The attitudes of managers toward continuing education management development programs were analyzed, using the Fishbein technique; by this approach, the beliefs people have and their evaluation of these beliefs are measured separately. The evaluation of a belief is multiplied by its strength to get the direction of the attitude. A questionnaire, consisting of 20 attitude statements, was administered to 170 middle managers who rated each statement on an agree-disagree scale and then on a good-bad scale; they also provided information on age, level of education, and length of time as a manager. Results showed that managers who were older, less educated, and in a managerial position for a number of years tended to have more favorable attitudes and generally tended to have more positive beliefs and evaluations. For diagnostic purposes, information was obtained on the individual and the group as a whole; this approach provides a basis for understanding and changing specific attitudes in order to produce maximal attitude change. (author/eb)
MEASURING ATTITUDES TOWARD MANAGEMENT DEVELOPMENT

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Presented at the Adult Education Research Conference
Minneapolis, Minnesota
February 27, 1970
OBJECTIVE

The objective of this paper is to measure attitudes toward management development as a part of the continuing education process. For this purpose, an attitude model first formulated by Martin Fishbein (1961) was selected. This conception attempts to reveal the underlying components of attitudes and it may provide a basis for understanding and changing a person's attitudes toward his continuing education.

Fishbein states that an attitude toward an object consists of two aspects: a) the strength of beliefs about the object, and b) the evaluative aspect of these beliefs. The contribution of the Fishbein model is that it attempts to assess in an integrated manner both the beliefs and evaluations of these beliefs. Mathematically, this can be expressed as follows:

$$A_o = \sum B_i a_i$$

$$A_o = \text{the attitude toward object } o$$

$$B_i = \text{the strength of belief } i \text{ about } o, \text{ that is, the "probability" or "improbability" that } o \text{ is associated with some other concept } x_i$$

$$a_i = \text{the evaluative aspect of } B_i, \text{ that is, the evaluation of } x_i$$

$$N = \text{the number of beliefs about } o, \text{ that is the number of responses in the individual's hierarchy}$$
Any belief can be placed on an agree-disagree dimension. For example, does the manager agree or disagree that "attending meetings on management development will increase job competency"? Stated in other terms, the respondent is asked to rate the probability of the link that attending meetings on management development will increase job competency. This agree-disagree rating provides a measure of the strength of a belief which plays a crucial role in the measurement of attitude. It is also important to consider that every belief has an evaluative component. Thus when confronted with a belief statement, the subject not only has an attitude to the object of the belief, but he also has an evaluation of the "linked object." For example, the statement "attending weekly meetings on management development will increase job competency" taps an attitude or evaluation to both "management development" and to "increasing job competency." If one wishes to know whether the subject's agreement with a statement is indicative of a positive or negative attitude, it is important to know how he evaluates the linked object, "increasing job competency." If the linked object is not taken into account, this might result in misleading attitude scores. Consider again, the following statement: "attending meetings on management development will increase job competency." If the subject agrees with the statement, this does not as yet suggest a favorable attitude toward management development meetings. He may feel that increasing job competency is bad, especially if he is hostile to management. In the case of this one statement he would be negatively directed toward management development meetings. Hence, the importance of rating the linked object.
Looking more carefully at the Fishbein model, we find that the evaluation of this linked object is multiplied by the strength of belief to get the direction of attitude on this statement. Once again, take the statement:

"My participation in a management development program will increase my job competency."

If I believe that my participation in a management development program will increase my job competency \([b_i = (+)]\) and I feel that increasing my job competency is good \([a_i = (+)]\), then I will be positively directed toward management development programs. Or, if I feel that my participation in a management development program will not increase my job competency \([b_i = (-)]\) and I feel that increasing my job competency is bad \([a_i = (-)]\), then I should also be positively directed in a negative way toward meetings on management development. In this case two minuses make a plus. On the other hand, if I do believe that my participation in a management development program will increase my job competency and I feel that increasing job competency is bad, then I will be negatively directed toward meetings on management development. I will also be negatively directed toward meetings on management development if I feel that increasing job competency is good but that my participation in a management development program will not, in fact, increase job competency. So if we take all the belief statements, and measure their strength and evaluation, we should be able to get an accurate picture of the subject's attitude.

A project was conducted to obtain preliminary information on the Fishbein model and to compare the Fishbein attitude approach with other techniques used in the attitude field. In a study on 48 managers, it was found that the
intercorrelations between the Fishbein attitude technique, Osgood's semantic differential, and the Sherif's method of ordered alternatives were all very significantly high (r for Osgood-Sherif = -.66 p < .01, r for Osgood-Fishbein = .60 p < .01, and r for Sherif-Fishbein = .60 p < .01).

Since all three techniques tended to do much the same thing, Fishbein's approach was chosen for use in the main study since it enabled us to specify the positive and negative elements in an individual's attitude. It will help us to answer the question — what are we actually saying when we say that someone has a negative attitude toward management development? In other words, the negativity in a subject's attitude may be due to strength of beliefs, evaluation of those beliefs, or both.

To obtain a further breakdown in our analysis of managerial attitudes, certain demographic variables were used. The attitudes, beliefs, and evaluations of different managers were compared on the basis of age, level of education, and the number of years in a managerial position.

SUBJECTS

One-hundred and sixty-eight middle managers from six companies served as subjects.

