Spring 4-2001

Academic Self-Confidence Scale: A Psychological Study in Two Parts

Holly Kristine Jones
University of Tennessee-Knoxville

Appendix D - UNIVERSITY HONORS PROGRAM
SENIOR PROJECT - APPROVAL

Name: Holly Kristine Jones

College: Arts and Sciences Department: English, Political Science, and Psychology

Faculty Mentor: Dr John Lounsbury

PROJECT TITLE: Academic Self-Confidence Scale: A Psychological Study in Two Parts

I have reviewed this completed senior honors thesis with this student and certify that it is a project commensurate with honors level undergraduate research in this field.

Signed: _____, Faculty Mentor

Date: 4-20-01

Comments (Optional):

University Honors Senior Project

Academic Self-Confidence Scale: A Psychological Study in Two Parts

Holly Jones

April 22, 2001

Mentor: Dr. John Lounsbury

Holly Jones

Development and Validation of a Scale to Test Academic Self Confidence

Self-confidence, a construct that refers to the standard idea of self-confidence, or the assurance that a person has in his or her own abilities, was conceptualized in the academic areas. A psychological personality scale was then developed to measure variations of this construct in students of different demographics, including gender, year in school, major, and cumulative G.P.A.

Upon development and testing of the scale, it was tested for correlation with other popular personality scales, including the NEO Achievement-Striving scale and the 1999 Bases of Self-Esteem School Competence Scale. It was hypothesized that these scales would show some correlation, with definite correlation between the constructs of achievement striving and with academic self-confidence.

Introduction to project:

Industrial-Organizational psychology has progressed widely as a way of working with the psychology of groups and interaction in the workplace, particularly in blue collar and factory atmospheres and in high-stress managerial positions. One of the most important keys to job satisfaction can lie in the relationships between the people one works with and with the people he or she supervises. This can present problems, as different people are needed for different tasks and different jobs. For example, a company may not necessarily want someone with a bubbly, outgoing personality to work technical support on in an intense research environment, as this person might be prone to make conversation rather than to focus on productivity. In the same rite, this company wouldn't want a highly introverted person who was focused on production rather than customer service to work front-line, greeting customers and developing public relations campaigns. There is basically a position for everyone and his or her personality type, and a large segment of Industrial-Organizational psychology works toward developing scales and strata to place people in jobs that they like and, more commonly, to find the right personalities for particular job environments.

Through this, many scales have been developed to measure everything from adaptiveness to change to manual dexterity. Scales have been developed for one-time situations such as mergers that will require employees to adapt to a new networking system, a new environment, new employers, and even completely different jobs. Other scales are more general, focusing on the profession as a whole; for example, scales to determine one's agreeableness are often given to

bank tellers and public relations workers. Another particularly interesting scale measures aggression, a personality trait normally thought of as negative, in a more positive light of persistence and assertiveness for hiring sales representatives.

Many people are familiar with the Myers-Briggs Type Indicator, and while quite a few people do not feel comfortable being placed into a stratification that allows for only 16 types, it can certainly make managerial and group work much easier by locating the basis of conflict and communication between co-workers and, even, students.

The idea of adapting scales to students through Industrial-Organizational psychology is still in growing stages, but scales can be used to help educators and parents target certain characteristics in the learning behaviors of students. Through these scales, the students can learn about themselves and the ways that they interact with others, and the educators can adapt their teaching styles for particular students in problem situations. For example, the introverted child may not work well in group situations, and while it is important for each person to gain mastery of cooperative skills, it is equally important to foster the individual preferences of these children rather than attempting to mold them into something that they are not, an action that often just leads to frustration.

My scale is also meant to determine learning styles and behaviors in students, following in the idea that one's personality is, indeed, important in the educational forum. Personality is a defining characteristic of the person, and, in this, a defining characteristic of how that person learns, thinks, behaves, rationalizes, and performs. Through greater understanding of personality attributes in educational arenas, more students may be given a learning environment more suitable

to their personal styles, thereby increasing interest in academics, test scores and grades, and future success.

In the future, more scales like this one may be made available in guidance counselors' offices and, as they are now, but on a wider basis, in career services departments of universities. This is a growing and productive field that offers greater opportunities to understand ourselves and those around us, and then to tailor our interactions to garner success.

Part One: Scale Development

I. Statement of Purpose

The purpose of the first part of this project was to develop and test a scale to measure the construct academic self-confidence. For the scale, the construct academic self-confidence refers to the standard idea of self-confidence, or the assurance that a person has in his or her own abilities. This definition was then conceptualized into the area of academics by limiting those abilities considered in the scale questions to those abilities associated with coursework, grades, and school situations in general. The scale results were then analyzed by gender, to see if there is any distinct and significant difference between the self-confidence of males and that of females in academics.

II. Methodology

When the first scale for academic self-confidence was developed, it contained 22 items, with three of those items (numbers 8, 9, and 14) inserted only as decoy items to partially disguise the aim and purpose of the test from the test subjects. The questions could be answered on a five-point scale with a score of one being "I strongly disagree" and a score of five being "I strongly agree." The test form, (See Appendix A.) was then uploaded to the Web site http://web.utk.edu/~hjones/quiz.htm where it was made available to all students currently enrolled in or recently graduated from college.

Demographic data included in the scale was gender, class, major, and G.P.A. 85 students answered the questionnaire with 41 being male and 44) being female. Grade distribution broke down into 8 freshmen, 19 sophomores, 23 juniors, 27 seniors, and 8 graduate students.

