2012-2013 Psychology's Report of

Assessment of Christian Beliefs, Values, Affections, and Practices

Consistent with the College's focus on the institutional level PLG, Christian Orientation, the

psychology department selected a two parts of the Program Learning Goal, *Values and Character*, that were

consistent with and expanded on Christian Orientation. The description for this PLG states "Our students will

value, appreciate, and welcome, through understanding and demonstrative action" the various parts of the

PLG, two of which are *Faith*, and *Openness to Experience*. The description of *Faith* states, "Students will be

able to articulate the interactions between psychology and faith." *Openness to Experience* involves

"understand[ing] the importance and desirability of a diversity of experiences, perspectives, and backgrounds

(including ethnic, sociocultural, and gender diversity) . . . embrac[ing] ambiguity, being comfortable without

closure or black-and-white answers, and valuing questions as much as answers."

This assessment focused on a survey of relatively recent graduates since some aspects of Values and

Character might not be apparent when the individual is still a student in the program.

Method

Participants

All psychology and neuroscience alumni who graduated between 2006 and 2012 (*N* = 142) were

emailed using email addresses obtained from the Alumni Office. Of these alumni, 58 responded; however, 11

of these did not complete the entire survey. Therefore, the responses from the remaining 47 alumni (a 33.1%

response rate) are the data considered in this report.

Thirteen of these graduates were men (28%); 34, women (72%), approximately equivalent to the

proportions at the college. Seven of the alumni were Neuroscience majors; 40, were Psychology majors.

Forty-two graduates had a single major; 5, had 2 or more majors. Most of the alumni identified themselves as

Caucasian (74.5%), and 12.8% did not identify an ethnic or racial group. The respondents were

approximately evenly distributed among most of the graduation years (See Table 1).

Materials

The Christian Orientation survey was adapted from the College Students' Beliefs and Values Survey,

one of the instruments used to evaluate religiosity and spirituality in higher education by the Higher

Education Research Institute (See Appendix A for the items in the Christian Orientation survey). The items selected, modified and added by the department were designed to address the PLGs identified above.

Table 1

Distribution of Respondents Across the Graduation Years

Graduation Year	No. of Respondents
2006	7
2007	6
2008	6
2009	3
2010	7
2011	11
2012	7

The survey items were presented on five web pages. The first page of items asked whether religious beliefs and practices, spirituality, and various social values had been changed by the alumnus' education at Westmont. The second set of items asked whether religious beliefs and practices, spirituality, and various social values had changed between the alumnus' senior year at Westmont and the present. Both sets of items were rated on a 7-point scale from -3, *Significant Negative Change*, to +3, *Significant Positive Change*.

The third set of items asked alumni to rate the importance of various community, spiritual, religious, and social values on a 7-point scale again from -3, *Very Unimportant* to +3, *Very Important*. The fourth set of items asked alumni to report the frequency with which they engaged in activities related to the values identified by the third set of items on a 5-point scale, from 0, *Never* to 4, *Frequently*.

The final set of items returned to spiritual and religious beliefs and asked about the purpose or usefulness of spiritual and religious beliefs. Again, alumni were asked to rate items on a 7-point scale, this time from -3, *Strongly Disagree* to +3, *Strongly Agree*.

Procedure

Alumni were emailed with a link to the first web page of the survey. They were asked to complete the survey within the next 3 weeks. All respondents were entered into a drawing for one of 3 $25.00 Amazon gift cards. If they had questions, they could call one of the department members.

Results and Discussion

The mean ratings and standard deviations for the five sets of survey items are presented in Tables 2, 3, and 4. All items were also correlated with each other. The correlation matrix is presented in Appendix B, an Excel document. With respect to the first two questions, *To what extent were the following changed by your education at Westmont?*, and *Compared with when you were a senior at Westmont, how would you describe your current . . .*, all mean ratings indicate positive change both when alumni were at Westmont and since graduating from Westmont. Standard deviations are moderate, indicating variability among the individual alumnus' responses. Changes since graduating from Westmont were smaller than those while at Westmont, ranging from .68 to 1.68, but this is not necessarily surprising.

