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THE ROSENBERG SELF-ESTEEM SCALE AND HARTER'S SELF-PERCEPTION PROFILE FOR ADOLESCENTS: A CONCURRENT VALIDITY STUDY

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The Rosenberg Self-Esteem Scale (RSE) is a widely used measure of global self-esteem. Although its psychometric properties have found considerable support, its relationship to a multidimensional scale of self-concept has yet to be investigated. The sample for this study consisted of 150 adolescents randomly drawn in equal numbers and equated by gender from grades 8 to 12. Along with the RSE, Harter's Self-Perception Profile for Adolescents was administered to assess the adolescents' self-concept in nine separate domains. Correlational and cross-validation multiple regression analyses found that the RSE total score and both its factor scores were strongly related to Global Self-Worth, supporting Rosenberg's conclusions that his scale is a measure of global self-esteem and that its two identified factors are essentially measuring one rather than two different constructs. Other findings include a gender difference, with females reporting significantly lower RSE scores, and modest correlational support for a grade level rise found in the literature.

In a review of measures of self-esteem, Chiu (1988) recommended the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) as a "brief and thorough measure . . .with considerable evidence of its reliability and validity" (p. 299), which is consistent with Wylie's (1974) earlier review. The popularity of this 10-item scale with investigators is attested to by its inclusion in over 60 published studies within the last five years, based on an author-conducted computer search. Thus, there continues to be considerable interest in this brief measure of global self-esteem.

In his 1965 book Rosenberg, using a sample of over 5,000 high-school-age students, supported his scale by demonstrating its relationship to depressive affect, psychosomatic symptoms, nurses' ratings, peer ratings, and a number of other constructs. The purported unidimensional nature of the RSE has been a matter of controversy in the literature. A review of available factor analytic studies with the RSE found both support for its unidimensional and bidimensional structure depending on the sampled population (Goldsmith, 1986). With adolescents, it appears that the positively worded

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items form one factor described as positive self-esteem (RSE +) and the negatively worded items form a second factor (RSE −) (Chiu, 1988; Goldsmith, 1986). However, Rosenberg (1979) has found that these factors are essentially measuring the same construct, given that their pattern of correlates to numerous other variables is almost identical. Despite Rosenberg's (1979) conclusions, the interpretation of RSE's factors still needs further examination.

In reviewing previous studies as well as her own research, Harter (1990) noted that global self-esteem is poorly captured in measures that combine evaluations across several domains (such as the Coppersmith Self-Esteem Inventory) rather than offering a separate set of items to measure this construct. Based on her own and others' research, Harter (1990) has found increasing differentiation in the domains of self-concept with advancing age, and with factor analytic studies she has demonstrated that by adolescence it is possible to distinguish nine separate domains of self-concept (Self-Perception Profile for Adolescents; Harter, 1988), with global self-worth one of the separate domains. One useful indication of the RSE's concurrent validity would be to examine its relationship to such a multidimensional scale, which would provide evidence as to the extent of its relationship to global self-esteem as opposed to other self-concept domains. A study of this nature was recommended by Wylie (1974) yet to date has not been conducted. Also, given the controversy surrounding the RSE's two factors and their possible differing interpretations, it would be useful to investigate these factor scores as they relate to a multidimensional scale of self-concept. Although the RSE is widely viewed as an excellent measure of global self-esteem, it is possible that its factors tap domains other than global self-esteem.

Method

Subjects

Subjects were drawn from grades 8 to 12 from a middle-class school district located in a semirural community. Thirty students (15 boys and 15 girls) were drawn at random from each of the 5 grade levels, comprising approximately 25% of total student enrollment. The sample was all White and excluded any students with educational handicaps (e.g., learning-disabled students).

Measures

Students completed the measures anonymously, providing background information about age, gender, and grade. Students then completed both the Self-Perception Profile for Adolescents (SPPA; Harter, 1988) and the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). The SPPA is a 45-item questionnaire that provides scores on nine factor analytically derived subscales (scores range from 1 [low] to 4 [high]). Harter reported alpha coefficients ranging between .74 and .92 for the nine subscales. Factor analysis established the presence of eight distinct subscales, with the Global Self-Worth subscale differing from the eight domains but overlapping with each. Recent work by the test author attests to its validity (Harter, 1989). The RSE is a 10-item measure of global self-esteem. Rosenberg (1965) originally scored the measure as a 7-point Gutman scale, yet most investigators have chosen to score each item with a weighted score from 1 (low) to 4 (high). With this scoring procedure, McCarthy and Hoge (1982) reported alpha coefficients of .74 and .77 using a sample of approximately 2,000 students enrolled in grades 7 to 12. The validity of the RSE was described earlier and is provided in greater

detail by the test author (Rosenberg, 1965, 1979) and supported by reviewers (Chiu, 1988; Simmons, 1987; Wylie, 1974). Given this study's interest in RSE's factor scores, separate scores were computed for each of the 5-item RSE+ and RSE− factors.

