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ABSTRACT

A problem currently facing many advertising agencies is the recruitment of top quality business school graduates as potential account managers. Viewing the problem from a marketing perspective, a career in advertising is seen as a product competing with other careers for the market of new graduates. Then it is possible to use one of the traditional methods of market analysis, attitude measurement, to compare the attitudes of students toward various careers. Recent research on brand attitudes has utilized an expectancy-value model, where attitude is conceptualized as a function of certain beliefs about the attitude object, weighted by some assessment of the value of the beliefs to the individual. In a study using the expectancy-value model, graduate students in business administration at the University of California, Los Angeles, responded to a questionnaire measuring attitudes toward seven different business careers, including advertising management. Results showed that advertising management ranked fourth among seven careers and was evaluated relatively neutrally. Students exhibited little disagreement as to the value of the 10 career features mentioned; however, there was considerable difference of opinion as to the ability of the careers to offer these features. Further analyses are given. (Author/TO)

MEASUREMENT AND DIAGNOSIS OF STUDENT ATTITUDES TOWARD A CAREER IN ADVERTISING*

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A chronic problem for many advertising agencies is the recruiting of top quality business school graduates into the profession. Perhaps due to a distorted perception of the industry, many of the current generation of MBA students do not aspire to join the ranks of the "Madison Avenue peddlers." While this unfortunate misconception of the role of advertising and advertising agencies is perplexing, it is nevertheless harsh reality to the recruiter forced to compete with more "respectable" professions.

In a very real sense, the modern advertising agency faced with recruiting problems needs to adopt a marketing perspective in its attempts to attract a reasonable share of the quality MBA graduates in the market. Once this viewpoint is adopted, then existing marketing technology can be applied to help solve the recruiting problem.

Recent developments in market research have been directed at market analysis through use of a general expectancy-value model of attitude. While the use of brand attitudes has been one of the traditional forms of market analysis, the expectancy-value attitude model provides the manager with much more detailed information about the competitive position of his brand in the market. Based on diagnostic information provided by the model, the manager can proceed with marketing strategies most appropriate for enhancing consumers' attitudes toward his brand.

The purpose of the present research is to demonstrate the use of the expectancy-value model in the measurement and diagnosis of student attitudes toward a career in advertising management. The results of this analysis will be specific "promotional" strategies which might be used by a recruiter in

attracting top quality MBA graduates into his agency.

The Expectancy-Value Model

While there are several forms of the general ExV model, one of the more influential formulations has been the model proposed by Rosenberg (1956):

$$A_j = \sum_{i=1}^{n} V_i I_{ij}$$

where A_j is the individual's expressed attitude (like-dislike) toward object or brand j; V_i is the value importance to the individual of expressing value i; I_{ij} is the individual's perceived instrumentality of the attitude object j in expressing value i; and n is the number of values salient in the situation.

While the concepts and mathematical notation employed by Rosenberg may seem a bit cumbersome, the basic idea of his model is really quite simple. For example, in assessing a student's attitude toward a career in advertising, it may be learned that he attaches a great deal of "value importance" to being creative--i.e., it gives him a sense of personal satisfaction to think of himself as a creative person. Secondly, it is discovered that he perceives advertising as a career in which one has an opportunity to be maximally creative--i.e., he perceives an advertising career as "instrumental" in expressing his creativity. These two pieces of information, taken together, imply that the student should be favorable toward a career in advertising; however, there are a number of other values which may also be aroused in the selection of a career. Hence the formula presented above allows the researcher to simultaneously consider the impact of all the relevant values on the individual's attitude.

Rosenberg's formulation has been used with varying degrees of success by several marketing and consumer researchers (Bither and Miller, 1969; Hansen,

1969; Mazis and Klippel, 1973; Healey, Lutz and Healey, 1974). In general, the model demonstrates adequate predictive power, in that correlations between expressed attitudes and the cognitive structure index ($\Sigma V_i I_{ij}$) are positive and statistically significant. However, the primary advantage of the expectancy-value model lies in its diagnostic power. A simple semantic differential may be an adequate measure of consumer attitudes, but in order to understand, or diagnosis, those attitudes, more detailed information is required. Such information is provided by the ExV model.

Having outlined the structure of the ExV model, attention is now directed at an application of the model to the MBA career market. Data collection procedures are presented in detail, following which the predictive and diagnostic capabilities of the model are investigated.

Method

The first step necessary in any investigation utilizing an ExV model is a series of open-end interviews to identify the salient values to be included in the analysis. Ten such interviews were conducted with students in the Graduate School of Management at UCLA. As a part of the interview, each student sorted a deck of cards on which had been typed approximately 100 values used in other studies employing the model. Based on the results of these pretests, ten values were selected as the ones most salient to students in career selection. The values selected are shown in Table 1.

