

# CROSS-VALIDATION OF A SHORT FORM OF THE MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

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This research is a cross-validation and extension of Reynolds' (1982) short form of the Marlowe-Crowne Social Desirability Scale, using three separate groups ( $N = 233$ ). Unlike Reynolds, the present researchers administered the 13 items as a separate entity, calculated Cronbach's Alpha for each sex, and also computed a test-retest correlation for one of the three groups. The authors conclude that this 13-item short form is a viable alternative to the full scale.

Researchers long have known that social desirability, as a response tendency, may confound self-report measures, and Maher (1978) notes that this is still a methodological concern in research. Although numerous researchers have developed techniques and instruments to assess the extent of social desirability response tendencies (Block, 1965; Crowne & Marlowe, 1960; Edwards, 1957; Messick, 1962), the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) is the most widely used inventory with nonpathological subjects.

The instrument consists of 33 true-false items originally chosen because they describe culturally approved behaviors with a low probability of occurrence. Most researchers use the Marlowe-Crowne as an adjunct measure to analyze the response set of subjects who are completing another self-report measure. Paulhus (1981) notes that investigators can control for social desirability in three major ways: (a) rational techniques, a method that precludes social desirable responding by building controls into the instrument; (b) covariate techniques, which remove social desirability by partial correlation or regression, the most common method used with the Marlowe-Crowne; and (c) factor analytic control, which removes social desirability while it derives factors from an item-correlation matrix.

Some researchers may not use the Marlowe-Crowne because it is longer than the inventory that the investigator is primarily concerned with analyzing. Strahan and Gerbasi (1972) and Reynolds (1982) have developed several short forms of the Marlowe-Crowne, of which a 13-item form developed by Reynolds appears to be the most satisfactory.<sup>1</sup> He reports a Kuder-Richardson Formula 20 (Richardson & Kuder, 1939) of .76 with a mean item to total scale correlation of .38, which compares favorably with the standard form's KR-20 of .82 and item to total scale correlation of .32. It should be noted, however, that in their original research, Crowne and Marlowe (1960) report a KR-20 of .88. Reynolds also reports that the short form correlated .93 with the standard form.

Several problems exist with the study. First, Reynolds (1982) never administered the short form separately, but computed the analyses for the short form only as a subset of the standard form. This procedure does not control for idiosyncracies of the subject pool or for response differences that may occur when researchers administer the short form. The present study corrects this major shortcoming.

Second, neither Reynolds (1982) nor Crowne and Marlowe (1960) calculated reliability separately for males and females. Sex differences are often important in self-report inventories, and to assume similarities without demonstration is not exemplary of good research. Reynolds did calculate separate means for males and females and found no significant difference.

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<sup>1</sup>Items 3, 6, 10, 12, 13, 15, 16, 19, 21, 26, 28, 30, 33.

Third, Reynolds (1982) does not report any stability measure for the short form. Crowne and Marlowe (1960) found a test-retest correlation of .89 with 31 subjects tested at a 1-month interval for the full version.

The present research attempts to rectify the above limitations. Concurrently, it provides reliability data for the short form.

## METHOD

### *Subjects*

Three subject populations were utilized. First, 233 subjects in introductory classes at a state university voluntarily completed the short form scale. There were 93 males (39.9%) and 133 females (57.1%), with 7 subjects who did not specify their sex. These subjects were taken from a cross-section of college majors and had a mean age of 20.5 years, with a standard deviation of 4.8 years.

The second group of subjects were undergraduate students in an upper-level psychology class at the same university. The sample consisted of 71 subjects, with 22 males (30.6%) and 49 females (68.1%). Their mean age was 25.3 years with a standard deviation of 6.8 years. Of these subjects, 45 took the inventory 6 weeks later, which provided the basis for the calculation of a test-retest correlation coefficient.

The third group consisted of counseling or experimental psychology graduate students at six universities. There were 61 males (46.2%) and 71 females (53.8%), with a mean age of 28.1 years and a standard deviation of 4.9 years.

### *Procedure*

All subjects completed the 13-item short form of the Marlowe-Crowne Social Desirability Scale and at least one other self-report measure. All responses were anonymous, and participation was voluntary.

## RESULTS AND DISCUSSION

Results are shown in Table 1. Richardson and Kuder's (1939) KR-20<sup>2</sup> was computed for each group, as well as for males only and females only within each group. Item-to-whole scale correlations also were calculated for each group and subgroup. The KR-20 coefficients ranged from .63 to .82, with an overall coefficient of .74. The mean item-to-whole correlation coefficients ranged from .42 to .56, with an overall mean of .49. Responses of 45 undergraduate psychology class students resulted in a 6-week test-retest correlation coefficient of .74. These reliability data compare favorably with Reynolds' (1982) findings and indicate that the short form of the Marlowe-Crowne is a viable alternative.

Separate reliability data for males and females showed few differences. In addition, a *t*-test was used to investigate sex differences in the means for each group. Based on the findings of Ramanaiah, Schill, and Leung (1977), Reynolds (1982), and Strahan and Gerbasi (1972), no significant differences between sexes were hypothesized. As Table 1 shows, there were no significant differences. Together, these findings indicate that few differences between males and females exist.

In summary, the short form can be used instead of the regular form without significant loss of reliability. This option is especially viable when the other experimental measures that a researcher is using are short, which would make a 33-item social desirability scale unwieldy. The present authors recommend Reynolds' (1982) short form because it now has been studied more extensively than other short forms and appears to be superior to all others.

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<sup>2</sup>A special case of Cronbach's alpha (Cronbach, 1951).

Table 1  
Descriptive Statistics and Reliability Estimates for the Short Form of the Marlowe-Crowne Social Desirability Scale

Group	N	M	SD	KR-20	Range IWC <sup>a</sup>	Mean IWC	t	p
Introductory	233	4.47	2.85	.71	.36-.58	.47	.75	.456
Males	93	4.61	2.95	.72	.28-.58	.48		
Females	133	4.33	2.68	.67	.36-.57	.45		
Upper-level	72	3.63	3.01	.78	.37-.70	.53	-1.26	.211
Males	22	2.91	2.31	.63	.02-.84	.42		
Females	49	3.88	3.24	.82	.36-.71	.56		
Graduate	132	3.86	2.98	.77	.21-.64	.51	-1.24	.219
Males	61	3.52	2.56	.69	.27-.61	.45		
Females	71	4.15	3.29	.82	.12-.74	.55		
Total	437	4.15	2.93	.74	.35-.57	.49	-.60	.549
Males	176	4.02	2.81	.72	.32-.56	.47		
Females	253	4.19	2.97	.75	.36-.60	.50		

<sup>a</sup>Item to whole correlation.

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