RELATIVE CONTRIBUTIONS OF VERBAL, ARTICULATIVE, AND NONVERBAL COMMUNICATION TO EMPLOYMENT DECISIONS IN THE JOB INTERVIEW SETTING

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Recruiter ratings of 338 on-campus interviews were used in a discriminant analysis procedure to determine the relative importance of the verbal, articulative, and nonverbal dimensions of communication during the job interview. Correlation of seven variables with the discriminant function indicated that appropriateness of content, fluency of speech, and composure were of greatest importance in contributing to a favorable employment decision. These findings were contrary to the recent literature which has emphasized the importance of nonverbal behavior. Implications for job-interview skills training are discussed, and suggestions for a comprehensive workshop model are presented.

The job interview is used primarily to help employers determine what the candidate is like as a person (Downs, 1969). Information concerning how the candidate gets along with other people and his or her desire to work is of greater importance during the job interview than information concerning employable skills and work experience (Schuh, 1973; Ulrich & Trumbo, 1965). Consequently it is not surprising to find that skilled interpersonal behavior in the job interview setting may give the candidate that extra edge that sets him or her apart from equally qualified applicants (Prazak, 1969).

The importance of job interview behavior has been duly noted in the literature (Clowers and Fraser, 1977; Drake, Kaplan, and Stone, 1972; Lumsden and Sharf, 1974). Often these behaviors are presented using global terms such as communication skills (Tschirgi, 1973) or enthusiasm and ability to communicate (Downs, 1969). More recently, however, specific verbal and nonverbal behaviors have been identified and investigated. As a result, there has been an increased debate over the relative contribution of various communicative dimensions to a successful job interview performance.

Although the literature generally approaches this issue in terms of a
dichotomous distinction between verbal and nonverbal behavior, it may be more appropriate to conceptualize communication during the job interview as involving three overt dimensions instead of two. As Mehrabian (1972) has noted, various articulative or vocal phenomena, such as fluency of speech or loudness of voice, should be differentiated from verbal and nonverbal behaviors. In addition, the term *dimension* rather than *behavior* is used to include observable, personal attributes, such as appearance, dress, and grooming, in addition to active, ongoing behaviors. Therefore, for the purposes of this study, communication during the job interview will be viewed as including verbal, articulative, and nonverbal dimensions.

Several investigators have studied the effects of nonverbal and articulative behaviors, such as eye contact, gesturing, smiling, and appropriate tone of voice, on interview ratings (Imada and Hakel, 1977; McGovern, 1977; Washburn and Hakel, 1973; Wexley, Fugita, and Malone, 1975). These studies clearly demonstrated the importance of appropriate nonverbal and articulative behaviors in attaining a favorable evaluation, although it should be noted that each was an analogue study and three of the four used college students as raters. Nevertheless, the accumulation of evidence appears so compelling that one investigator who stated in 1973 that "It's not just what you say, it's how you say it" (Washburn and Hakel, 1973, p. 140, italics added) was ready four years later to conclude "It's not what you say, but how you say it" (Imada and Hakel, 1977, p. 299, italics his).

It may be premature, however, to award the nonverbal and articulative dimensions a predominant position in the job interview. Other investigators have identified a range of content areas which appear of some importance. Hakel and Schuh (1971) in analyzing responses from over 2800 employment interviews found that candidate statements concerning his or her sociability and good character were seen as important across seven different occupational categories. Content areas such as the ability to explain one's skills, answer problem questions, and make positive self statements also have received attention in the literature (Keil and Barbee, 1973; McGovern, Tinsley, Liss-Levinson, Laventure, and Britton, 1975; Prazak, 1969; Wheeler, 1977).

The distinction between the verbal, articulative, and nonverbal dimensions is of some importance. Training procedures designed to increase job interview skills for a variety of populations have been developed and evaluated (Barbee and Keil, 1973; Hollandsworth, Dressel, and Stevens, 1977; Hollandsworth, Glazeski, and Dressel, 1978; Grinnel and Lieberman, 1977). This research has made it quite clear that techniques for improving nonverbal skills, for example, are different from those useful in improving verbal content. Given that job
interview skills workshops operate under realistic time limitations, frequently one workshop activity must be sacrificed in order to include another. Therefore the relative importance of the verbal, articulative, and nonverbal dimensions must be established so that training time can be used with maximum effectiveness.

Direct investigation of the relative importance of the three dimensions has been limited. For example, the four nonverbal studies cited above each held the verbal content of the simulated interviews constant across conditions. Also data concerning the reactions of actual employment interviewers to the various dimensions are lacking. The need for gathering job interview data "from real life, rather than from artificial settings" has been noted elsewhere (Landry and Bates, 1973, p. 144; Wright, 1969). Subsequently, this study was designed to investigate the relative importance of the nonverbal, articulative, and verbal dimensions in actual on-campus job interviews.

