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# APPLICANT REACTIONS TO ALTERNATIVE SELECTION PROCEDURES

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*ABSTRACT:* The present study solicited the reactions of 390 current and future job seekers to 13 selection procedures. Results suggest that applicants prefer selection methods with high apparent content validity, in particular, simulations (both written and oral) and tests with business-related content. Reference checks also received positive evaluations, while personality inventories, drug testing and honesty testing were generally viewed as neutral. Reactions to interviews varied according to interview content and nature of the interviewer (line versus staff). Overall, reactions were predictable on the basis of applicants' faith in the employer's ability to accurately interpret the procedure; their beliefs about the extent to which the employer actually needs to use the procedure, and their beliefs about likely self-performance on the procedure.

Increased economic competition, changing litigation standards, advances in meta-analysis, and growing recognition of the importance of employee selection have resulted in increased experimentation with diverse selection techniques. For example, increased usage has been documented for such diverse procedures as drug testing (Carlson, 1990; Faley, Kleiman, & Wall, 1988), personality assessment (Hogan, Hogan & Busch, 1984; Jones & Wuebker, 1988; Moore, 1987), handwriting analysis (McCarthy, 1988), cognitive ability testing (Hartigan & Wigdor, 1989) and honesty or integrity testing (Sackett, Burris & Callahan, 1989; Ones, Viswesvaran & Schmidt, 1991).

The expansion of selection technologies has not occurred without considerable controversy, however. For example, drug testing has been

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challenged on the basis of its potential invasiveness and because of the minimal protection afforded applicants whose samples are erroneously analyzed (e.g., Castro, 1986). Handwriting analysis has generated controversy not only because of its apparent lack of job-relatedness, but also because of disappointing empirical validity evidence (Neter & Ben-Shakhar, 1989).

Even demonstrated empirical validity does not ensure acceptability, however. For example, cognitive ability tests have been shown to be valid in a wide variety of situations (Schmidt & Hunter, 1981). Nevertheless, they remain controversial because of their adverse impact on minorities (e.g., Hartigan & Wigdor, 1989) and because of lingering suspicions that paper-and-pencil tests do not give a full picture of one's "true abilities" (e.g., Linn, 1982; Sternberg, 1985).

To date, the vast majority of research on selection devices has focused on their validity as employer selection tools. In contrast, the present paper focuses on the impressions that various techniques create among applicants. This is an important issue because procedures that are regarded as offensive or non-job-related can lead to such negative outcomes as lawsuits (Bible, 1990; Cascio, 1991), reduced applicant motivation to do well (with a possible concomitant reduction in operational validity; see Arvey, Strickland, Drauden & Martin, 1990), or withdrawal from the application process (e.g., Hartigan & Wigdor, 1989; Rynes, Bretz & Gerhart, 1991). Thus, it is important to examine how applicants feel about the wide range of selection procedures currently in use and, if possible, to identify some general factors that underlie reactions to any given procedure.

## PREVIOUS RESEARCH

By far the most widely investigated procedure (from the applicant's perspective) is drug testing (e.g., Crant & Bateman, 1990, Konovsky & Cropanzano, 1991; Murphy, Thornton & Reynolds, 1990; Stone & Kotch, 1989). In general, these studies suggest that most people accept at least some forms of drug testing, although attitudes depend considerably on the specifics surrounding test use (Crant & Bateman, 1990; Murphy, et al., 1990; Stone & Kotch, 1989). Attitudes also appear to exhibit fairly wide individual differences in perceived acceptability, although few reliable predictors of these differences have been identified.

A few studies have also examined other isolated selection devices, usually one at a time. For example, Ryan and Sackett (1987a) examined attitudes toward honesty tests, while Martin and Nagao (1989) investigated computerized interviews. While these single-device studies provide very useful information about the specific procedure of interest,

they tend to be limited in terms of what they can say about general characteristics of applicant reactions to selection procedures (Rynes, in press).

