

**Assessing the General Education Behavioral Science Division
Student Learning Outcomes in PSY 101
Spring 2013 Update
submitted by
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7/10/2013**

Three credits of Chaminade University's General Education Requirements for all Baccalaureate Degrees include a Behavioral Science Course. General Psychology (PSY 101) is an optional course fulfilling this requirement. Consistent with the need for assessing student learning outcomes (SLO) at the program level, the student learning outcomes for the General Education Requirements also need to be assessed. As there is, at this time, no agreed upon approach for assessing the overall student learning outcomes for the General Education Requirements, it is necessary to perform this assessment of student learning outcomes within the specific course, in this case, the General Psychology course. The Chaminade University Catalog states that for the Behavioral Science Requirement the student will demonstrate:

1. The ability to apply the scientific method to the study of human behavior in various environmental contexts.
2. An understanding of human behavior relative to various environmental contexts.
3. An understanding of human behavior relative to adapting to various changing environmental contexts.

Day Program Results

In order to continue the assessment of the General Education student learning outcomes, a series of 12 multiple choice questions (four per student learning outcome) was administered during the final exams in the sections of the Spring 2013, Day Undergraduate (DUG) PSY 101, General Psychology course (N = 42). The questions were previously drawn from 4 different chapters in the same "Exploring Psychology" textbook (CH's 1, 4, 11 & 15 currently—9th Edition) and had been revised following a psychometric analysis in 2009. There was one instructor for the two sections assessed. This instructor used a different text from the Exploring Psychology textbook. This was the sixth use of the developed instrument with a textbook being used for the class that was not the one from which the questions were originally drawn. The total sample size was 42 for the on campus daytime students this semester.

Out of 12 possible correct answers, a mean total score of 8.643 (72%) with a standard deviation of 1.75 was obtained from the 42 student respondents. The KR20 reliability coefficient for the instrument was found to be 0.38 for both sections combined.

A frequency distribution table was constructed to show the distribution of total scores. It can be seen in Table 1.

Table 1. Frequency Distribution of Total Score

<u>Total Score</u>	<u>Frequency</u>	<u>Percentage</u>	<u>Cum. Percentage</u>
3	1	2.4	2.4
4	1	2.4	4.8
6	2	4.8	9.5
7	4	9.5	19.0
8	8	19.0	38.1
9	12	28.6	66.7
10	11	26.2	92.9
11	2	4.8	97.6
12	1	2.4	100
Total	42		

The raw scores appear to be slightly negatively skewed. On the total score, 81% scored 8 or above (passing).

SLO #1 The ability to apply the scientific method to the study of human behavior in various environmental contexts

Of the four questions assessing this SLO, 31% of the 42 students (13) answered 100% (4/4) correct; 36% (15) answered 75% (3/4) correct; 29% (12) answered 50% (2/4) correct; 2% (1) answered 25% (1/4) correct; and, 2% (1) answered 0% correct. The mean score for this SLO assessment was 2.905 with a standard deviation of 0.957.

SLO #2 An understanding of human behavior relative to various environmental contexts

Of the four questions assessing this SLO, 29% of the 42 students (12) answered 100% (4/4) correct; 50% (21) answered 75% (3/4) correct; 17% (7) answered 50% (2/4) correct; and, 5% (2) answered 25% (1/4) correct. The mean score for this SLO was 3.024 with a standard deviation of .811.

SLO #3 An understanding of human behavior relative to adapting to various changing environmental contexts

Of the four questions assessing this SLO, 17% of the 42 students (7) answered 100% (4/4) correct; 52% (22) answered 75% (3/4) correct; 21% (9) answered 50% (2/4) correct; 5% (2) answered 25% (1/4) correct; and, 5% (2) answered 0% (0/4) correct. The mean score for this SLO was 2.714 with a standard deviation of 0.969

Day Program Conclusions

The analysis of the data for assessing the General Education Behavioral Science Division SLO's in PSY 101, General Psychology classes in Spring 2013, indicates that students have demonstrated an understanding of the three student learning outcomes. The average total score of 8.643 represents an overall passing score of 72%. Using a higher standard, with 75% or 3 out of 4 questions answered correctly considered "passing" for each SLO, 67% passed SLO #1, 79% passed SLO #2 and 69% passed SLO #3.

