

Self Esteem Scale

This memo discusses the Self-Esteem scale. Social psychological scales, such as self-esteem, play an important role in research on educational attainment. The UWBHS senior survey included seven questions which allowed for the construction of a Rosenberg Self Esteem scale (Rosenberg 1965). This memo will review the survey questions used to create a self esteem scale, suggestions for creating a scale, and descriptive statistics for two potential self esteem indicators.

In social psychology, self esteem is a term which refers to an individual's perception of his or her own worth. Further, self esteem is conceptualized as an enduring personality characteristic. One of classic discussions of the concept of self-esteem is Rosenberg's *Society and adolescent self-image* (1965). Generally it has been argued that a positive relationship exists between self-esteem and academic performance (Filozof et al. 1998; Rosenberg, 1965; Wiest et al 1998). However, the relationship between self-esteem may vary across racial/ethnic groups as Asian American students report the lowest levels of self-esteem and the highest level of academic attainment, while African American youth report the highest levels of self esteem and the lowest levels of academic achievement (Bankston and Zhou, 2002).

Self Esteem Questions in the UWBHS

To measure self esteem the Senior Survey included seven questions that constituted the Rosenberg Self Esteem scale. The questions are listed below. The response option for all seven questions was a four point scale that included strongly agree (1), agree (2), disagree (3), and strongly disagree (4). These questions were scattered throughout different sections of the survey.

- S011) I feel that I do not have much to be proud of (pos).
- S076) I feel I am a person of worth, the equal of others (neg).
- S080) I feel useless at times (pos).
- S082) On the whole I am satisfied with myself (neg).
- S090) At times, I think I am no good at all (pos).
- S098) I feel good about myself (neg).
- S102) I am able to do things as well as most other people (neg)

Creating the Self Esteem Scale

The construction of the self esteem scale is rather straightforward—it is the mean of the seven questions that constitute the scale. The SPSS syntax used to create the scale is included at the end of this memo. The syntax creates two variables—**estscl4** and **estscl**. The only difference between these measures is the magnitude of their scale. **Estscl4** is a scale from 1 to 4 with high values indicating high self esteem, while **estscl** is a scale from 0 to 1 with high values indicating high self esteem.

Descriptive Statistics for Self Esteem Scales

Descriptive Statistics						
		N	Minimum	Maximum	Mean	Std. Deviation
estscl	Hi	9483	.00	1.00	.7130	.17358
Self-Esteem, (0-1)mean.4(11r,76,80r,82,90r,98,102)						
estscl4	Hi	9483	1.00	4.00	3.1389	.52074
Self-Esteem, (1-4)mean.4(11r,76,80r,82,90r,98,102)						

Citations

Bankston, Carl L. III and Min Zhou. 2002. "Being Well vs. Doing Well: Self-Esteem and School Performance among Immigrant and Nonimmigrant Racial and Ethnic Groups." *International Migration Review* 36(2):389-415.

Filozof, Eileen M., Helena K. Albertin, and Courtney R. Jones. 1998. "Relationship of Adolescent Self-Esteem to Selected Academic Variables." *Journal of School Health* 68(2):68-72.

Rosenberg, M. (1965). *Society and adolescent self-image*. Princeton, NJ: Princeton University.

Wiest, Dudley J., Eugene H. Wong, and Dennis A. Kreil. 1998. "Predictors of Global Self-Worth and Academic Performance among Regular Education, Learning Disabled, and Continuation High School Students." *Adolescence*. 33:601-618.

SPSS Syntax for Self Esteem Scale

Note: comments explaining reverse coding and the minimum threshold of valid responses to create the index are included in the syntax below and they are italicized.

**Reverse coding Questions 76, 82, 98, and 102. *A review of questions 76, 82, 98, and 102 illustrates that a response of strongly disagree (4) indicates low self-esteem while a response of strongly agree (1) on questions 11, 80, and 90 indicates high self esteem. *To make the responses match across all seven questions, questions 76, 82, 98, and 102 are reverse coded into a new variable so that a value of 4 indicates high self esteem (as it does on Qs 11, 80, and 90).*

```
missing values S011 S076 S080 S082 S090 S098 S102 (-99797 thru -999) .
do repeat
a = S076 S082 S098 S102 /
b = S076r S082r S098r S102r .
compute b = (a * -1 ) + 5 .
end repeat .
** NOTE: compute b = (a * -1 ) + 5 is the same as the following.
* if a = 1 b = 4 .
* if a = 2 b = 3 .
* if a = 3 b = 2 .
* if a = 4 b = 1 .

variable label S076r 'Agree? I feel I am a person of worth, the equal of others'.
variable label S082r 'Agree? On the whole I am satisfied with myself'.
variable label S098r 'Agree? I feel good about myself'.
variable label S102r 'Agree? I am able to do things as well as most oth people'.
value labels S076r S082r S098r S102r
1 'Strongly Agree'
2 'Agree'
3 'Disagree'
4 'Strongly Disagree' .

* S011 S076r S080 S082r S090 S098r S102r .
* The percentage of cases with missing data is very low for these 7 questions—it is in the range of 1 to 3% missing for each indicator. *However across all seven questions the percentage of cases with at least one missing value is 7%. *As the data appear to be missing at random and given that we want to minimize the number of cases with missing values, the self-esteem scale is constructed for any cases that have at least four valid responses to any 7 of the self esteem questions (meaning if a respondent, for example, has four valid responses on any of the 7 questions the mean of those four questions will be his/her score on the scale). *The final version of the scale has values for 98.5% of all cases.
compute estscl4=mean.4(S011, S076r, S080, S082r, S090, S098r, S102r) .
variable label estscl4 'Hi Self-Esteem, (1-4)mean.4(11r,76,80r,82,90r,98,102)' .
compute estscl = ((estscl4 - 1) / 3) .
variable label estscl 'Hi Self-Esteem, (0-1)mean.4(11r,76,80r,82,90r,98,102)' .
**** end of creating self-esteem scale .
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