

STUDENT LEARNING ASSESSMENT REPORT

PROGRAM: Psychology (B.A.)

SUBMITTED BY: Linda Cote-Reilly (Chair, Department of Psychology)

DATE: August 2018

BRIEFLY DESCRIBE WHERE AND HOW ARE DATA AND DOCUMENTS USED TO GENERATE THIS REPORT BEING STORED:

1. **PSY 497 (Senior Seminar) Grading Rubric for Critical Thinking.** This is a course-embedded direct assessment of student work. Final papers (4000-word papers in which they explore a topic in psychology from the perspective of several different theories) were rated in 12 sections of this course over 8 semesters (Fall 2014-Spring 2018). Ratings were completed by 4 course instructors (all full-time members of the psychology department). 149 student papers were evaluated. The completed rubrics (in electronic and paper formats) are stored in the Psychology Department Chair's University Gmail account and in a locked file drawer in the Chair's locked office (Linda Cote-Reilly, Rowley G111). SPSS data are stored on the University's P drive.
2. **PSY 302 (Research Design) Grading Rubric for Research.** This is a course-embedded direct assessment of student work. Final research posters (APA-style research reports) were rated in 12 sections of this course over 8 semesters (Fall 2014-Spring 2018). Data for one section was missing (n = 11 students) which constitutes 7 % of the data. Ratings were completed by 2 course instructors (all full-time members of the psychology department) and 36% of data were rated by a second FT faculty member in the psychology department (5 different faculty members served as second raters). 146 student posters were evaluated. The completed rubrics (in electronic and paper formats) are stored in the Psychology Department Chair's University Gmail account and in a locked file drawer in the Chair's locked office (Linda Cote-Reilly, Rowley G111). SPSS data are stored on the University's P drive.
3. **Marymount Graduating Student Survey (GSS) – Psychology** (2014-2015, 2015-2016, 2016-2017, 2017-2018). Summary statistics for relevant items. The total number of students responding ranged from 123-126 (depending on item). These surveys, along with the Alumni Surveys, were obtained electronically from the Office of Institutional Effectiveness and then stored on a password-protected computer in Rowley G111.
4. **Marymount Alumni Survey (AS) – Psychology** (2014-2015, 2015-2016, and 2016-2017). Summary statistics for relevant items. Number of alumni participating varied by year and ranged from 19-32 (with graduation classes from 2010-2012 and 2014-2016 represented). The Alumni Survey polls students 1 year and 5 years after graduation. The response rate for this survey was (at best) 1/3 the response rate for the GSS even though twice as many students were solicited for the AS than the GSS.
5. **PSY 497 Focus Group Transcripts.** SEHS Associate Dean Shannon Melideo (or her designee) conducted focus groups in all sections of PSY 497 from AY 2014-2015 through AY 2017-2018. Data were missing for two semesters (Fall 2014 and Fall 2015 which represents 25% of semesters assessed). Approximately 60 students participated. These electronic transcripts are stored in my university Gmail account and/or in a locked file drawer in Dr. Linda Cote-Reilly's locked office (Rowley G111). This assessment report has also been uploaded to the Psychology Department Canvas site.

SPSS was used to analyze the data from the critical thinking and research rubrics. The (blank) grading rubrics and SPSS summary statistics are included in the Appendix. The full SPSS output files and raw data (items 1 and 2 above) can be obtained from Dr. Cote-Reilly. The raw data from items 3 and 4 (above) can be obtained from the Office of Institutional Effectiveness, and the full focus group transcripts (item #5 above) are available upon request from Dr. Cote-Reilly.

EXECUTIVE SUMMARY

Program description from the Course Catalog: Please copy and paste the current year's catalog description of this program. This is generally a one-two paragraph description immediately following the name of the program. Please be sure to include the listing of program outcomes as printed.

The psychology degree consists of a core of required courses plus completion of coursework chosen by students to reflect their interests, career aspirations, or graduate study ambitions.

Students take courses that emphasize effective scientific reasoning (construction of knowledge), critical thinking (analysis of knowledge), communication (transmission of knowledge), and transfer (application of knowledge).

Students earning an undergraduate degree in psychology will gain the knowledge and skills necessary for entry-level professional responsibilities in a variety of community, business, government, and educational settings. Examples include public relations, athletic training, college student services, human resources, public health services, family and child services, crisis counseling centers, substance abuse treatment, and community corrections.

The psychology degree also prepares students for graduate study in psychology, counseling, and related fields.

Marymount offers graduate programs in counseling and forensic and legal psychology, and more information about these programs can be found in the university's [*Graduate Catalog*](#).

Upon successful completion of the psychology program, students will be able to

- demonstrate critical evaluation of a psychological topic through effective writing;
- apply psychological research methodologies and statistical techniques to a research question;
- apply specialized psychological knowledge in a professional setting; and
- demonstrate effective presentation skills within the discipline.

