

A Technique for Measuring Consumer Attitude Toward Any Advertisement

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Most of the existing methods for evaluating advertising are unsatisfactory for various reasons. So-called laboratory techniques, which can most satisfactorily isolate the necessary variables, are often unsuitable because they create artificial situations which are not strictly comparable to the ones in which advertising is used. Those field surveys or measures of consumer response to advertising which give satisfactory results are impractical from the point of view of the costs involved. Also, the question of reliability of these methods has not been satisfactorily dealt with in many cases. It appears that there is needed a simple, economical instrument which may be used as a reliable index of the value of any advertisement as measured in terms of consumer reaction to it.

Accordingly to Link (3), "Among all methods of measuring the relative effectiveness of advertising, that of submitting ads to the judgment of selected groups of people would be the most valuable if its reliability could be determined."

In constructing such an instrument, it was decided to employ a technique suggested by Likert (2). For the measurement of attitudes he has evolved a method which he found to give as high reliabilities as were obtained by the Thurstone attitude scales (5). Likert's method, besides eliminating much of the labor involved in constructing a Thurstone scale, does not depend upon the principle of determining scale values for statements by means of a judging group. Recent studies at Purdue (1) have demonstrated that this method can be satisfactorily applied to the type of statements used in the generalized attitude scales developed by Remmers (4).

Accordingly, it became the purpose of the present study to construct and evaluate an instrument, following Likert's technique, for the measurement of consumer attitude toward any advertisement.

Likert's method involves a battery of statements expressing various attitudes toward an attitude object. Each statement is a scale in itself by virtue of the several alternatives by which the subject responds to it. The present study employed the following seven alternatives of response to each statement: strongly agree, agree, mildly agree, indifferent, mildly disagree, disagree, strongly disagree. Following Likert, the investigator found a satisfactory method of scoring to be the assigning of numerical values from 7 to 1 to each of these response alternatives. In statements expressing a negative attitude, this weighting was reversed. An individual's score could then be computed by averaging or summing the numerical value of the response to each statement, a comparatively high score expressing a more favorable attitude than one which is comparatively low.

The first step in the construction of the instrument was the collection of statements which would be indicative of consumer attitude toward any advertisement. In order to make these as representative as possible, the reactions of 25 subjects to 30 advertisements were collected. These were full-page advertisements, both colored and uncolored, which seemed representative of good and poor advertising for certain products for which the group might be expected to be potential consumers.

From these reactions, 354 statements which seemed most suitable were assembled. The second step, was the judging of the statements by six members of the psychology staff of Purdue University. They rated the statements as good, fair, and poor, in accordance with a criteria set up for them as to the purpose of the instrument.

The third step was the selection for a preliminary battery of the 50 statements indicated by the judges' ratings to be the best. Each statement chosen was rated good by at least five of the six judges. Twenty-five positive and 25 negative statements were chosen by the investigator from the group which seemed best according to the judgments expressed.

The fourth step involved the administration of the preliminary instrument to 50 subjects, 25 men and 25 women, associated with Purdue University. Each subject rated each of six advertisements on the basis of these 50 statements. Six full-page advertisements, five colored and one uncolored, were used. Three displayed products; two, services; and one, good-will.

From scores obtained by summing the numerical values of the subject's response to each statement, the instrument was evaluated as to reliability and validity. Reliabilities of the instrument for the first four advertisements were found by the split-half method of correlation. These ranged from $.96 \pm .01$ to $.98 \pm .003$. In view of these very high reliabilities and the fact that the instrument seemed too long to be practical, the Spearman Brown formula was applied to determine what the reliability would become if the test were shortened to 40% of its present length. *R*'s were predicted of $.90 \pm .02$ to $.95 \pm .01$, indicating satisfactory reliability if the instrument followed the prediction.

By computing the percentages of subjects whose total score on the battery for a given advertisement was at or above the indifference point, a rank order rating of the advertisements was obtained for the scale data. A validating criterion, based upon reactions of another group to these same advertisements, also enabled a rank order of preference to be established. For the two techniques the ranks were identical except for the reversed order ranking of the advertisements standing 1 and 2 and 4 and 5. A rank difference correlation was found to yield a *P* of $.93 \pm .01$.

The number of statements was reduced to 20 for the final instrument by selecting those which seemed to be the most discriminating of a favorable or an unfavorable attitude, on the basis of the number of responses of indifferent which each received for all of the six advertisements. Ten positive and ten negative statements were selected.

The data from the preliminary administration were rescored on the basis of the 20 statements selected for the final scale. The split-half reliabilities ranged from $.89 \pm .02$ to $.94 \pm .01$. Since these all fell within

the allowable error range of the reliabilities for 20 statements predicted by the formula, it seems that the Spearman-Brown formula did predict accurately for this data.

A second group of 25 men and 25 women students of Purdue University were then asked to rate the same advertisements on the basis of the final instrument of 20 statements. Split-half reliabilities were found to range from $.78 \pm .04$ to $.94 \pm .01$.

In order to have a larger group upon which to base the reliabilities, it was considered desirable to combine the data obtained from the first group on the basis of 20 statements with that of the second group. That the groups were fairly comparable was shown by the similarity of the sigmas of the distributions of their scores. Split-half reliabilities for the entire group of 100 were found to range from $.84 \pm .02$ to $.92 \pm .01$. Ranking by percentages gave the same order of preference as was obtained from the 50 subjects on 50 statements. Therefore, the rank difference correlation with the criterion was again found to be $.94 \pm .01$.

It would seem that within limitations imposed by method the instrument appears to give satisfactory results. Although the numbers of subjects used were too small to be conclusive, it appears that the instrument is measuring, by the crude index employed, a function rather closely related to that of the validating criterion. So far as the conditions of this investigation permit, the battery appears to be reasonably satisfactory. It should be useful, especially in view of its simplicity and economy, as a means of determining the relative merits of various types of advertising.

Bibliography

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