work. Recommendations are forthcoming from Psy 2000, including modules, new assignments, and guest speakers are also being worked on and are committed to collect artifacts for in-class and other assignments.

2) With whom did you share the results of the year’s assessment efforts?

   The department members have reviewed all of the data collected for the 2013-2014 assessment report. Adjuncts will also receive a copy of the document.

3) Based on your program’s assessment findings, what subsequent action will your program take?
As noted above, the department is pursuing implementation of the ideas for Psych 1010 and Psy 2000.
Appendix A

Please provide the following information about the full-time and adjunct faculty contracted by your department during the last academic year (summer through spring). Gathering this information each year will help with the headcount reporting that must be done for the final Five Year Program Review document that is shared with the State Board of Regents.

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Headcount</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Doctoral Degrees</td>
<td></td>
</tr>
<tr>
<td>Full-time Tenured</td>
<td>9</td>
</tr>
<tr>
<td>Full-time Non-Tenured (includes tenure-track)</td>
<td>1</td>
</tr>
<tr>
<td>Part-time</td>
<td>9</td>
</tr>
<tr>
<td>With Master's Degrees</td>
<td></td>
</tr>
<tr>
<td>Full-time Tenured</td>
<td></td>
</tr>
<tr>
<td>Full-time Non-Tenured</td>
<td>1</td>
</tr>
<tr>
<td>Part-time</td>
<td>1</td>
</tr>
<tr>
<td>With Bachelor's Degrees</td>
<td></td>
</tr>
<tr>
<td>Full-time Tenured</td>
<td></td>
</tr>
<tr>
<td>Full-time Non-tenured</td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Full-time Tenured</td>
<td></td>
</tr>
<tr>
<td>Full-time Non-tenured</td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td></td>
</tr>
<tr>
<td>Total Headcount Faculty</td>
<td></td>
</tr>
<tr>
<td>Full-time Tenured</td>
<td>9</td>
</tr>
<tr>
<td>Full-time Non-tenured</td>
<td>2</td>
</tr>
<tr>
<td>Part-time</td>
<td>10</td>
</tr>
</tbody>
</table>

**Full-time Faculty (tenured)**

- Eric Amsel, PhD (t)
- Aaron Ashely, PhD (t)
- Todd Baird, PhD (t)
- Lauren Fowler, PhD (t)
- Azenett Garza, PhD (t)
- Joe Horvat, PhD (t)
- Theresa Kay, PhD (t)
- Maria Parrilla de Kokal, MA
- Melinda Russell-Stamp, PhD
- Matthew Schmolesky, PhD (t)
- Leigh Shaw, PhD (t)

**Adjunct Faculty**

- Mark Adams, PhD
- Heather Chapman, PhD
- Jennifer Hamson-Utley, PhD
- Josh Marquit, PhD
- Craig Oreshnick, PhD
- Wayne Owen, PhD
- Doug Richards, PhD
- Margaret Smith, PhD
- Trisha Weeks, PhD
- Seth Wilhelmsen, MA
Appendix B: Psychological Literacy Assessment

Questionnaire

Please answer each question by writing in the answer or circling the best answer

1) Name, W Number, and Email Address __________________________________________

2) Sex
   Male
   Female

3) Year in School
   Freshman
   Sophomore
   Junior
   Senior

4) Age

5) Anticipated Final Grade in Introductory Psychology Class (Circle 1)
   A
   A-
   B+
   B
   B-
   C+
   C
   C-
   D+
   D
   D-
   F

6) Are you a
   Psychology major
   Psychology minor
   Neither

7) If NEITHER, are you planning to become a
   Psychology major
   Psychology minor
   Neither

8) How many of the psychology courses have you taken PRIOR to the one in which you are enrolled? (Please give the title and course and whether it was a high school or college course)

9) In this class, how often do you take notes on all major points made by your psychology instructor?
   A. Always
   B. Often
   C. Sometimes
   D. Never

10) In this class, how often do you read the assigned pages of the textbook?
    A. Always
    B. Often
    C. Sometimes
    D. Never
11) How often do you attend this class?
A. 90% or more
B. 75% - 95%
C. 50% - 75%
D. Less than 50%

