Because interviewing is a face-to-face interaction belonging to the genre of interpersonal relationships, the employment interview is subject to some of the same problems that beset interpersonal relationships. Problems can occur in both interviews and interpersonal relationships because of bias, which originates from background characteristics, psychological factors, and behavioral factors pertaining to both parties. To learn more about how bias toward behavioral characteristics and background characteristics of job applicants can influence selection decisions, three hypotheses were tested: (1) applicants who spoke little during an interview would be viewed less favorably; (2) evaluations of black applicants by white interviewers would be less favorable than those of white applicants; and (3) interviewer evaluations would be a function of the combined effects of vocal activity and race of the applicants. Each hypothesis was confirmed. The results suggest that, under experimental conditions, applicant behaviors (vocal activity) are more important than applicant characteristics (race), but that race remains an important variable in interviewer evaluations.

(Author/CS)
THE EFFECTS OF VOCAL ACTIVITY AND RACE OF APPLICANT ON JOB SELECTION INTERVIEW DECISIONS

AUTHOR

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THE EFFECTS OF VOCAL ACTIVITY AND RACE OF APPLICANT ON SELECTION INTERVIEW DECISIONS

The decision to hire/not hire is of paramount importance to both organizations and prospective employees. Many complex factors interface with and impact on the decision-making process in hiring. The majority of these factors are accumulated and evaluated during the selection interview.

The interview is a specialized form of oral, face-to-face communication between people in an interpersonal relationship. It is entered into for a specific task related purpose associated with a particular subject matter. Interviews occur frequently in day-to-day interactions (Downs, Smeyak & Martin, 1980, p.5).

An interview has taken place when two parties (a party can consist of more than one individual) come together for a predetermined and serious purpose designed to interchange behavior by the asking and answering of questions (Cash & Stewart, 1978, p.5). Interview situations can range from a simple planned conversation between parent and child in order to gain information to a more complex interaction which takes place between superior and subordinate. Within the employment setting there are several stages at which interviews take place such as initial contact, appraisal, discipline, and exit stages. This study focused on one aspect of the initial contact stage, the selection interview.

Because the selection interview is a face-to-face oral interaction belonging to the genre of interpersonal relationships, it is subject to some of the same problems that plague interpersonal relationships. Problems can occur in both the interview and interpersonal relationships due to bias, an unwanted systematic error which leads to dysfunctional behavior (Downs, et al, 1980, p.33).

According to Kahn and Cannell, bias in the interview originates from three sources; the background characteristics, the psychological factors and the behavioral factors of both the interviewer and applicant (1963, p.194). Bias can result from each of these areas in both the interviewer and applicant.

The purpose of the investigation reported here was to learn more about how bias toward the behavioral factors and background characteristics of applicants can influence interview evaluations. The specific purpose was to discover the relationship between vocal activity, race of applicant and evaluation in the selection interview.
COMMUNICATION IN THE EMPLOYMENT INTERVIEW

The importance of the applicant's behavior in the interview is substantiated by research results. Hiring officers from 70 business firms ranked communication skills observed during the interview as the most important factor in evaluating an applicant (Tschirgi, 1973). Results from a survey conducted by Downs (1972, p.25) indicates that recruiters rank oral communication ability very high in their list of decision factors for hiring. Furthermore, in a list of most frequent complaints about interviewees, poor communication was ranked first. One component of poor communication was talking too little or too much (Downs, et al, 1980, 147). Exhibiting the appropriate amount of talk assumes an important role in the selection interview.

Vocal activity, the amount of time spent talking in a social interaction, fits into the general category of behavioral factors (Hayes and Sievers, 1972). On the basis of research dealing with vocal activity in the screening interview it appears that interviewers are biased against applicants who's perceived amount of talking is too little. McCroskey and Richmond report that there is the possibility that persons who are perceived as speaking too little may be systematically excluded from organizations (1978, p.5). Exclusion begins during the initial contact stage, either in the screening or selection interview.

Results from a study conducted using business administration students as subjects revealed a significant difference between the evaluation of applicants perceived as talking too little and those exhibiting appropriate amounts of talking (Richmond, 1977). Though only the credentials of applicants were presented with a passing reference to their communication behavior, subjects responded to them differently. Other factors held constant, applicants perceived as talking too little were judged less task and socially attractive, were projected to be less satisfied with their job, to have poorer relationships with peers, supervisors and subordinates at work, to be less productive, and to have less likelihood for advancement (Richmond, 1977).

