Assessment Plan Application in the Psychology Undergraduate Program at Utah State University

Methods

1. Field Supervisors’ Assessment of students’ acquisition skills or integration of knowledge/skills in practicum and internship settings.
2. Examination in psychology to assess cumulative knowledge (Senior Year). The E.T.S. Major Test is currently used.
3. Demonstration of data analysis and/or research design skills via actual analyses.
4. Post-graduation (follow-up) data regarding employment status, program satisfaction, recommendations for program improvement.
5. Assessment of written communication skills through one or more of the following: Written reports, Essays, Literature Reviews, Comprehensive research reports, Proposals.

The undergraduate psychology program at Utah State University is committed to turning out students who are well educated and service oriented. In addition to coursework, students are required to complete apprenticeship experiences outside of the classroom.

Learning Objectives

1) Students will demonstrate an appropriate Knowledge Base in Psychology.

To assess knowledge in psychology, students take the Major Field Test (MFT) in Psychology (published by ETS). This test was first implemented in Fall 2015.

ETS-MFT Test Outcomes

Participants.

N=69 students enrolled in Psychology 5330 (Principles of Psychological Measurement and Test Theory) on the Logan campus. 47 (68%) seniors, 14 (20%) juniors, 1 (1%) sophomore.

Sub scores and Indicators.

Results of the exam were provided in four sub areas: 1) Learning, Cognition, Memory (LCM), 2) Perception, Sensation, Physiology (PSP), 3) Clinical, Abnormal, Personality (CAP), and 4) Developmental & Social (DS). Assessment indicators are Memory and Cognition (MC), Perception, Sensation, Physiology
Comparison Schools (N=872)

Comparison schools were chosen from the list of schools participating in the exam nationally.
The following schools were selected for comparison, Ball State University (n=104), Clemson University (n=185), Indiana University South Bend (n=35), James Madison University (n=55), Kennesaw State University (n=166), Mississippi State University (n=11), University of Idaho (n=8), University of Missouri-St. Louis (n=201), University of Oklahoma (n=10), and Wayne State University (n=97). Schools were selected based on their land-grant status as well as similarity to the psychology program at Utah State University (USU).

Results

The following figures show USU scores in comparison to the ten comparison schools, as well as to all United States (U.S.) schools in the test results database.

Figure 1. Comparison of total scores
Figure 2. Comparison of Sub scores

Figure 2. Learning, Cognition, Memory (LCM), Perception, Sensation, Physiology (PSP), Clinical, Abnormal, Personality (CAP), Developmental & Social (DS)

Figure 3. Memory and Cognition (MC), Perception, Sensation, Physiology (PSP), Clinical, Abnormal (CA), Social (S), Measurement and Methodology (MM)

Figure 3. Assessment Indicators (%correct)
2) Students will gain skills in Scientific Inquiry and Critical Thinking.

Evidence of scientific inquiry and critical thinking is taken from a sample of exam scores from Psychology 5330: Principles of Psychological Measurement and Test Theory and an excerpt of scores from Psychology 3500: Research Methods in Psychology.

PSY5330 “covers psychological test and measurement theories, including statistical theories for defining reliability and validity, It also discusses the application of psychometric theory to psychological scale development and evaluation.” (USU Catalog). The departmental goal in this area is to achieve a minimum score 80% correct on the tested topics. Exam topics and percentage correct on these exams are as follows for the Fall 2015 academic semester:

- Review of Basic Statistical Concepts, Intro to Classical Test Theory 82% correct
- Measurement Models of Classical Test Theory with Mplus Software I 78% correct
- Measurement models of classical test Theory with Mplus Software II 74% correct
- Latent State-Trait Theory 91% correct
- Item Response Theory 85% correct

PSY3500 lists, among other learning objectives, that students will “Locate, read, and critically analyze psychology’s scientific literature, Sort good science from junk science in the real world, Create a research proposal to address an interesting and important empirical question, and to Verbally present psychological research to peers. This course uses Quizzes, homework, a final paper, exams, and a presentation score to determine competence in the objective area. Creation of the research proposal and instructor critique of each section from inception through final proposal Demonstrates data analysis and/or research design skills via actual analyses. PSY3500 scores will be discussed in greater detail in section 4: Communication.
3) Students will demonstrate Ethical and Social Responsibility in a Diverse World.

Students are exposed to diversity topics in one of two required courses in the Sociocultural Influences section of the psychology major. This section of the major includes the courses Psychology 4230: Psychology of Gender (PSY4230) and Psychology 4240: Multicultural Psychology (PSY4240). A pre/posttest is being initiated in the PSY4230 course Spring 2016. PSY4240 recently began to make use of several measurement tools, for example the Multicultural Experiences Questionnaire (MEQ), Color- Blind Racial Attitudes Scale (CoBRAS), Multigroup Ethnic, Identity Measure (MEIM) and Scale of Ethnocultural Empathy (SEE). These measures are delivered as a pre/posttest in the course of instruction of the class. Sample size was N=36 for the pretest and n=34 for the posttest.