12) Compared to other classes you are taking, how much time do you devote to working on this class.
A. Much more than the other classes
B. Somewhat more than the other classes
C. The same as the other classes
D. Somewhat less than the other classes
E. Much less than the other classes

13) To prepare for each test, I carefully read the required textbook pages and review all the lecture notes. This is something that is ...
A. Very true of me
B. Mostly true of me
C. Somewhat true of me
D. Not at all true of me
Psychology as Science Questionnaire

Listed below are 20 statements, each of which presents an opinion regarding some aspect of psychology. Read each of these statements carefully and indicate the extent to which you agree or disagree with each statement. Do so by identifying the appropriate number under each statement on a scale from 1 (strongly disagree) to 7 (strongly agree) For example:

Psychology should be a required course for college students.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you decide that you agreed slightly with the statement, then circle the number 3. Be sure to circle a number for each statement.

1. A psychology course is an important part of any person’s college education

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. The different areas within psychology seem very unrelated to each other

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. An undergraduate degree in psychology should be a Bachelor of Science rather than a Bachelor of Arts degree

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. It’s just as important for psychology students to do experiments as it is for students in chemistry and biology

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. An introductory psychology course should cover as broad a range of topics as possible

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Research conducted in controlled laboratory settings is essential for understanding everyday behavior

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
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7. Even though each person is unique, it is possible for science to find general laws explaining human behavior

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8. Carefully controlled research is not likely to be useful in solving psychological problems

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9. Our ability as humans to behave in any way we choose makes our attempts to predict behavior ineffective

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10. Psychological advice given in popular books and magazines is often as useful as more research-based claims

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11. Studying specific examples of how psychology is used is the most interesting part of a psychology course

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12. Governments funding of experimentation is as necessary for expanding what we know about psychology as it is for gaining knowledge in areas like chemistry and physics

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13. The study of psychology should be seen primarily as a science

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14. Courses in psychology place too much emphasis on research and experimentation

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15. Psychology courses should spend time covering various job possibilities for people with psychology degrees

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16. Psychological research can enable us to anticipate people's behavior with a high degree of accuracy

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17. Psychologists working as counseling professionals don't need to be so concerned with research findings

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18. Psychological theories presented in the media should not be trusted unless they are supported by experiments

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19. Psychology will never be a true science because its predictions of individual behavior are seldom exact or certain

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20. Students get little benefit from learning about procedures for conducting psychology experiments

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**CODING:** \((\text{PAS3} + \text{PAS4} + \text{PAS6} + \text{PASS7} + \text{PAS12} + \text{PAS13} + \text{PAS16} + \text{PAS18} + (8 - \text{PAS8}) + (8 - \text{PAS9}) + (8 - \text{PAS10}) + (8 - \text{PAS14}) + (8 - \text{PAS17}) + (8 - \text{PAS19}) + (8 - \text{PAS20})) / 15\)
Psychological Knowledge Questionnaire (PK)

Check the answer for each of the following questions which you think is the best. Be sure to read each of the five options carefully before selecting your answer.

1. Which of the following sayings is confirmed by psychological research on interpersonal attraction?
   1. “Opposites attract”
   2. “Beauty is only in the eye of the beholder”
   3. “Absence makes the heart grow fonder”
   4. **“Birds of a feather flock together”**
   5. “Familiarity breeds contempt”

2. The person who is recognized as the founder of psychology is:
   1. Sigmund Freud.
   2. B. F. Skinner.
   4. **Wilhelm Wundt.**
   5. John Watson.

3. If an instructor wanted to teach Introduction to Psychology using the ideas of the behavioral perspective, (s)he would:
   1. let the students choose for themselves the type of material they wanted to study so it would be personally meaningful and reflect their goals and values.
   2. **give students many opportunities to test their knowledge of the material so they could be rewarded and reinforced for learning.**
   3. focus on cognitive aspects of brain functioning that facilitate new learning.
   4. have to consider how learning occurs differently for people in different societies and cultures, and in different situations.
   5. try to understand the unconscious influences on students' interest in psychology.