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	41	48.2	48.2	48.2
	2	44	51.8	51.8	100.0
	Total	85	100.0	100.0	

YEAR

	Frequency	Percent	Valid Percent	Cumulative Percent
1	8	9.4	9.4	9.4
2	19	22.4	22.4	31.8
3	23	27.1	27.1	58.8
4	27	31.8	31.8	90.6
5	8	9.4	9.4	100.0
Total	85	100.0	100.0	

III. Results

From the 85 responses, frequencies for each self-confidence question broke down as follows:

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

**Item numbers 2, 4, 10, and 22 were recoded.

Question 1. I always approach academic situations with assurance:

Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	5.9	5.9	5.9
	2	29	34.1	34.1	40.0
	3	15	17.6	17.6	57.6
	4	28	32.9	32.9	90.6
	5	8	9.4	9.4	100.0
	Total	85	100.0	100.0	

Question 2. I would never take more than 15 hours of class:

Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	17.6	18.1	18.1
	2	19	22.4	22.9	41.0
	3	11	12.9	13.3	54.2
	4	19	22.4	22.9	77.1
	5	19	22.4	22.9	100.0
	Total	83	97.6	100.0	
Missing	System	2	2.4		
Total		85	100.0		

Question 3. I always know the answers to class questions:

Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	2.4	2.4	2.4
	2	18	21.2	21.2	23.5
	3	30	35.3	35.3	58.8
	4	33	38.8	38.8	97.6
	5	2	2.4	2.4	100.0
	Total	85	100.0	100.0	

Question 4. I am not an extremely confident person:

Q4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	11.8	11.9	11.9
	2	24	28.2	28.6	40.5
	3	15	17.6	17.9	58.3
	4	25	29.4	29.8	88.1
	5	10	11.8	11.9	100.0
	Total	84	98.8	100.0	
Missing	System	1	1.2		
Total		85	100.0		

Question 5. I am comfortable with extra work or activities:

Q5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	11.8	11.8	11.8
	2	22	25.9	25.9	37.6
	3	15	17.6	17.6	55.3
	4	27	31.8	31.8	87.1
	5	11	12.9	12.9	100.0
	Total	85	100.0	100.0	

Question 6. I am always very sure of myself before an exam:

Q6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	7.1	7.1	7.1
	2	23	27.1	27.1	34.1
	3	21	24.7	24.7	58.8
	4	31	36.5	36.5	95.3
	5	4	4.7	4.7	100.0
	Total	85	100.0	100.0	

Question 7. I remain sure of myself after exams:

Q7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	2.4	2.4	2.4
	2	23	27.1	27.1	29.4
	3	30	35.3	35.3	64.7
	4	25	29.4	29.4	94.1
	5	5	5.9	5.9	100.0
	Total	85	100.0	100.0	

Question 8. (Decoy) I read *The Daily Beacon* every day:

Q8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	16.5	17.3	17.3
	2	14	16.5	17.3	34.6
	3	9	10.6	11.1	45.7
	4	18	21.2	22.2	67.9
	5	26	30.6	32.1	100.0
	Total	81	95.3	100.0	
Missing	System	4	4.7		
Total		85	100.0		

Question 9. (Decoy) I think that UT students are too apathetic:

Q9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	4.7	5.1	5.1
	2	12	14.1	15.2	20.3
	3	40	47.1	50.6	70.9
	4	19	22.4	24.1	94.9
	5	4	4.7	5.1	100.0
	Total	79	92.9	100.0	
Missing	System	6	7.1		
Total		85	100.0		

Question 10. I never expect high grades:

Q10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	17	20.0	20.0	20.0
	2	34	40.0	40.0	60.0
	3	8	9.4	9.4	69.4
	4	12	14.1	14.1	83.5
	5	14	16.5	16.5	100.0
	Total	85	100.0	100.0	

Question 11. I am always apprehensive about graded work:

Q11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	7.1	7.1	7.1
	2	25	29.4	29.4	36.5
	3	13	15.3	15.3	51.8
	4	32	37.6	37.6	89.4
	5	9	10.6	10.6	100.0
	Total	85	100.0	100.0	

Question 12. I can be anything that I want to be:

Q12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	23.5	23.5	23.5
	2	23	27.1	27.1	50.6
	3	12	14.1	14.1	64.7
	4	14	16.5	16.5	81.2
	5	16	18.8	18.8	100.0
	Total	85	100.0	100.0	

Question 13. I feel comfortable leading academic groups:

Q13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	11.8	11.8	11.8
	2	24	28.2	28.2	40.0
	3	16	18.8	18.8	58.8
	4	26	30.6	30.6	89.4
	5	9	10.6	10.6	100.0
	Total	85	100.0	100.0	

Question 14. (Decoy) I feel that voting is a very important duty in society:

Q14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	31.8	31.8	31.8
	2	18	21.2	21.2	52.9
	3	11	12.9	12.9	65.9
	4	14	16.5	16.5	82.4
	5	15	17.6	17.6	100.0
	Total	85	100.0	100.0	

Question 15. It doesn't bother me to be wrong if I answer a question in class:

Q15

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	9.4	9.4	9.4
	2	28	32.9	32.9	42.4
	3	8	9.4	9.4	51.8
	4	36	42.4	42.4	94.1
	5	5	5.9	5.9	100.0
	Total	85	100.0	100.0	

Question 16. Some people would say that I am egotistical:

Q16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	11.8	11.8	11.8
	2	25	29.4	29.4	41.2
	3	8	9.4	9.4	50.6
	4	30	35.3	35.3	85.9
	5	12	14.1	14.1	100.0
	Total	85	100.0	100.0	

Question 17. Having high grades makes me feel good about myself:

Q17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	23.5	23.5	23.5
	2	30	35.3	35.3	58.8
	3	4	4.7	4.7	63.5
	4	18	21.2	21.2	84.7
	5	13	15.3	15.3	100.0
	Total	85	100.0	100.0	

Question 18. I never skip class:

Q18

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	9.4	9.4	9.4
	2	34	40.0	40.0	49.4
	3	10	11.8	11.8	61.2
	4	17	20.0	20.0	81.2
	5	16	18.8	18.8	100.0
	Total	85	100.0	100.0	