In a similar study conducted by Daly and Leth, similar results were obtained (1977). Applicants described as talking too little were judged to be less competent, predicted to be less successful on the job, to require more training, to be less satisfied on the job, and to have more difficulty establishing good relationships with co-workers than applicants described as talking more. It appears that applicants talking too little are discriminated against in the hiring process, possibly even when the available job is compatible with the amount of talking exhibited (McCroskey and Richmond, 1978; Daly and Leth, 1977).
RACE IN EMPLOYMENT EVALUATION

The most significant finding of investigators in the area of race and employment evaluations was that supervisors give higher ratings to employees of the same race. Black raters rate black employees higher than white employees. Likewise, white employers rate white employees higher than black employees (Hamner, Kim, Baird, and Bigoness, 1974, p.705-711). There were systematic differences in the evaluation of applicants according to race. Overall, high performing white applicants were preferred the most. Black applicants were favored over white applicants in low performance conditions. Raters tended to make greater distinctions between high and low performing white applicants, but this did not hold true for black applicants. When scores were collapsed across high and low performance conditions, the evaluations of black applicants regressed toward the mean. Raters tended to see the entire group of black applicants as average. Not only were black applicants categorized as average, but under identical performance conditions, they continued to be rated lower than white applicants (Hamner, et, 1974).

There is no question that on-the-job evaluations are different from the selection interview situation. However, this study lends empirical support to the intuitive conclusion reached by blacks who experience evaluation in an interracial work setting: race effects employment evaluation. Biases empirically proven to exist in the work setting may well exist in the selection interview.

Race, prejudice, and biographical similarity were manipulated in the selection interview by Wexley and Nemeroff. They presented subjects with applicant resumes representing eight test conditions. The investigators found unexpected results in that race appeared to be non-significant. Biographical
similarity accounted for the greatest portion of variance. Race had no effect on the interview evaluations (Wexley and Nemeroff, 1973).

Findings from the preceding two studies are contradictory. The first study of race in employment indicates a negative bias toward racial differences. The second study of race in the selection interview found race to be non-significant. Due to differences in methodologies and operationalization of variables, no clear trend has emerged (Byrne, 1971, p.174). Under some conditions, race can cause positive results; under others, negative. The effects of race depend on the meaning of race in general and its significance to the topic of the interview (Gorden, 1975).

SUMMARY AND HYPOTHESES

The studies reviewed involving amount of talking in the screening interview suggest a bias against applicants who are perceived as talking too little. Applicants exhibiting low vocal activity receive negative evaluations. Unlike vocal activity the race of applicant does not influence interview evaluations in a clear directional trend (Gorden, 1975, p.215). Therefore, it is difficult to predict how race would affect evaluation in the selection interview. Empirical evidence supports the supposition that vocal activity and race independently influence selection interview decisions. It is therefore logical to suspect vocal activity and race in combination also influence selection in interview decisions.

Based on findings from the research reviewed in previous sections of this work, the following three hypothesis were tested.

H₁: Interviewer evaluations of applicants exhibiting low levels of vocal activity will be less favorable than evaluations of applicants with high vocal activity.

H₂: Interviewer evaluations of black applicants will be different than interviewer evaluations of white applicants.

H₃: Interviewer evaluations are a function of the vocal activity and race of applicant.

Method

Measurement

Vocal activity has been operationalized as words or lines read (Matarazzo, Holman & Weins, 1967) and by
ratio of total time spent talking (as compared to other members of the group) (Hayes & Seivers, 1972). For purposes of the research reported here, vocal activity was operationalized as the ratio of words or lines read. In the high vocal activity condition the applicant delivered 76 percent of the lines to the interviewer's 24 percent (Stewart & Cash, 1974, p. 13). The low vocal activity condition consisted of 50 percent applicant lines to 50 percent interviewer lines.

A second independent variable, race, was operationalized by the use of two applicants who were racially different in the physiognomic dimension. Applicants were judged racially different by variances in complexion, hair, fullness of lips, skin texture, nose, ears, and curvature of the mouth (Secord, 1959). The two specific categories of race used in this study were black and caucasian.

The dependent variable in the study, interviewer evaluation, was measured by the use of the Interviewer Rating Form (IRF) (see Table 1). Three previously developed instruments served as a source pool for questions used to construct the IRF (Landy & Bates, 1973; Byrne, 1971; McCroskey & McCain, 1974). Questions one and eight measure attraction on the social dimension, two and five on the physical dimension, and seven and ten on the task dimension (McCroskey & McCain, 1974, see Table 1). Questions twelve and three also measure the task dimension of attraction, but
they measure the applicant's ability to get along with others (Byrne, 1971, Appendix A; see Table 1).