4. A psychologist compares the test performance of two groups of students. One group was told to study regularly for several days before the exam. The other group was told to study only the night before the exam. The psychologist then compared the test performance of the two groups. In this experiment, what was the independent variable?
   1. How well students performed on the exam.
   2. **The types of questions asked on the exam.**
   3. When students studied for the exam.
   4. The IQ of the students in each group.
   5. How anxious were students prior to the exam.

5. According to humanistic theorists, mental health consists of:
   1. A strong ego that can resist the id and the superego.
   2. Adjusting to the hereditary traits underlying one's personality.
   3. **Striving for wholeness and trust in oneself.**
4. Trying to avoid relying on defense mechanisms.
5. Knowing how to obtain rewards and avoid punishment from the environment.

6. According to Piaget, in which stage of cognitive development is thinking intuitive and illogical but involves language and symbolic play?
   1. Formal operational
   2. Sensorimotor
   3. Concrete operational
   4. Postoperational
   5. Preoperational

7. Schizophrenia is best described as:
   1. a tendency to extreme mood swings.
   2. irresponsibility, immaturity, lack of conscience, and potential for harmful behavior.
   3. a split from reality, resulting in confused and disconnected thoughts, emotions, and perceptions
   4. a division of the personality into multiple identities.
   5. persistent feelings of sadness.

8. The right hemisphere of the brain is somewhat more specialized for what intellectual functions?
   1. Movements of the right side of the body
   2. Step-by-step logical reasoning
   3. Creativity and intuition
   4. Memory
   5. Reading

9. Your mind alters or reorganizes new information before putting it in memory. This process is called:
   1. storage.
   2. adaptation.
   3. encoding.
   4. procedural memory.
   5. sensory memory.

10. According to psychologist Abraham Maslow, self-actualization describes:
    1. how young children develop self-awareness and a personal identity.
    2. how individuals achieve self-control and the ability to regulate their behavior.
    3. the fulfillment that occurs in close, intimate relationships.
    4. how people identify and achieve their unique potential.
    5. the emotions that accompany heightened, prolonged physical activity.

11. Erikson proposed a series of stages of psychosocial development. Which of the following stages corresponds to adolescence?
    1. Generativity vs. Stagnation
2. Identity vs. Role confusion
3. Basic trust vs. Mistrust
4. Integrity vs. Despair
5. Industry vs. Inferiority

12. All of the following are true of hereditary influences on behavior except:
1. genes interact with the environment to affect human characteristics.
2. it is rare that a single gene affects a specific human characteristic. More commonly, genes interact with other genes.
3. genetic influences account for individual differences between people, but not for how people are similar.
4. some genes are dominant and others are recessive, but most genes have additive (or blended) effects on human characteristics.
5. hereditary influences on offspring can be estimated, and thus genetic counseling can be important for young adults anticipating parenthood.

13. Biofeedback procedures depend on the knowledge that physiological processes can be:
1. regulated by another person.
2. brought under voluntary control.
3. monitored by machines.
4. controlled chemically.
5. tolerated with special training techniques.

14. REM sleep is best described as:
1. the period of deepest sleep in which the heart and breathing rates are lowest.
2. a period of sleep in which delta waves occur.
3. the period of sleep in which the eyes dart back and forth, and during which most dreaming occurs.
4. a sleep disorder in which a person sometimes stops breathing during the night.
5. a period when a person is actually asleep but, upon waking, does not recall having been asleep.

15. You are probably aware of feeling somewhat anxious or worried while sitting in your doctor's or dentist's office. This is probably because you have previously experienced uncomfortable examinations there. To a psychologist, this illustrates:
1. short-term memory.
2. operant conditioning.
3. cognitive social learning.
4. defense mechanisms.
5. classical conditioning.

16. Sensation accounts for which of the following?
1. Your ability to experience the world in three dimensions.
2. Your awareness that objects remain the same shape and size despite your changing visual perspective to them.
3. Your awareness of energy from environmental events.
4. Your capacity to focus your attention on the things that interest you.
5. Your ability to enjoy the music you listen to.