Fortunately, a few studies have explicitly compared reactions to two or more selection devices and, in the process, suggested something about the underlying characteristics that tend to make certain procedures better-liked than others. For example, at least two studies have compared work samples to paper-and-pencil tests. Schmidt, Greenthal, Hunter, Bemer and Seaton (1977) reported that both black and white machinist apprentices found work samples to be a fairer, clearer, and more valid way of assessing work qualifications than a content-valid, paper-and-pencil test. Similarly, Cascio and Phillips (1979) reported that the number of complaints concerning a large municipal selection system were dramatically reduced by shifting from paper-and-pencil tests to work samples.

More recently, studies have been conducted that compare three or more devices. In one, Smither, Millsap, Stoffey and Reilly (1991) asked 184 college juniors and seniors to evaluate a hypothetical recruiting brochure in which the firm's selection practices were described as either an in-basket simulation, a cognitive ability test, or a biodata inventory. Consistent with Schmidt, et al.'s (1977) and Cascio and Phillips' (1979) results, the in-basket (simulation) was evaluated as the most job-related and fair procedure. In addition, subjects in the in-basket condition perceived the organization to have fairer personnel practices in general, were more attracted to the organization, and expressed stronger (hypothetical) intentions to apply.

In another multiple-procedure study, Smither and Pearlman (1991) examined the extent to which eight cognitive ability tests and six other selection procedures were perceived as (a) content valid and (b) empirically valid for entry-level management positions. In general, they found that simulations, interviews, and tests with relatively concrete items (e.g., standard written English tests) were perceived as having both the highest empirical, and content, validities. Differences between perceived empirical and perceived content validities were generally small, although all eight cognitive ability tests were perceived to have higher empirical than content validities. No differences in reactions were found by race, degree level, or employment status. However, higher-ability subjects perceived cognitive ability tests to be more valid than did lower-ability subjects.

Although research has thus begun to produce some generalizations concerning applicant reactions, considerable work remains to be done. First, given the unbalanced attention to only a small subset of procedures in use, a wider range of practices needs to be examined (Lyness, 1991). Second, a number of important operational issues remain unad-

dressed, such as the impact of using line versus staff interviewers, or written versus oral simulation formats (Rynes & Barber, 1990). Third, in order to obtain a better understanding of how applicants are likely to react to any given procedure, more work is needed to identify underlying dimensions of attitudes toward a broad range of selection devices (Herriot, 1989; Rynes, in press).

The present study contributes to each of these research needs. First, a wide range of selection procedures is examined, including several designed explicitly to address important operational issues. Second, the study examines three specific beliefs about selection devices that a pretest suggested might be important to overall applicant reactions. Finally, a variety of demographic and background characteristics were measured and assessed for their possible effects on attitudes toward different devices.

## METHOD

### *Subjects*

Subjects were 390 students from one midwestern (67%) and one northeastern (33%) university. Eighty-one percent of the respondents were business majors, 59% were male, and 63% were undergraduates. On average, subjects had 15 months full-time and 26 months part-time work experience. Forty-three percent were actively seeking employment at the time of the study, with an average of 6.7 campus interviews per job seeker. The typical subject had a 3.24 grade point average, and was participating in 2.44 extracurricular activities. Thirty-four percent had had a course in employee selection.

Subjects were solicited through classroom participation, campus mailboxes, and notices in campus placement offices. Because responses were anonymous and because some subjects were approached in more than one way, it is impossible to calculate a precise response rate. In all, however, approximately 750 questionnaires were distributed, suggesting a response rate of more than 50%.

### *Instrument*

The questionnaire consisted of five pages of selection scenarios, followed by two pages of personal background information. An original version of the questionnaire was pretested on 12 graduate students who suggested a number of word changes and the addition of an item reflecting whether or not subjects had taken a course in employee selection.