Table 1 shows pre and posttest scores for the participants on the different measures.

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Pretest Score</th>
<th>Posttest Score</th>
<th>Sig (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEQ Experience – (range 13-38; sum score): Multicultural experiences a person has had. Higher scores indicative of higher number of experiences.</td>
<td>25.67</td>
<td>27.64</td>
<td>.004</td>
</tr>
<tr>
<td>MEQ Desire- (range 6-32; sum score): Represents effort or desire to increase multicultural experiences. Higher scores indicative of more effort of desire.</td>
<td>19.89</td>
<td>21.44</td>
<td>.003</td>
</tr>
<tr>
<td>MEQ Total- (range 19-70; sum score)</td>
<td>45.56</td>
<td>49.08</td>
<td>.001</td>
</tr>
<tr>
<td>MEQ Discrimination Perceptions (range 16-90; sum score): Overall perception of others’ discrimination towards diverse groups. Higher scores indicate higher perceived discrimination.</td>
<td>53.27</td>
<td>54.31</td>
<td>.537</td>
</tr>
<tr>
<td>MEQ Social Group Impressions- (range 16-90; sum score): Your attitude toward diverse groups. Higher scores indicate more positive attitudes.</td>
<td>58.97</td>
<td>64.33</td>
<td>.003</td>
</tr>
<tr>
<td>MEIM Total Score- (range 1-4; mean score): Includes developmental, cognitive, and affective components of ethnic identity. Higher scores are indicative of a stronger ethnic identity.</td>
<td>2.69</td>
<td>3.04</td>
<td>.000</td>
</tr>
</tbody>
</table>
SEE Empathic Feeling and Expression - Higher scores indicate higher empathic feeling and expression.

SEE Empathic Perspective Taking (range 1-6; mean score)
Higher scores indicate higher empathic perspective taking.

SEE Acceptance of Cultural Differences (range 1-6 mean score) Higher scores indicate higher acceptance of cultural differences.

SEE Empathic awareness (range 1-6; mean score) Higher scores indicate higher empathic awareness.

CoBRAS - Higher scores indicate higher color-blind racial ideation. Scale range 20-120.

Note. Multicultural Experiences Questionnaire (MEQ), Multiethnic Identity Measure (MEIM), Scale of Ethnocultural Empathy (SEE), Color-blind Racial Ideology Scale (CoBRAS).

These tests have now been incorporated as a regular part of the Psychology 4240: Multicultural Psychology course every semester that it is taught. IRB approval has been given to do a 3-month follow-up to see if the gains were sustained.

4) Students demonstrate effective Communication skills, including written and verbal skills.

Communication is a specific focus in several psychology courses. Courses required for the psychology major that meet the requirements for Communication Intensive (CI) designation include: Psy 3500 Research Methods, Psy 4950 Undergraduate Apprenticeship, and Psy 5200 Intro to Interviewing and Counseling. Results from Psychology 3500: Research Methods (CI) and Psychology 4950: Undergraduate Apprenticeship (CI) will be detailed.

As partial fulfillment of course requirements for Psy 3500, students are required to compose a research proposal. This assignment is broken into sections including a research question, paper outline, literature review, feedback, methods, presentation, and final submission. The scores for the final submissions are listed below (Table 2) followed by a graphic comparison (Figure 4) of mean scores for the four semesters compared.
Table 2

<table>
<thead>
<tr>
<th></th>
<th>Spring 2014</th>
<th>Fall 2014</th>
<th>Spring 2015</th>
<th>Fall 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>89.39</td>
<td>87.47</td>
<td>85.81</td>
<td>86.29</td>
</tr>
<tr>
<td>Sample Size</td>
<td>n=62</td>
<td>n=65</td>
<td>n=65</td>
<td>n=57</td>
</tr>
</tbody>
</table>

Figure 4. Comparison of Scores for Psychology 3500 Research Proposals

Psychology 4950 requires several writing assignments in addition to the applied portion of the required coursework. Scores from the following assignments were analyzed: Applied Proposal Paper, Research Proposal Paper, Vita, Applied Final Paper, and Research Final Paper. The grades for the course are listed below (Table 3) followed by a graphic comparison (Figure 5) mean scores for the four semesters compared.
Table 3

<table>
<thead>
<tr>
<th></th>
<th>Spring 2014</th>
<th>Fall 2014</th>
<th>Spring 2015</th>
<th>Fall 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>88.58</td>
<td>93.35</td>
<td>94.33</td>
<td>90.96</td>
</tr>
<tr>
<td>Sample Size</td>
<td>n=69</td>
<td>n=58</td>
<td>n=68</td>
<td>n=75</td>
</tr>
</tbody>
</table>

Figure 5. Comparison of Mean of Final grades for Psy 4950.

In addition to this general information on grades, the scores on only the written communication assignments from the Psy 4950 course for Fall 2015 average at 90.08%.

5) Students will engage in Professional Development activities that enhance the application of their psychology skills.