List all of the program's learning outcomes: (regardless of whether or not they are being assessed this year)

Learning Outcome	Year of Last Assessment	Assessed This Year	Year of Next Planned Assessment
Research - <i>Students will apply psychological research methodologies and statistical techniques to a research question.</i> (Construction of knowledge)	2013-2014	Yes	2021-2022
Critical Thinking - <i>Students will demonstrate critical evaluation of a psychological topic through effective writing.</i> (Analysis of knowledge)	2013-2014	Yes	2021-2022
Oral Communication - <i>Students will demonstrate effective presentation skills within the discipline.</i> (Transmission of knowledge)	2015-2016	No	2019-2020
Career Preparation – <i>Students will apply specialized psychological knowledge in an internship setting.</i> (Application of knowledge)	2015-2016	No	2019-2020
Notes: In Fall 2014, we were approved to move to biennial assessment reporting. All 4 of our current learning outcomes were assessed during our 2012-2013 program review. Following our program review, we decreased our learning outcomes from 6 to 4, deleting Global Perspective and Ethics, a change approved by APBP. Our 4 remaining learning outcomes (listed above) are consistent with American Psychological Association recommendations for undergraduate psychology programs (APA Guidelines for the Undergraduate Psychology Major – Version 2.0, 2012). Our next program review will be during AY 2018-2019.			

Describe briefly how the program's outcomes support Marymount's mission, strategic plan, and relevant school plan (generally not more than two paragraphs, may use bullet points):

The Psychology program's outcomes support Marymount's Mission in the following ways:

1. The **Research** outcome (*Students will apply psychological research methodologies and statistical techniques to a research question*) supports Marymount's emphasis on scholarship, inquiry learning, and intellectual curiosity.
2. The **Critical Thinking** outcome (*Students will demonstrate critical evaluation of a psychological topic through effective writing*) supports MU's emphasis on academic excellence, intellectual curiosity, and written communication.

3. The **Oral Communication** and **Career Preparation** outcomes (*Students will demonstrate effective presentation skills within the discipline and Students will apply specialized psychological knowledge in an internship setting*) support the development of opportunities for personal and professional growth.
4. The **Career Preparation** outcome (*Students will apply specialized psychological knowledge in an internship setting*) supports MU's emphasis on promoting professionalism and career readiness.

The Psychology program's outcomes support Marymount's Strategic Plan and the SEHS Strategic Plan by:

1. Offering rigorous, cohesive, integrated undergraduate curricula that produce superior graduates able to succeed in their positions and communities – Our four learning outcomes (**Research, Critical Thinking, Oral Communication, and Career Preparation**) collectively support this goal. Consistent with American Psychological Association (APA) recommendations, our learning outcomes center around skill development in research and statistical methodology, writing and critical thinking, oral communication, and career preparation/professionalism. These learning outcomes prompt students to construct, analyze, transmit, and apply psychological knowledge, essential skills for anyone pursuing a career in the field of psychology.
2. Strengthening Marymount's Catholic identity – Our **Research, Critical Thinking, and Career Preparation** learning outcomes collectively address this goal, particularly in the way that expectations for ethical behavior and service to others are embedded in many of our research, critical thinking, and career preparation assignments. For example, our students become familiar with the APA's *Ethical Principles of Psychologists and Code of Conduct* and must abide by this code when conducting independent research with human participants (**Research**). They also reflect on and write about how this ethical code applies to their conduct and interactions at their internship sites (**Career Preparation**). Finally, in PSY 497 (Senior Seminar), psychology majors integrate scholarly literature in two sub-fields of psychology in order to devise a program or an applied research project that addresses a pressing social problem, such as homelessness, PTSD in veterans, or psychological disorder stigma (**Critical Thinking**).
3. Strengthening Marymount's ties to the larger community through outreach and collaboration – Through their internship, students connect with the larger community (**Career Preparation**). Many of our psychology majors choose community outreach programs for their internship sites (*e.g.*, Doorways Shelter for Women and Families; Alternative House; Rape, Abuse, and Incest National Network; National Alliance on Mental Illness), and some of our students' internship supervisors are Marymount alumni. We also have a Psychology Careers Night every Fall, and many of the presenters who have careers in psychology are Marymount alumni.

Please note that the SEHS Strategic Plan highlights all three of the items that are identified above from Marymount's Strategic Plan. The Psychology learning outcomes also support the SEHS goals (stated on the SEHS website) of fostering caring, reflective, and ethical professionals, grounded in both psychological theory and practice. (***Note that during this assessment Psychology was part of SEHS. Going forward we will be part of SSME so our school goals may change, as may MU's Mission and Strategic Plan, with our new President.**)

The Psychology program's four interrelated learning outcomes are intentionally consistent with best practices in the discipline. The APA recommends that college students need the following skills to succeed in the 21st century:

1. **Scientific Reasoning** (Construction of knowledge)
All students complete a 3-course methodology sequence beginning in their first semester with a 1-credit laboratory course designed to allow students to "work with" the material they are learning in their introductory psychology course. This course helps students understand how we know what we know (how knowledge in our field is created). No other universities in the area have such a course. We also have a statistics course that lays the foundation for students to conduct their own research project in our Research Design course. In addition, approximately 12% of our majors are working on research with Psychology faculty beyond the classroom (this includes Discover grants, Honors theses, other student independent projects for course credit, and faculty projects and grants).

2. Critical Thinking (Analysis of knowledge)

Unlike mathematics where $2 + 2$ always equals 4, the study of human behavior is complex and the answers to our questions ever-changing. Thus, the faculty in our department teach students to think critically about psychological phenomena by first evaluating the validity of the source of the information (information literacy), and secondly by asking students to weigh the evidence (before coming to a conclusion) using a variety of techniques (*i.e.*, experimentation, case studies, studying controversial topics, peer discussion).