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Insert Table 1.

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In addition to studying attitudes of students toward a career in advertising, it was felt necessary to consider alternative careers as well.

Altogether, seven careers were included in the questionnaire (see Table 2).

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Insert Table 2.

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The final questionnaire instrument consisted of ten scales designed to measure V_i, one for each of the ten values. Consistent with Rosenberg (1956), these were 7-point bipolar scales ranging from "gives me maximum satisfaction" to "gives me maximum dissatisfaction." Instrumentalities for each of the seven occupations were measured on 7-point scales ranging from "completely blocks" to "completely attains" (Rosenberg, 1956). In total, 70 instrumentality scales were included in the questionnaire. A_j for each career was measured by two semantic differential items ("good-bad" and "appealing-unappealing"). The questionnaire concluded with a general preference measure, in which the student was asked to indicate his top three career choices out of the seven included by placing the appropriate numeral in the margin next to the career.

A total of 176 MBA students at UCLA completed the questionnaire; one questionnaire was discarded because of incomplete data, leaving 175 responses available for analysis.

Analysis and Results

The first step in the data analysis was to construct the cognitive structure indices for each respondent for each career. To accomplish this, all V_i and I_{ij} measures were coded -3 to +3, such that +3 represented the "maximum satisfaction" and "completely attains" ends of the scales. Recent research by Bettman, Capon and Lutz (1974a, 1974b) has indicated that this

form of coding is more appropriate than the 0-6 or 1-7 coding frequently used in consumer research. Following the coding step, the V_i measures were multiplied by each set of I_{ij} measures and summed to yield seven cognitive structure indices, the theoretical range of values being -90 to +90, with positive scores representing favorable responses.

The A_j measures were constructed by simply adding the responses to the two semantic differential items. The theoretical range of values for A_j, then, was 2 to 14, with high values representing favorable attitudes.

Model Validation

Having constructed the seven attitude scores and cognitive structure indices, the next step was to determine if the ExV model was operating in the current situation. That is, it was necessary to establish that the ExV model was providing an adequate prediction of student attitudes. Without evidence of the model's predictive power, further diagn analyses would be fruitless, since the information would not be useful in attempts to modify student attitudes.

This model validation step is essential in any investigation utilizing the ExV model. In the p esent case, two separate forms of model validation were undertaken--one at the individual level and one at an aggregate level.

Individual level validation. The ExV model, with its roots in the social psychology literature, is essentially a model of individual behavior. As such, one test of the model's validity is the extent to which it can predict an individual's attitudes. While this type of analysis does not have immediate managerial implications, it does provide some indication of the validity of the theory underlying the model. This type of information is

of value because it provides a foundation upon which aggregate level analyses can be built. To know that the model works at the individual level is one of the most compelling reasons for basing marketing or promotional strategies on the results of the diagnostic stage of the analysis.

Accordingly, in the present investigation, a correlation analysis was conducted to determine the strength of association between A_j and the cognitive structure index for <u>each</u> of the 17 students in the sample. These correlations were thus based on 7 observations for each respondent (one observation for each career). Results of these analyses, summarized in Table 3,

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Insert Table 3.

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show strong support for the ExV model. Nearly half the sample demonstrated correlations which were above .50. Even after taking into account the relatively small number of observations on which these correlations were based, the results are almost startling in their support of the model. The average amount of variance explained in individual attitude ratings (as measured by adjusted r^2) is over 40%, a figure which is quite high, considering the number of potential explanations for a student's career choice. Thus the results of the individual level analysis provide strong support for the validity of the ExV model.

<u>Aggregate level validation.</u> A more managerially useful validation procedure is to compute correlations <u>across</u> all the respondents for each of the seven occupations. This provides information regarding the validity of the ExV model for analyzing the market as a whole. Accordingly, the seven A_j

measures and their corresponding cognitive structure indices were included in a correlation analysis (n = 175). Results of this analysis are summarized in Table 4 as a multitrait-multimethod matrix (Campbell and Fiske, 1959).

In a sense, both the A_j measure and the cognitive structure index can be regarded as measures of the same underlying construct--i.e., attitudes toward careers. Viewed in this manner, the multitrait-multimethod matrix becomes useful for determining the validity of the ExV model. Campbell and Fiske (1959), in developing this form of analysis, conceptualized two types of validity: convergent validity and discriminant validity. Briefly, convergent validity represents the degree to which two measures of the same construct (e.g., attitude) converge, or correlate, with one another. Discriminant validity refers to the ability of the measure to adequately discriminate between two related, but clearly distinct, constructs (e.g., attitude toward advertising and attitude toward accounting).