PROCEDURE

Instructors in Management Development at the Pennsylvania State University administered the questionnaire to managers in their classes before course instruction had begun. It is important to point out that all managers present were not favorably disposed to such programs. In many cases it was company policy that dictated attendance.
The same questionnaire was administered to all subjects. Each questionnaire contained 20 statements. The subject was first given an information sheet asking for age, level of education, and years as a manager. Next, he was instructed on how to use a seven-point scale. Then he rated a series of belief statements on a seven-point agree-disagree dimension, e.g. "My participation in management development programs increases my job competency." This constituted the subject's belief \( b_i \) rating. This was followed by his rating on the evaluative aspect \( a_i \) of each belief on a seven-point good-bad scale. As an example, the subject rated "increasing my job competency," on a good-bad scale. A subject's total score was obtained by multiplying each belief by its corresponding evaluative aspect and then summing the 20 products.

RESULTS

The results of the study are presented in Table I.

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean Attitude Scores</th>
<th>F Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>64.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>55.38</td>
<td>F = 4.69 ( p &lt; .01 )</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>80.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 50</td>
<td>87.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Mean Attitude Scores</th>
<th>F Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school</td>
<td>83.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>73.50</td>
<td>F = 5.32 ( p &lt; .01 )</td>
<td></td>
</tr>
<tr>
<td>College graduate</td>
<td>67.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post graduate</td>
<td>60.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years as a manager</th>
<th>Mean Attitude Scores</th>
<th>F Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>47.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-10</td>
<td>77.53</td>
<td>F = 7.73 ( p &lt; .01 )</td>
<td></td>
</tr>
<tr>
<td>Over 10</td>
<td>82.58</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Although an analysis of variance showed a significant difference for each of the three demographic variables in Table I, it was evident from subsequent t-tests that the means between groups were frequently insignificant within each of the variables. To capture differences, some of the categories for each variable were combined and a subsequent analysis was performed.

For age, there was a significant difference on total scores between the under 40 and over 40 age groups ($t = 5.39 \ p < .01$). The analysis of both the beliefs and evaluative aspects produced a significant difference between groups ($t = 2.66 \ p < .01$, $t = 4.70 \ p < .01$). The same pattern of results held for the analysis of years as a manager.

A significant difference was found in attitude between managers who had been on the job less than a year and those who had been on the job more than a year ($t = 7.70 \ p < .01$). There was also a significant difference between the beliefs and evaluative aspects of both groups ($t = .49 \ p < .01$, $t = 5.75 \ p < .01$).

For levels of education, the results were somewhat different. The t value was $4.35 \ (p < .01)$ for the high school versus college group (the latter group being a combined group of those who had some college, graduates, and post graduates). However, in breaking down their attitude scores, there was a significant difference between the belief scores ($t = 4.84 \ p < .01$), but no significant difference between the evaluation aspect scores ($t = 1.01 \ p > .05$).

**DISCUSSION**

It is clear from the results above that the older managers tend to be more favorably disposed toward management development programs. Upon closer inspection, it is also evident that both the strength of belief and evaluative aspects are different for the two age groups. In other words,
most of the over 40 group tend to believe that continuing education will increase their job competency, their opportunities for advancement, and so on. Therefore, they have stronger beliefs. In addition they tend to have higher evaluative scores. For example, they are more likely than the under 40 group to feel that increasing job competency and opportunities for advancement are good things. This same holds true for the breakdown by years as a manager. Managers who have been on the job more than a year have a more favorable attitude, stronger beliefs and more positive evaluative aspects than those on the job for less than a year. With regard to level of education, the results are much the same except that in the case of the evaluative aspects there are no differences. In other words, both high school and college educated groups believe that, for example, increasing competency and opportunities for advancement are good things (a_i); however, the high school educated believe that management development will increase their competency and their opportunities for advancement, whereas the college educated do not.

From an analysis of the different groups in the study, it was evident that both the age and years as a manager variables could be collapsed under the education variable. Most managers who had been on the job a long time were in the older age group and tended to be the least educated, whereas the most highly educated tended to be the youngest and newest managers. There are a variety of factors that might cause the differences between attitude on the basis of level of education. College educated managers may be less favorable because their knowledge and information is recent. The results of this study indicate that the more educated do not necessarily have a more favorable attitude to educational programs. In fact, in the case of managers, the opposite seems to hold true.
APPLICATION TO ATTITUDES TOWARD ADULT EDUCATION PROGRAMS

This technique offers a very useful method of studying attitude change toward any form of adult education. The model enables us to specify the positive and negative elements in an individual's attitude. By operationally teasing out the strength of a subject's beliefs from his evaluative aspects of his beliefs, the technique provides an answer to the question — what are we actually saying when we state that someone has a negative attitude toward adult education. In other words, the negativity in a subject's attitude may be due to strength of beliefs, evaluation of these beliefs, or both.

For example, I may believe that adult education will increase my knowledge of politics, but I may not feel that a knowledge of politics is good. On the other hand, I may feel that political knowledge would be good, but I may not believe that attending adult education programs will actually increase my political knowledge. It may be necessary to concentrate our efforts on trying to change the strength of beliefs a person already has or the evaluative aspect of these beliefs. It may also be possible to teach people new beliefs.

REFERENCES