17. The part of the nervous system that accounts for your energized, aroused feeling in emotional situations (such as rapid breathing, heart-rate, perspiration) is called the:
   1. sympathetic nervous system.
   2. adrenal gland.
   3. central nervous system.
   4. parasympathetic nervous system.
   5. thalamus.

18. To decrease a child’s disruptive behavior in the classroom, a teacher takes away 10 minutes of recess time for each instance of poor behavior. This is an example of:
   1. negative reinforcement.
   2. extinction.
   3. higher-order conditioning.
   4. punishment.
   5. classical conditioning.

19. Experienced tennis players know what kinds of shots will be more successful under different weather conditions on clay or grass courts. This is because they use intuitive rules-of-thumb that they have acquired over time called:
   1. insights.
   2. algorithms.
   3. latent learning.
   4. mental sets.
   5. heuristics.

20. An emphasis on how childhood experiences shape adult personality and the unconscious influences on behavior would be true of which kind of theorist?
   1. Humanistic
   2. Behavioral
   3. Psychoanalytic
   4. Biological
   5. Cognitive

21. You have always considered yourself a conservative, but recently a friend gently pointed out that some of your attitudes and beliefs are rather liberal. After thinking it over, you modified those attitudes so they would be more consistent with your overall conservative philosophy. You did this because of:
   1. cognitive dissonance.
   2. primary process thinking.
   3. the fundamental attribution error.
   4. scripts for social behavior.
   5. the reality principle.
22. Once you have learned to ride a bicycle, you can ride it easily and without consciously thinking about how to do so. This is because, stored in your mind, is:
   1. sensory memory.
   2. motor memory.
   3. semantic memory.
   4. **procedural memory.**
   5. conditioned reflexes.

23. A woman is discovered years after her disappearance from her family, living a new life in a community far away. She has assumed a new identity and has no memory at all of her previous life. You suspect that she is experiencing:
   1. a **dissociative disorder.**
   2. schizophrenia.
   3. a mood disorder.
   4. a personality disorder.
   5. a somatoform disorder.

24. "Operational definitions" of psychological variables are defined:
   1. in scientific, precise terms.
   2. in ways which can be easily understood.
   3. in terms that are consistent with the psychological theory to be tested.
   4. **in terms that specify the objective procedures for measuring it.**
   5. in non-intuitive ways.

25. Lisa believes that if she works hard, plans carefully, and uses her natural gifts, she will do well in school and obtain a good job. We would describe Lisa as:
   1. demented.
   2. experiencing diffusion of responsibility.
   3. showing the effects of persuasive influence.
   4. experiencing cognitive dissonance.
   5. **having an internal locus of control.**

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Psychological Misconceptions Questionnaire (PM)

Please read following statements and rate each on the following scale according to your own personal opinions:

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<th>Very sure it's false</th>
<th>Somewhat sure it's false</th>
<th>Somewhat sure it's true</th>
<th>Very sure it's true</th>
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<td>The standards defining mental disorders have changed over the years. T</td>
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<td>Your eyes, ears, and other sensory organs provide an accurate experience of the world as it truly exists. F</td>
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<td>People feel better when they express their anger than when they try to control it. F</td>
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<td>People's recall of early childhood experiences tends to be clear and accurate. F</td>
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<td>Even a skilled hypnotist cannot force hypnotized people to do things against their will. T</td>
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<td>6</td>
<td>People will act in immoral, illegal, or dangerous ways if ordered to do so by a recognized authority. T</td>
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<td>IQ tests are culturally biased. F</td>
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<td>8</td>
<td>Most children who are abused do not grow up to become abusive parents. T</td>
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<td>The effects of alcohol on behavior arise from its chemical effects on the body. F</td>
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<td>Obesity is primarily the result of overeating. F</td>
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<td>Beauty is in the eye of the beholder. F</td>
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<td>Eyewitness memory for events is vivid and accurate, and resistant to misleading suggestion. F</td>
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<td>It doesn't matter whether you use rewards or punishments to manage a child's behavior, as long as your standards are consistent. F</td>
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<td>Adolescence is a period of considerable conflict, turmoil, and stress. F</td>
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<td>Early brain development research shows that a lot of stimulation is essential early in life for the brain to grow properly. T</td>
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<td>People tend to believe that the world is a fair place, in which bad people are punished and the good are rewarded. T</td>
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Psychological Research Methods (PR)

Please choose the best answer for each of the following 10 multiple-choice questions which address the topic of research methodology in psychology.