Students in the psychology major have a variety of professional development opportunities. Outcomes from Psychology 4950: Undergraduate Apprenticeship and conference presentations and publications of students are highlighted here. The annual study survey also provides data related to this area.

Students in Psychology 4950 are required to complete an apprenticeship in both an applied setting and in a research setting. Students are also able to complete independent research and applied work. Learning objectives for individual projects/experiences are developed by the student and their
Students are then evaluated by their supervisor on these learning objectives at midterm and again at the completion of the experience. A sample of locations for these projects can be found in Appendix A. A summary of the final learning objective evaluation scores are below.

![Mean Final Ratings (percentage) for Applied and Research Projects](image)

**Figure 7. Mean Ratings for Psychology 4950 Applied and Research Ratings**

Publications and professional conference presentations are a key part of professional development. Undergraduate students are consistently involved in these activities. Appendix B contains a sampling of publications and presentations the undergraduate Psychology students have been involved in over the last 5 years. Undergraduates are indicated in Boldface.

Graduates from the psychology undergraduate program are surveyed approximately 1-year post graduation. Questions are asked regarding employment and continuing education among other subjects. Questions were updated for the graduating class of 2012-2013 to address the updated learning objectives set forth by the American Psychological Association (APA) for undergraduate psychology programs. Graduates are asked to rate how well the psychology department addresses the following areas: Knowledge Base of Psychology, Scientific Inquiry and Critical Thinking, Ethical and Social Responsibility in
a Diverse World, Communication, and Professional Development. Appendix C demonstrates answers to these questions.
Appendix A
Sampling of Apprenticeship / Independent Experience

Animal Behavior Lab Relapse Study
Bear River Mental Health Department
Best Friends Child Development Center
Boy Scouts of America
CASA – Court Appointed Special Advocate
Catalyst RTC
Choices- Studying cult, psy, & bio processes of Latino youths mental and behavioral health
Chrysalis
College Pass and Check & Connect
Contextual Behavioral Science Lab
Delay Discounting Research
Discounting in Different Contexts
District Court
Early Autism Project
Engagement and Burnout in Youth Sports
Firefighter Mental Health / Employee Assistance Program
Frontier Middle School
Grey Matters Study – Alzheimer’s
Impulsivity Study
Innovative Health Care – Habilitative Support
Lab Assistant for Behavior Analysis, Psychological Statistics
Logan River Academy – Youth Treatment Facility
Multisensory Cognition Lab
Neuroscience Lab
Relapse Prevention Study
Sherwood Recovery Resort
STE2M Project
Student Athlete Mentor Program
Study on OCD and OCD subsets
Teaching Assistant for General Psychology, Strategies for Academic Success, Behavior Analysis
Uinta Academy
United Families.org
Upward Bound
USU Academic Resource Center (renamed Academic Service Center)
USU Counseling and Psychological Services (CAPS)
USU Disability Resource Center
USU Disability Resource Center – Wilson Elementary
USU Veterans Resource Center
Walking Study
Web Based Act Interventions
Appendix B
Sampling of Peer Reviewed Publications and Presentations


Conference Presentations

Christensen, D.B., & Blais, R.K (2016, February) *Impact of Military Sexual Trauma on PTSD and Relationship Quality* Poster presented at annual Utah Conference of Undergraduate Research, Salt Lake City, UT.

Christensen, D.B., & Blais, R.K (2016, January) *Impact of Military Sexual Trauma on PTSD and Relationship Quality* Poster presented at annual Research on Capitol Hill event, Salt Lake City, UT.

Help Seeking in Victims of PTSD Poster presented at the annual meeting of the International Society for Traumatic Stress Studies, New Orleans, LA.


Sponsored Student Presentations  *faculty co-authorship precludes consideration for student awards


Student Showcase Presentations

McKay Mattingly 2012 and 2014
Analise Barker 2015
Figure 8 compares student ratings of psychology program performance on the 5 goals set forth by the APA. Please note for the 2014-2015 academic year, we are still in the process of collecting survey responses. Results will be updated regularly as we finish our survey season. The current data for the 2014-2015 year is $n=28$.

![Learning Goals: Student Ratings](image)

**Figure 8. Student Ratings of Psychology Program performance on 5 goals**

The next several figures detail the employment status of our graduates.
Figure 9. Employment Status: Employed, Unemployed, Student. *The student category is new for the 2014-2015 academic year.

Figure 10. Employment Status: Full-time v. Part-time.
Figure 11. Employment Status: Temporary v. Permanent

Figure 12. Employment Status: Government v. Private Sector
Figure 13. Employment Status: Psychology Related v. Not Related

Figure 14. Employment Status: Do you use the psychology principles you learned in your employment?
*This question was added in the 2012-2013 academic year.
Figure 15. Employment Status: Career or Non-Career Position

Figure 16. Employment Status: Employed in Utah v. Out of Utah State University
Questions are also asked about graduate school application and acceptance. A summary of this information can be found in figures 17 and 18.

**Figure 17. Graduate School: Application**

**Figure 18. Graduate School: Acceptance**