Question 19. I enjoy offering answers in class discussions:

Q19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	11.8	11.8	11.8
	2	25	29.4	29.4	41.2
	3	16	18.8	18.8	60.0
	4	21	24.7	24.7	84.7
	5	13	15.3	15.3	100.0
	Total	85	100.0	100.0	

Question 20. I always try to participate openly in class:

Q20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	9.4	9.4	9.4
	2	25	29.4	29.4	38.8
	3	18	21.2	21.2	60.0
	4	30	35.3	35.3	95.3
	5	4	4.7	4.7	100.0
	Total	85	100.0	100.0	

Question 21. If I don't agree with a grade I have received, I always talk to the professor about it:

Q21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	10.6	10.6	10.6
	2	23	27.1	27.1	37.6
	3	13	15.3	15.3	52.9
	4	32	37.6	37.6	90.6
	5	8	9.4	9.4	100.0
	Total	85	100.0	100.0	

Question 22. I second-guessed my answers on this survey:

Q22

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	9.4	9.4	9.4
	2	23	27.1	27.1	36.5
	3	18	21.2	21.2	57.6
	4	24	28.2	28.2	85.9
	5	12	14.1	14.1	100.0
	Total	85	100.0	100.0	

With all 22 questions after recoding, the first reliability output revealed a relatively high Coefficient Alpha of .8788 (See Appendix B for Item-Total Correlations). After removing the decoy questions as well as the strongly worded questions 3, 6, 7, 15, 16, and 18, leaving 13 questions total, the Coefficient Alpha rose to .9027.

The mean Inter-Item Correlation was also quite high at .4210 (See Appendix C for Corrected Item-Total Correlations).

Total scale statistics were as follows:

Mean: 38.8780

Variance: 127.8615

Standard Deviation: 11.3076

When the corrected scale for Academic Self-Confidence was correlated with the demographic data for sex, class, and G.P.A., it was determined that there was actually no significant relationship between gender and Academic Self-Confidence.

Correlations

		SELFCONF	GENDER	YEAR	GPA
SELFCONF	Pearson Correlation	1.000	.007	.209	.112
	Sig. (2-tailed)	.	.947	.059	.331
	N	82	82	82	78
GENDER	Pearson Correlation	.007	1.000	.184	.212
	Sig. (2-tailed)	.947	.	.092	.059
	N	82	85	85	80
YEAR	Pearson Correlation	.209	.184	1.000	.081
	Sig. (2-tailed)	.059	.092	.	.475
	N	82	85	85	80
GPA	Pearson Correlation	.112	.212	.081	1.000
	Sig. (2-tailed)	.331	.059	.475	.
	N	78	80	80	80

In fact, when an Independent Sample T test was run between gender and Academic Self-confidence, it was determined that males only had a .1738 mean difference over females.

IV. Discussion/Item Analysis

For those items deleted from the scale (3, 6, 7, 8, 9, 14, 15, 16, and 18) the major problem, omitting the decoy items, revolved around strong wording. For example, item 3 read "I always know the answers to class questions," and while many of the other items in the scale were strongly worded, this item may have repelled those students who may hold high self-confidence in academics, but do not feel that "always knowing the answer" is a determinant of this confidence. On the contrary, some students may allow wrong answers to calm their confidence, explaining the removal of item 15 "It doesn't bother me to be wrong if I answer a question in class." This question would reflect more of a situational behavior rather than a tendency.

For items 6 and 7, the question of testing confidence may have been too far removed from the question of overall academic confidence. It is likely that many confident students suffer from some forms of test anxiety, thereby calling for the removal of both of these items. Item 18, "I never skip class," does not reflect a gain or lack of academic confidence in that some confident students may not need consistent attendance in order to feel good about their performance while, on the other hand, less confident students may feel more dependent upon the class atmosphere, needing every class lecture to succeed.

The 13 remaining questions of the scale appear to have a high possibility of determining academic self-confidence in

college students with no bias toward gender. However, further validation against other scales and retesting must occur to confirm this.

Part Two: Validation of Scale

I. Statement of Purpose/Hypothesis

The purpose of the second part of this project was to test the previously developed scale and validate it against other logically related scales after developing hypotheses about the relationships between these scales.

It was hypothesized that Academic Self-Confidence would have a high, positive correlation with Achievement-Striving, as tested by the NEO Achievement-Striving scale. The basis of this is that as students feel more confident in their academic achievements, then they will be more likely to pursue larger goals with more diligence.

It was also hypothesized that, due to the similarity of question structure, the 1999 Bases of Self-Esteem School Competence Scale would correlated positively with the Academic Self-Confidence scale.

Finally, it was hypothesized that as students become more and more self-confident in their academic work, they will be less likely to spend a lot of time studying outside of class, as they will feel more assured of the information that they retain from the class itself.

II. Methodology

For the second administration of the Academic Self-Confidence scale, 33 items were included on the Web page. The remaining 13 items were interspersed with seven items from the NEO Achievement Striving Scale and with eight

items from the Bases of Self Esteem 1999 School Competence scale.

The questions were again rated on the same five-point scale with a score of one being "I strongly disagree" and a score of five being "I strongly agree." The revised test form, (See Appendix D.) was then uploaded to the same Web site http://web.utk.edu/~hjones/quiz.htm where it was again made available to all students currently enrolled in or recently graduated from college.

Demographic data included in the second scale was gender, class year, major, honors received, hours spent studying each week, and G.P.A. A total of 60 students answered the questionnaire with 22 being male and 38 being female. Grade distribution broke down into 5 freshmen, 9 sophomores, 10 juniors, 18 seniors, and 18 graduate students.