Method

Subjects

During the 1976–1977 academic year 73 on-campus recruiters working through the Placement Bureau rated candidate interview behaviors using a rating scale described in more detail below. Rating scales representing 338 interviews were returned. The number of interviews per recruiter ranged from one to 18 with a mean of 4.6. Eighty-nine percent of the recruiters rated ten or less interviews each so that the data reflect a wide range of recruiter characteristics and occupational categories.

Candidate Evaluation Scale (CES)

An eight-item rating scale was developed for this study. In order to minimize the imposition of the recruiters' personal values, interpretations, and beliefs about interview behavior, a modified behaviorally-anchored rating format was used (Smith and Kendall, 1963). In this case, each item contained a brief description of the optimum behavior to be rated. Ratings were made in terms of how descriptive this ideal behavior was of the candidate's actual behavior during the interview. Rating scales of this nature have been found to be resistant to the effects of extraneous rater or ratee characteristics (Cascio and Valenzi, 1977).

Each dimension was rated on a four-point scale corresponding to (1) not descriptive at all, (2) barely descriptive, (3) somewhat descriptive, and (4) very descriptive. The scale for "Would you hire this candidate?" corresponded to (1) not a chance, (2) probably not, (3)
probably, and (4) definitely. The seven verbal, articulative, and non-verbal dimensions were defined as follows:

1. **Eye contact.** Generally maintained appropriate eye contact when speaking or listening to the interviewer.
2. **Loudness of voice.** Spoke with clarity and appropriately loud without whispers or shouts.
3. **Body posture.** Sat erect, used appropriate hand gestures, facial expression appropriate to verbal message.
4. **Fluency of speech.** Spoke spontaneously, used words well, was able to articulate thoughts clearly.
5. **Appropriateness of content.** Responded concisely, cooperated fully in answering questions, stated personal opinions when relevant, and kept to the subject at hand.
6. **Personal appearance.** Neat and clean in appearance, and appropriately dressed.
7. **Composure.** Appeared at ease during the interview, comfortable and relaxed.

The nonverbal dimension is represented by items #1, 3, 6, & 7, while items #2 & 4 are concerned with the articulative dimension. Item #5 represents the verbal dimension.

**Procedure**

The CES was completed by the recruiter immediately following the job interview. In that these interviews represented an initial step in an ongoing employment process, none of the candidates was offered a job during the interview itself. Recruiter responses to the question, “Would you hire this candidate?” resulted in a four-fold classification of candidates corresponding to “not a chance” (n = 19); “probably not” (n = 129); “probably” (n = 143); and “definitely” (n = 47). This post-interview rating was selected as a criterion variable, and the data were subjected to a discriminant function analysis using the seven items from the CES as predictor variables. Steps taken to insure confidentiality of the ratings made it impossible to determine the degree of overlap of raters on given subjects, although inspection of the appointment sheets would suggest that few subjects were rated by more than one recruiter.

**Results**

A multivariate comparison of the four groups was made through a direct discriminant function analysis with the seven variables being utilized simultaneously. Only the first of the three possible discriminant functions was found to differentiate between the groups at the .01 level ($\chi^2 = 265.241$, $df = 21$, $p < .001$). The associated canonical
correlation for the first discriminant function was .71 indicating a strong relationship between the group and score vectors.

To avoid the problem of unequal scale differences among the four groups (Bargmann, 1969) and to provide a means for ordering the variables based on their relative contributions to group differentiation (Timm, 1974), the correlation of each variable with the discriminant function was obtained (Table 1). The correlations allowed for the following relative ordering of importance of the variables: (1) appropriateness of content, (2) fluency of speech, (3) composure, (4) body posture, (5) eye contact, (6) loudness of voice, and (7) personal appearance. However, an examination of the discriminant weights revealed that body posture had a negative weight. This, plus the fact that it correlated positively with the discriminant function, suggested that it did contribute to group differentiation but did so more crudely than the other variables (Bargmann, 1969).

Reanalysis with body posture deleted had virtually no effect on the overall results. The first discriminant function was still highly significant ($p < .001$) and none of the correlations of the remaining six variables with the discriminant function were changed for the first two decimal places.