1. An investigator has found a negative correlation between the amount of vitamin C people take and the number of colds they get. The investigator could safely conclude from this finding that:
   1. The more vitamin C taken is associated with getting fewer colds
   2. People who get few colds are compelled to take vitamin C
   3. Taking vitamin C causes people to get few colds
   4. The more vitamin C taken is associated with getting more colds

2. An explanation using an integrated set of principles that organizes and predicts observations is called a(n):
   1. Experiment
   2. Hypothesis
   3. Theory
   4. Survey

3. In a study involving the effects of drug use on dreams, the type and amount of drug used would be the ______ variable and the effect on a person’s dreams would be the _____ variable.
   1. dependent, independent
   2. independent, dependent
   3. empirical, rational
   4. rational, empirical

4. A correlation between self-esteem and annual income of -.75 would indicate that:
   1. Higher levels of annual income are associated with lower levels of self-esteem
   2. Lower levels of self-esteem are associated with lower levels of annual income
   3. Higher levels of self-esteem are associated with higher levels of annual income
   4. It is impossible to predict annual income levels from knowledge of self-esteem levels
5. The key advantage of the experimental method is that it:
   1. **Allows for direct cause-effect conclusions**
   2. Enables experimenters to study more phenomena
   3. Is best suited for the investigation of abnormal behavior
   4. Enables replication or empiricism

6. The part of an experiment that the experimenter deliberately manipulates is the:
   1. Hypothesis
   2. Control group
   3. Dependent variables
   4. **Independent variables**

7. A group of researchers wanted to determine if people will eat more food in a room with red paint and red decorations than in a room that is decorated in blue. Half the participants in this study ate in a red room and half ate in a blue room. The researchers then measured how much food was consumed in each of the two rooms. In this study, the independent variable was:
   1. The type of food that was available during the study
   2. The amount of food that was consumed
   3. **The color of the decorations in the room**
   4. How hungry the participants were at the end of the study

8. Which of the following correlation coefficients expresses the strongest degree of relationship between two variables?
   1. -.88
   2. .81
   3. .15
   4. 1.12

9. What is a representative sample?
   1. A small population
   2. A group of participants who know each other
   3. A sample that is identical in size and characteristics to a population
   4. **A sample selected to reflect the characteristics of a population of interest**
10. Which of the following is the best description of the use of inferential statistics?
   1. Procedure used to explain the relationship between two variables
   2. A method for summarizing a large amount of data with a few numbers
   3. Method used to determine the practical importance of research findings
   4. Procedure for determining if differences are due to chance or non-chance factors

CODING: ((PR1 EQ 1) + (PR2 EQ 3) + (PR3 EQ 2) + (PR4 EQ 1) + (PR5 EQ 1) + (PR6 EQ 4) +
(PR7 EQ 3) + (PR8 EQ 1) + (PR9 EQ 4) + (PR10 EQ 4)) / 10

Psychological Ethics (PE)

Please carefully read the following 15 items about ethics in psychology. Answer each question by clicking on the button next to the best, most ethical, answer.

1. It is unethical for research psychologists to:
   1. **Offer excessive compensation for research participation.**
   2. Offer no compensation for research participation.
   3. Have a restricted research sample.
   4. All of the above

2. Serious relationships (dating, etc.) between psychology instructors and students are:
   1. Always ethical.
   2. Always unethical.
   3. Sometimes unethical.
   4. **Are prohibited in circumstances in which the professor has evaluative authority over the student.**

3. A competent psychologist:
   1. Ignores differences between him/herself and his/her clients.
   2. **Seeks consultation and supervision when developing new areas of practice.**
   3. Does not serve populations with which he/she has little or no experience.
   4. Is able to serve all client populations.
4. A psychologist is required to be confidential about information. But under which of the following circumstances can a psychologist break confidentiality?
   1. Under no circumstances.
   2. **In order to be reimbursed by an insurance company for services rendered.**
   3. Only when a client says, “I could just kill somebody”, but does not identify a specific person.
   4. Only with written consent of client.

