





## Cluster 5 / Individuals in the Human Community Assessment Day, Fall 2005 Freshman Cohort

### Section 1. Assessment Practices in Cluster 5

#### 1.1. The Structure of Cluster 5

Starting in the fall of 2003, students were expected to complete their Cluster 5 General Education course requirement by completing 3 credit hours (1 course) in each domain of Cluster 5. The courses can be taken in any order with the expectation that students will finish their coursework in Cluster 5 by the end of the sophomore year. Below is a list of the courses in each domain.

Wellness Domain	
GHTH	100. Personal Wellness
GKIN	100. Lifetime Fitness and Wellness
GEIC	101. Individuals in the Human Community: The Individual Perspective
Sociocultural Domain	
GPSYC	101. General Psychology
GPSYC	160. Life Span Human Development
GSOCI	240. Individual in Society
GEIC	102. Individuals in the Human Community: The Community Perspective

#### 1.2. The Learning Objectives and Goals of Cluster 5

The goals and objectives for the Sociocultural domain and the Wellness domain and how the instruments align with the goals and objectives are shown in Appendices A and B respectively.

### Section 2. Assessment Day Fall 2005 Administration

#### Sample Sizes Used in Analysis...

Samples of 1069, 1031, and 880 students were used to conduct analyses.

The size of the sample used in each analysis depended upon whether or not each student's assessment had all the data necessary for each of the analyses.

Staff members from CARS, in conjunction with the JMU General Education Program, held the Fall 2005 Assessment Day on Saturday, August 27<sup>th</sup>, prior to the students' first day of class at JMU. Over 3,500 freshmen participated in the day, which yielded enough data to effectively assess all five General Education clusters, in addition to numerous student affairs and other university programs.

Approximately 1031 randomly-selected freshmen completed the various Cluster 5 instruments, although not all students took all instruments. Proper data analysis requirements brought the effective sample size to between 880 and 1069 students (depending upon the analysis). Specific sample sizes for each analysis are reported throughout this report. This is the third cohort of students having Cluster 5 data since the reorganization of Cluster 5 into the Wellness and Sociocultural domains.

Why different sample sizes? The Cluster Five analyses use various record sources to analyze the data, including other instruments, the PeopleSoft JMU Student Information System, and the Assessment Day Instruments themselves. Only complete records with in-range data were used at each level of analysis, so the different sample sizes represent the highest number of students with acceptable records for each of the three levels of analysis.

Students participated in testing during a four-hour session held in either the morning or the afternoon. All room and instrument assignment was random according to each student's JMU student identification number. Trained proctors administered and monitored all tests.

#### Instrument Used to Assess Cluster Five Sociocultural Domain:

- The Sociocultural Domain Assessment, Version 4 (SDA4)

#### Instruments Used to Assess Cluster Five Wellness Domain:

- The Knowledge of Health and Wellness Test – Version 2 (KWH2)
- The Health and Wellness Questionnaire (HWQ)
- The Well-Being Scale (WBS)

#### 2.1. Assessment Instruments

##### 2.1.1. Sociocultural Domain

A single instrument is used to assess student knowledge and skills in the Sociocultural Domain.

##### 2.1.1.1 The Sociocultural Domain Assessment-Version 4 (SDA4)

The Sociocultural Domain Assessment (SDA) is a scenario-based multiple-choice test created by Sociocultural domain faculty. The first version of the SDA was administered in Fall 2003 with the more recent versions being administered since

that time (see table below). In Fall 2005, the fourth version of the SDA (SDA4), which has 44 items, was administered to incoming freshmen.

Administration	Sample	# Items	SDA Version	# of Students
Fall 2003	Incoming Freshmen	30	SDA1	526
Spring 2004	2nd semester Sophomores	42	SDA2	242
Fall 2004	Incoming Freshmen	40	SDA3	802
Spring 2005	2nd semester Sophomores	30/42	SDA1/SDA2	398
Fall 2005	Incoming Freshmen	44	SDA4	1069

### 2.1.2. Wellness Domain

Three instruments are used to assess student knowledge and skills in the Wellness domain.

#### 2.1.1.2 The Knowledge of Health and Wellness Test-Version 2 (KWH2)

The original version of the Knowledge of Wellness and Health test (KWH1) was administered to the students in Fall 2003. The KWH is a scenario-based multiple-choice test created by Wellness domain faculty. The KWH has been revised since Fall 2003 with the more recent versions being administered since that time (see table below). A revised version of the instrument, the 60-item KWH3 was administered during the Spring 2005 Assessment Day. On average, it took students 20 minutes to complete the test.