Results and Discussion

The RSE and SPPA correlations are shown in Table 1. Inspection of the correlations reveals that the pattern of correlations among RSE, RSE+, and RSE− and the other collected measures is very similar. To further investigate the RSE's relationship to the SPPA, cross-validation multiple regression analyses were computed. This procedure requires that the sample be randomly divided into two equal groups: Group A and Group B. A multiple regression analysis is performed on Group A to determine a regression equation, which is applied to Group B's data to compute predicted dependent variable scores. Finally, these predicted scores are correlated with the actual Group B dependent variable scores. This cross-validation method corrects for chance and inflated R^2 found in stepwise multiple regression methods. Following this procedure, the subscale accounting for the most variance in each case was the Global Self-Worth subscale: RSE $r(73) = .75$, 56% of the variance; RSE+ $r(73) = .71$, 50% of the variance; and RSE− $r(73) = .64$, 41% of the variance. The Scholastic Competence subscale was initially identified as a second significant predictor for both RSE and RSE−, but the subsequent analyses indicated that in both instances this subscale did not add to the explained variance. In further considering the two factor scores RSE+ ($M = 3.14$, $SD = .51$) and RSE− ($M = 2.95$, $SD = .57$), it is found that they do significantly differ, using a correlated t test $t(149) = 4.21$, $p < .001$), yet this difference is rather small and does not impact substantially on the scale's interpretation. Together these findings are strongly supportive of Rosenberg's (1965, 1979) conclusions that his measure is a strong

Table 1
Correlations between the Rosenberg Self-Esteem Scale (RSE) and its Two Factors with the Collected Variables

	RSE	RSE+	RSE−
Age	.05	.02	.06
Sex (1 = male and 2 = female)	−.18	−.18	−.18
Grade	.17	.17	.14
Self Perception Profile for Adolescents			
Scholastic Competence	.48	.41	.47
Social Acceptance	.45	.44	.37
Athletic Competence	.43	.44	.35
Physical Appearance	.55	.58	.43
Job Competence	.28	.22	.25
Romantic Appeal	.39	.36	.34
Behavioral Conduct	.15	.10	.19
Close Friendship	.30	.27	.27
Global Self-Worth	.76	.72	.66
Rosenberg Self-Esteem (RSE)	1.00	.87	.89
RSE−	.89	.63	1.00

Note. $rs \geq .17$, $p < .05$; $rs \geq .21$, $p < .01$; and $rs \geq .27$, $p < .001$.

indicator of an adolescent's global self-esteem, and, furthermore, they support the unidimensional nature of the scale, because the factors RSE+ and RSE− were found to exhibit a very similar pattern of correlates. Even more supportive, based on the cross-validation multiple regression analyses, both factors were strongly related to SPPA's subscale Global Self-Worth.

In considering the pattern of the correlates to the RSE and the multiple regression analysis, we find additional support for recent self-concept research conducted by Harter (1990) and Simmons (1987). These authors have found that body image is an important determinate for global self-esteem. The present study found this to be a second independent variable in the stepwise multiple regression analysis after SPPA's Global Self-Worth subscale. This finding provides further correlational evidence for the importance of an adolescent's body image as it relates to global self-esteem.

The mean scores by sex and grade, along with alpha coefficients, are shown in Table 2. Based on their studies and reviewing other research, Harter (1990) and Simmons (1987) have reported two central findings pertaining to adolescent global self-esteem: (a) it is most often found to be lower among females than males, and (b) it increases with advancing grade level. To explore these findings using the present sample, a 2 (Sex) × 5 (Grade) ANOVA was computed. Major effects were significant for Sex, $F(1, 140) = 5.71$, $p < .02$, but not for Grade, $F(4, 140) = 1.50$, $p = .20$, nor the Interaction, $F(4, 140) = 1.98$, $p = .09$. Thus, for this sample, the gender difference was found, but the grade level difference was not. However, an earlier reported significant correlation between grade and the RSE, $r(148) = .17$, $p < .05$ (see Table 1), indicates modest support for a positive relationship between global self-esteem and advancing grade level. A possible reason for the lack of support for this grade level increase may be found by considering a previous study that was supportive of such grade level increase and utilized the RSE. With a sample of approximately 2,000 diverse adolescents, McCarthy and Hoge (1982) reported a significant but small increase (less than .10 point between advancing grades) across the six grade levels studied. Thus, an important difference between the present study and this prior one is a huge difference in sample size, which may have precluded the detection of this important but rather subtle finding.

This study has explored the RSE's relationship to a multidimensional measure of self-concept. Through the use of correlations and multiple regression analyses, findings are supportive of the RSE's strong relationship with global self-worth beyond that found with other self-concept domains. These findings are consistent with Rosenberg's (1965, 1979) description of the scale and supportive of its current use in the literature. Considering the matter of its two possible factors, this study supports Rosenberg's (1979)

Table 2
Rosenberg Self-Esteem Scale (RSE) Mean Scores by Sex and Grade

		Male		Female		Total	
Grade	alpha	*M*	*SD*	*M*	*SD*	*M*	*SD*
8	.82	3.03	.43	2.93	.54	2.98	.49
9	.88	3.04	.47	2.73	.52	2.89	.51
10	.82	2.98	.44	3.20	.35	3.09	.41
11	.80	3.22	.52	3.06	.32	3.14	.43
12	.89	3.42	.37	2.86	.57	3.14	.55
Total	.89	3.14	.47	2.96	.49	3.05	.48

conclusion that these two factors are measuring essentially identical constructs. However, these findings are limited to the age and other characteristics of the sample, because there is evidence that with adults the RSE's dual factors may indeed meaningfully differ (Goldsmith, 1986). This study is a further indication of the value of the RSE as an excellent brief measure of global self-esteem for either clinical or research purposes.

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PUBLICATION PRODUCTIVITY IN SELECTED SCHOOL PSYCHOLOGY JOURNALS: 1985-1991

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This study examines the institutional affiliations of authors who have published in the three major journals of School Psychology and two additional journals started recently in the field between January, 1985, and July, 1991. The specific journals examined were *Psychology in the Schools, Journal of School Psychology*, and the *School Psychology Review*. These journals comprise the primary research outlets in School Psychology. In addition, papers published in *Professional School Psychology* and the *Journal of Psychoeducational Assessment* were also included in the analysis because these represent relatively new publication outlets for School Psychology. Findings regarding institutional productivity are compared with those obtained from previous studies in this area.

One index of the quality of a graduate program is determined by identifying the leading contributors by institution of research productivity over a given period. Research

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