The second two questions addressed the value of activities that involve improvement of the local and broader community, and the frequency with which alumni have engaged in these activities in the past year. Mean ratings of nearly all of these listed activities indicated that they are *Slightly* to *Very Important* to our alumni. The ratings of only two items fell between *Neither Important Nor Unimportant* and *Slightly Important*: *Influencing political structure* and *Being involved in environmental projects.* These ratings are not inconsistent with the fact that these alumni were psychology majors.

One of the highest ratings was for *Making sure your values and behavior are congruent* ($M = 2.74/3.00$). Furthermore, nearly all correlations (See Appendix B) of the alumni's ratings of these the importance of these activities and the frequency with which they engaged in these activities over the past year were significantly and positively correlated (rs ranged from .31 to .82), indicating a congruence between their values and behaviors. The only non-significant correlation was that between the value and behavior of *Influencing influencing social values*.

The mean ratings for the last set of survey items, which addressed the importance of alumni's spiritual and religious beliefs, were quite strongly positive—none less than 1.00, *Slightly Agree*, except for the two items that were reverse scored, *Make it difficult for me to enjoy life*, and *Sometimes make me ashamed*. These two items were *Slightly* to *Moderately Disagreed* with. Overall, then, spiritual or religious beliefs are important to our graduates with the highest mean ratings for *Give meaning/purpose to my life* and *Helped develop my identity*.

A factor analysis of the survey items, using the principal components procedure, was done to see what clusters of survey items were correlated with each other. Six items were removed from this analysis due to their high correlations (.80+) with at least one other item. Small coefficients of less than .45 were suppressed because of the large numbers of survey items and relatively small number of respondents. A scree plot was used to determine how many factors to identify. Fifty-three percent of the variance was accounted for by 5 factors. The Varimax procedure was used to rotate the solution. The survey items that loaded onto each factor, the loading scores, and the name of the factor or component are presented in Tables 5, 6, and 7.

The first factor, on which the most items loaded, seems to be *Religious and Spiritual Beliefs, Values, and Practices.* The behaviors and values that load on this factor are not only religious or spiritual practices in the narrow sense. They include increased understanding

The second factor focuses on the current state of alumni. It involves the importance of values and frequency of behavior related to *Increased Understanding of and Openness to Others Who are Different.* The related items focused on the value and behavior of getting along with and accepting people of different races/cultures, and with different lifestyles and beliefs; and understanding community and national social problems as well as global issues.

The third factor involved the effects of a Westmont education, and it also focused on *Increased Understanding of and Openness to Others Who are Different.* This factor included items relating to the values of getting along with and accepting people of different races/cultures, and with different lifestyles and beliefs; and understanding community and national social problems as well as global issues.

The fourth factor focused on the value of *Influencing Larger Social Structures*; it is more conceptual and includes items relating to influencing political structure and social values; developing a meaningful philosophy of life; reading about and reflecting on the connections between psychology and life; helping others; and promoting racial understanding.

The final, fifth factor seems to focus on *Local Community Involvement*. This factor had the least number of items loading on it, and they were mostly values and actions relating to leading in the community and participating in community programs.

Conclusions

Relatively recent alumni who graduated with a neuroscience or psychology major experienced positive changes in their religious and spiritual understanding, beliefs, and practices while they were at Westmont, and since they have graduated from Westmont. These religious and spiritual changes are associated with changes in social values, affections, and behaviors that indicate an openness to understanding of and accepting others who are different on a number of dimensions.

In addition, their religious and spiritual beliefs provide meaning, comfort, healing, and peace in their present lives and a foundation for living.

Congruence of alumni's values and behavior is important to them (2.75/3.00; small SD), and in their reports of the importance of all but one activity and the frequency of engaging in those activities, moderately (.30) to highly correlated (.80+).

Finally, they value the importance of both local community involvement and attention to broader social structures and issues.