The semantic differential attitude measure (A_j) is well-known and well-documented. It therefore can be used as a baseline against which to compare the validity of the ExV measure of attitude. The circled values in Table 4 are the correlations which pertain to convergent validity; all seven correlations are positive and significant, providing further evidence for the validity of the ExV model. The average correlation between the semantic differential and ExV measures was .47, as computed through Fisher's r to z transformation.

While the evidence regarding convergent validity is impressive, the discriminant validity of the ExV model must also be considered. Intercorrelations of the seven ExV measures (entries in boxes in Table 4) averaged .38, a relatively high figure. In contrast, the underlined figures in Table 4 which represent the intercorrelations of the semantic differential attitude measures average only .08. This pattern of results indicates that the ExV

measure is somewhat lacking in discriminant validity. This result is not surprising, however, due to the fact that the 10 V_i measures are used in constructing each of the seven cognitive structure indices. This overlap of measures used to construct the indices ensures that some positive correlation will exist among the indices. Although this is clearly an undesirable feature of the ExV model, it is not a damning one--as long as the ExV measure is supplemented by the semantic differential or some other independent attitude measure.

In summary, both the individual level and aggregate level analyses provide strong support for the validity of the ExV attitude model. A slight weakness is apparent regarding the discriminant validity of the model, but this can be overcome by the use of an independent attitude measure. The next section undertakes a diagnosis of student attitudes toward careers, demonstrating the usefulness of the ExV model in devising recruiting strategies.

Diagnosis of Student Attitudes

Having established that student attitudes are, in fact, related to the V_i and I_{ij} components in the ExV model, a more detailed analysis of the data is warranted.

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Insert Table 5.

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Table 5 presents the means on both expressed attitude (A_j) and the cognitive structure index. The former shows advertising management to be the fourth most attractive career, while the latter indicates that advertising

is fifth on the list. In either case, it is an undesirable position for the agency recruiter. However, summary scores such as those presented in Table 5 give little indication as to how the recruiter might seek to improve his position in the "market." For this task, he needs information regarding the students' perceptions of advertising as a career. This information is shown in Table 6.

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Insert Table 6.

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The four "market segments" corresponding to the four columns in Table 6 were generated by grouping together those students who had indicated a career in advertising management as either their first, second, or third choice or had not selected it at all. Important differences among these four groups reveal possible recruiting strategies.

A finding of immediate interest is that there are virtually no differences among the four groups in terms of their endorsement of the ten values included in the questionnaire. The largest discrepancy, between the "First Choice" and "Not Chosen" groups, was .66 for "power and authority." In contrast, seven of the 10 instrumentality variables exhibited differences of one (or nearly one) scale unit between the same two groups. This pattern of results informs the recruiter that students who are not favorable to advertising are not "different" in terms of the values they hold, but rather they perceive advertising differently than those s' dents who are favorable toward it.

This is an important bit of information to the recruiter, for it tells him that he does not need to attempt to change a student's values, which

would be a difficult and ethically questionable task. Lutz (1974) has discussed the problems inherent to a "value change" strategy and has presented empirical evidence which indicates the difficulty of changing individuals' values.

More viable and potentially effective attitude change strategies are suggested by examining the instrumentality ratings in Table 6. For instance, Achievement is a value regarded highly by all four groups, yet the "Not Chosen" group does not perceive advertising as leading to achievement to a great degree. One recruiting strategy, therefore, would be to stress the achievements of advertising executives and the potential for similar achievements by the student recruit. In a similar vein, many students question the fairness, sincerity and honesty of an advertising career (witness the negative values in Table 6). Here the recruiter may wish to emphasize the recent developments in the industry and in government which have led to greater "truth in advertising."

Similar strategies could be developed around the values pertaining to Kindness, earnings, and prestige. However, it should be noted that many of the discrepancies in perceptions of advertising must be corrected by actual changes in the industry, not just by changes in recruiters' presentations.

In summary, of the two possible attitude change strategies discussed (i.e., value change and instrumentality change), instrumentality change appears to be the most viable in this case. A third strategy, which will not be discussed in detail here, involves the use of new values in recruiting presentations in attempting to increase students' attitudes toward advertising. Further discussion of this strategy can be found in Boyd, Ray and Strong (1972).

Conclusion

The present research attempted to demonstrate the validity and usefulness of the expectancy-value attitude model in measuring and diagnosising student attitudes toward a career in advertising. Prescriptions for changing these attitudes were offered.

As indicated previously, the ExV model appears to have adequate validity and can be of enormous value to the recruiter and the advertising manager in general, when used in conjunction with a global attitude measure. Attitude change strategies similar to the ones suggested here can be applied in any attitude change situation with a high probability of success. Thus it would appear that the advertising agency could benefit from the use of the ExV model on two fronts: recruiting new employees and devising advertising campaigns.