A comparison of this current administration (Spring 2013) to the most recent previous administration (Fall 2012, N = 120) revealed an increase in total score means from 7.8 to 8.6. The standard deviations were similar with only a slight difference (SD = 2.22 in Fall and 1.75 in Spring). The changes in SLO score means were also minimal (SLO#1 = 2.67 to 2.90, SLO#2 = 2.86 to 3.02 and SLO#3 = 2.29 to 2.71). Slight increases in scores were noted on all SLO's. The Spring sections were both taught by the same instructor and had a much smaller N value than the Fall semester. This might account for the slight differences.

AEOP Results

In order to continue to assess the General Education student learning outcomes for the AEOP (Adult Evening and Online Programs), the same series of 12 multiple choice questions (four per student learning outcome) which had been utilized for the Day Undergraduate Program previously was administered during the final exam in two sections of the Spring AEOP semester (N = 20). Only two evening, in-class sections were selected because of difficulties in maintaining test security for online administration. The questions were again drawn from 4 different chapters in the same "Exploring Psychology" textbook (CH's 1, 4, 11 & 15). This was not the textbook used for the class by either of the two instructors.

Out of 12 possible correct answers, a mean total score of 8.75 (72.9%) with a standard deviation of 1.41 was obtained from the 20 student respondents. The KR20 reliability coefficient for the instrument was reported as 0.36 which is similar to the Day sections.

A frequency distribution table was constructed to show the distribution of total scores. It can be seen in Table 2.

Table 2. Frequency Distribution of Total Score

<u>Total Score</u>	<u>Frequency</u>	<u>Percentage</u>	<u>Cum. Percentage</u>
5	1	5	5
6	1	5	10
8	5	25	35
9	7	35	70
10	5	25	95
11	1	5	100
Totals	20	100	

The raw score distribution appears negatively skewed with 90% scoring an 8 or above (passing).

SLO #1 The ability to apply the scientific method to the study of human behavior in various environmental contexts

Of the four questions assessing this SLO, 20% of the 20 students (4) answered 75% (3/4) correct; 60% (12) answered 50% (2/4) correct; and 20% (4) answered 25% (1/4) correct. The mean score for this SLO assessment was 2.00 with a standard deviation of 0.649.

SLO #2 An understanding of human behavior relative to various environmental contexts

Of the four questions assessing this SLO, 55% of the 20 students (11) answered 100% (4/4) correct; 35% (7) answered 75% (3/4) correct; and, 10% answered 25% (1/4) correct. The mean score for this SLO was 3.35 with a standard deviation of 0.933.

SLO #3 An understanding of human behavior relative to adapting to various changing environmental contexts

Of the four questions assessing this SLO, 40% of the 20 students (8) answered 100% (4/4) correct; and, 60% (12) answered 75% (3/4) correct. The mean score for this SLO was 3.40 with a standard deviation of 0.503.

AEOP Conclusions

The analysis of the data for assessing the General Education Behavioral Science Division SLO's in PSY 101, General Psychology two AEOP classes in Spring 2013,

indicates that students have demonstrated an understanding of the three student learning outcomes. The average total score of 8.75 represents a passing score of 73%. With a higher passing rate of 75% (3/4 correct) for each SLO, two of the three SLO's are passed (SLO #1 – 20% passed; SLO #2 – 90% passed and SLO #3 – 100% passed). The results for total score are similar to the Day students. There do appear to be some slight differences for a couple of the SLO's (see below).

Day Results compared to AEOP Results

A comparison of the results obtained from the Day students to the AEOP students was performed this semester. Table 3 shows the results of a series of independent *t* tests performed on the data.

Table 3. Mean Score Comparison of Day to AEOP Students

Score	Group	N	Mean	SD	t value	sig
Total	DAY	42	8.64	1.75	-.239	.812
	AEOP	20	8.75	1.41		
SLO#1	DAY	42	2.90	.958	4.37	.001
	AEOP	20	2.00	.649		
SLO#2	DAY	42	3.02	.811	-1.41	.164
	AEOP	20	3.35	.933		
SLO#3	DAY	42	2.71	.969	-2.97	.004
	AEOP	20	3.40	.503		

The interpretation of Table 3 above is that there was no significant difference between the Total scores or the SLO #2 (Environmental Context) scores between the two groups of students. There were however significant differences shown to exist between the SLO #1 (Scientific Method) and SLO #3 (Adaptation to Changing Environmental Contexts) scores. The Day students scored significantly higher on the Scientific Method learning outcome and the AEOP students scored significantly higher on the Adaptation to Changing Environmental Contexts learning outcome. Further analyses in the Fall 2013 semester will be performed. No PSY 101 changes appear to be warranted at this time for either group.