*Background information.* Subjects provided information about a variety of personal characteristics, summarized in the preceding section. In addition, they provided responses to a ten-item measure of job search self-efficacy ($\alpha$ = .80). This scale assessed applicants' self-perceived abilities to persuade employers, to make a good impression, to come across as a stable person, to effectively present one's qualifications, to withstand difficult questioning, and so on. This measure was included because of previous suggestions that applicants' confidence in their job-finding abilities might somehow affect the way they view specific selection procedures (Herriot, 1989). Each item was assessed on a 7-point scale, with "7" indicating a very strong belief in one's job-finding capabilities. The mean self-efficacy response was 4.92, with a standard deviation of .85.

*Scenarios.* The thirteen selection devices presented in the scenarios are listed in Table 1, in order of their placement in the questionnaire. To maximize task involvement, subjects were instructed to consider each scenario in terms of how they would react if they were to confront it in their own job searches.

In line with previous research, it was expected that reactions would generally correlate with the extent to which devices appeared to be content-valid or explicitly job-related. For example, simulation interviews, written simulations and the business-related ability test[1] were all expected to fare well in terms of applicant reactions. Beyond that, general predictions were difficult to make because (a) none of the other pro-

**Table 1**
**Selection Scenarios in Order of Appearance**

1. Generic first interview conducted by staff recruiter
2. General ability test (based on Watson-Gleser)
3. Psychological assessment by corporate staff psychologist
4. Reference checks with professors and previous employers
5. Simulation-based second interview with line recruiter
6. On-the-spot handwriting sample
7. Written simulation exercise involving complex work issue
8. Drug test following second interview
9. (Overt) integrity test
10. Generic first interview with line recruiter
11. Business-related test (adapted from Watson-Gleser format)
12. Personality inventory (reflecting "big five" dimensions)
13. Generic second interview with line recruiter

[1]These labels have been constructed as a useful shorthand for discussion in this manuscript; the scenarios were not given "labels" in the questionnaire and, as such, were not seen by the subjects.

cedures was strongly job-content-oriented, and (b) previous research has not compared most of these procedures directly against one another.

Nevertheless, a number of specific scenario comparisons are of particular interest from an operational standpoint. For example, scenarios 1 and 10 both involve "generic" campus interviews (general interviews that inquire about information available on the subject's resume), but scenario 1 is conducted by a staff recruiter and scenario 10 by a person in the applicant's own functional area. The question of line-versus-staff effectiveness is an important issue, given that current practice in campus recruiting appears to involve approximately 50% staff and 50% line recruiters (Rynes & Boudreau, 1986).

Similarly, scenarios 5 and 13 contrast two different types of second interviews. Because these are second interviews, both are assumed to be conducted by line specialists, but scenario 5 is based on situational or simulation-based questions, while scenario 13 is based on generic resume-related information. Special attention was focused on different kinds of interviews because they are universally employed (and highly varied), but have received virtually no attention from the applicant's perspective (Lyness, 1991).

Scenarios 2 and 11 examine whether general ability tests are more or less favorably perceived than ability tests that are worded in terms of business-related content. Both scenarios were based on actual questions from the Watson-Gleser Critical Thinking Appraisal, which Ryan and Sackett (1987b) found to be the most commonly used ability test in individual assessment. Sample items for the general ability test included actual Watson-Gleser subject matter (e.g., a teaching experiment and a polio vaccination program), while items for the business-related test presented questions about accounting systems and business strategies. Both test scenarios portrayed the same format; specifically, reading a scenario and then saying whether certain statements were definitely true, probably true, and so on.

The scenarios pertaining to personality inventories, honesty testing, drug testing handwriting analysis, and psychological assessment were included for a variety of reasons: their increased usage, the amount of controversy they have generated, and in most cases, the lack of prior research concerning applicant reactions to them. Even in the one case (drug testing) where a considerable amount of research has been conducted, there has been litttle attempt to assess those reactions relative to alternative procedures, or to extract generalizable principles of applicant reactions to selection.

Because a variety of instruments are currently in use for most categories of selection devices, we tried to make scenario descriptions as representative of a particular category as possible. For example, the per-

sonality inventory was described as assessing the "big-five" personality dimensions (e.g., conscientiousness, extraversion, openness to experience; see Barrick & Mount, 1991). Additionally, the description of the integrity test was modeled from the overt (rather than general personality-based) variety, in order to distinguish it from the more general personality measure.