These results met both benchmarks identified by the department; first, that the alumni experience positive change in religious and spiritual understanding, beliefs, and practices while at Westmont and in the years following Westmont. Second, their values and behavior are congruent in the majority of instances.

Table 2

Mean Ratings and Standard Deviations (in parentheses) of First Two Sets of Survey Items

Questions Asked	Religious beliefs and convictions	Religious practice	Ability to get along with different races/cultures	Understanding the problems facing community	Understanding the social problems facing nation	Understanding global issues	Acceptance of people with different religious/spiritual views	Acceptance of people with different lifestyles	Spirituality
1. To what extent were the following changed by your education at Westmont?	1.91	1.26	1.00	1.62	1.53	1.55	1.23	1.17	1.72
	(1.28)	(1.41)	(1.06)	(1.03)	(1.08)	(1.08)	(1.32)	(1.36)	(1.21)
2. Compared with when you were a senior at Westmont, how would you describe your current:	0.96	0.68	1.32	1.40	1.47	1.19	1.47	1.68	0.94
	(1.43)	(1.55)	(1.25)	(1.10)	(1.18)	(1.23)	(1.20)	(1.14)	(1.26)

Scale is -3 to +3, *Significant Negative Change* to *Significant Positive Change*

Table 3

Mean Ratings and Standard Deviations (in parentheses) of Second Two Sets of Survey Items

Questions Asked	Influencing political structure	Influencing social values	Helping others who are in difficulty	Being involved in environmental projects	Developing a meaningful philosophy of life	Participating in a community action program	Helping to promote racial understanding	Being a community leader	Integrating spirituality into your life	Developing your spiritual formation	Developing your spiritual practices	Reading about today's Church	Reading about Church doctrine or theology	Reading about and reflecting on the connections between psychology and your life	Reading about and reflecting on the connections between your profession and faith	Reading about and reflecting on the connections among family, community, and faith	Making sure your values and behavior are congruent	Supporting your church's programs	Reading about and reflecting on Scripture	Spending time with people who are not like you-- racially, religiously, socioeconomically	Financially supporting charities
Importance of these activities to you personally[*]	0.26 (1.51)	1.91 (0.88)	2.70 (0.72)	0.64 (1.42)	2.36 (0.87)	1.32 (1.34)	1.40 (1.26)	1.02 (1.55)	2.45 (0.75)	2.30 (0.86)	2.21 (0.91)	0.98 (1.57)	0.83 (1.86)	1.85 (1.37)	1.74 (1.52)	2.13 (1.03)	2.74 (0.57)	1.28 (1.70)	1.64 (1.76)	1.72 (1.39)	1.19 (1.61)
Frequency of these activities in the last year[**]	1.15 (0.86)	2.23 (0.91)	3.26 (0.90)	1.06 (1.09)	2.81 (0.85)	1.70 (1.20)	1.91 (1.25)	1.79 (1.23)	3.15 (0.81)	2.74 (1.09)	2.87 (0.99)	1.79 (1.18)	1.74 (1.22)	2.79 (1.16)	2.51 (1.32)	2.68 (1.00)	3.49 (0.59)	2.34 (1.37)	2.53 (1.38)	2.87 (0.97)	1.87 (1.28)

[*] Scale of -3 to +3, *Very Unimportant* to *Very Important*

[**] Scale of 0 to 4, *Never* to *Frequently*

Table 4

Mean Ratings and Standard Deviations (in parentheses) of Last Set of Survey Items

Questions Asked	Helped develop my identity	One of the most important things in my life	Provided comfort, healing, and peace when I needed them	Helped me deal with doubt and uncertainty	Give meaning/purpose to my life	Make it difficult for me to enjoy life	Help define the goals I set for myself	Provide me with strength, support, and guidance	Sometimes make me ashamed	Lie behind my whole approach to life	Are the foundation for all of my behavior
My spiritual/religious beliefs . . .	2.40	2.21	2.30	2.11	2.47	-1.85	1.98	1.96	-1.30	1.64	1.81
	(1.35)	(1.33)	(1.02)	(1.36)	(0.93)	(1.59)	(1.19)	(1.44)	(1.90)	(1.85)	(1.38)