***Items 2, 3, 4, 9, 10, 15, 22, 24, and 25 were recoded

SEX

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	36.7	36.7	36.7
	2	38	63.3	63.3	100.0
	Total	60	100.0	100.0	

CLASS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	8.3	8.3	8.3
	2	9	15.0	15.0	23.3
	3	10	16.7	16.7	40.0
	4	18	30.0	30.0	70.0
	5	18	30.0	30.0	100.0
	Total	60	100.0	100.0	

III. Results

From the 60 responses, frequencies for each of the 13 original self-confidence questions broke down as follows:

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

*** Items 2, 4, 10, and 22 were recoded

Question 1. I always approach academic situations with assurance:

Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	10.0	10.0	10.0
	2	31	51.7	51.7	61.7
	3	12	20.0	20.0	81.7
	4	11	18.3	18.3	100.0
	Total	60	100.0	100.0	

Question 2. I would never take more than 15 hours of class:

Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	16.7	16.7	16.7
	2	20	33.3	33.3	50.0
	3	9	15.0	15.0	65.0
	4	12	20.0	20.0	85.0
	5	9	15.0	15.0	100.0
	Total	60	100.0	100.0	

Question 4. I am not an extremely confident person:

Q4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	16.7	16.7	16.7
	2	17	28.3	28.3	45.0
	3	16	26.7	26.7	71.7
	4	13	21.7	21.7	93.3
	5	4	6.7	6.7	100.0
	Total	60	100.0	100.0	

Question 5. I am comfortable with extra work or activities:

Q5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	21.7	21.7	21.7
	2	29	48.3	48.3	70.0
	3	11	18.3	18.3	88.3
	4	5	8.3	8.3	96.7
	5	2	3.3	3.3	100.0
	Total	60	100.0	100.0	

Question 10. I never expect high grades:

Q10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	26.7	26.7	26.7
	2	26	43.3	43.3	70.0
	3	7	11.7	11.7	81.7
	4	10	16.7	16.7	98.3
	5	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

Question 11. I am always apprehensive about graded work:

Q11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.0	5.0	5.0
	2	22	36.7	36.7	41.7
	3	9	15.0	15.0	56.7
	4	19	31.7	31.7	88.3
	5	7	11.7	11.7	100.0
	Total	60	100.0	100.0	

Question 12. I can be anything that I want to be:

Q12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	36.7	36.7	36.7
	2	24	40.0	40.0	76.7
	3	7	11.7	11.7	88.3
	4	7	11.7	11.7	100.0
	Total	60	100.0	100.0	

Question 13. I feel comfortable leading academic groups:

Q13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	26.7	26.7	26.7
	2	17	28.3	28.3	55.0
	3	9	15.0	15.0	70.0
	4	10	16.7	16.7	86.7
	5	8	13.3	13.3	100.0
	Total	60	100.0	100.0	

Question 17. Having high grades makes me feel good about myself:

Q17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	25	41.7	41.7	41.7
	2	20	33.3	33.3	75.0
	3	4	6.7	6.7	81.7
	4	8	13.3	13.3	95.0
	5	3	5.0	5.0	100.0
	Total	60	100.0	100.0	

Question 19. I enjoy offering answers in class discussions:

Q19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	30.0	30.5	30.5
	2	18	30.0	30.5	61.0
	3	8	13.3	13.6	74.6
	4	13	21.7	22.0	96.6
	5	2	3.3	3.4	100.0
	Total	59	98.3	100.0	
Missing	System	1	1.7		
Total		60	100.0		

Question 20. I always try to participate openly in class:

Q20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	25.0	25.0	25.0
	2	23	38.3	38.3	63.3
	3	7	11.7	11.7	75.0
	4	9	15.0	15.0	90.0
	5	6	10.0	10.0	100.0
	Total	60	100.0	100.0	

Question 21. If I don't agree with a grade I have received, I always talk to the professor about it:

Q21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	20.0	20.7	20.7
	2	19	31.7	32.8	53.4
	3	15	25.0	25.9	79.3
	4	9	15.0	15.5	94.8
	5	3	5.0	5.2	100.0
	Total	58	96.7	100.0	
Missing	System	2	3.3		
Total		60	100.0		

Question 22. I second-guessed my answers on this survey:

Q22

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	13.3	13.6	13.6
	2	25	41.7	42.4	55.9
	3	11	18.3	18.6	74.6
	4	12	20.0	20.3	94.9
	5	3	5.0	5.1	100.0
	Total	59	98.3	100.0	
Missing	System	1	1.7		
Total		60	100.0		

With all 13 questions after recoding, the first reliability output revealed a much lower coefficient alpha of .6377 due to the smaller sample of subjects and the changed demographics for these subjects. The mean Inter-Item Correlation was also much smaller for this data set at .1191 (See Appendix E for Item-Total Correlations).

Total scale statistics were as follows:

Mean: 32.2500

Variance: 43.1364

Standard Deviation: 6.5678

To note the distinctive nature of this scale sample, it should be noted that the Coefficient Alpha for the NEO Achievement striving scale was .7212 with a mean Inter-Item correlation of .2861. The Bases of Self Esteem scale for School Competence, however, registered much higher with Inter-item correlation of .6248 and Coefficient Alpha of .9428.

When the second data set for self-confidence was correlated with the data for the BSE School Competence scale and the NEO Achievement-Striving, it was determined that, the BSE School Competence had little correlation with either the NEO Achievement Striving scale or with the Academic Self-Confidence scale. However, the NEO Achievement Striving scale did, indeed, support the

hypothesis for strong positive correlation between the two. The NEO Achievement Striving scale correlated with the Academic Self-Confidence scale .440, which is highly significant at the .001 level.