In order to assess the subjects' behavioral intentions toward the applicant, questions four and nine were included on the IRF (Landy & Bates, 1973; see Table 1). As a check for actual manipulation of variables, questions eleven and six were added to complete the IRF (developed by the author; see Table 1).

The internal consistency of the IRF was determined by analyzing data from pilot and experimental studies with the Coefficient Alpha (Cronbach, 1951). The obtained alpha level, indicating correlation between two random samples of items from a universe of items, reached .76. The mean correlation between items, which is an index of consistency, reached .51 (Cronbach, 1951). Table 1 displays descriptive statistics about each item on the IRF.

Four extraneous variables were potentially operative in this investigation. They were race of subject, sex of subject, racial attitude of subject, and attractiveness of applicants. The first three variables were statistically
controlled by holding them constant in each regression equation.

Levels of attractiveness, the fourth extraneous variable was experimentally controlled. Because attraction is highly influential in interpersonal evaluation, precautions were taken to minimize its effects (Byrne, London & Reeves, 1976).

A Q-Sort method was used to select two applicant photographs from a stimulus pool of 14 young men (seven black and seven caucasian). The two applicant photographs chosen for experimental use were perceived by subjects (N = 36) as racially different, but equally attractive.

INSERT TABLE TWO

Subjects

Subjects were university students from introductory management courses (N = 301). Students took part in this research as part of a class activity. The courses included students from almost every classification and major stratum. A statistical description of the sample is shown in Table 3.

INSERT TABLE THREE
Procedures

Since random assignment of individual students was not possible, the random assignment of intact classes to experimental conditions was employed.

Test conditions consisted of four interviews for the position of manager with Universal Life Insurance Company. These four conditions resulted from a crossing of the two independent variables of vocal activity and race of applicant (see Table 4). All conditions were presented on a ring-master, slide-cassette player.

Data Collection

The settings for data collection were classrooms. Each experiment was conducted during regular class periods. Classes were shown a slide of the applicant and heard a tape-recorded interview for the position of manager. Subjects were then asked to complete the IRF. When this was completed, subjects were allowed to ask questions about the experiment and job selection interviewing. Data was subjected to a multiple regression analysis. Results are as follows.

Results

Hypothesis one stated that interviewer evaluations of applicants exhibiting high vocal activity would be
more favorable than evaluations of applicants exhibiting low vocal activity. The $F$ test obtained a value of 18.719, which is beyond the specified .05 level of significance. The statistics displayed in Table 5 indicate that the mean interview evaluation was higher under the high vocal activity condition than in the low vocal activity condition. The difference is statistically significant, as evidenced by an $R^2$ of .2907. In other words, 29.07 percent of the variance in interviewer evaluations was attributed to vocal activity. On the basis of the findings reported here, hypothesis one was accepted.

INSERT TABLE FIVE

INSERT TABLE SIX

Hypothesis two concerned comparisons between interviewer evaluations of black and white applicants. The prediction was that there would be a significant difference between the mean interview evaluations of black and white applicants. The $F$ test yielded an $R^2$ of .2523. Therefore, the 25.23 percent of variance contributed to interviewer scores by race of applicants was significant. Not only that, but the significant $F$ of 4.33 indicated that there was a difference between the two groups. The second hypothesis
was accepted. There was a statistically significant difference between the interviewer evaluations of black and white applicants. The race of applicants contributed to the variance in interviewer evaluations. Significance was beyond the .05 level of acceptance (see Table 6).

The third hypothesis of the research reported was: interviewer evaluations would be a function of the vocal activity and race of applicant. The F test of this hypothesis was significant. The obtained F ratio of 16.40 revealed that the $R^2$ of .3174 was significant. These results suggest that the variance in interviewer scores was not due to chance or interviewer characteristics. Instead, the variance was due to the combined effects of the independent variables, vocal activity and race of applicant.

The $R^2$ of .3174 indicated that the linear combination of vocal activity and race contributed 31.74 percent of the variance in the dependent variable, interviewer evaluations.

A partial regression weight analysis revealed that vocal activity contributed more than race. Of the 31 percent total variance accounted for by the combined effects of vocal activity and race, 11.79 percent was contributed by vocal activity (see the test of Hypothesis three Table 6). Eight percent of that total was contributed by race (overlap between the two accounted for 11.76 percent of the total). Under the specified experimental conditions, how much the applicant talked was of greater importance than race.
The results have been displayed in Table 6. Hypothesis three was supported. Interviewer scores were a function of vocal activity and race of applicant. These two independent variables did contribute to the variance in interviewer evaluations.