Scale of -3 to +3, *Strongly Disagree* to *Strongly Agree*

Table 5

Component #1 with Survey Item Descriptions and Factor Loadings

1--Religious & Spiritual Beliefs, Values & Practices			
Survey Items	**Factor Loading**	**Survey Items**	**Factor Loading**
Education Affected:		**Frequency of Behavior in Last Year:**	
Religious beliefs & convictions	.587	Integrating spirituality into your life	.779
Religious practices	.554	Developing your spiritual practices	.791
Spirituality	.576	Reading about today's Church	.630
Comparing Sr. Year & the Present, Affected:		Reading about Church doctrine or theology	.587
Religious Practices	.569	Reading about & reflecting on the connections between your profession & faith	.516
Values Important to Me:			
Integrating spirituality into your life	.759	Reading about & reflecting on the connections among family, community & faith	.492
Developing your spiritual formation	.809		
Developing your spiritual practices	.818	Supporting your church's programs	.572
Reading about today's Church	.711	Reading about & reflecting on scripture	.748
Reading about Church doctrine or theology	.618	**My Spiritual/Religious Beliefs:**	
Reading about & reflecting on the connections between your profession & faith	.598	Are one of the most important things in my life	.668
		Give meaning/purpose to my life	.617
Reading about & reflecting on the connections among family, community & faith	.574	Help define the goals I set for myself	.642
		Lie behind my whole approach to life	.642
Supporting your church's programs	.660	Are the foundation for all of my behavior	.694

Table 6

Components #2 & #3 with Survey Item Descriptions and Factor Loadings

2		3	
Maintenance of Broader Social & Other-Directed Values		**Effect of Education at Westmont**	
Increased Understanding of & Openness to Others Who are Different			
Survey Items	**Factor Loadings**	**Survey Items**	**Factor Loadings**
Comparing Sr. Year & the Present, Affected Views on:		**Education Affected:**	
		Religious beliefs & convictions	.484
Ability to get along with different races/cultures	.608	Religious practices	.486
Understanding the problems facing community	.775	Ability to get along with different races/cultures	.675
Understanding the social problems facing the nation	.749	Understanding the problems facing community	.782
Understanding global issues	.564	Understanding the social problems facing the nation	.651
Acceptance of people with different religious/spiritual views	.675	Understanding global issues	.676
Spirituality	.583	Acceptance of people with different religious/spiritual views	.702
Frequency of Behavior in Last Year:		Acceptance of people with different lifestyles	.665
Influencing social values	.571		
Helping others who are in difficulty	.542	Spirituality	.501
Helping to promote racial understanding	.603	**My Spiritual/Religious Beliefs:**	
Spending time with people who are not like you—racially, religiously, socioeconomically	.629	Give meaning/purpose to my life	.466
My Spiritual/Religious Beliefs:			
Sometimes make me ashamed	.466		

Table 7

Components #4 & #5 with Survey Item Descriptions and Factor Loadings

4--Value of Influencing Large Social Structures		5--Local Community Involvement	
Survey Items	**Factor Loadings**	**Survey Items**	**Factor Loadings**
Values Important to Me:		**Values Important to Me:**	
Influencing political structure	.580	Participating in a community action program	.655
Influencing social values	.656	Being a community leader	.487
Helping others who are in difficulty	.662	Spending time with people who are not like you—racially,	.685
Developing a meaningful philosophy of life	.697	religiously, socioeconomically	
Helping to promote racial understanding	.629	Financially supporting charities	.583
Reading about & reflecting on the connections	.706	**Frequency of Behavior in Last Year:**	
between psychology & your life		Participating in a community action program	.600
Making sure your values & behavior are congruent	.552	Being a community leader	.568
Frequency of Behavior in Last Year:		Financially supporting charities	.513
Developing a meaningful philosophy of life	.708	**My Spiritual/Religious Beliefs:**	
Financially supporting charities	-.461	Provided comfort, healing & peace when I needed them	.573