

**UNDERGRADUATE PSYCHOLOGY PROGRAM
EVIDENCE ANALYSIS II
SUBMITTED BY
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The most recent evidence from the assessment process for the undergraduate psychology program supports the current direction of our content and delivery regarding program learning outcomes.

Reliability

All undergraduate Psychology program cumulative assessment tools have established reliability. There are faculty members who are able to explain low reliability, if necessary, due to issues such as small variance.

Inter-rater reliability (N = 4) has been established for both the Integrative Paper (alpha = .8735) and the Marianist Values Paper (alpha = .9004) that are utilized, in the Senior Seminar (Psy 490) for cumulative program assessment.

Now that inter-rater reliability has been established, the next step is to analyze the content of the rubrics relative to student program learning outcomes. The two program learning outcomes assessed by the Integrative Paper rubric are *Psychology as an Integrated System* and *Specific Focuses in Psychology*. This assessment will occur during Spring 2010 for the Day program and the next time Psy 490 is offered in the Evening program (AEOP).

Although understanding Marianist Educational Values are not a Program Student Learning Outcome, these values are part of the University Mission and thus are assessed as a way of linking the Psychology program to the University Mission Statement. This assessment will also occur during Spring 2010 for the Day program and the next time Psy 490 is offered in the Evening program (AEOP).

Validity

The construct validity of the Comprehensive Exam (alpha = .76), given in the Senior Seminar capstone course (Psy 490) was determined (N=129) using a principle component analysis procedure from SPSS. The analysis addressed the first five Psychology program student learning outcomes.

Five Scales (49 total items), each one corresponding to a specific Psychology program student learning outcomes were used for the analysis. The 5 items from the Marianist Educational Values scale were eliminated as the Marianist Educational Values are not a Psychology program student learning outcome. The one item that represents the Integrative Scale was also eliminated as one item was not sufficient for this type of analysis.

The hypothesis was that there should only be one component as all the scales are essentially assessing various aspects of the same construct, basic knowledge of psychology. In other words, although scales are created to represent distinct student learning outcomes, in all likelihood there are not five distinct program student learning outcomes. There is just one.

Using the principle component extraction method within the SPSS Factor Analysis program, with no rotation, one component was extracted, thus supporting the hypothesis and establishing the construct validity of the Comprehensive Exam. It also indicates that although we created five student program learning outcomes to assist us in assessing the Psychology program, there is, in fact, only one program student learning outcome: basic knowledge of psychology.

Component Matrix

	Component
	1
SCIMETH	.755
SOCCC	.707
COUNSTHE	.701
LIFESPAN	.664
APPPSY	.454

Extraction Method: Principal Component Analysis.
a 1 components extracted.

Direct Evidence

That student learning has occurred is clear when comparing, for example, the Spring Day mean score (35.04, 2009) with the chance scores (13.75) on the Comprehensive Exam (alpha = .76) given in the Senior Seminar capstone course (Psy 490). Utilizing standard error of difference at the 99% confidence level, the difference between the mean score and the chance score is quite significant. Student learning has occurred and knowledge has been gained.

Overall mean performance on the Comprehensive Exam (items = 55), combining both Day and Evening (AEOP) programs, has increased by 4.2455 points between 2008 and 2009. A T-test was performed comparing these two means. Levenes' Test for equality of variances indicated no significant differences between the variances of the two groups. The T-test indicated a statistically significant improvement (.021) in mean score from 30.8 (2008) to 35.0455 (2009).

Scale analysis has resulted in examining and re-structuring course format, content and delivery in the capstone course Psy 490. This is ongoing. Scale analysis has resulted in an item analysis relative to item difficulty and item reliability. Specific concerns were in the areas of Applied Psychology and Marianist Educational Values. This has resulted in an examination of specific course content and instructor delivery regarding these areas. Improvement has occurred in Applied Psychology for both the Day and Evening programs. Apparent Improvement has occurred for the Day program in Marianist Educational Values while this area remains flat for the Evening program. Intervention in the Evening program is to notify all Evening

instructors to focus and assess Marianist Educational Values as part of their student course learning outcomes. This will occur for the next term.

In general, it is believed that a series of interventions (some of them noted above) has resulted in an increase in overall performance on the Comprehensive Exam.

Indirect Evidence

Indirect evidence from the Psychology Program Exit Evaluation (5 point Likert scale, 32 items plus 2 evaluative items, $\alpha = .95$) between 2007-2009 indicates that the student's perception of learning and knowledge gained for both Day and Evening (AEOP) students, as indicated through mean scores and percentage agreeing/strongly agreeing, is positive and quite strong across 31 of the 32 items. One item of concern, however, was statistical methods.

The Scientific Method scale score, where statistical items are found on the Comprehensive Exam, has been quite consistent for both the Day and Evening programs. An item analysis will be performed following the administration of the Comprehensive Exam Spring 2010. A third class in statistics with a new instructor, there were three different instructors, was offered Fall Day 2009 to help us address this issue.

Indirect evidence from the Psychology Program Exit Evaluation for the Day program (2007-2009) indicates that the students rate the overall program between good and excellent with the trend moving into the excellent range.

Indirect evidence from the Psychology program exit evaluation for the Day program (2007-2009) indicates that the students agree/strongly agree that they would recommend our psychology program to others with the mean and percent agreeing/strongly agreeing trend indicating an increase from 2007.

Indirect evidence from the Psychology program Course and Instructor Evaluations ($\alpha = .95$) from Fall 2007 to Fall 2008 indicates that the content and instructors of the psychology program offerings, both Day and Evening, are well received. Of specific importance are the *academic requirements for this course were challenging* item (Day: N=1118, 87% agree/strongly agree; Evening: N=611, 91% agree/strongly agree) and the *I gained a significant amount of knowledge from this course* item (Day: N=1117, 89% agree/strongly agree; Evening: N=620, 91% agree/strongly agree). Thus, students perceive that they learn and gain knowledge in a challenging context.

Conclusion

Reliable evidence indicates that the Psychology program is delivering what it purports to deliver in a challenging context where students clearly are learning. The Comprehensive Exam, relative to the first five program student learning outcomes, has construct validity. There is one construct: basic knowledge of psychology. Thus, the total score, of the five scales, is the best indicator of

performance. The Psychology program is continually assessed and analyzed for the purpose of total quality improvement.