*Dependent Variables.* Subjects made two overall assessments of how they would react to each scenario: "After this experience, my attitude toward the company would be much more favorable," and "After this experience, I would be very motivated to further pursue this company." Both responses were obtained on 7-point scales, where "1" = "very strongly disagree" and "7" = "very strongly agree." Eventually, because of high correlations, the two assessments were combined into a composite average (average $\alpha$ = .87 across the thirteen scenarios).

*Mediating Beliefs.* In addition to assessing how applicants rate various selection procedures, we also wanted to learn something about the underlying causes of those assessments. Although previous authors have examined a number of potential determinants (e.g., perceived invasiveness, perceived fairness, political orientation), these have typically been chosen on a logical rather than empirical basis and have often been specific to a single device (e.g., political orientation and drug testing).

Given the relative scarcity of applicant reaction research, it seemed appropriate to conduct some basic preliminary research to try to identify some underlying sources of overall evaluations. Consequently, as a pretest, 41 active job seekers were interviewed concerning their attitudes toward various selection procedures and the reasons for holding those attitudes. Interviews were tape recorded, transcribed, and eventually categorized in terms of reasons given for liking or disliking particular procedures.

Results revealed that, across procedures, three considerations were mentioned most frequently as reasons for positive or negative attitudes. The first (usually mentioned in a negative context) concerned beliefs about whether or not employers could be trusted to accurately interpret the information revealed by a procedure. The second concerned beliefs about whether or not the employer actually needed to acquire the information to make a good hiring decision. The third reflected beliefs about how well the individual felt he or she would perform on the procedure.

Based on pretest results, these three factors were incorporated into the present study as potentially generalizable sources of overall reactions to selection procedures. For each of the 13 selection devices, subjects indicated their extent of agreement (on 7-point scales) with the following statements: "I would have great faith in the company's capac-

ity to evaluate me accurately through this procedure," "I feel I would do very well on this procedure," and "A company needs this kind of information to select the right employees."

*Analyses*

First, descriptive analyses were conducted to assess subjects' reactions to, and beliefs about, the various devices. Then, hierarchical regression analyses were conducted, device by device (i.e., thirteen in all), to assess the extent to which individual differences and belief factors accounted for variance in the overall attitude composite (attractiveness of the organization and willingness to pursue an offer).

Because each subject evaluated thirteen scenarios, it was possible to determine the extent to which each subject was generally lenient, or strict, in evaluating selection procedures. Accordingly, in the first hierarchical step, we included a control variable representing each subject's mean attitude toward all procedures *other* than the procedure currently being assessed. The inclusion of this control insured that subjects' attitudes toward each device would be analyzed relative to their own "personalized" means. This is an important advantage because the use of group means to study individual judgment processes can lead to considerable loss of power and specification error (Keppel, 1973).

Step two tested for possible individual differences based on subjects' demographic and personal characteristics. These included sex, grade point average, graduate versus undergraduate status, campus, major, full-time and part-time work experience, whether or not the subject was actively engaged in job search, number of extracurricular activities, whether the subject had had a course in employee selection, and job search self-efficacy.

Step three added the three specific beliefs about each device, namely, beliefs about the employer's ability to accurately interpret the procedure, beliefs about whether employers need the information, and beliefs about how well one would perform on the device. Average increments to variance explained ($R^2$) across the thirteen devices were calculated at each of the three steps, as were average standardized regression coefficients ($\beta$) for each separate independent variable.