3. Communication Skills (Transmission of knowledge)

Psychology majors hone their communication skills by writing papers and giving oral presentations throughout their studies at Marymount. They take at least two writing-intensive courses in the major in order to learn how to think and write like psychologists. This focus on effective communication skills will set students apart from their peers in the workplace and graduate studies.

4. Career Preparation (Application of knowledge)

Students complete an internship at a site of their choosing, reflecting their own interests and career goals. Examples of recent internship sites include: Arlington County Juvenile and Domestic Relations District Court (forensic psychology), Community Advocates for Family and Youth (advocacy), National Center for Missing and Exploited Children (nonprofit service), Fort Belvoir Community Hospital Brain Assessment Research Lab (research), Psychiatric Rehabilitation Services (counseling), Ivymount School (special education, applied behavioral psychology), Sibley Hospital (applied developmental psychology), and Navy Federal Credit Union (I/O psychology). Internships are important because they help students focus their career interests and goals, teach them about workplace culture, and provide essential networking opportunities. Using data from the last assessment report (because Supervisor Ratings will be assessed in the next assessment report), from Spring 2015-Spring 2016, 17% of our interns were offered jobs at their internship sites, and 76% of the supervisors recommended their student intern for future employment in the field (with 24% not responding). Of the graduates responding to our 2015-2017 Alumni Surveys, an average of 80% were employed in psychology or a related field. (Many fields are related to psychology or make use of psychology, although our students may not always recognize this. Looking at the descriptions of where students work on the AS, when students answered that question, one can see that nearly all use Psychology.)

Provide a brief description of the assessment process used including strengths, challenges and planned improvements to the process, and provide evidence of the existence of a culture of continuous improvement based on assessment (*generally not more than two paragraphs, may use bullet points*):

Strengths of the assessment process include:

- course-embedded assessment for all four of our learning outcomes. Course-embedded assessment is recommended by the American Psychological Association (APA) as a “best practice” in the teaching of psychology. Course-embedded assessment allows the instructor to immediately adapt her course should she see that the course learning outcomes are not being met.
- Another strength of our assessment is the use of psychometrically solid rubrics. The critical thinking rubric used in this report was adapted from the AAC & U’s critical thinking rubric and it shows a high degree of interitem reliability with our sample: overall Cronbach’s $\alpha = .925$, with interitem correlations ranging from .720 to .786. Each element in our research rubric captures the principle parts of a research report in psychology (APA format: introduction, hypothesis, method, results, conclusions). Although developed independently of each other, psychology’s research rubric is very similar to the rubric used in DSC 101, and this is appropriate because both are inquiry courses (thus it shows construct validity). Interitem reliability for our research rubric was Cronbach’s $\alpha = .762$, with interitem correlations ranging from .271 to .483. (An $\alpha \leq .70$ is generally considered to show good reliability).

- Interrater reliability was also good for the research rubric. As mentioned above, 36% of these data were coded by two FT instructors. Related samples t-tests indicated that there were no significant differences between raters on four out of five of the items [literature review, $t(52) = 1.592$, $p = .117$; methodology, $t(52) = 0.904$, $p = .370$; results, $t(52) = 0.140$, $p = .889$; conclusions, $t(52) = 0.711$, $p = .480$]; the only difference was for item 2 (statement of hypothesis), $t(52) = 4.019$, $p < .001$. Correlations between the instructor and second raters' scores ranged from $r = .204$ to $.596$; only the correlation for item 2 was not significant, $r(51) = .204$, $p = .142$. The finding of no significant differences between raters' scores and significant positive correlations between those rating the same student work demonstrates that the instructor ratings are valid assessments of student work. (SPSS output appears at the end of this document). Although the correlation between the instructor and rater for item 2 was positive, it was not statistically significant, and there were significant differences between their ratings ($M_D = \sim .50$, half a point). Analysis of data on a section-by-section basis did not help to determine why this was the case as sample sizes were smaller and no patterns emerged in the data. The hypothesis should appear in the Introduction of a research report, and in some cases it was elsewhere in the report (e.g., Results). It may be that one rater was giving students a lower score on this item because it was not appearing where they expected it to be, because mean ratings for both the instructor ($M = 3.2877$, $SD = .77867$) and second rater ($M = 3.8868$, $SD = .91799$) were above the accepted 3.00. Item 2 is an area for improvement for interrater agreement.
- A final strength of the assessment process is that we were able to gather direct assessments from 93% of students (who have taken PSY 302 in the past 4 years) for our research standard and 100% of students (who have taken PSY 497 in the past 4 years) for our critical thinking standard. Thus we have direct performance data from nearly all students, giving us a large and robust dataset.

Challenges include:

- Collecting all rubrics in a timely manner. As mentioned above, 7% of data were missing for our research standard. Although this is a small amount of missing data for a large major, our hope was that by using course-embedded assessment we would have 100% data as we did for critical thinking. Planned improvements include the Chair being vigilant about collecting assessment data at the end of every semester and entering it into SPSS at the end of each semester.
- A second challenge is gathering and understanding the focus group results. As mentioned above, 25% of these data were missing, and even when it was collected, not all students attended the focus group session and not all students present participated. One semester the focus group questions for Criminal Justice were administered to students. The purpose of a focus group is to allow student responses to take the interview in unexpected but important directions (for information-gathering purposes). This generally has not happened in our focus groups. We end up with a lot of group-think and "me too" responses. Planned improvements include no longer holding a focus group with graduating seniors and instead adding the open-ended questions from the focus group to the Psychology supplement of the Graduating Student Survey (GSS). This will enable us to poll the same group of students, but get individual responses not influenced by their peers. As we have observed in the classroom, quieter students are more likely to express themselves in writing. As can be seen above, the response rate for the GSS (~ 95 students) is better than the focus group attendance and participation (~ 60).