#### 2.2.1.2 The Health and Wellness Questionnaire (HWQ) – Part 1

Part 1: The Health and Wellness Questionnaire (HWQ) is a self-report survey that was developed to measure student's own health and wellness behaviors. The HWQ has been revised since Fall 2003 with the more recent versions being administered since that time (see table below). A second version of the HWQ, the HWQ2-Part 1, was administered during the Fall 2005 Assessment Day.

#### 2.3.1.2 The Health and Wellness Questionnaire (HWQ) – Part 2

Administered along with the HWQ was the faculty-created Part 2 of the HWQ. This instrument contains 33 health and wellness statements - some statements were facts, others were commonly held "myths". Students were asked to indicate whether or not they believed each statement to be true. On average, it took students 9 minutes to complete both parts of the HWQ.

#### 2.4.1.2 The Well-Being Scale (WBS)

The Well-Being Scale (WBS), developed by Ryff (1989), is a self-report measure of psychological well-being or positive psychological functioning. Fall 2004 was the first time the WBS was administered for the purposes of Cluster 5 Assessment.

Administration	Sample	# Items	Version	# of Students
Fall 2003	Incoming Freshmen	35	KWH1	861
		15	HWQ1 – Part 1	665
		33	HWQ1 – Part 2	665
Fall 2004	Incoming Freshmen	60	KWH2	636
		15	HWQ2 – Part 1	690
		54	WBS	1350
Spring 2005	2nd semester Sophomores	35	KWH1	644
		15	HWQ1 – Part 1	644
		33	HWQ1 – Part 2	644
Fall 2005	Incoming Freshmen	60	KWH3	1031
		15	HWQ2-Part 1	880
		54	WBS	1471









### 4.3. Suggestions for Improving the KWH3

Future improvements to the KWH3 assessment are analogous to those for the SDA4, and may include the following:

- **Establishment of a Cut Score** Determining a cut score, or lowest “acceptable” score for proficiency, for the KWH3 is essential for Health and Wellness Domain faculty to effectively interpret the results of the assessment. A cut score is essential for the Health and Wellness Domain faculty to effectively make inferences about the student learning taking place due to the various health and wellness courses.
- **Evaluation of Existing Items:** Some items on the Fall 2005 administration of the KWH3 did not function as well as other items. Rewording item stems (the question being asked) or changing the response options may improve these items.
- **Creation of New Items:** New items could replace less-effective existing items on the KWH3 or could be used to create a second form of the KWH3, which would allow for greater test security during Assessment Day.

## Section 5. Performance in the Wellness Domain: HWQ2-Part 1

Performance in the Wellness Domain is measured using three different instruments, one of which is the first part of the Health and Wellness Questionnaire-Version 2 (HWQ2) instrument. The directions on the HWQ2-Part 1 instruct students to consider their health behaviors over the past six months and report how many times per week, on average, they engaged in a number of healthy and unhealthy behaviors.

The students reported their responses using the scale in the 1<sup>st</sup> column below and the description of the anchors in the 2<sup>nd</sup> column. Students’ responses to healthy items were converted using the scale in the 3<sup>rd</sup> column, while responses to unhealthy items were converted using the scale in the 4<sup>th</sup> column. Scoring in this manner allows higher scores to correspond to more healthy behavior.

Response Scale	Description	Healthy Item Score	Unhealthy Item Score
A. Frequently	7 or more times per week	4	1
B. Often	4 to 6 times per week	3	2
C. Sometimes	1 to 3 times per week	2	3
D. Never	0 times per week	1	4

A total score was computed based on all 15 items; only persons with complete data on all 15 items were used in these analyses. Overall, students are averaging about 68.13% of the total possible points on the HWQ2. The fall 2005 freshman cohort scores have a relatively large standard deviation, meaning that the scores vary somewhat widely. Below are three ways to look at the scores to understand how much they vary:

- **Mid-50%:** The middle-50% of the scores range from 63% - 73%, meaning that 25% of the scores are above this range and 25% of the scores are below this range.
- **± 1 Standard Deviation:** Approximately 66% of the scores fall within a range of 60% correct on the low end, and 76% correct on the high end—a range of 16 percentage points.
- **± 2 Standard Deviations:** Approximately 95% of the scores fall within a range of 52% correct on the low end, and 85% correct on the high end—a range of 33 percentage points.

	N	Possible Range	Lowest Score	Highest Score	Mean	Standard Deviation	Avg. Percent of total points
Total Avg Test Score: F05	880	15 - 60	25 out of 60	56 out of 60	40.88	4.95	68.13%

### The Health and Wellness Questionnaire

Measures the frequency with which students engage in healthy behavior.

### On Average...

Students receive 68% of the possible points on the questionnaire.