Correlations

		MYSCALE	NEOACHIE	SCHCOMPT
MYSCALE	Pearson Correlation	1.000	.440	.178
	Sig. (2-tailed)	.	.001	.192
	N	56	55	55
NEOACHIE	Pearson Correlation	.440	1.000	.209
	Sig. (2-tailed)	.001	.	.116
	N	55	59	58
SCHCOMPT	Pearson Correlation	.178	.209	1.000
	Sig. (2-tailed)	.192	.116	.
	N	55	58	59

** Correlation is significant at the 0.01 level (2-tailed).

When correlations were found between the demographic factors, there were also significant correlations between samples. The correlation between Academic Self-Confidence and Study Time was significantly negative, supporting the idea that the more confident students are, the less time they feel that they need to study outside of class. However, it is interesting to note that study time is positively correlated with the number of honors received, and that Academic Self-Confidence is negatively correlated with these honors. This may suggest that those students who are academically self-confident do not strive for tangible rewards so much as they strive for their own personal goals and achievements.

		MYSCALE	NEOACHIE	SCHCOMPT	SEX	CLASS	HONORS	STUDY	GPA
MYSCALE	Pearson Correlation	1.000	.440	.178	-.017	-.218	-.291	-.291	-.229
	Sig. (2-tailed)	.	.001	.192	.900	.107	.033	.029	.113
	N	56	55	55	56	56	54	56	49
NEOACHIE	Pearson Correlation	.440	1.000	.209	-.125	-.200	-.117	-.353	-.234
	Sig. (2-tailed)	.001	.	.116	.345	.128	.386	.006	.101
	N	55	59	58	59	59	57	59	50
SCHCOMPT	Pearson Correlation	.178	.209	1.000	-.099	-.065	-.109	-.200	.193
	Sig. (2-tailed)	.192	.116	.	.458	.624	.419	.129	.180
	N	55	58	59	59	59	57	59	50
SEX	Pearson Correlation	-.017	-.125	-.099	1.000	-.058	-.031	-.161	-.146
	Sig. (2-tailed)	.900	.345	.458	.	.657	.819	.220	.306
	N	56	59	59	60	60	58	60	51
CLASS	Pearson Correlation	-.218	-.200	-.065	-.058	1.000	-.120	.254	.076
	Sig. (2-tailed)	.107	.128	.624	.657	.	.369	.050	.597
	N	56	59	59	60	60	58	60	51
HONORS	Pearson Correlation	-.291	-.117	-.109	-.031	-.120	1.000	.322	.371
	Sig. (2-tailed)	.033	.386	.419	.819	.369	.	.014	.009
	N	54	57	57	58	58	58	58	49
STUDY	Pearson Correlation	-.291	-.353	-.200	-.161	.254	.322	1.000	.231
	Sig. (2-tailed)	.029	.006	.129	.220	.050	.014	.	.102
	N	56	59	59	60	60	58	60	51
GPA	Pearson Correlation	-.229	-.234	.193	-.146	.076	.371	.231	1.000
	Sig. (2-tailed)	.113	.101	.180	.306	.597	.009	.102	.
	N	49	50	50	51	51	49	51	51

As far as gender is concerned, again, there was only slight difference between males and females in their level of academic self-confidence. According to an Independent Samples T-Test of sex versus the Self-Confidence scale, the mean difference was only .2333, with males having the slight edge.

IV. Discussion

Overall, the large difference between inter-item correlation and coefficient alpha can be best accounted for by the smaller sample size that tended to be more heavily weighted toward seniors and graduate students, and toward females. Nevertheless, the significant correlation between Achievement Striving and Academic Self-Confidence fulfilled the hypothesis that those who are more confident about themselves in school have the tendency to be confident in goal seeking, thereby being highly focused on achievement. It is interesting to note that, despite the similarity of some questions, the BSE 99 School Competence scale did not reflect academic self-confidence, and the main reason for this can be accounted for in the BSE School Competence scale's consideration of allowing self-esteem to drop if poor grades are received to be a sign of poor school competence.

Appendix A

445 Measurement and Testing Quiz

Informed Consent

This survey is being conducted as part of a class requirement for Psychology 445 at the University of Tennessee. If you have any questions, please call Dr. John Lounsbury (423) 974-3423 (Campus Address: Department of Psychology, Austin Peay.) Your responses will be treated as being anonymous. You are under no obligation whatsoever to answer any question you do not wish to answer. Results should be calculated by the end of the Fall semester. For other questions, E-mail me

NOTICE: The email submission form has changed, so you should be able to use this regardless of whether you have your email client set up in your Web browser

AOL USERS: There has been some difficulty with the submission form on AOL. If you are using AOL, your submission may not work, and you may wish to instead copy the answers and email them to me separately.

Please type in only your initials, showing that you understand the above statement.

Your Initials :

DEMOGRAPHICS

Gender:

Year in school:

Major:

Approximate G.P.A.:

Do you wish to receive results when all research is complete?:

○ Yes ○ No

If you wish to receive results, please enter your name and email address here:

For each of the following questions, please choose the answer that is the most true for you.

1) I always approach academic situations with assurance:

2) I would never take more than 15 hours of class:

3) I always know the answers to class questions:

4) I am not an extremely confident person:

5) I am comfortable with extra work or activities:

6) I am always very sure of myself before an exam:

7) I remain sure of myself after exams:

8) I read *The Daily Beacon* every day:

9) I think that UT students are too apathetic:

10) I never expect high grades:

11) I am always apprehensive about graded work:

12) I can be anything that I want to be:

13) I feel comfortable leading academic groups:

14) I feel that voting is a very important duty in society:

15) It doesn't bother me to be wrong if I answer a question in class:

16) Some people would say that I am egotistical:

17) Having high grades makes me feel good about myself:

18) I never skip class:

19) I enjoy offering answers in class discussions:

20) I always try to participate openly in class:

21) If I don't agree with a grade I have received, I always talk to the professor about it:

22) I second guessed my answers on this survey:

Congratulations, you are finished!