To examine the individual effects of the seven variables, univariate comparisons were made between the four groups. Each of the predictor variables was found to significantly differentiate between the groups (Table 1). The Eta coefficients associated with each univariate $F$-ratio suggested that the relationship between each predictor and the grouping dimension was well within the range of valid predictors.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Univariate $F$</th>
<th>Eta</th>
<th>Standardized Discriminant Weights</th>
<th>Correlations with Discriminant Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriateness of Content (V)</td>
<td>72.19</td>
<td>.63</td>
<td>.47</td>
<td>.68</td>
</tr>
<tr>
<td>Fluency of Speech (A)</td>
<td>59.09</td>
<td>.59</td>
<td>.25</td>
<td>.60</td>
</tr>
<tr>
<td>Composure (N)</td>
<td>46.35</td>
<td>.54</td>
<td>.26</td>
<td>.51</td>
</tr>
<tr>
<td>Body Posture (N)</td>
<td>31.52</td>
<td>.47</td>
<td>-.03</td>
<td>.44</td>
</tr>
<tr>
<td>Eye Contact (N)</td>
<td>31.27</td>
<td>.47</td>
<td>-.08</td>
<td>.43</td>
</tr>
<tr>
<td>Loudness of Voice (A)</td>
<td>29.26</td>
<td>.46</td>
<td>.12</td>
<td>.41</td>
</tr>
<tr>
<td>Personal Appearance (N)</td>
<td>26.83</td>
<td>.44</td>
<td>.15</td>
<td>.38</td>
</tr>
</tbody>
</table>

$p < .001$.

Note—(V) = Verbal dimension; (A) = Articulative dimension; (N) = Nonverbal dimension
Calculation of Eta coefficients resulted in a rank ordering of the variables identical to that obtained by correlating these variables with the discriminant function. This would suggest that the predictors were relatively independent. An examination of the within groups intercorrelations matrix supports this. The largest average correlation of a variable with the remaining variables was .37 for body posture, the weakest predictor. The lowest average correlation was .24 for composure. The average intercorrelation among the entire set was a modest .30. With body posture removed the average correlation among the remaining predictors was .27 (Table 2).

**Discussion**

Estimates of the relative contributions of these behaviors to the employment decision indicated that appropriateness of content was the single most important variable. Fluency of speech and composure were ranked as second and third in importance, respectively. Eye contact, body posture, loudness of voice, and personal appearance also contributed to the decisions in that order but much less strongly than the first three variables.

These findings have direct implications for job interview skills training. First, the importance of preparing a candidate for what to say in the job interview must be stressed. Although various articulative and nonverbal behaviors were found to be important as well, the ability of the candidate to respond concisely, answer questions fully, state personal opinions when relevant, and keep to the subject at hand appears to be crucial in obtaining a favorable employment decision. In that structured group discussions have been found to assist in the acquisition of these verbal skills, these data would suggest that training need reflect a balance between the more traditional group discussion approach and behaviorally-oriented communication skills techniques (cf. Hollandsworth et al., 1977).

**TABLE 2**

*Pooled Within Groups Correlation Matrix*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Appropriateness of Content</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Fluency of Speech</td>
<td>.38</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Composure</td>
<td>.24</td>
<td>.26</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Body Posture</td>
<td>.36</td>
<td>.39</td>
<td>.23</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Eye Contact</td>
<td>.21</td>
<td>.34</td>
<td>.34</td>
<td>.44</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Loudness of Voice</td>
<td>.16</td>
<td>.40</td>
<td>.20</td>
<td>.40</td>
<td>.43</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>7. Personal Appearance</td>
<td>.17</td>
<td>.28</td>
<td>.17</td>
<td>.40</td>
<td>.26</td>
<td>.29</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Fluency of speech also was found to contribute strongly to the employment decision. This behavior reflects one's articulative skills and as such may be responsive to training that focuses on improving one's ability to emit well-organized and focused answers. Recent data (Hollandsworth et al., 1978) suggest that training a candidate to pause before answering, focus on the key words in the interviewer's question, and briefly organize his or her answer before responding is useful in decreasing speech disturbances and improving speech fluency. This pause-think-speak training, which is similar to cognitive-behavior modification procedures used initially with impulsive children (Meichenbaum, 1977), appears to hold promise as a potent technique in training for the articulative dimension.

These results would support the continued focus on the nonverbal dimension but question the use of a training model which has this as its primary goal. For example, Grinnel and Liberman (1977) report on the use of a micro-counseling model for teaching job interview skills to the mentally retarded. The results indicated that the model was effective only in increasing ratings of eye contact and body posture. While this may represent a meaningful and realistic gain for this difficult population, the results of this study would suggest that these two areas are relatively less important than other job interview behaviors.

The results of this study would indicate that the verbal, articulative, and nonverbal dimensions of communication in the job interview setting all play an important role in obtaining a favorable employment decision. Workshop models designed to improve job interview behaviors could benefit through the inclusion of specific components for training skills in each of these areas. In addition, these findings may be of interest to the employer or personnel officer who desires a better understanding of those factors which influence his or her employment decisions. After all, the purpose of the job interview is to provide information that is obtained most readily through direct, interpersonal communication. Thus any steps taken on either side of the desk to improve communication in the job interview may facilitate the process of achieving an appropriate, productive, and meaningful match between candidate and job.

REFERENCES


Wexley, K. N., Fugita, S. S., and Malone, M. P. An applicants nonverbal behavior and


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