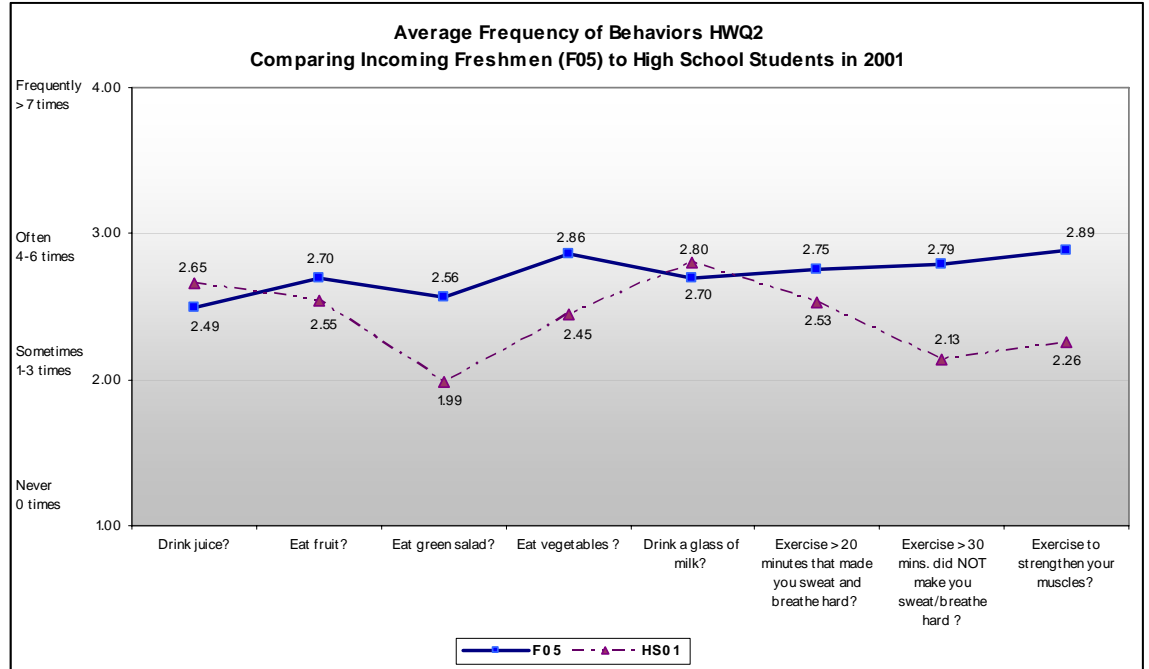


5.3. Comparison of the F05 Freshman Cohort to 2001 High School Students

**Compared to High School Students...**

This year's freshman cohort eat salads and vegetables and exercise more frequently.

Because the HWQ2 is based on a subset of items from the Youth Risk Behavior Surveillance Survey (YRBSS; Grunbaum, et al., 2002), students' responses to the YRBSS can be compared to students' responses on the HWQ2. In 2001, the YRBSS was administered to a nationally representative sample of High-School students (N=13,601). A comparison of the average responses to common items on the YRBSS and the HWQ2 for JMU incoming freshmen from the fall 2005 cohort and the High-School students in 2001 (HS01) is shown below.



**Similarities**

JMU incoming freshmen seem to have comparable behavior to high school students when it comes to drinking juice, eating fruit, drinking milk, and exercising in a cardiovascular manner.

**Differences**

JMU incoming freshmen are eating green salad and vegetables and exercising moderately more frequently than high school students. In addition, JMU incoming freshmen are participating in anaerobic and weight-training activities more than high school students.

5.4. Suggestions for Improving the HWQ2

Wellness domain faculty should consider the frequency with which they would like to see students engaging in these behaviors. These levels (e.g., drink 4 glasses of milk per week) would then serve as the behavioral "goals" for students completing their wellness course.

## Section 6. Performance in the Wellness Domain: WBS

### The Well-Being Scale (WBS)...

Is the self-report measure adopted to assess student's general levels of well-being for the Cluster Five Wellness Domain.

The Well-Being Scale, or WBS, is a 54-item scale developed by Carol Ryff (1989) that measures students' well being on six subscales:

- Autonomy
- Environmental Mastery
- Personal Growth
- Positive Relations with Others
- Purpose in Life
- Self-Acceptance

Well-being is a domain concerned with the optimal functioning and experience of human-beings (Ryan & Deci, 2001). The study of well-being focuses on the *presence of wellness* in human beings, as opposed to the *absence of illness* (Brim, Ryff, & Kessler, 2004).