Describe how the program implemented its planned improvements from last year: **The first two columns were pre-loaded by PIE**

Outcome	Planned Improvement	Update (Indicate when, where, and how planned improvement was completed. If planned improvement was not completed, please provide explanation.)
<p>Oral Communication (Transmission of Knowledge) - Students will demonstrate effective presentation skills within the discipline.</p>	<p>Because students exceeded expectations on both direct and indirect measures for this learning outcome and showed the same strong results as the last time the outcome was assessed, no program improvements are necessary. We will continue to encourage all faculty teaching psychology courses to use our Oral Communication rubric to grade presentations in their classes. By using this scoring rubric repeatedly throughout students' careers, we aim to foster the skills necessary for strong oral presentations. The department will also discuss the possibility of collecting assessment data on presentations in lower-level courses to serve as a basis for comparison to the senior-level presentations already being assessed. Finally, as discussed above, we will examine the need for any changes to the oral presentation rubric items themselves.</p>	<p>As a department we decided that we will continue to disseminate the oral communication rubric to all Psychology instructors and encourage its use. At this time we will continue to use assessment data from capstone experiences (and not throughout the program) because currently we are meeting expectations and because approximately half of our students are transfers, our sample size for assessment would be much smaller. As mentioned in the last Assessment Report, in Fall 2015 the scoring on this rubric was changed from a 3-point scale to a 5-point scale. Prior to F15, each item on the rubric was rated on a 3-point response scale, ranging from 0 = <i>Unsatisfactory</i> to 2 = <i>Excellent</i>. As of F15, we modified the presentation rubric to have a 5-point response scale (ranging from 1 = <i>Unsatisfactory</i> to 5 = <i>Excellent</i>). This allows raters' responses to be more specific, which gives students more helpful feedback. This is also in line with the 5-point rating scales for our other rubrics and all of the rubrics PIE uses. 5-point rating scales are very popular in our field while also efficient. In addition, in April 2017 the oral presentation rubric was reorganized by content area (see Appendix), which is a more helpful way for students to understand the important components of a presentation. In addition, this new design will allow us to generate three sets of measurements from this rubric: students' overall presentation scores, their item scores, and their content area score, thereby helping us to better understand student performance.</p>
<p>Career Preparation (Application of Knowledge) - Students will apply specialized psychological knowledge in an internship setting.</p>	<p>Because students exceeded expectations on both direct and indirect measures of assessment for this learning outcome, no program improvements are necessary. We will consider whether the Career Preparation outcome is appropriately focused (as discussed above), and we will consider possible revisions to the site</p>	<p>The supervisor evaluation was revised Spring 2015 to be shorter and more consistent with other departments (and it is now administered through Jobs4Saints by Career Services). The last assessment report had data using both the old and new forms. The following improvements are planned for the</p>

Outcome	Planned Improvement	Update <i>(Indicate when, where, and how planned improvement was completed. If planned improvement was not completed, please provide explanation.)</i>
	supervisor evaluation (of intern performance) and to the focus group content and process.	<p>assessment of Career Preparation. In considering whether the Career Preparation outcome is appropriately focused, in Summer 2018, we determined that the questions about ethics in the Psychology supplements to the GSS and Alumni survey are not necessary and therefore they will be removed from these surveys. Ethics was a previous learning outcome but was never removed from the GSS, AS, or supervisor evaluation. (The internship instructor asks students to write an ethics paper, so the questions on ethics will be kept on the supervisor evaluation but not used for assessment of program outcomes.) Second, we will change this learning outcome from: Career Preparation – Students will apply specialized psychological knowledge in an internship setting (Application of knowledge) to Career Preparation – Students will apply specialized psychological knowledge <i>and skills</i> in an internship setting (Application of knowledge and skills) because we do want our students to use their research, critical thinking, and oral communication skills on the job as well as apply their knowledge base in psychology. Third, we will also change the supplemental questions on the GSS and AS to ask separately about psychological knowledge and skills. Fourth, we will investigate whether APA has a rubric for application of knowledge in undergraduate programs and if so, consider using these items in our assessment.</p>

Provide a response to last year's University Assessment Committee review of the program's learning assessment report:

Comment: The most careful storage of information on individual faculty computers, that needs to be used in establishing trend data, is not encouraged.

Response: Data are saved using space and technology provided by the University. Grading rubrics are in paper form (in a locked drawer in the Chair's locked University office) and on the University Gmail drive of the department Chair. SPSS files are stored on the University's P drive. A copy of this report is stored on the University's P drive and on Canvas.

Comment: Be careful not to put an interpretation of the outcome in bold and relegate the actual outcome wording to smaller print. For example, in Outcome 1 - Presentation skills do not automatically equate with transmission of knowledge. There are numerous

examples of highly persuasive advertising and political messages that do not transmit knowledge. If you require evidence of program content knowledge as a key requirement of an oral presentation, then the case must be made that it covers both content knowledge and communication skills.