5. An ethical requirement for research psychologists is to get approval for the research they are performing. The research proposal is reviewed by an Institutional Review Board whose primary purpose is to:
   1. Review projects for scientific merit.
   2. **Protect the public from harm.**
   3. Establish standards governing the conduct of psychologists in research.
   4. All of the above.

6. For psychologists in clinical practice, dual relationships (i.e., having a relationship with a client as a psychologist and in another role like a teacher, supervisor, etc.)
   1. **Are not prohibited unless they are harmful or exploitative.**
   2. Are always prohibited
   3. Are restricted to small or rural community settings.
   4. Are always harmful.

7. In obtaining informed consent for participation in a psychology experiment, a psychologist
   1. **Allows potential subjects the freedom to decline participation.**
   2. Is required to have written consent for every experiment.
   3. Discusses every implication of withdrawing and continuing in the experiment.
   4. Does not give the prospective participants the opportunity to ask questions.

8. In the clinical practice of psychology, informed consent includes:
   1. Information about the limits of confidentiality.
   2. Dialogue about financial arrangements and fees.
   3. Respect for the client’s autonomy.
   4. **All of the above.**
9. In underserved areas, or areas where there are few psychologists, a psychologist
   1. May routinely provide services to a client, even if he/she is not fully competent to
      provide the services.
   2. Provides services to a client population only if he/she is fully competent to do so.
   3. **Provides services to anyone in case of an emergency**
   4. Can choose to work with any population and refer those persons with whom he/she
      does not want to work.

10. It is difficult to draw a clear line between those student - faculty relationships that are
    ethical and those that are unethical. We may do so by assessing:
    1. The extent the relationship includes coercion (a faculty member intimidating
       students)
    2. The extent of exploitation (a faculty member taking advantage of students)
    3. Neither A not B
    4. **Both A and B**

11. Being competent to teach psychology includes:
    1. **Mastery of the subject matter.**
    2. Mastery of technology.
    3. Sticking to the designated lesson plan and ignoring classroom dynamics.
    4. All of the above.

12. Psychology instructors
    1. Are responsible to their students and their universities, but not to society, in
       general.
    2. **Are obligated to give grades that accurately reflect students’ work.**
    3. Write letters of reference that only positively highlight students’ qualities.
    4. Due to academic freedom, can present only their viewpoint, rather than the factually
       based information.

13. Relationships between psychology teachers and students:
    1. **May involve group activities (such as, going to lunch together) as acceptable
       behaviors.**
    2. Are no different than that of psychotherapists and clients.
    3. Should involve a large amount of positive out of classroom experiences.
    4. Are governed by the rule of avoiding social activities (such as, going to lunch
       together).
14. The decision to use deception (misinforming participants about the true purpose of a study) in research
   1. Cannot ever be justified.
   2. Requires sharing the costs and benefits of deception with participants before an experiment begins.
   3. Requires consideration of the use of other designs, such as naturalistic observation.
   4. Is always justified because of the research's scientific value.

15. When psychologists or psychology students work on research together, authorship credit for the resulting research paper
   1. Is determined by the relative scientific contribution of persons involved.
   2. Is one of the last issues addressed in the research and publication process.
   3. May be given for minor contributions such as, running participants or assisting with statistical analysis.
   4. May be given for possession of an important institutional position, such as department chair.

CODING: \(((\text{PE1 EQ 1}) + (\text{PE2 EQ 4}) + (\text{PE3 EQ 2}) + (\text{PE4 EQ 2}) + (\text{PE5 EQ 2}) + (\text{PE6 EQ 1}) + (\text{PE7 EQ 1}) + (\text{PE8 EQ 4}) + (\text{PE9 EQ 3}) + (\text{PE10 EQ 4}) + (\text{PE11 EQ 1}) + (\text{PE12 EQ 2}) + (\text{PE13 EQ 1}) + (\text{PE14 EQ 3}) + (\text{PE15 EQ 1})) / 15\)

**Psychological Applications and Careers (PAC)**

Please carefully read the following 12 items about careers and applications in psychology. Answer each question by clicking on the button next to the best, most appropriate, answer.