The specific formulation employed in the present research is only one form of the ExV model. Other operationalizations are available and may be more suitable for use among the general populace (Bettman, Capon and Lutz, 1974b). In any case, the expectancy-value model appears to be a valuable management tool in the formulation of promotional strategies in a wide variety of situations.

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Table 1

Values Selected for Use in the Study

1. Being kind to others.
2. Receiving high earnings.
3. Having power or authority.
4. Being honest with others.
5. Being creative.
6. Having a sense of personal achievement.
7. Being fair to others.
8. Having prestige.
9. Being sincere.
10. Working hard.

Table 2

Careers Included in the Study

1. Accounting Management
2. Financial Management
3. Computer Science
4. Advertising Management
5. Industrial Relations
6. Entrepreneurial Business
7. Sales Management

Table 3

Results of Individual Level Correlation Analyses

Value of r	Number of Respondents	% of Total	Cumulative % of Total
$\geq$ .8745[a]	44	25	25
.7545[b]-.8744	40	23	48
.5100-.7544	38	22	70
.0000-.5099	37	21	91
<.0000	16	9	100
Avg. r = .7082[c]	175	100	

[a]Significant ($p < .01$)

[b]Significant ($p < .05$)

[c]Computed via Fisher's r to z transformation

Table 4

Multitrait-Multimethod Matrix Based on Results of Aggregate Level Correlation Analysis[a]

	A_1[b]	Σ_1[c]	A_2	Σ_2	A_3	Σ_3	A_4[d]	Σ_4[d]	A_5	Σ_5	A_6	Σ_6	A_7	Σ_7
A_1	-													
Σ_1	(49)	-												
A_2	37	19	-											
Σ_2	11	[47]	(41)	-										
A_3	27	07	22	02	-									
Σ_3	08	[39]	14	[39]	(33)	-								
A_4	-06	04	-02	05	-00	03	-							
Σ_4	-02	[29]	-00	[42]	-19	[23]	(51)	-						
A_5	-05	03	-02	-02	-07	-05	33	13	-					
Σ_5	03	[28]	16	[37]	-02	[42]	21	[39]	(47)	-				
A_6	-09	-09	-04	20	-08	-02	12	10	-00	-03	-			
Σ_6	-09	[26]	02	[52]	-10	[27]	06	[45]	-02	[29]	(55)	-		
A_7	01	05	-05	09	-04	-01	37	28	18	11	25	18	-	
Σ_7	07	[31]	12	[32]	-11	[23]	36	[64]	15	[48]	13	[43]	(52)	-

[a] All entries are correlation coefficients (decimals omitted). Values exceeding .20 are significant ($p < .01$), and values exceeding .15 are significant ($p < .05$).

[b] Expressed attitude toward career 1 (see Table 2).

[c] Cognitive structure index ($\Sigma V_i I_{i1}$) for Career 1.

[d] Career 4 is Advertising Management.

Table 5

Mean Attitudes Toward Business Careers

	Career	A_j	$\Sigma V_i I_{ij}$
A_2	Financial Management	10.96	25.89
A_6	Entrepreneur Business	10.93	30.09
A_1	Accounting Management	8.90	16.03
A_4	Advertising Management	8.34	15.91
A_3	Computer Science	8.00	15.61
A_5	Industrial Relations	7.69	16.80
A_7	Sales Management	7.50	11.50

Table 6

Diagnosis of Students' Attitudes Toward Advertising

	First Choice	Second Choice	Third Choice	Not Chosen
n	12	22	20	121
V_i	1.75	2.05	1.50	1.74
Kindness	2.42	1.82	2.00	1.94
Earnings	2.08	1.59	1.55	1.42
Power	2.17	2.09	1.70	2.09
Honesty	2.08	2.32	2.25	2.00
Creativity	2.75	2.55	2.90	2.60
Achievement	2.08	2.09	1.75	1.97
Prestige	1.58	1.27	1.80	1.42
Sincerity	1.75	1.64	1.80	1.82
Hard Work	1.50	1.64	1.40	1.65
I_{i4}	1.33	0.64	0.25	0.03
Kindness	2.33	1.96	1.80	1.25
Earnings	1.58	1.41	1.25	0.72
Power	0.25	0.27	-0.70	-0.78
Honesty	2.83	2.59	2.60	2.05
Creativity	2.50	2.05	1.60	1.20
Achievement	0.50	0.59	0.10	-0.49
Prestige	1.67	1.59	1.30	0.72
Sincerity	0.75	0.00	-0.70	-0.70
Hard Work	2.00	1.96	1.55	1.25
$\Sigma V_i I_{i4}$				
$\bar{X}$	33.17	26.73	20.40	11.50
σ	14.78	15.32	16.49	20.27
A_4				
$\bar{X}$	12.75	11.23	10.00	7.10
σ	2.09	1.72	2.08	2.77

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