## RESULTS

Table 2 summarizes means and standard deviations for attitudes and beliefs regarding the thirteen scenarios. Scenarios are ordered in terms of scores on the overall attitude composite. The position of each

**Table 2**
**Means and Standard Deviations**

| Scenarios | Order | Attitude | Faith in Company's Evaluation | Believe Will Do Well | Company Needs To Know |
|---|---|---|---|---|---|
| Simulation | | 5.12 | 5.14 | 5.40 | 5.38 |
| 2nd Line Intervs. | (5) | (1.15) | (1.34) | (1.24) | (1.43) |
| Reference | | 4.78 | 4.80 | 5.89 | 4.91 |
| Checks | (4) | (1.04) | (1.40) | (1.20) | (1.61) |
| Business- | | 4.49 | 4.41 | 5.25 | 4.80 |
| Related | (11) | (1.00) | (1.24) | (1.12) | (1.24) |
| Test | | | | | |
| Written | | 4.41 | 4.49 | 5.07 | 4.49 |
| Scenario | (7) | (1.38) | (1.50) | (1.30) | (1.52) |
| Personality | | 3.97 | 3.75 | 5.37 | 3.98 |
| Inventory | (12) | (1.22) | (1.49) | (1.18) | (1.58) |
| Drug Test | | 3.82 | 3.71 | 6.22 | 4.18 |
| | (8) | (1.51) | (1.79) | (1.42) | (1.88) |
| Honesty | | 3.80 | 3.43 | 5.67 | 4.01 |
| Test | (9) | (1.36) | (1.58) | (1.42) | (1.77) |
| Generic | | 3.57 | 3.57 | 5.48 | 4.36 |
| Interv. | (10) | (1.20) | (1.48) | (1.28) | (1.46) |
| Line Rectr | | | | | |
| General | | 3.47 | 3.23 | 4.77 | 3.45 |
| Ability | (2) | (1.23) | (1.47) | (1.47) | (1.63) |
| Test | | | | | |
| Generic | | 3.31 | 2.97 | 5.07 | 4.34 |
| Interv. | (1) | (1.09) | (1.35) | (1.49) | (1.49) |
| Staff Rectr | | | | | |
| Psychological | | 3.17 | 2.99 | 4.97 | 2.90 |
| Assessment | (3) | (1.38) | (1.55) | (1.36) | (1.62) |
| | | 3.08 | 3.11 | 5.29 | 3.78 |
| Generic, 2nd | (13) | (1.32) | (1.45) | (1.40) | (1.57) |
| Line Interv. | | | | | |
| Handwriting | | 2.95 | 2.42 | 4.31 | 2.21 |
| Analysis | (6) | (1.25) | (1.54) | (1.54) | (1.44) |

scenario in the original questionnaire (column two) suggests that order of presentation had no effect on subjects' judgments.

Consistent with previous findings that attitudes correspond closely with job-relatedness (e.g., Cascio & Phillips, 1979; Smither, et al., 1991), the three scenarios with the most obvious basis in content validity (simulation-based interview, written simulation, business-related test) all ranked within the first four positions. Moreover, comparisons within particular categories of procedures (tests, interviews) showed a similar preference for more content-valid formats. For example, the simulation-

based interview was rated significantly higher than all three generic interviews (all t-values > 20; $p < .001$), and the business-related test more favorably than the general ability test ($t = 12.5$; $p < .001$). Beyond these particular comparisons, however, it is difficult to make content-validity-based statements because none of the other procedures is particularly content-valid.

The association between applicant attitudes and average empirical validities also appears to be close for most devices. For example, subjects had high regard for high-validity simulation-based procedures (e.g., Latham & Saari, 1984), mid-range attitudes toward devices with mid-range validities (e.g., honesty tests and personality inventories; see Barrick & Mount, 1991 or Ones, et al., 1991), and very negative attitudes toward low-validity handwriting analyses (Neter & Ben-Shakhar, 1989). There were, however, two apparent discrepancies between attitudes and observed empirical validities: reference checks and general ability tests.

In the case of references, applicant attitudes were considerably more positive than most assessments of empirical validity (e.g., Gatewood & Feild, 1990). Strongly positive attitudes toward reference checks may arise from several factors: the apparent "reasonableness" of requesting information from teachers or previous employers; the presumption of serious employer interest when references are requested, and/or the applicant's ability to control the source of the information. Although reference-based information is also highly valued by employers (when they can get it) and can be a good predictor of post-hire adjustment (e.g., Granovetter, 1974; Schwab, 1982), in practice the usefulness of reference checks is often reduced by a variety of considerations (e.g., limited disclosure due to fear of lawsuits).