Special thanks to Heather Hayes, for letting me steal her idea. Take her quiz here: Heather's Really Cool Quiz

---

Submit Form | Reset Form

Appendix B

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

		Mean	Std Dev	Cases
1.	Q1	3.0649	1.1623	77.0
2.	Q2	3.1299	1.4631	77.0
3.	Q3	3.1948	.8891	77.0
4.	Q4	3.0000	1.2773	77.0
5.	Q5	3.1299	1.2497	77.0
6.	Q6	3.0779	1.0230	77.0
7.	Q7	3.0519	.9445	77.0
8.	Q8	3.3377	1.5270	77.0
9.	Q9	3.0909	.9059	77.0
10.	Q10	2.7143	1.4314	77.0
11.	Q11	3.1299	1.1959	77.0
12.	Q12	2.8052	1.4603	77.0
13.	Q13	3.0130	1.2512	77.0
14.	Q14	2.7532	1.5231	77.0
15.	Q15	3.0909	1.1941	77.0
16.	Q16	3.0649	1.3012	77.0
17.	Q17	2.7532	1.4157	77.0
18.	Q18	2.9091	1.3395	77.0
19.	Q19	3.0519	1.2659	77.0
20.	Q20	3.0000	1.1002	77.0
21.	Q21	3.0779	1.1895	77.0
22.	Q22	3.0779	1.2436	77.0

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Correlation Matrix

	Q1	Q2	Q3	Q4	Q5
Q1	1.0000				
Q2	.4282	1.0000			
Q3	.0131	.0612	1.0000		
Q4	.4431	.2394	.1159	1.0000	
Q5	.6735	.4872	.0953	.4533	1.0000
Q6	.2059	.0371	.1712	.4028	.0949
Q7	.2486	.0331	.4579	.3163	.2395
Q8	.0690	.0802	.0866	.1552	.1077
Q9	.2193	.2491	.0431	-.1137	.2568
Q10	.5254	.4829	.0857	.2519	.5727
Q11	.3346	.4188	.1615	.4565	.4111
Q12	.5502	.2891	.0296	.3597	.6773
Q13	.4699	.3584	.2697	.4775	.6384
Q14	.5220	.3983	-.0126	.2435	.6392
Q15	.2706	.2643	-.0789	.4917	.2830
Q16	.0146	-.1704	.1936	.1583	.0109
Q17	.5776	.3968	-.0031	.1164	.5836
Q18	-.0300	-.0879	.2250	.1000	.0857
Q19	.3643	.3728	.2013	.2278	.6111
Q20	.3704	.2942	.1345	.2809	.6029
Q21	.3294	.2663	.2841	.3551	.6127
Q22	.6337	.3487	-.0615	.4556	.5691

	Q6	Q7	Q8	Q9	Q10
Q6	1.0000				
Q7	.4860	1.0000			
Q8	.2777	.0698	1.0000		
Q9	-.0787	-.0056	.1107	1.0000	
Q10	.0334	.2350	.0267	.3552	1.0000
Q11	.4218	.2968	.1198	.2076	.3678
Q12	.0103	.1982	-.0409	.2921	.6340
Q13	.2665	.2778	.3282	.2543	.3547
Q14	-.0635	.1554	-.0372	.3598	.6492
Q15	.0911	-.1209	-.0026	-.1051	-.0154
Q16	.3421	.2756	.2272	.0396	-.1453
Q17	-.1955	.1180	-.0523	.3974	.6466
Q18	.2549	.1078	.2596	-.1991	.0480
Q19	-.0235	.1298	.0453	.2942	.4222
Q20	.0468	.1773	.1488	.1584	.2924
Q21	-.0483	.2072	.1882	.1277	.3996
Q22	.1296	.2318	.2215	-.0064	.4562

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Correlation Matrix

	Q11	Q12	Q13	Q14	Q15
Q11	1.0000				
Q12	.3688	1.0000			
Q13	.4561	.4191	1.0000		
Q14	.3429	.6466	.4229	1.0000	
Q15	.2496	.1159	.3603	.0631	1.0000
Q16	.0960	-.0625	.2096	-.1644	-.0462
Q17	.1824	.6256	.2618	.7647	.0524
Q18	.0075	.0043	.1970	-.0692	-.0277
Q19	.2649	.3543	.4648	.4435	.2406
Q20	.2800	.2784	.5926	.4004	.2504
Q21	.3813	.4482	.5386	.4392	.2729
Q22	.3647	.4070	.5067	.4410	.2433

	Q16	Q17	Q18	Q19	Q20
Q16	1.0000				
Q17	-.2269	1.0000			
Q18	.1620	-.1438	1.0000		
Q19	.1497	.4037	-.0360	1.0000	
Q20	.2482	.3041	.0982	.7841	1.0000
Q21	.0477	.3866	.0623	.4866	.6334
Q22	.0619	.3773	-.0115	.4153	.4808

	Q21	Q22
Q21	1.0000	
Q22	.4139	1.0000

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

N of Cases = 77.0

Statistics for	Mean	Variance	Std Dev	N of Variables
Scale	66.5195	215.6476	14.6849	22

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.2466	-.2269	.7841	1.0110	-3.4556	.0457

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
Q1	63.4545	192.6722	.6702	.6842	.8680
Q2	63.3896	194.0830	.4765	.4775	.8736
Q3	63.3247	209.6169	.2035	.4986	.8799
Q4	63.5195	194.9634	.5341	.5718	.8716
Q5	63.3896	186.2936	.8147	.7847	.8629
Q6	63.4416	207.5656	.2387	.5975	.8795
Q7	63.4675	205.2522	.3512	.5320	.8768
Q8	63.1818	204.7033	.1971	.3666	.8837
Q9	63.4286	207.8008	.2690	.4840	.8785
Q10	63.8052	189.2116	.6193	.6708	.8685
Q11	63.3896	195.7409	.5521	.5297	.8712
Q12	63.7143	188.9962	.6106	.6593	.8688
Q13	63.5065	188.7006	.7383	.6890	.8653
Q14	63.7662	187.8131	.6112	.7091	.8687
Q15	63.4286	205.4586	.2560	.5211	.8797
Q16	63.4545	210.2775	.0974	.3601	.8849
Q17	63.7662	193.2078	.5193	.7454	.8720
Q18	63.6104	210.7146	.0807	.3357	.8858
Q19	63.4675	193.0417	.5971	.7569	.8697
Q20	63.5195	195.2529	.6239	.8006	.8696
Q21	63.4416	193.6183	.6227	.6754	.8692
Q22	63.4416	192.7235	.6191	.6386	.8691