Descriptions of the WBS Subscales from Ryff (1989) are shown below:

- **Self acceptance.** A high scorer in SA is characterized as possessing a positive attitude toward the self (including a positive attitude of one's past life), and as accepting one self's good and bad qualities. A low scorer in SA feels dissatisfied with self, a negative attitude towards one's past life, is troubled about personal qualities, and wishes to be a different person.
- **Positive relations with others.** A high scorer in PR is able to have warm, satisfying, and trusting relationships with others, feels concern about the welfare of others, is capable of empathy, affection, and intimacy, and comprehends the give and take of human relationships. On the other hand, a low scorer in PR has few close and satisfying relationships with others, experiences difficulty in being warm and concerned about others, experiences frustration in interpersonal relationships, and is not willing to compromise.
- **Autonomy.** A high scorer in AU is independent, able to resist social pressures to think and act a certain way, able to self-regulate, and able to evaluate the self by one's own personal standards. A low scorer in AU is concerned about what others think and expect, relies on others to make important decisions, and conforms to the social pressures perceived by other people.
- **Environmental Mastery.** A high scorer in EM has a sense of competence in managing and controlling the environment and its complexities, is effective and efficient in utilizing surrounding opportunities, and is able to choose or create contexts that are congruent to one's personal needs. A low scorer in EM has difficulty managing daily events, feels that changing or improving the context is out of one's control, and is unaware of surrounding opportunities.
- **Purpose in life.** A high scorer in PL has life goals and a sense of directedness, believes the present and past life has meaning, and has objectives for living. A low scorer in PL lacks a sense of meaning and directedness in life, has few goals, and sees no purpose of past life.
- **Personal Growth.** A high scorer in PG possesses a feeling of continuous development, views the self as constantly growing and expanding, is open to new experiences, realizes his or her potential, recognizes improvement in self and behavior over time, and is changing in ways that reflect greater self-knowledge and effectiveness. A low scorer in PG possesses a sense of personal stagnation, lacks a sense of improvement and continuous development, feels bored and uninterested with life, and feels unable to develop new attitudes or behaviors.

### 6.1. Comparison of Well-Being Among Cohorts

This figure shows the average WBS subscale scores for four different cohorts of students: F03 (incoming freshmen in Fall 2003), F04 (incoming freshmen in Fall 2004), S04 (2nd semester sophomores in Spring 2004), and F05 (incoming freshmen in Fall 2005). The trends in well-being levels across the subscales seem to be similar for the four cohorts. Scores are fairly high on all 6 subscales indicating high well-being. Comparing across subscales, the Autonomy and Environmental Mastery well-being are the lowest for all cohorts. Students in the F05 cohort seem to have consistently lower well-being scores than the previous-year's cohort (F04) on all subscales, although the differences are not substantial. In fact, the F05 freshman cohort is ranked third of the four cohorts on Environmental Mastery, and is ranked last among the cohorts for Autonomy.

### The Rank of This Year's Freshman Cohort Compared to Four Other Cohorts:

Autonomy: .....	4
Environmental Mastery: .....	3
Personal Growth: .....	2
Positive Relationships: .....	2
Purpose in Life: .....	2
Self Acceptance: .....	2



## Section 7. Relationships Among the KWH3, HWQ2, and WBS

### There is a moderate positive relationship...

Between students' overall well-being and the frequency with which they engage in healthy behavior.

Comparing students' overall knowledge of wellness, frequency of behavior, and general well-being can be useful with understanding the wellness profile for this year's freshman class. Using a sample of 465 students from the F05 Freshman Cohort had complete data on all three wellness instruments, the correlations among scores on those instruments can be examined.

### 7.1. Correlations Among All Three Scales

The relationships between the three wellness scales indicate the following:

- There is a **moderate positive relationship** ( $r = 0.317$ ) between students' overall levels of well-being and the frequency in which students engage in healthy behaviors (HWQ).
- There is **no relationship** ( $r = 0.030$ ) between students' knowledge of health and wellness (KWH) and the frequency in which students engage in healthy behaviors (HWQ).
- There is **no relationship** ( $r = -0.017$ ) between students' knowledge of health and wellness (KWH) and students' overall levels of well-being.

	KWH	HWQ	WBS
KWH		0.030	-0.017
HWQ	0.030		0.317**
WBS	-0.017	0.317**	

\*\* Correlation is significant at the 0.01 level (2-tailed). N = 465

### 7.2. Correlations Between the HWQ Scores and the WBS Subscales

To further examine how well-being and health behavior were related in this sample, the correlations between the 15 items on the HWQ and the six subscales on the WBS were computed. Only correlations  $\geq |0.15|$  are reported. Recall that the HWQ reports the *frequency* with which students engage in behavior, whereas the WBS indicates students' overall levels of well-being.

### More Correlations...

Environmental Mastery and Self Acceptance positively correlate with exercise frequency.

Personal Growth and, to a lesser degree, Purpose in Life, positively correlate with healthy eating.