1. Counseling Psychologists are different than Clinical Psychologists in that:
   1. Only Clinical Psychologists are licensed.
   2. Counseling Psychologists can only see clients who have no diagnosed mental illness.
   3. Only Clinical Psychologists can perform therapy.
   4. Although their academic training may be different, both are licensed to provide therapy to clients with any diagnosis.
2. School Psychologists are different than Educational Psychologists in that:
   1. only Educational Psychologists carry out diagnostic assessments and performance evaluations of individual students.
   2. only School Psychologists apply knowledge of the psychology of learning and the environment to improve students' educational experiences and achievement.
   3. **only School Psychologists offer counseling services to students.**
   4. only Educational Psychologists develop and assesses treatment plans.

3. Psychologists who work with private, public, or nonprofit businesses and industries to improve the workplace and the performance, satisfaction, and well-being of its people are called:
   1. **Industrial/Organizational Psychologists**
   2. Business Psychologists
   3. Social Psychologists
   4. Consulting Psychologists

4. To assist persons with disabilities in reaching their full potential is the goal of which of the following psychologists?
   1. Health Psychologists
   2. **Rehabilitation Psychologists**
   3. Educational Psychologists
   4. Consulting Psychologists

5. To be an effective therapist, it is important for psychologists to have which of the following skills?
   1. Empathy skills
   2. Scientific reasoning skills
   3. Listening skills
   4. **A, B, and C above**

6. Which of the following is NOT typically a service provided by Forensic Psychologists to the justice system?
   1. Competency and child custody evaluations
   2. **Criminal profiling**
   3. Evaluations of the risk of reoffending
   4. Testimony as an expert witness
7. Which is the following is true for those whose career in psychology lies in applying psychology to help people?
   1. They do not do research
   2. They do not read and write for scientific journals
   3. They do not write grants
   4. **None of the above is true of applied psychologists**

8. Which of the following is the key difference between practitioners and researchers in psychology?
   1. Researchers work in universities and practitioners work in hospitals or related institutions.
   2. Researchers study statistics and scientific methods in graduate school but practitioners do not.
   3. Researchers publish in scientific journals but practitioners do not.
   4. **Practitioners and researchers share many similarities in training and background but differ in their goals to help or understand people.**

9. Which one of the following is required for a person to call himself or herself as a “psychologist” in the USA?
   1. **Passing a national licensing test in psychology and being issued license as a psychologist by the state licensing board in which the person resides.**
   2. A graduate degree (MA or PhD) in Clinical Psychology.
   3. An undergraduate degree (BA or BS) in Psychology.

10. Which one of the following is the primarily way that Sports Psychologists work with coaches and athletes?
    1. Improving exercise adherence, rehabilitating injuries, building self-esteem, teaching group dynamics.
    2. **Developing mental training routines as a regular part of athletes' workouts.**
    3. Helping with game preparation, team cohesion, communication skills, and other areas that affect athletic performance.
    4. All of the above.

11. Which one of the following psychologists is trained to deliver a variety of services, including individual assessment, organizational development, education/training, employee selection/appraisal, change management, and expert support?
    1. **Social Psychologists**
    2. Consulting Psychologists
    3. Counseling Psychologists
    4. Cognitive Psychologists
12. Which one(s) of the following degrees in psychology is required for a student to become a therapist?
   1. An academic degree (e.g., a masters MA or doctor PhD of philosophy.
   2. A professional degree (e.g., PsyD or Psychology Doctorate).
   3. A therapy degree (e.g., td or therapy doctorate).
   4. A or b above.