**Interaction**

An interaction between vocal activity and race was detected, but was found to be non-significant. The interaction between vocal activity and race of applicant yielded an \( R^2 \) of \( .0097 \) (\( F = 2.113; \text{DF } = 2,293 \)). The probability was greater than \( .05 \) (.1205) that the \( R^2 \) was due to an interaction. Under the reported experimental conditions, the interaction between vocal activity and race of applicant accounted for 1 percent of the variance in interviewer evaluations.

**Discussion and Conclusions**

On the basis of the findings concerning vocal activity and evaluations, it was concluded that interviewers can be influenced by the amount of talking exhibited by an applicant. Low vocal activity negatively influenced the overall evaluation.

This finding has at least one implication for interviewers. They should become aware of possible biases against applicants who are perceived as talking too little. The best qualified applicant may not be the one who talks as much as an interviewer would like. When the best qualified applicant is not hired simply because he or she is perceived as talking too
little, both the hiring institution and the applicant lose. The hiring institution loses productivity and funds for extended recruitment. The applicant loses due to a behavior that may not directly relate to the position which is being interviewed for (Daly & Leth, 1977, p.14-16). Since interviewers rate lower those applicants perceived as exhibiting low levels of vocal activity, both the interviewer and interviewee should be aware of this bias.

Findings relevant to hypothesis two revealed that black applicants were evaluated differently than white applicants. The implication of this finding is that there is a need for continued vigilance by minority persons toward racial discrimination in employment. Affirmative action, federal supreme court rulings and Equal Employment Opportunity policy notwithstanding, race continues to be influential in the job selection interview. Members of the general public and professional interviewers alike should not be mislead into thinking that evaluation influenced by race no longer exists. The effects of the variable can still be felt in the job selection interveiw.

Findings concerning the combined effects of vocal activity and race lead to a discussion of the importance of applicant behaviors and characteristics. Several investigations incorporating both behaviors and characteristics of the job applicant revealed behavioral variables to be of more importance than characteristic variables (Renwick & Tosi, 1978; Wexely & Nemeroff, 1973; & Hopper, 1977).
In the current investigation, the behavior variable of vocal activity was more important than the applicant characteristic of race. How much the applicant talked was more influential than his race.

However, the over generalization of this finding from experimental to non-experimental settings could be misleading for applicants and interviewers. The implication of this findings is that job applicants can overcome negative effects of such characteristics as sex, age, and race by proper manipulation of their amount of talking, educational background, and attitudes displayed. One author, in giving advice to applicants, says just that (Tschirgi, 1973, p. 75).

Is is true that the behavior of applicants does have an effect on the results of job selection interviews. Applicants do have some measure of control over interview results because they have options in amount of talking, attitudes displayed, and many other behavioral variables. That applicant behaviors in the job selection interview are extremely important is unquestionable. They are important in both experimental and non-experimental settings. However, to believe that applicants can always overcome the affect of characteristics which might elicit negative evaluations by exhibiting the correct behaviors would be a mistake. That kind of thinking denies the experience of many applicants in the interview situation.

Even though under the experimental conditions reported
here, the behavioral variable was more important than the applicant characteristic of race, the reader should be cautious in making generalizations about what the findings imply in non-experimental settings. Though the combined effects of vocal activity and race of applicant were important to interviewer evaluations, generalizations about the relative importance of vocal activity and race should be conservative.

Summary

The investigation reported concerned the role of vocal activity and race of applicant in the job selection interview. Three hypotheses were tested: (1) interviewer evaluations of applicants exhibiting low vocal activity will be more favorable than the evaluations of applicants exhibiting high vocal activity; (2) interviewer evaluations of black applicants will be different than the evaluations of white applicants; and (3) interviewer evaluations would be a function of the vocal activity and race of applicant. Each of the three hypotheses was confirmed.

Conclusions from the study were as follows: (1) under experimental conditions, applicant behaviors are more important than applicant characteristics; (2) interviewer evaluations decrease with a decrease in vocal activity, and (3) race remains an important variable in interviewer evaluations.