		WBS Subscale					
	HWQ Item	Autonomy	Environ. Mastery	Personal Growth	Positive Relations with Others	Purpose in Life	Self-Acceptance
Q2	Eat fruit?			0.184	0.161	0.177	
Q3	Eat green salad?			0.173			
Q4	Eat vegetables?			0.174		0.167	
Q6	Eat hamburger, hotdogs, or sausage?			0.168			
Q8	Exercise $\geq$ 20 minutes that made you sweat and breathe hard?		0.167				0.162
Q10	Exercise to strengthen your muscles?		0.212				0.164
Q12	Socialize with friends or family?		0.189	0.176	0.284		0.219
Q13	Do stretching exercises?		0.214	0.185	0.176	0.152	0.161
Q14	Read nutritional labels?					0.164	
Q15	Skip meals?		0.173				

###

## Technical Report

The fall 2005 Cluster Five Report includes detailed statistical and psychometric information related to the assessment of the Cluster Five Wellness and Sociocultural domains.

### Section 1. Sample Sizes Used in Analysis

#### 1.1. Number of students used for each analysis

Analysis of Cluster Five, Individuals in the Human Community, was conducted using a sample of randomly-selected students who were required to take the assessments for the Sociocultural Domain, the Health and Wellness Domain, or both. Although CARS originally scanned up to 1069 Scantrons for the Sociocultural Domain and as many as 1471 Scantrons for the Health and Wellness Domain, the actual analyses used progressively-smaller samples to exclude incomplete records while maximizing the largest effective sample for each level of analysis (actual samples sizes for each analysis are indicated in the table below). For example, a student who only completed ten of the SDA4 questions is not included in this analysis; and, similarly, a student for whom we lack demographic information or a complete Student Opinion Survey (motivation instrument) is also excluded from the analysis. While it is possible to score missing responses to questions on the criterion-referenced Cluster Five instruments as “incorrect”, this option was not pursued due to the possibly-incorrect assumption that the student did not know the answer to the question. Marking a missing response as “incorrect” would therefore inaccurately measure students’ knowledge of the Cluster 5/Individuals in the Human Community objectives. Furthermore, CARS acquired a very large sample of students, which easily allows for the deletion of these incomplete records while maintaining the integrity of the assessment.


Sample Name	Assessment	N	Description
Sociocultural Domain Assessment Samples			
SDA4_F05	Fall 2005: SDA4	1069	Fall 2005 sample with complete data on all 44 items
Wellness Domain Assessment Samples			
KWH3_F05	Fall 2005: KWH3	1031	Fall 2005 sample with complete and valid data on all KWH items
HWQ_F05	Fall 2005: HWQ2	880	Fall 2005 sample with complete and valid data on the HWQ items
WBS_F05	Fall 2005: WBS	1471	Fall 2005 sample with complete and valid data on the WBS items
WellnessCombined_F05	Fall 2005: KWH3/HWQ2/WBS	465	The intersection of students who took all three wellness instruments and had complete and valid data on all three.


### Section 2. SDA4 Instrument Psychometric Properties

Overall, the psychometric properties for the SDA4 are appropriate for an instrument used in this type of assessment context.

#### 2.1. SDA4 Instrument

It is important to note that the Center for Assessment and Research Studies is currently evaluating the factor structure and reliability of this instrument. Cluster 5 faculty will be notified as to any suggested changes to the SDA4 per this analysis.

 = Item that was substantially changed for the SDA4

 = Item that is new to the SDA4

Item #	Mean	Standard Deviation	Cronbach's Coefficient Alpha	Coefficient Alpha with Deletion	Total Correlation with Deletion	Marginal Reliability
1	0.790	0.407	0.658	0.660	0.037	Consider Deletion or Revision
2	0.374	0.484	0.658	0.648	0.225	
3	0.543	0.498	0.658	0.649	0.210	
4	0.453	0.498	0.658	0.656	0.121	