Reliability Coefficients 22 items

Alpha = .8788 Standardized item alpha = .8780

Appendix C

Appendix C: Reliability

****** Method 2 (covariance matrix) will be used for this analysis ******

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

		Mean	Std Dev	Cases
1.	Q1	3.0732	1.1524	82.0
2.	Q2	3.1220	1.4435	82.0
3.	Q4	3.0000	1.2571	82.0
4.	Q5	3.1341	1.2449	82.0
5.	Q10	2.6951	1.3939	82.0
6.	Q11	3.1341	1.1839	82.0
7.	Q12	2.8293	1.4470	82.0
8.	Q13	3.0000	1.2373	82.0
9.	Q17	2.7439	1.4299	82.0
10.	Q19	3.0244	1.2763	82.0
11.	Q20	2.9756	1.1108	82.0
12.	Q21	3.0732	1.1841	82.0
13.	Q22	3.0732	1.2251	82.0

Correlation Matrix

	Q1	Q2	Q4	Q5	Q10
Q1	1.0000				
Q2	.4250	1.0000			
Q4	.4091	.2177	1.0000		
Q5	.6644	.4923	.3945	1.0000	
Q10	.5213	.4789	.2325	.5717	1.0000
Q11	.2914	.3732	.4397	.3814	.3543
Q12	.5481	.2642	.3529	.6365	.6166
Q13	.4416	.3594	.4604	.6172	.3508
Q17	.5734	.4041	.0618	.6091	.6417
Q19	.3597	.3602	.1847	.6118	.4275
Q20	.3486	.2944	.2652	.5738	.2901
Q21	.3308	.2981	.3235	.6131	.3952
Q22	.6083	.3509	.4489	.5440	.4470

	Q11	Q12	Q13	Q17	Q19
Q11	1.0000				
Q12	.3450	1.0000			
Q13	.4298	.4068	1.0000		
Q17	.1591	.5812	.2582	1.0000	
Q19	.2511	.3499	.4691	.4296	1.0000
Q20	.2466	.2816	.6108	.2991	.7754
Q21	.3276	.4109	.5309	.3977	.4644
Q22	.3336	.4041	.5213	.3562	.4094

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Correlation Matrix

	Q20	Q21	Q22
Q20	1.0000		
Q21	.6115	1.0000	
Q22	.5003	.4133	1.0000

N of Cases = 82.0

Statistics for	Mean	Variance	Std Dev	N of Variables
Scale	38.8780	127.8615	11.3076	13

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.4210	.0618	.7754	.7136	12.5444	.0182

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
Q1	35.8049	110.0108	.6835	.6220	.8926
Q2	35.7561	110.0139	.5206	.3821	.9001
Q4	35.8780	114.3306	.4445	.4173	.9025
Q5	35.7439	104.9336	.8382	.7499	.8854
Q10	36.1829	106.8427	.6620	.5877	.8930
Q11	35.7439	114.5139	.4715	.3454	.9011
Q12	36.0488	106.6889	.6382	.5766	.8943
Q13	35.8780	109.3183	.6575	.5675	.8934
Q17	36.1341	108.3398	.5871	.6212	.8968
Q19	35.8537	109.8055	.6141	.6936	.8953
Q20	35.9024	112.2126	.6125	.7543	.8956
Q21	35.8049	111.0232	.6186	.5393	.8952
Q22	35.8049	109.7639	.6466	.5187	.8939

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Correlation Matrix

	Q20	Q21	Q22
Q20	1.0000		
Q21	.6115	1.0000	
Q22	.5003	.4133	1.0000

N of Cases = 82.0

Statistics for Scale	Mean	Variance	Std Dev	N of Variables
	38.8780	127.8615	11.3076	13

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.4210	.0618	.7754	.7136	12.5444	.0182

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
Q1	35.8049	110.0108	.6835	.6220	.8926
Q2	35.7561	110.0139	.5206	.3821	.9001
Q4	35.8780	114.3306	.4445	.4173	.9025
Q5	35.7439	104.9336	.8382	.7499	.8854
Q10	36.1829	106.8427	.6620	.5877	.8930
Q11	35.7439	114.5139	.4715	.3454	.9011
Q12	36.0488	106.6889	.6382	.5766	.8943
Q13	35.8780	109.3183	.6575	.5675	.8934
Q17	36.1341	108.3398	.5871	.6212	.8968
Q19	35.8537	109.8055	.6141	.6936	.8953
Q20	35.9024	112.2126	.6125	.7543	.8956
Q21	35.8049	111.0232	.6186	.5393	.8952
Q22	35.8049	109.7639	.6466	.5187	.8939

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Reliability Coefficients 13 items

Alpha = .9027 Standardized item alpha = .9043

Appendix D

445 Measurement and Testing Quiz

Informed Consent

This survey is being conducted as part of a class requirement for Psychology 445 at the University of Tennessee. If you have any questions, please call Dr. John Lounsbury (423) 974-3423 (Campus Address: Department of Psychology, Austin Peay.) Your responses will be treated as being anonymous. You are under no obligation whatsoever to answer any question you do not wish to answer.

For other questions, E-mail me

NOTICE: Most of the questions in this survey pertain to students, particularly college students; however, the situations noted herein may not be limited only to those students. Therefore, the questions are open to non-students and graduates so long as an academic environment is considered and the questions are answered to the best of your ability.