One suggestion for future research is that investigators include other communication variables such as interruption
behavior and reaction time latency. Another question to be answered by future investigators is whether or not vocal activity and interpersonal evaluation have a curvilinear relationship in the selection interview as they do in small-group settings (Daley, McCroskey & Richmond, 1977).
<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>R (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would like to have a friendly chat with him.</td>
<td>2.34</td>
<td>.874</td>
<td>.6460</td>
</tr>
<tr>
<td>2. He is not very good looking.</td>
<td>2.58</td>
<td>.857</td>
<td>.5819</td>
</tr>
<tr>
<td>3. I would enjoy working with this person in an experiment.</td>
<td>2.33</td>
<td>.824</td>
<td>.7155</td>
</tr>
<tr>
<td>4. Would show no interest in candidate under any circumstances.</td>
<td>1.88</td>
<td>.874</td>
<td>.6855</td>
</tr>
<tr>
<td>5. I think he is quite handsome.</td>
<td>3.12</td>
<td>.958</td>
<td>.6211</td>
</tr>
<tr>
<td>6. He did not talk enough.</td>
<td>1.64</td>
<td>.740</td>
<td>.3572</td>
</tr>
<tr>
<td>7. If I wanted to get things done, I could probably depend on him.</td>
<td>2.03</td>
<td>.777</td>
<td>.6648</td>
</tr>
<tr>
<td>8. It would be difficult to talk with him.</td>
<td>2.05</td>
<td>.907</td>
<td>.6775</td>
</tr>
<tr>
<td>9. Would make every possible effort to contact and talk with this candidate.</td>
<td>3.67</td>
<td>.952</td>
<td>-.3154</td>
</tr>
<tr>
<td>10. I believe I would dislike working with this person in an experiment.</td>
<td>2.13</td>
<td>.889</td>
<td>.7871</td>
</tr>
<tr>
<td>11. He spent an appropriate amount of time talking in the interview.</td>
<td>2.13</td>
<td>.807</td>
<td>.6776</td>
</tr>
<tr>
<td>12. He would not be good to work with to solve a problem.</td>
<td>1.00</td>
<td>.000</td>
<td>.0000</td>
</tr>
</tbody>
</table>

Alpha = .7594
Mean Correlation = .5082

NOTE: Questions 1, 3, 5, 7, 9, and 11 were weighted with 5 at strongly agree to 1 at strongly disagree. Questions 2, 4, 6, 8, 10, and 12 were weighted with 1 at strongly agree to 5 at strongly disagree. Possible scores ranged from 0-60.
TABLE 2
PERCEIVED ATTRACTIVENESS
AS MEASURED BY Q-SORT

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Mean Rating</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>2.91</td>
<td>.92</td>
</tr>
<tr>
<td>White</td>
<td>2.58</td>
<td>.96</td>
</tr>
</tbody>
</table>

Note: t greater than .05; DF = 70; p = .208
Mean ratings on scale of 0 - 5
<table>
<thead>
<tr>
<th>Subject</th>
<th>Number</th>
<th>Percentage of Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>35</td>
<td>11.30%</td>
<td>301</td>
</tr>
<tr>
<td>White</td>
<td>266</td>
<td>88.70%</td>
<td>301</td>
</tr>
<tr>
<td>Male</td>
<td>179</td>
<td>59.80%</td>
<td>301</td>
</tr>
<tr>
<td>Female</td>
<td>122</td>
<td>40.20%</td>
<td>301</td>
</tr>
<tr>
<td>Condition</td>
<td>Applicant Vocal Activity</td>
<td>Race of Applicant</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>1,1</td>
<td>High</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>1,2</td>
<td>Low</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>2,1</td>
<td>High</td>
<td>White</td>
<td></td>
</tr>
<tr>
<td>2,2</td>
<td>Low</td>
<td>White</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 5
MARGINAL MEANS FOR VOCAL ACTIVITY AND RACE OF APPLICANTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocal Activity (High)</td>
<td>Column</td>
<td>45.49</td>
</tr>
<tr>
<td>Vocal Activity (Low)</td>
<td>Column</td>
<td>43.97</td>
</tr>
<tr>
<td>Race of Applicant (Black)</td>
<td>Row</td>
<td>45.38</td>
</tr>
<tr>
<td>Race of Applicant (White)</td>
<td>Row</td>
<td>43.90</td>
</tr>
<tr>
<td>Variable</td>
<td>$R^2$</td>
<td>DF</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------</td>
<td>-----</td>
</tr>
<tr>
<td>Vocal Activity (High, Low)</td>
<td>.2907</td>
<td>1,269</td>
</tr>
<tr>
<td>Applicant Race (Black, White)</td>
<td>.2523</td>
<td>1,296</td>
</tr>
<tr>
<td>Vocal Activity (High, Low)</td>
<td>.3174</td>
<td>2,295</td>
</tr>
<tr>
<td>Applicant Race (Black, White)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction (Vocal Activity and Race)</td>
<td>.0097</td>
<td>2,293</td>
</tr>
</tbody>
</table>

*Significant beyond .05  
**Significant beyond .01
Notes

1Race is not a unidimensional concept and includes other dimensions such as culture and language.
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