Item #	Mean	Standard Deviation	Cronbach's Coefficient Alpha	Coefficient Alpha with Deletion	Total Correlation with Deletion	Marginal Reliability
5	0.548	0.498	0.658	0.656	0.113	
6	0.696	0.460	0.658	0.657	0.096	
7	0.689	0.463	0.658	0.653	0.155	
8	0.746	0.436	0.658	0.657	0.090	
9	0.391	0.488	0.658	0.643	0.298	
10	0.514	0.500	0.658	0.651	0.191	
11	0.236	0.425	0.658	0.663	-0.003	Consider Deletion or Revision
12	0.455	0.498	0.658	0.650	0.196	
13	0.599	0.490	0.658	0.649	0.223	
14	0.409	0.492	0.658	0.663	0.022	Consider Deletion or Revision
15	0.736	0.441	0.658	0.658	0.076	Consider Deletion or Revision
16	0.483	0.500	0.658	0.648	0.235	
17	0.784	0.412	0.658	0.655	0.133	
18	0.586	0.493	0.658	0.665	-0.005	Consider Deletion or Revision
19	0.513	0.500	0.658	0.655	0.131	
20	0.797	0.402	0.658	0.645	0.291	
21	0.822	0.382	0.658	0.650	0.216	
22	0.744	0.437	0.658	0.655	0.136	
23	0.593	0.491	0.658	0.642	0.317	
24	0.902	0.298	0.658	0.655	0.132	
25	0.550	0.498	0.658	0.653	0.168	
26	0.379	0.485	0.658	0.653	0.162	
27	0.505	0.500	0.658	0.653	0.168	
28	0.558	0.497	0.658	0.642	0.307	
29	0.802	0.399	0.658	0.654	0.149	
30	0.785	0.411	0.658	0.650	0.207	
31	0.559	0.497	0.658	0.650	0.205	
32	0.633	0.482	0.658	0.655	0.139	
33	0.195	0.396	0.658	0.660	0.039	Consider Deletion or Revision
34	0.735	0.441	0.658	0.644	0.304	
35	0.685	0.465	0.658	0.656	0.113	
36	0.698	0.459	0.658	0.644	0.301	
37	0.565	0.496	0.658	0.651	0.183	
38	0.260	0.439	0.658	0.649	0.221	
39	0.767	0.423	0.658	0.648	0.234	
40	0.451	0.498	0.658	0.659	0.083	Consider Deletion or Revision
41	0.698	0.459	0.658	0.646	0.262	
42	0.370	0.483	0.658	0.663	0.014	Consider Deletion or Revision
43	0.776	0.417	0.658	0.651	0.192	
44	0.614	0.487	0.658	0.649	0.220	

## 2.2. Reliability

The overall reliability for the SDA4 instrument, as measured by Cronbach’s Coefficient Alpha, is **0.6579**, which is acceptable for a JMU Assessment Day instrument. There are eight items on the current version which, if deleted, would increase the overall reliability of the instrument. The items are marked above as “Consider Deletion or Revision.”

Test Version	Cohort	Reliability
SDA4	F05 Freshmen	.66
SDA3	F04 Freshmen	.68
SDA1	F03 Freshmen	.59

*\* The SDA2 was only given to second-semester sophomore cohorts, so comparison to the freshmen cohorts is not appropriate*

## 2.3. Modified and New Items

The SDA4 has seven items that were significantly altered from the SDA3 and four items that are completely new to the SDA test. As indicated above, one modified item (#11) and one new item (#42) appear to have low discrimination and may need attention in the future.

### Section 3. KWH3 Instrument Psychometric Properties

Overall, the KWH's psychometric properties are appropriate for a test being use to these kinds of program assessment purposes.

Item #	Mean	Standard Deviation	Cronbach's Coefficient Alpha	Coefficient Alpha with Deletion	Total Correlation with Deletion	Marginal Reliability
1	0.405	0.491	0.526	0.521	0.107	
2	0.325	0.469	0.526	0.517	0.148	
3	0.255	0.436	0.526	0.540	-0.109	Consider Deletion or Revision
4	0.882	0.323	0.526	0.527	0.029	Consider Deletion or Revision
5	0.215	0.411	0.526	0.527	0.031	Consider Deletion or Revision
6	0.679	0.467	0.526	0.514	0.183	
7	0.343	0.475	0.526	0.531	0.000	Consider Deletion or Revision
8	0.463	0.499	0.526	0.523	0.089	
9	0.303	0.460	0.526	0.526	0.055	
10	0.498	0.500	0.526	0.512	0.201	
11	0.158	0.365	0.526	0.529	0.000	Consider Deletion or Revision
12	0.116	0.321	0.526	0.525	0.061	
13	0.714	0.452	0.526	0.524	0.073	
14	0.319	0.466	0.526	0.525	0.061	
15	0.195	0.396	0.526	0.525	0.060	
16	0.592	0.492	0.526	0.515	0.168	
17	0.767	0.423	0.526	0.521	0.106	
18	0.141	0.348	0.526	0.528	0.014	Consider Deletion or Revision
19	0.412	0.492	0.526	0.525	0.069	
20	0.344	0.475	0.526	0.523	0.089	
21	0.839	0.368	0.526	0.519	0.145	
22	0.583	0.493	0.526	0.520	0.117	
23	0.116	0.321	0.526	0.530	-0.023	Consider Deletion or Revision
24	0.366	0.482	0.526	0.539	-0.079	Consider Deletion or Revision
25	0.357	0.479	0.526	0.535	-0.037	Consider Deletion or Revision
26	0.538	0.499	0.526	0.520	0.117	
27	0.742	0.438	0.526	0.509	0.245	
28	0.493	0.500	0.526	0.516	0.158	
29	0.360	0.480	0.526	0.535	-0.036	Consider Deletion or Revision
30	0.473	0.500	0.526	0.524	0.081	
31	0.588	0.492	0.526	0.523	0.084	
32	0.615	0.487	0.526	0.529	0.023	Consider Deletion or Revision
33	0.539	0.499	0.526	0.520	0.113	
34	0.695	0.460	0.526	0.520	0.115	
35	0.449	0.498	0.526	0.516	0.162	
36	0.705	0.456	0.526	0.517	0.148	
37	0.540	0.499	0.526	0.524	0.074	
38	0.357	0.479	0.526	0.526	0.056	
39	0.649	0.478	0.526	0.508	0.246	
40	0.151	0.359	0.526	0.525	0.060	
41	0.842	0.365	0.526	0.519	0.141	
42	0.769	0.422	0.526	0.513	0.202	
43	0.400	0.490	0.526	0.522	0.101	
44	0.164	0.370	0.526	0.535	-0.083	Consider Deletion or Revision
45	0.455	0.498	0.526	0.517	0.151	
46	0.248	0.432	0.526	0.517	0.154	
47	0.228	0.420	0.526	0.525	0.061	
48	0.656	0.475	0.526	0.511	0.217	
49	0.785	0.411	0.526	0.507	0.275	
50	0.423	0.494	0.526	0.524	0.077	
51	0.541	0.499	0.526	0.513	0.187	
52	0.642	0.480	0.526	0.522	0.101	
53	0.735	0.441	0.526	0.512	0.205	