Please type in only your initials, showing that you understand the above statement.

Your Initials :

DEMOGRAPHICS

Gender:

Year in school:

Major:

Approximate G.P.A.:

On average, approximately how many hours per week do you spend studying?:

Approximately how many academic honors have you received or do you expect to receive?:

Do you wish to receive results when all research is complete?:

○ Yes ○ No

If you wish to receive results, please enter your name and email address here:

For each of the following questions, please choose the answer that is the most true for you.

1) I always approach academic situations with assurance:

2) I would never take more than 15 hours of class:

3) I am easy-going and lackadaisical:

4) I am not an extremely confident person:

5) I am comfortable with extra work or activities:

6) I am always very sure of myself before an exam:

7) I remain sure of myself after exams:

8) I have a clear set of goals and work toward them in an orderly fashion:

9) When I start a self-improvement program, I usually let it slide after a few days:

10) I never expect high grades:

11) I am always apprehensive about graded work:

12) I can be anything that I want to be:

13) I feel comfortable leading academic groups:

14) I work hard to accomplish my goals:

15) I don't feel like I'm driven to get ahead:

16) I strive for excellence in everything I do:

17) Having high grades makes me feel good about myself:

18) I never skip class:

19) I enjoy offering answers in class discussions:

20) I always try to participate openly in class:

21) If I don't agree with a grade I have received, I always talk to the professor about it:

22) I second guessed my answers on this survey:

23) I'm something of a "workaholic":

24) Whether or not I am a good student is unrelated to my overall opinion of myself:

25) My opinion about myself isn't tied to how well I do in school:

26) My self-esteem is influenced by my academic performance:

27) How well I perform academically is related to my sense of self-worth:

28) My self-esteem gets a boost when I get a good grade on an exam or paper:

29) Doing well in school gives me a sense of self-respect:

30) I feel better about myself when I know I'm doing well academically:

31) When I do poorly on an exam or paper, my self-esteem suffers:

32) My self-esteem drops if I receive poor grades:

33) I feel bad about myself whenever my academic performance is lacking:

Congratulations, you are finished!

Special thanks to Heather Hayes, for letting me steal her idea. Take her quiz here: Heather's Really Cool Quiz

---

Submit Form | Reset Form

Appendix E

Appendix E: Reliability for Self-Confidence only

****** Method 2 (covariance matrix) will be used for this analysis ******

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

		Mean	Std Dev	Cases
1.	Q1	2.4643	.9138	56.0
2.	Q2	2.8036	1.2992	56.0
3.	Q4	2.7143	1.1711	56.0
4.	Q5	2.2321	.9722	56.0
5.	Q10	2.2321	1.1118	56.0
6.	Q11	3.1607	1.1721	56.0
7.	Q12	2.0000	.9909	56.0
8.	Q13	2.6786	1.4027	56.0
9.	Q17	2.0536	1.2273	56.0
10.	Q19	2.3393	1.2399	56.0
11.	Q20	2.4464	1.3201	56.0
12.	Q21	2.4821	1.1440	56.0
13.	Q22	2.6429	1.1189	56.0

Correlation Matrix

	Q1	Q2	Q4	Q5	Q10
Q1	1.0000				
Q2	-.0290	1.0000			
Q4	.2961	-.0137	1.0000		
Q5	.0607	.1519	.1232	1.0000	
Q10	.2141	.1077	.1357	.0333	1.0000
Q11	-.3256	-.1461	-.1381	-.0812	-.3222
Q12	.2811	-.0282	.2194	.3964	.3301
Q13	.2036	.0445	.3858	.4557	.0954
Q17	-.0874	.0067	-.1283	.0351	.1506
Q19	.3238	.1098	.0805	.2955	.0078
Q20	.1566	-.0009	-.0454	.2295	.1015
Q21	-.0093	.0893	.0775	.1754	.2678
Q22	.3074	-.1742	.1011	-.0728	.1556

	Q11	Q12	Q13	Q17	Q19
Q11	1.0000				
Q12	-.1409	1.0000			
Q13	-.0344	.4579	1.0000		
Q17	.1329	.2841	-.0321	1.0000	
Q19	.0369	.1776	.3879	.1073	1.0000
Q20	.1056	.1807	.4422	.2207	.7945
Q21	.0496	.2566	.3023	.2662	.3056
Q22	-.2050	.0984	.0298	-.0388	.1151

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Correlation Matrix

	Q20	Q21	Q22
Q20	1.0000		
Q21	.4569	1.0000	
Q22	.0484	-.1187	1.0000

N of Cases = 56.0

Statistics for Scale	Mean	Variance	Std Dev	N of Variables
	32.2500	43.1364	6.5678	13

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	2.4808	2.0000	3.1607	1.1607	1.5804	.1038

Item Variances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	1.3650	.8351	1.9675	1.1325	2.3561	.1080

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.1191	-.3256	.7945	1.1200	-2.4402	.0368

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
Q1	29.7857	39.3351	.2588	.3704	.6219
Q2	29.4464	41.0880	.0216	.1581	.6646
Q4	29.5357	38.9442	.1930	.2962	.6322
Q5	30.0179	37.9088	.3577	.3280	.6074
Q10	30.0179	38.7451	.2280	.3080	.6261
Q11	29.0893	44.3373	-.1650	.2550	.6881
Q12	30.2500	36.3727	.4838	.4614	.5881
Q13	29.5714	32.5766	.5366	.5383	.5625
Q17	30.1964	39.0334	.1693	.2541	.6371
Q19	29.9107	33.5373	.5614	.7237	.5637
Q20	29.8036	32.9971	.5537	.7564	.5618
Q21	29.7679	35.9269	.4303	.3398	.5918
Q22	29.6071	41.4429	.0307	.1840	.6567

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Reliability Coefficients 13 items

Alpha = .6377 Standardized item alpha = .6374