

**Assessing the General Education Behavioral Science Division
Student Learning Outcomes in PSY 101:
Fall 2014 Update
submitted by
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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

During the Summer 2014, Dr.'s Mulford and Ficklin, in consultation with Dr. Iwamoto rewrote one of the items in an attempt to increase reliability and better assess the above outcomes. A series of 15 multiple choice questions (five per student learning outcome) was constructed and was administered during the final exams in the five sections of the Fall 2014, Day Undergraduate (DUG) PSY 101, General Psychology course (N = 150). The questions were selected from 4 different chapters in the same "Exploring Psychology" textbook (CH's 1, 4, 11 & 13 currently—9th Edition—David G. Myers) and had been revised following a psychometric analysis in 2009 and again in 2013. Three additional questions were selected for the revised version of the examination using the same textbook in 2013. There was one instructor for two sections assessed and three additional instructors for three additional sections (i.e., 5 sections and 4 instructors). The instructor for the two sections used a different text from the Exploring Psychology textbook. This was the ninth 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 150 for the on campus, daytime students this semester.

Out of 15 possible correct answers, a mean total score of 10.127 (67.5%) with a standard deviation of 2.54 was obtained from the 150 student respondents. This is an increase from an average score of 9.323 the previous year. The KR20 internal

consistency reliability coefficient for the instrument was found to be 0.57 for all day sections combined. This is an increase from .39 the previous year.

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

Table 1. Frequency Distribution of Total Scores

Total Score	Frequency	Percentage	Cum. Percentage
2	1	.7	.7
3	1	.7	1.4
4	2	1.3	2.7
5	3	2.0	4.7
6	8	5.3	10.0
7	7	4.7	14.7
8	12	8.0	22.7
9	22	14.7	37.4
10	21	14.0	51.4
11	26	17.3	68.7
12	20	13.3	82.0
13	16	10.7	92.7
14	9	6.0	98.7
15	2	1.3	100.0
Total	150		

The raw scores appear to be relatively normally distributed with a slight negative skew (Mean = 10.13, Median = 10.00). On the total score, 77.3% scored 9 or above which represents a raw score of 60% or minimal passing).

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

Of the five questions assessing this SLO, 16.7% of the 150 students (25) answered 100% (5/5) correct; 28.7% (43) answered 80% (4/5) correct; 30.7% (46) answered 60% (3/5) correct; 12.7% (19) answered 40% (2/5) correct; 8.0% (12) answered 20% (1/5) correct; and, 3.3% (5) answered 0% correct. The mean score for this SLO assessment was 3.23 with a standard deviation of 1.29.

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

Of the five questions assessing this SLO, 20.7% of the 150 students (31) answered 100% (5/5) correct; 35.3% (53) answered 80% (4/5) correct; 32.7% (49) answered 60% (3/5) correct; 7.3% (11) answered 40% (2/5) correct; 2.7% (4) answered 20% (1/5) correct; and, 1.3% (2) answered 0% correct (0/5). The mean score for this SLO was 3.600 with a standard deviation of 1.062.

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

Of the five questions assessing this SLO, 16.7% of the 150 students (25) answered 100% (5/5) correct; 30.0% (45) answered 80% (4/5) correct; 29.3% (44) answered 60% (3/5) correct; 16.0% (24) answered 40% (2/5) correct; 6.0% (9) answered 20% (1/5) correct; and, 2.0% (3) answered 0% correct (0/5). The mean score for this SLO was 3.293 with a standard deviation of 1.213.

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 the Fall 2014 semester indicates that students have demonstrated an understanding of the three student learning outcomes. The average total score of 10.127 represents an overall passing score of 67%. Using a standard of 3 out of 5 questions answered correctly considered "passing" for each SLO, 76.1% passed SLO #1, 88.7% passed SLO #2 and 76.0% passed SLO #3. These scores and the instrument's internal consistency reliability have increased from the previous year. An item analysis revealed that none of the items had a total score correct percentage of less than 50% (item difficulty) and no items had a negative point bi-serial correlation (item discrimination).

PACE Results

In order to continue to assess the General Education student learning outcomes for the PACE (Professional And Continuing Education), the same series of 15 multiple choice questions (five per student learning outcome) which had been utilized for the Day Undergraduate Program was administered during the final exam in one section of the Fall PACE semester (N = 11). Only one evening, accelerated (10 week), in-class section was selected because the other sections were online. The questions were again drawn from 4 different chapters in the same "Exploring Psychology" textbook (CH's 1, 4, 11 & 13). This was not the textbook used for the class by the participating instructor.

Out of 15 possible correct answers, a mean total score of 11.545 (76.9%) with a standard deviation of 1.507 was obtained from the 11 student respondents. The KR20 reliability coefficient for the instrument was reported as 0.09 which reflects the lack of overall score variance due to a low n value (range of scores was restricted from 8 to 13 only).

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>
8	1	9.1	9.1
10	1	9.1	18.2
11	2	18.2	36.4
12	4	36.4	72.8
13	3	27.2	100.0
Totals	8		

The raw score distribution appears normally distributed with 91% scoring a 9 or above (passing).

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

Of the five questions assessing this SLO, 9.1% of the 11 students (1) answered 100% (5/5) correct; 54.5% (6) answered 80% (4/5) correct; 18.2% (2) answered 60% (3/5) correct; 9.1% (1) answered 40% (2/5) correct; and, 9.1% (1) answered 20% (1/5) correct.. The mean score for this SLO assessment was 3.454 with a standard deviation of 1.13.

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

Of the five questions assessing this SLO, 45.5% of the 11 students (5) answered 100% (5/5) correct; 36.4% (4) answered 80% (4/5) correct; and, 18.2% (2) answered 60% correct (3/5). The mean score for this SLO was 4.273 with a standard deviation of 0.786.

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

Of the five questions assessing this SLO, 18.2% of the 11 students (2) answered 100% (5/5) correct; 45.5% (5) answered 80% (4/5) correct; and, 36.4% (4) answered 60% (3/5) correct. The mean score for this SLO was 3.818 with a standard deviation of 0.751.

PACE Conclusions

The analysis of the data for assessing the General Education Behavioral Science Division SLO's in PSY 101, General Psychology one PACE class in the Fall 2014 semester, indicates that students have demonstrated an understanding of the three student learning outcomes. The average total score of 11.54 represents a passing score of 76.9%. With a passing rate of 60% (3/5 correct) for each SLO, two of the three of the SLO's (# 2 and #3) were passed by 100% of the PACE students and 81.8% passed SLO #1.

Day Results compared to PACE Results

A statistical comparison of the results obtained from the Day students compared to the accelerated, evening (PACE) students was deemed inappropriate given the low number of PACE students and restricted variance of their scores. Further analyses may be possible if and when more students are able to be assessed in the PACE program or assessed online without jeopardizing test security. The average scores for the total and each SLO do appear relatively consistent from the Day to the PACE students.