Response: While it is true that presentation skills do not automatically equate with transmission of knowledge, the student product we assess does involve transmission of knowledge. Our assignment is not advertising or political messages, it is students' presentation of the PSY 497 senior seminar 4000-word paper in which they research a topic in Psychology using several theoretical perspectives, thus it covers both content knowledge and communication skills, as evidenced in the Oral Communication rubric attached in the Appendix. Sources of information students use are reputable peer-reviewed research articles and literature reviews available through PsychNet.

Comment: Consider re-assessing the standard for some performance measures when 100% meet a medium level standard. It is interesting that the internship rubric collects more information on ethics and skills than knowledge, yet it is used as a primary measure of knowledge. Would it be possible to expand the rubric to break down knowledge areas so that supervisors could evaluate those areas?

Response: As suggested by the Assessment Committee, we will revise our rubric to be sure that we are looking at students' knowledge. Specifically, we will explore whether APA has a rubric for assessing students' application of knowledge in an internship setting. Additionally, as mentioned above, we will keep the ethics items on the supervisor evaluation because s/he wants to know how well students show ethical behavior, but we will not use these items for this assessment just as we do not use all items on the GSS or AS for assessment. The ethics items will be removed from the Psychology supplement for the GSS and AS.

Comment: In Outcome 2 the data shows that internship supervisors believe that students rank in the 65% of knowledge and only reach 100% after they completed an internship. The usual expectation is that an internship is an opportunity to display knowledge acquired thru the program. The indirect measure also focuses on skills.

Response: This question asks about students' knowledge of that particular job site: "knowledge of internship site (e.g., client population, objectives, strategies)" and not about knowledge of psychology generally. For Psychology knowledge and skills are interrelated; we want students to demonstrate their research, critical thinking, and oral communication skills at their job site as well as apply their knowledge of the field of psychology. As a result, as mentioned above, we will change the standard to ask about knowledge and skills (we are interested in both). But more to the point, we will revise the internship supervisor evaluation to be sure we are getting information about students' application of psychological knowledge. We will also change the supplemental questions on the GSS and AS to ask separately about psychological knowledge and skills.

Comment: The comment that "no program improvements are necessary" seems to contradict a culture of continuous improvement. If you are not able to identify areas where your program needs to improve through your assessment process, then your assessment process needs to change: more detailed rubrics that provide more granular information, the addition of classroom-based assessment, additional direct measure for each outcome, etc. There are always, always, always areas that need improvement.

Response: The Department of Psychology believes that a culture of continuous improvement is demonstrated by constantly assessing outcomes and making changes as necessary but not unnecessarily. Indeed, as stated on MU's PIE website: "Assessment helps answer the question, 'Is all of our work and our resources bringing about the results we want?'"

<https://www.marymount.edu/Home/Faculty-and-Staff/Office-of-Planning-Institutional-Effectiveness/Assessment>". Despite what was stated on our last assessment report, as documented there and above, we *did* make changes to our rubrics and process as a result of that assessment report (as we do for every assessment report). Our most important means of assessment are the direct assessments of student work embedded in each class. It is important to remember that these are end-point (capstone) assessments, taken after students have taken many other Psychology courses where our learning outcomes are taught and emphasized. When student learning meets our goals, it means that our expectations for student learning, what we are teaching our students, and what students are learning are clear and aligned with each other, as they should be if one is to provide a quality education. Our report was accepted as submitted.

Comment: Your assessment process should provide you with enough information to clearly identify areas that need improvement. Please amend your process to make sure it does.

Response: Above we stated the changes we made to the assessment process as a result of the last assessment report. In summary, for Oral Presentation we organized the rubric by category to allow more fine-grained analysis of this standard. For Career Preparation we will be sure that our questions address knowledge of the field of psychology and we will clarify the standard to state that we will also assess skills (and knowledge). Instead of Focus Groups, we will incorporate those open-ended questions into the Psychology supplement to the GSS.

Outcomes Assessment 2017-2018

Learning Outcome 1: Research - Students will apply psychological research methodologies and statistical techniques to a research question.