**CODING:** \[ ((\text{PAC1 EQ 4}) + (\text{PAC2 EQ 3}) + (\text{PAC3 EQ 1}) + (\text{PAC4 EQ 2}) + (\text{PAC5 EQ 4}) + (\text{PAC6 EQ 2}) + (\text{PAC7 EQ 4}) + (\text{PAC8 EQ 4}) + (\text{PAC9 EQ 1}) + (\text{PAC10 EQ 4}) + (\text{PAC11 EQ 2}) + (\text{PAC12 EQ 4})) \] / 12
Appendix C: Department of Psychology Student Achievements 2012-1013 (Bold=Faculty, *=WSU Psychology Student)

Student Publications


Faculty-Student Presentations

A total of 41 different students presented 22 unique posters, supervised 9 faculty members, at 10 local, regional, national or international conferences this conference season.

WSU Day at the Capitol

Hargrave*, A. & Russell-Stamp, M. (February, 2013). NAMI’s peer-to-peer class and its effects on mental health literacy. Poster presented at WSU Day at the Capitol, Salt Lake City, UT.

Utah Council for Undergraduate Research (UCUR)


Weber State University Research Symposium


Hargrave*, A. & Russell-Stamp, M. (March, 2013). NAMI’s peer-to-peer class and its effects on mental health literacy. Presentation at the Weber State University Research Symposium, Ogden, UT.


Council on Undergraduate Research Posters on the Hill (Washington, D.C.)


National Conference for Undergraduate Research (NCUR)


Bench*, J., Feller*, D. & Fowler, L. A. (April, 2013). Auditory processing and the stress response: how the startle response and habituation may be predictors of PTSD. Presentation accepted at the National Conferences for Undergraduate Research, La Crosse, WI.


Rocky Mountain Psychological Association Conference (RMPA)


**Community Involvement Center Service Symposium**


**Weber State University Teaching and Learning Symposium**

**Association of Psychological Science (APS)**


**Jean Piaget Society (JPS)**


**Student-Faculty Grants**

OUR research grants:

**Fowler**: Jennifer Bench*, Daniel Feller*, Sterling Haws*, Matt Fullmer*

**Baird**: Eric Bitton*

OUR Travel grants:

**Amsel**: Jennifer Killpack*

**Ashley**: Brandi Christensen*, Stephanie Porter*, Blisse Voigt*.

**Fowler**: Jennifer Bench*, Daniel Feller*, Trevor Hicks-Collins*.

**Faculty-supervised Community Service**

**Matthew Schmolesky**: supervised two psychology and neuroscience students (Daniel Feller and Ariel Hargrave) in offering scientific presentations on the brain at local junior high schools.

**Eric Amsel**: supervised a total of three practicum students, two (Monique Mayeda and Rebecca Bauer) at the *Treehouse Children’s Museum* and one (Jennifer Chadwick) at the *DaVinci Academy of Arts and Science*.

**Theresa Kay**: supervised 3 students (Ariel Hargrave, Stephanie Fitzgerald ; Brett Bartliff) at Ogden OUTreach.

**Melinda Russell-Stamp** and **Maria Parrilla de Kokal**: supervised 12 students (Collin Atwater, Suzie Cressall, Gentry Phillips, Wendy Heninger, Antoinette Kingsford, T.J. Leydon, April Mildon, Tanner Mitchell, Lauren Nelson, Scott Ploharz, Kaylee Richards, Logan Zaring) at *Youth Impact*. 
Azenett Garza and Maria Parrilla de Kokal: supervised 7 students (Leandro Cornejo, LaChere Earl, Antoinette Kingsford, Lashelle Mann, Karen Morello, Preston Surrage, Ysenia Quintana) at OWCAP Head Start.
Appendix D: Requested CCEL Information

<table>
<thead>
<tr>
<th>Educational Offering</th>
<th>Course Name(s) and Number(s)</th>
<th>Number of student participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capstone Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical/Practicum Experiences</td>
<td>4380/4390</td>
<td>21</td>
</tr>
<tr>
<td>Internships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate Research</td>
<td>2800/4800/4910/2830/4830</td>
<td>48</td>
</tr>
<tr>
<td>CEL designated courses (these are already tracked by the CCEL Office – you don’t need to provide this unless you want it for internal documentation).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please indicate)</td>
<td></td>
<td></td>
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