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New Evidence of a Favorability Effect upon Scores on the Taylor Manifest Anxiety Scale

By ELAINE TAYLOR, I. E. FARBER, AND R. P. KABRICK

It has been recently suggested that scores on Dr. Janet Taylor's Manifest Anxiety Scale (6) may be influenced by a favorability factor. This factor involves the social evaluation of an item by a subject and his attempt to answer the item in such a manner as to place himself in a socially favorable light. Such a response set may cause a subject to select an item, not only for its adequacy as a description of himself, but also because it may make him look well.

There is some evidence to support the view that this factor may be operating in connection with the Anxiety (A-) Scale. In an unpublished study by Cook, *et al* (1) the favorability ratings by anxious and nonanxious subjects of the items in the Iowa Biographical Inventory, which includes the Taylor Anxiety Scale, showed that the expression of anxiety is considered socially undesirable. Heineman (3) also found that the denial of anxiety was consistently rated as more desirable than its admission. These findings suggest that, if a favorability factor were influencing subjects' responses, A-scale scores might tend to cluster around low values. The frequency distribution obtained from the standardization group of 1971 subjects taking the original Taylor Anxiety Scale does indeed exhibit a marked positive skewness.

Secondly, within this standardization group the correlation between the A-scale scores and scores on the K-scale of the Minnesota Multiphasic Personality Inventory (MMPI) is $-.74$. Since high scores on the K-scale are typically interpreted as reflecting an excessively defensive attitude (5), this rather high negative relationship indicates that the A-scale scores are affected by subjects' consideration of the social desirability of their responses.

In an attempt to reduce the possible influence of the favorability factor, Heineman (3) constructed and evaluated a forced choice form (FC) of the anxiety scale. In this forced form each item consists of three statements, an anxiety and a nonanxiety statement matched for social favorability, and a second nonanxiety statement differing in social favorability from the other two. Subjects were instructed to select within each item the statement most descriptive of themselves and the one least descriptive of themselves. This FC scale was made up of two sections, the first (FC-1) containing the

50 items in the Taylor scale, and the second (FC-2) containing 50 items that have been found to correlate highly with total scores on the Taylor scale.

The total FC test was administered to 209 Introductory Psychology students who had taken the Taylor A-scale previously. The correlations between the scores on the FC form and scores on the original Taylor A-scale were consistent with the interpretation that the influence of social desirability was significantly reduced by the forced choice technique. Such an interpretation is in line with Cronbach's finding (2) that the forced choice technique is relatively free from the influence of response sets such as favorability considerations.

Although the distribution of A-scale scores was, as noted previously, positively skewed, the distribution of FC scores proved to be slightly, but significantly, negatively skewed. The range of scores for each section of the FC scale, taken individually, was the same as for the Taylor A-scale; however, the FC scores were considerably higher. Heineman found that the correlation between the FC-scale and the K-scale was significantly lower than that between the Taylor scale and the K-scale.

Heineman also carried out a "bias" experiment in which subjects were instructed to fake their answers in order to give the best possible impression of themselves. The results of this experiment indicated that the A-scale scores are susceptible to deliberate faking, while the scores on the FC form are not.

The general conclusion drawn by Heineman from these various results was that they are consistent with the notion that a favorability factor may be operating to depress anxiety scores on the A-scale and that the influence of social desirability may be reduced considerably by use of the forced choice method.

The present study is concerned with the results of a recent administration of the revised form of the A-scale (6) and a corresponding revision by Kabrick (4) of Heineman's forced choice scale. The procedure differed from previous administrations in that both scales were taken during a single two-hour testing session. Testing sessions were held in the afternoon and evening in two different rooms on two different days. In four of the eight sessions, the A-scale was administered first and in the other four sessions the FC-scale was given first. The scores on the two tests are presented in Table I as a function of their order of presentation. The FC scores are for only those 50 items corresponding to the 50 items in the revised Taylor A-scale.

Table 1
Anxiety Scores as a Function of Order of Presentation.

	A-scale		FC-scale	
	1st	2nd	1st	2nd
N	137	135	134	131
M	14.6	17.4	30.7	28.4
SD	7.5	8.4	5.4	5.3
<i>t</i>	2.93		3.40	

When the A-scale and the FC-scale were given first their means were approximately the same as those for the previous administration of this form (4). However, the mean score for the A-scale taken first was lower than that for the A-scale taken following the FC-scale. Opposite results were obtained for the FC-scale. In this instance the mean for the group taking the forced choice form first was higher than the mean for the group taking the forced choice form second. Both of these differences were significant at the .001 level of confidence.

There are a number of possible interpretations of these results. One possibility is that they are the consequence of some sort of sampling error. Thus, the group that obtained the lower scores on the A-scale was also the one that obtained the lower scores on the FC-scale. In order to investigate the plausibility of such an interpretation, the two large groups were broken down into sub-groups according to time and place of testing session. It will be recalled that there were 8 different testing sessions. Thus, eight sub-group means were obtainable for each scale, four for a given scale administered first and four for that scale administered second. The sub-group means showed that there was no occasion in which the mean of a sub-group taking the A-scale first was as high as any sub-group taking it second. Likewise, there was no occasion in which the mean of a sub-group taking the FC-scale first was lower than any sub-group taking the FC-scale second. Such results make an interpretation in terms of sampling error highly unlikely.

It is believed that a more reasonable interpretation is one that considers the joint influence of the factors of social favorability and transfer in the present situation. On the supposition, based upon earlier evidence, that the favorability factor lowers anxiety scores on the A-scale, we should expect lower scores on a forced choice form of the same test taken subsequently. Although the favorability factor itself presumably does not influence the FC scores directly, the retention of responses made on the A-scale and a tendency to remain consistent would effect the FC-scores. The reverse would be true for individuals taking the FC-scale first. Since social favor-

ability would not be so important a determinant of responses, more anxiety responses would be checked. In this instance, the effects of transfer and tendencies to consistency would lead to an increase in anxiety scores on the A-scale taken subsequently.

If this interpretation is correct, care must be exercised in the evaluation of scores on the anxiety scales and related tests to consider the mutual effects of one on the other. In instances in which the favorability factor contributes differentially to scores on different tests administered at the same time, the order of test administration must be taken into account.

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