Assessment Activity

Outcome Measures <i>Explain how student learning will be measured and indicate whether it is direct or indirect.</i>	Performance Standard <i>Define and explain acceptable level of student performance.</i>	Data Collection <i>Discuss how the data was collected and describe the student population</i>	Analysis <i>1) Describe the analysis process. 2) Present the findings of the analysis including the numbers participating and deemed acceptable.</i>
Direct assessment: Full-time Psychology faculty teaching PSY 302 rated their students' final research reports in PSY 302 using the grading rubric in the Appendix.	An acceptable level of performance is a mean of 3.00 on the 5-point rating scale, with 66% (2/3 majority) of students earning ratings of 3.00 or above. A "3" on this rating scale means that students met the standard, so 4s and 5s mean that the student exceeded the standard.	Final research posters were rated in 12 sections of this course over 8 semesters (Fall 2014-Spring 2018). There were 2 different instructors. 146 student posters were evaluated. Data for one section was missing (n = 11 students) which constitutes 7 % of the data. 5 different faculty members served as second raters).	Data for each of the 5 items on the rubric and for each of the 146 students were entered into SPSS. Mean scores were computed for each of the five items separately and an overall mean score was computed. Summary statistics appear in the Appendix. (Note that M = mean and SD = standard deviation, per APA format). For item 1 <i>Quality of the Literature Review/Introduction</i> , M = 3.25, SD = 1.04 and 76.0% of students scored 3 or above. For item 2 <i>Description of Purpose</i> , M = 3.29, SD = .78, and 87.7% of students scored a 3 or above. For item 3 <i>Quality of Design/Methodology</i> , M = 3.40, SD = .63 and 96.6% of students scored 3 or above. For item 4 <i>Description of Results</i> , M = 3.42, SD = .98, and 82.9% of students scored 3 or above. For item 5 <i>Quality of Conclusions</i> , M = 3.39, SD = .87, and 84.9% of students scored 3 or above. The overall mean (all items combined) was 3.35, SD = .62 and 76% of students scored 3 or above. These data indicate that our students are meeting our performance expectations for each of the items separately and for the overall standard.
Indirect assessment: Marymount Graduating Student Survey – Psychology supplement (2014-2015, 2015-2016, 2016-2017, 2017-2018) administered by PIE.	Summary statistics for relevant items. An acceptable level of performance was M = 3.00 or greater and a majority (66%) of students rating their preparation as "good or excellent".	The total number of students responding ranged from 94-96 (depending on item). Two items were relevant for the research standard.	For the item "find appropriate sources of information" Ms ranged from 3.98 to 4.30 (SDs = .64-.99) and 72.1% to 90% of respondents rated their preparation as good to excellent. For the item "use quantitative/qualitative techniques within your professional field" Ms ranged from 3.97 to 4.44 (SDs = .59-.91) and 63.3% to 95.2% of respondents rated their preparation as good to excellent. These data indicate that our students are meeting our performance expectations, however, for the most recent GSS (2017-2018) the percentage of students rating "use quantitative and qualitative techniques..." fell just below 66% (for the other years it was 83.7% or higher). This will be discussed below.

Outcome Measures <i>Explain how student learning will be measured and indicate whether it is direct or indirect.</i>	Performance Standard <i>Define and explain acceptable level of student performance.</i>	Data Collection <i>Discuss how the data was collected and describe the student population</i>	Analysis <i>1) Describe the analysis process. 2) Present the findings of the analysis including the numbers participating and deemed acceptable.</i>
Indirect assessment: Marymount Alumni Survey – Psychology supplement (2014-2015, 2015-2016, and 2016-2017) administered by PIE.	Summary statistics for relevant items. An acceptable level of performance was a majority (66%) of students rating their preparation as “good or excellent”.	The number of alumni participating varied by year and ranged from 19-32 (with graduation classes from 2005-2016 represented). Two items were relevant for the research standard.	For the item “find appropriate sources of information” 78.9% to 83.9% of respondents rated their preparation as good to excellent. For the item “use quantitative/qualitative techniques within your professional field” 67.7% to 74.1% of respondents rated their preparation as good to excellent. These data indicate that our students are meeting our performance expectations.
Indirect assessment: The Associate Dean conducted focus groups in PSY 497 <i>Senior Seminar</i> .	An acceptable level of performance is mostly positive student comments.	Focus groups were conducted in all sections of PSY 497 from AY 2014-2015 through AY 2017-2018. Data were missing for two semesters (Fall 2014, Fall 2015 which represents 25% of semesters assessed). Approximately 60 students were present at the focus groups but not all participated.	Students were asked, “How well do you think the Department of Psychology has prepared you to conduct and understand research to answer questions in Psychology?” Most students who responded said they felt prepared to do research, thereby supporting the findings from the other direct and indirect measures in this section (see Appendix for full responses). Students also commented that they would have liked more WI classes or classes with SPSS to prepare them to do research in PSY 302. Several expressed little interest in doing research.

Interpretation of Results

Describe the extent to which this learning outcome has been achieved by students (Use both direct and indirect measure results):

The data cited in the table above overwhelmingly suggest that Psychology students are achieving this learning outcome.

Briefly describe program strengths and opportunities for improvement relative to assessment of outcome:

The result of this assessment suggests that psychology students are achieving the research learning outcome. This result is similar to the last assessment of this LO in 2014. In the two assessments prior to 2014 we were not meeting this outcome. The changes that we made to the program that began to show up in 2014 were that we revised our methodology sequence and improved our (relatively new) PSY 105 labs in 2010. Thus, these results suggest that the addition and revision/strengthening of the PSY 105 laboratories has helped our students to meet the research standard by giving them repeated exposure to research throughout their time at Marymount. Fortunately, these results also suggest that when we did away with PSY 270 Tests and Measurements and PSY 300 Research Writing as a result of our 2012-2013 Program Review, this did not detract from students’ learning with respect to research. (Our research sequence used to be PSY 105 laboratory, PSY 201 Statistics for the Social Sciences, PSY 270 Tests and Measurements, PSY 300 Research Writing and PSY 302 Research Design. We deleted PSY 270 and PSY 300 as a result of the last Program Review because we learned very few undergraduate psychology programs offered this course and APBP wanted us to reduce the number of credits in our major. Instead of requiring students to take PSY 300, students are now required to take a WI content course.)

Even though we met the standard, on the alumni survey students rated their ability to use qualitative and quantitative techniques in the field lower than finding appropriate sources of information, and on the most recent GSS 63.3% of our students rated their ability to use quantitative/qualitative techniques within our field as good or excellent (just missing our goal of 2/3 majority). It should be noted that on this GSS students rated their own self-confidence lower than most

other items in the evaluation of their own development. Also, in the focus group, a few students commented that s/he would have liked more time to learn SPSS. Because SPSS is so expensive, students only have an opportunity to use it in a computer lab, and are unlikely to purchase it for their home computer. This represents an opportunity for improvement. Psychology students are introduced to SPSS in PSY 105 *General Psychology Laboratory* and again in PSY 302 *Research Design for Psychology* and they master it when they do research with Psychology faculty beyond the classroom (e.g., Discover, Honors, PSY 433 *Research* or PSY 451 *Project*). Approximately 12% of our majors do research beyond the classroom each year.

