The Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (RSE; Rosenberg 1965) is an attempt to achieve a unidimensional measure of global self-esteem. It was designed to be a Gutman scale, which means that the RSE items were to represent a continuum of self-worth statements ranging from statements that are endorsed even by individuals with low self-esteem to statements that are endorsed only by persons with high self-esteem. Rosenberg (1965) scored his 10-question scale that was presented with four response choices, ranging from Astrongly agree@ to strongly disagree,@ as a six-item Guttman scale. The first item included questions 1 through 3 and received a positive score if two or three of its questions were answered positively. Questions 4 and 5 and questions 9 and 10 were aggregated into two other items that were scored positively, if both questions in the item had positive answers. Questions 6 through 8 counted individually formed the final three items. For the negatively worded RSE questions, responses that expressed disagreement and, hence, were consistent with high self-esteem, were considered positive or Aendorsed.@ Rosenberg (1965) demonstrated that his scale was a Guttman scale by obtaining high enough reproducibility and scalability coefficients.

Multiple studies have been conducted to investigate the validity and reliability of the RSE. Their results are summarized in table 3. Whereas some studies have shown that the scale is a valid and reliable unidimensional measure of self-esteem, others have found that the RSE is comprised of two factors. Goldsmith (1986) suggested that the RSE factor structure depends on age and other characteristics of the sample. Accordingly, table 3 includes age and occupation of the subjects. It is notable that the studies presented in the table match Goldsmith=s hypothesis. Investigations that used high school or college students supported the scale=s unidimensionality (Silbert and Tippett 1965; Crandal 1973; McCarthy and Hoge 1982), or obtained factors that were interdependent and had similar patterns of correlates (Rosenberg 1979; Hagborg 1993). In contrast, analyses completed with adults identified two meaningful and, sometimes, independent dimensions of personality (Kaplan and Pokorny 1969; Shahani et al 1990). The identified dimensions were mostly defined by negatively worded vs. Positively worded RSE items and were called self-derogation and self-enhancement (Shahani et al. 1990).

Not all studies that employed the RSE have used Guttman scaling to obtain a self-esteem score. Many researchers have preferred to calculate the scale≡s total score by summing subjects≡ responses across all ten TSE questions (Kaplan and Pokormy 1969; McCarthy and Hose 1982; Shahani et al 1990; Hagborg 1993). Further, the investigators have differed in the number of points that they have included in the response scale for each questions. For example, McCarthy and Hoge (1982), similarly to Rosenberg, used a 4-point scale, whereas Shahani et al. (1990) employed a 6-point scale. Empirical evidence has been provided for the reliability of all these later versions of the RSE (table 3).

Table 3

Study	Subjects	Scaling	Unidimensional ?	Construct Validity[1]	Convergent Validity[2]	Reliability
Rosenberg 1965	¢ High school juniors & seniors ¢ (N=5,024	Guttman scaling	Yes Reproducibility=.92 Scalability=.72	Significant association (p<.05) between the RSE and self-reports and nurses= and peers= ratings of depression, psychophysiological indicators of anxiety, peer group reputation, and other relevant constructs		
Silbert & Tippett 1965	¢ College students ¢ (N=44)	Guttman scaling	Yes		Pearson rs ¢ of .67 with Kelly Repertory Test (Kelly 1955); ¢ of .83 with Health Self-Image Questionnaire (Heath 1965); ¢ of .56 with interviewers= ratings of self-esteem	2-week test-retest coefficient of .85 (N=28)
Kaplan & Pokorny 1969	¢ Community adults ¢ (N=500)	Calculated two factor scores by summing responses ranging from 1 to 4 across the questions	¢ No; ¢ Two uncorrelated factors accounting for 45% of the total variance; ¢ Factors represent substantive dimensions of personality	¢ Significant association (p>.001) between the RSE Factor 1 and psychophysiological indicators of anxiety, depressive affect, and utilization of psychiatric and other medical resources; ¢ Factor 2 was not related to these variables		

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[1] Further in the test the word ›correlation= is symbolized by ›r= and the word ›correlations= by ›rs.=

[2] Further in the text Cronbach=s alpha is symbolized by ›á.=

Study	Subjects	Scaling	Unidimensional?	Construct Validity	Convergent Validity	Reliability
Crandal 1973	С College students (N>300)	Guttman scaling	Yes		r of .60 with Coopersmith=s Self-Esteem Inventory (Coopersmith 1967)	
Carmines & Zeller 1974, 1979			С No; С Two factors that, however, were explained by response styles			
Rosenberg 1979	Students		С No; С Two factors that, however, were found to measure the same personality dimension	The factors= patterns of correlates to numerous variables were almost identical		
McCarthy & Hoge 1982	С Students from grades 7 to 12	Summing responses ranging from 1 to 4 across the questions	Yes			С alpha of .74; С One year later alpha was .77 (N=1,852) С Difference between scores obtained with the 7 month interval was not significant (N=103)

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Study	Subjects	Scaling	Unidimensional?	Construct Validity	Convergent Validity	Reliability
Goldsmith 1986	C N=340; C Adults (N=87); undergraduates		C No; C Two factors; C Systematic variation, however, was found to be negligible	Not factorially invariant across populations		
Shahani, Dipboye, & Phillips 1990	C Employees of a state agency C (N=1,726)	Summing responses ranging from 1 to 6 across the questions	C No; C Two correlated factors, r=.41	Rs with work-related attitudes obtained for factor I were in the opposite direction and somewhat larger than those obtained for factor 2		For the total RSE scale alpha of .80
Hagborg 1993	C Students from grades 8 to 12 C (N=150)	Summing responses ranging from 1 to 4 across the questions	C No; C Two factors found to differ significantly (p<.001); C However, the difference was small (means=3.14 & 2.95) & did not impact substantially on the scale=s interpretation	The RSE and its factors had almost identical patterns of correlates with the APhysical Appearance@scale (rs of .55, .58, & .43, respectively), the AScholastic Competence@scale (rs of .48, .41, & .47, respectively), and other scales of the Harter=s Self-Perception Profile for Adolescents (SPPA; Harter 1988)	C rs of .76, .72, & .66 of the RSE and its factors, respectively, with the AGlobal Self-Worth@scale of SPPA; C The AGlobal Self-Worth@ scale explained 56, 50, & 41 percent of the variance in the RSE and its factors, respectively	