Item #	Mean	Standard Deviation	Cronbach's Coefficient Alpha	Coefficient Alpha with Deletion	Total Correlation with Deletion	Marginal Reliability
54	0.020	0.141	0.526	0.528	-0.056	Consider Deletion or Revision
55	0.314	0.464	0.526	0.526	0.058	
56	0.451	0.498	0.526	0.521	0.112	
57	0.590	0.492	0.526	0.507	0.249	
58	0.500	0.500	0.526	0.518	0.136	
59	0.630	0.483	0.526	0.518	0.134	
60	0.116	0.321	0.526	0.525	0.052	

### 3.1. Reliability

The overall reliability for the KWH3 instrument, as measured by Cronbach's Coefficient Alpha, is **0.5262**, which is marginally acceptable for a JMU Assessment Day instrument. There are 13 items which, if deleted, would increase the overall reliability of the instrument. The items are marked above as "Consider Deletion or Revision".

Test Version	Cohort	Reliability
KWH3	F05 Freshmen	.53
KWH2	F04 Freshmen	.59
KWH1	F03 Freshmen	.38

## Section 4. HWQ2 Instrument Psychometric Properties

Item #	Mean	Standard Deviation	Cronbach's Coefficient Alpha	Coefficient Alpha with Deletion	Total Correlation with Deletion	Marginal Reliability
1	2.494	0.838	0.624	0.620	0.166	
2	2.700	0.780	0.624	0.576	0.454	
3	2.565	0.836	0.624	0.590	0.355	
4	2.859	0.813	0.624	0.583	0.398	
5	2.699	1.007	0.624	0.638	0.093	Consider Deletion or Revision
6	2.828	0.677	0.624	0.624	0.121	Consider Deletion or Revision
7	2.483	0.737	0.624	0.641	0.000	Consider Deletion or Revision
8	2.751	0.818	0.624	0.586	0.380	
9	2.791	0.860	0.624	0.594	0.325	
10	2.289	0.868	0.624	0.573	0.449	
11	3.272	0.759	0.624	0.642	-0.001	Consider Deletion or Revision
12	3.717	0.542	0.624	0.623	0.121	
13	2.244	0.884	0.624	0.577	0.422	
14	2.348	1.070	0.624	0.590	0.340	
15	2.835	0.768	0.624	0.634	0.062	Consider Deletion or Revision

### 4.1. Reliability

The overall reliability for the HWQ2 instrument, as measured by Cronbach's Coefficient Alpha, is **0.624**, which is marginally acceptable for a JMU Assessment Day instrument. There are 5 items which, if deleted, would increase the overall reliability of the instrument. The items are marked above as "Consider Deletion or Revision".

Test Version	Cohort	Reliability
HWQ2	F05 Freshmen	.62
HWQ2	F04 Freshmen	.60
HWQ2	F03 Freshmen	.62

## Section 5. WBS Instrument Psychometric Properties

The Center for Assessment and Research Studies is currently undertaking an in-depth study of the psychometric properties of the WBS instrument. As of the writing of this report, findings suggest that interpreting the WBS as an instrument with six subscales may not be appropriate.

Using the F05 freshman cohort data, the fit indices for the six-factor model are only moderate, and the fit of the six-factor model with the negative item method effect is much more appropriate.

The Center continues to evaluate the appropriateness of the WBS as an assessment instrument at JMU and will make recommendations to the Cluster Five faculty as additional information becomes available.