Discuss planned curricular or program improvements for this year based on assessment of outcome:

Planned curricular improvements include investigating ways we might give students a better background in SPSS. Although we have thought about adding SPSS to PSY 201 Statistics in the Social Sciences, PSY 105 and PSY 302 are the only courses in our methodology sequence that all (or nearly all) psychology majors take at Marymount, including the transfer students. So adding SPSS to PSY 201 would benefit only half of our students. Another possibility we will explore is adding SPSS to PSY 260 Learning and Cognition, an inquiry course that all Marymount psychology majors take. Another planned improvement is to be sure that the PSY 302 course is assigned to either the Psychology Laboratory room (Rowley G129) or a computer lab where SPSS is available for students to use. Getting PSY 302 assigned to an appropriate classroom has proven far more challenging than it should be (even though we request appropriate classrooms when the Chair submits schedules in the fall).

In 2018-2019 we will have a Program Review where we expect to learn more about how other similar universities are teaching their students to do psychological research and infusing SPSS into the curriculum. As was the case with the last Program Review, the Program Review process will undoubtedly help us to improve our program in ways that we cannot predict now. We made major changes to our program as a result of the last program review and expect to do so this time as well.

Learning Outcome 2: Critical Thinking - Students will demonstrate critical evaluation of a psychological topic through effective writing.

Assessment Activity

Outcome Measures <i>Explain how student learning will be measured and indicate whether it is direct or indirect.</i>	Performance Standard <i>Define and explain acceptable level of student performance.</i>	Data Collection <i>Discuss how the data was collected and describe the student population</i>	Analysis <i>1) Describe the analysis process. 2) Present the findings of the analysis including the numbers participating and deemed acceptable.</i>
Direct assessment: Full-time Psychology faculty teaching PSY 497 rated their students' final papers using the grading rubric in the Appendix.	An acceptable level of performance is a mean of 3.00 on the 5-point rating scale, with 66% (2/3 majority) of students earning ratings of 3.00 or above. . A "3" on this rating scale means that students met the standard, so 4s and 5s mean that the student exceeded the standard.	Critical thinking rubrics for students' final papers in Senior Seminar. Data were collected from 12 sections of this course over 8 semesters (Fall 2014-Spring 2018). Ratings were completed by 4 course instructors (all full-time members of the psychology department). 149 student papers were evaluated.	Data for each of the 4 items on the rubric and for each of the 149 students were entered into SPSS; data about the instructor and section were also entered. Next mean scores were computed for each of the four items separately and an overall mean score was computed. Summary statistics appear in the Appendix. For item 1 <i>Explanation of Issues</i> , M = 3.95, SD = .88 and 97.3% of students scored 3 or above. For item 2 <i>Evidence</i> , M = 3.42, SD = .92 and 84.6% of students scored 3 or above. For item 3 <i>Student's Position</i> , M = 3.69, SD = .95 and 92.6% of students scored 3 or above. For item 4 <i>Conclusions</i> , M = 3.61, SD = .96 and 89.9% of students scored 3 or above. The overall mean (all items combined) was M = 3.67, SD = .84 and 83.2% of students scored 3 or above. These data indicate that our students are meeting our performance expectations for

Outcome Measures <i>Explain how student learning will be measured and indicate whether it is direct or indirect.</i>	Performance Standard <i>Define and explain acceptable level of student performance.</i>	Data Collection <i>Discuss how the data was collected and describe the student population</i>	Analysis <i>1) Describe the analysis process. 2) Present the findings of the analysis including the numbers participating and deemed acceptable.</i>
			each of the items separately and for the overall standard.
Indirect assessment: Marymount Graduating Student Survey – Psychology supplement (2014-2015, 2015-2016, 2016-2017, 2017-2018) administered by PIE.	Summary statistics for relevant items. An acceptable level of performance was $M = 3.00$ or greater and a majority (66%) of students rating their preparation as “good or excellent”.	The total number of students responding ranged from 94-96 (depending on item). Three items were relevant for the critical thinking standard.	For the item “conduct research to support a position” Ms ranged from 3.80 to 4.35 (SDs = .67 - .96) and 53.3% to 90% of respondents rated their preparation as good to excellent. For the item “develop a coherent written argument” Ms ranged from 4.02 to 4.40 (SDs = .68 - .96) and 76.7% to 90% of respondents rated their preparation as good to excellent. For the item “evaluate the quality of information (e.g., scholarly articles, newspapers)” Ms ranged from 4.26 to 4.56 (SDs = .60 - .93) and 83.7% to 95.2% of respondents rated their preparation as good to excellent. Taken as a whole, these data indicate that our students are meeting our performance expectations. However, the percentage of students rating “conduct research to support a position” as good or excellent for the most recent GSS did not meet expectations (53.3%). This will be discussed below.
Indirect assessment: Marymount Alumni Survey – Psychology supplement (2014-2015, 2015-2016, and 2016-2017) administered by PIE.	Summary statistics for relevant items. An acceptable level of performance was a majority (66%) of students rating their preparation as “good or excellent”.	The number of alumni participating varied by year and ranged from 19-32 (with graduation classes from 2005-2016 represented). Three items were relevant for the critical thinking standard.	For the item “conduct research to support a position” 57.9% to 78.1% of respondents rated their preparation as good to excellent. For the item “develop a coherent written argument” 74.1% to 81.3% of respondents rated their preparation as good to excellent. For the item “evaluate the quality of information (e.g., scholarly articles, newspapers)” 74.1% to 87.5% of respondents rated their preparation as good to excellent. Generally these data indicate that our students are meeting our performance expectations (with the exception of a 57.9% rating for “conduct research to support a position) on the 2017 Alumni Survey $n = 19$. This will be discussed below.
Indirect assessment: The Associate Dean conducted focus groups in PSY 497 <i>Senior Seminar</i> .	An acceptable level of performance is mostly positive student comments.	Focus groups were conducted in all sections of PSY 497 from AY 2014-2015 through AY 2017-2018. Data were missing for two semesters (Fall 2014, Fall 2015 which represents 25% of semesters assessed). Approximately 60 students were present	Students were asked, “How well do you think your experience as a psychology major has prepared you to think critically in order to analyze and evaluation information?” Generally students responded that they were well-prepared by the psychology major to think critically. Students also commented that they were able to apply critical thinking in their internships and in other classes, and that professors in other fields at MU commented positively about their ability to think critically. Some students also commented about the

Outcome Measures <i>Explain how student learning will be measured and indicate whether it is direct or indirect.</i>	Performance Standard <i>Define and explain acceptable level of student performance.</i>	Data Collection <i>Discuss how the data was collected and describe the student population</i>	Analysis <i>1) Describe the analysis process. 2) Present the findings of the analysis including the numbers participating and deemed acceptable.</i>
		at the focus groups but not all participated.	need for WI classes before they take PSY 497 Senior Seminar, which is a bit puzzling because a prerequisite for PSY 497 is a PSY 300-level WI class, and typically students would have taken two WI classes at MU before taking PSY 497.

Interpretation of Results

Describe the extent to which this learning outcomes has been achieved by students *(Use both direct and indirect measure results):*
The preponderance of direct and indirect measures indicate that Psychology students are achieving this learning outcome (see data in previous table).

Briefly describe program strengths and opportunities for improvement relative to assessment of outcome:

Strengths of the program include that students perform well on direct assessments of critical thinking. Students' perceptions of their own critical thinking skills were generally lower than direct assessments of their critical thinking skills, suggesting a lack of confidence in their own abilities. There was a lot of variability among cohorts in students' perceptions of their ability to think critically, on the GSS and Alumni Survey, with our lowest ratings coming from the most recent cohort. The 57.9% rating for "conduct research to support a position" on the 2017 Alumni Survey and 53.5% of the GSS 2017-18 represents an opportunity for improvement (this year had the lowest response rate, n = 19, for the AS).

Some students also commented about the need for WI classes before they take PSY 497 Senior Seminar, which is a bit puzzling because a prerequisite for PSY 497 is a PSY 300-level WI class. We know that in past semester the prerequisites in MaryNet have not always worked properly, thus allowing students to register for classes for which they do not have the prerequisites. We will need to be sure that all students taking PSY 497 have taken the prerequisite. This also represents an opportunity for improvement.

Discuss planned curricular or program improvements for this year based on assessment of outcome:

As a department we decided that only full-time faculty will teach the course where students are expected to have mastered critical thinking (i.e., PSY 497 *Senior Seminar*) and the WI course in the major that students must take as a prerequisite for PSY 497. This change was implemented in 2013-2014 AY, so this is the first assessment for which all students have had a PSY 300-level WI as a prerequisite for PSY 497 and for which they had a FT faculty member teach both of those courses. During this assessment cycle four different full-time professors taught PSY 497 and only FT professors teach our WI courses in the major that are a prerequisite for PSY 497 (five different professors). Faculty usually teach one or the other – PSY 300-level WI or PSY 497 (which is also WI) because the WI courses are so labor intensive and we have decided as a department that we will share that load. This distributes the responsibility of teaching critical thinking and writing skills to all FT faculty in the department. Planned curricular improvements include: as a department we will discuss the writing assignments that are required in our PSY 300-level WI courses. It is possible that students are having different experiences (asked to do different kinds of writing) in these WI classes. We want to be sure that students are doing writing that will utilize and enhance their critical thinking skills (and not writing journal entries, for example). We will also encourage faculty to use the Critical Thinking Rubric in all WI classes that also have critical thinking as a learning outcome. The phrase, "Conduct research to support a position" implies library research (i.e., what does the research say about this topic). Another change we will make is to clarify this item on the GSS and AS so that students are clear that this does not mean empirical research but instead means library research, because we know students do not feel confident about their ability to do empirical research (even though they CAN do it).

This coming academic year we will complete a Program Review and will undoubtedly make changes to our program based upon what we learn as a result of that process. We made substantial changes to our critical thinking rubric and writing classes during our last Program Review, and the effects of those were discussed (and assessed) above.

Appendices

- Oral Communication revised rubric
- Career Preparation current rubric
- Research Rubric and SPSS output
- Critical Thinking Rubric and SPSS output
- GSS (pertinent questions for this year's report only)
- Alumni Surveys (pertinent questions for this year's report only)
- Focus Group Results (pertinent questions for this year's report only)