### 5.1. Reliability

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The overall reliability for the WBS instrument, as measured by Cronbach's Coefficient Alpha, is **0.935705**, which is acceptable for a JMU Assessment Day instrument.

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## Section 6. Appendices

### 6.1. Appendix A: The Sociocultural Domain Goals and Objectives

Goals	Objectives	SDA3 Items	Fall	# Items/Objective	% of Total
		2004			
1 Make plausible interpretations about behavior in social contexts	a infer meaning of behavior	21		1	
	b reject inappropriately simplistic judgments about causes of behavior	5,12		2	
	c discern multiple causes for behavior	24		1	
	d identify assumptions underlying a perspective or worldview	8		1	
	<b>Total # Items for Goal 1:</b>				<b>5</b>
2 Identify implications of taking action regarding social/behavioral issue	a discern essential features of social/behavioral issues	11,13		2	
	b predict probable consequences of a course of action	2,6		2	
	c recognize flaws in reasoning that make alternative positions less viable	10,15		2	
<b>Total # Items for Goal 2:</b>				<b>6</b>	<b>15.00</b>
3 Use evidence to develop and evaluate positions regarding social/behavioral issue	a discriminate between reputable and nonreputable sources of information	4,14,16, 37		4	
	b recognize the criteria that constitute reputable sources	18,19		2	
	c identify potential bias in sources of information	3, 22, 33		3	
	d recognize potential for personal bias to influence choice	31, 35, 40		3	
<b>Total # Items for Goal 3:</b>				<b>12</b>	<b>30.00</b>
4 Discriminate between ethical and nonethical practices in the social/behavioral sciences	recognize researcher's obligation to provide a rationale for methods selected to address specific questions	9		1	
	b identify procedures for protection of participant well-being	17,23, 26, 32, 34, 39		6	
	c discern populations/situations to which findings may be generalized	20,25,27, 36		4	
<b>Total # Items for Goal 4:</b>				<b>11</b>	<b>27.50</b>
5 Identify relevant contributions of sociocultural/psychological variables to a perspective	a recognize complexity of nature-nurture argument	1, 38		2	
	b interpret interaction concept appropriately	29,30		2	
	c identify factors that influence construction of identity	28,7		2	
<b>Total # Items for Goal 5:</b>				<b>6</b>	<b>15.00</b>
<b>OVERALL TOTAL</b>				<b>40</b>	<b>100.00</b>

### 6.2. Appendix B: The Wellness Domain Goals and Objectives

Goals	Objectives	Assessment Items 7/29/2004	# Items/Objective	% of Test
1 Students should be able to understand the dimensions of wellness, the various factors affecting each dimension, and how dimensions are interrelated.	a Identify the dimensions of wellness.	24,30,40,48,53,57	6	8.00
	b Identify factors that influence each dimension of wellness.	3,6,8,22,44,46,58	7	9.33
	c Recognize how dimensions of wellness are interrelated.	5,10,13,36,42,49,60	7	9.33
<b>Total # Items for Goal 1:</b>			<b>20</b>	<b>26.67</b>
2 Students should be able to understand the relationship between personal behaviors and lifelong health and wellness.	a Recognize the importance of lifestyle in disease prevention	1,18,20,35,52	5	6.67
	b Recognize the relationship between health behaviors and wellness.	16,39,54,59	4	5.33
	c Identify and apply the theories of health behavior change.	11,14,25,26,56	5	6.67
	d Examine the role of consumer health issues related to overall wellness	4,12,19,27,47,50	6	8.00
<b>Total # Items for Goal 2:</b>			<b>20</b>	<b>26.67</b>
3 Students will recognize an individual's level of health and wellness and understand how these levels impact quality of life	a Assess one's levels of health and wellness	17,28,41	3	4.00
	b Evaluate how one's levels of health and wellness compare to recommended levels	7,9,29,31,55	5	6.67
	c Recognize how genetics, environment and lifestyle behaviors influence health and wellness levels.	Assessed via items for 1b, 2a, 2b	0	0.00
<b>Total # Items for Goal 3:</b>			<b>8</b>	<b>10.67</b>
4 Students will identify and implement strategies to improve their wellness	a Identify a realistic and adjustable personal wellness plan.	15,32,33,37,43,51	6	8.00
	b Recognize how to use self-management skills relating to healthy lifestyle behaviors.	2,21,23,34,38,45	6	8.00
<b>Total # knowledge items Goal 4:</b>			<b>12</b>	<b>16.00</b>
	c Participate in a greater number of healthy wellness-related activities.	Assessed via HWQ2	15	20.00
<b>Total # Behavioral Items for Goal 4:</b>			<b>15</b>	<b>20.00</b>
<b>Total # Items</b>			<b>75</b>	<b>100.00</b>