In contrast, attitudes toward ability tests were considerably below what would be predicted on the basis of empirical validity evidence. Tests ranked ninth overall, eleventh in terms of perceived need-to-know, and ninth on faith in ability to accurately evaluate candidates. Moreover, these low opinions were held even by those who had taken a selection course: there were no significant differences in any attitudes or beliefs concerning ability tests between those who had, and hadn't, been exposed to a course in selection. This suggests either that instructors are not adequately conveying available validity evidence, or that students retain somewhat skeptical attitudes toward general ability tests, regardless.

Attitudes were considerably improved, however, when the ability test format was framed in a business-related context. Specific contrasts show that the business-related test was evaluated sharply above the general ability test on both perceived employer need-to-know ($t = 13.24$; $p < .001$) and ability to accurately evaluate results ($t = 13.68$; $p < .001$). Subjects also felt they would do better on the business-related test, although the size of the difference was considerably smaller ($t =$

4.84; $p < .001$). Interestingly, all three of these patterns held true for non-business as well as business majors, and for those with a selection course as well as those without.

Results also suggested that line representatives were more positively regarded than staff interviewers at the campus interview stage (scenarios 1 vs. 10; $t = 2.86$; $p < .05$). Examination of subjects' beliefs showed that they had greater faith in line recruiters' abilities to evaluate their qualifications ($t = 5.52$; $p < .001$), and in their own abilities to convey positive impressions to line recruiters ($t = 3.90$; $p < .001$). These results are consistent with those of Rynes and colleagues (1991), who found that line recruiters were accorded higher credibility than staff recruiters in both their screening (evaluative) and recruiting (information-providing) roles. It should also be mentioned, however, there was no difference in perceived need-to-know across the two types of recruiter. This is comforting evidence of careful subject responding, given that interview content was in fact presented in the same way across the two scenarios.

Table 3 summarizes hierarchical regression results concerning the factors that underlie overall evaluations. Step one reveals that individ-

**Table 3**
**Summary of Hierarchical Regression Analyses**
**(Averaged across the 13 Scenarios)**

| Step | Increment to $R^2$ | Independent Variable | Average $\beta$ |
|---|---|---|---|
| Step 1 | .14 | | |
| | | Response tendency | .37 |
| Step 2 | .03 | | |
| | | Sex | .00 |
| | | GPA | −.02 |
| | | Business major | .00 |
| | | Extracurriculars | .00 |
| | | Selection course | .01 |
| | | Graduate student | −.02 |
| | | Midwest campus | .04 |
| | | Actively searching | −.01 |
| | | Part-time experience | −.01 |
| | | Full-time experience | .00 |
| | | Job search self-efficacy | −.02 |
| | | (Response tendency) | .34 |
| Step 3* | .49 | | |
| | | Believe will do well | .08 |
| | | Employer needs to know | .23 |
| | | Faith in scoring | .54 |
| | | (Response tendency) | .15 |

*Background characteristics from Step 2 are still included in the Step 3 analysis, but are not reported separately in this table due to their statistical nonsignificance.

ual response tendencies, by themselves, explain a considerable amount of variance in attitudes toward specific devices. Coefficients across the 13 regressions ranged from $\beta = .29$ to .51 (all significant at $p < .001$), with the four largest effects observed for honesty tests ($\beta = .51$), personality inventories ($\beta = .45$), psychological assessments ($\beta = .43$) and drug tests ($\beta = .39$). These findings reinforce the value of repeated-measure designs in identifying and controlling for individual response tendencies (see also Dreher, Ash & Hancock, 1988), particularly on "controversial" judgments that elicit relatively wide differences of opinion.

Step two reveals that applicants' demographic and background characteristics were not strongly associated with their reactions to selection procedures. As a set, these variables resulted in an increment to $R^2$ of only .03. Additionally, across the thirteen regressions, only nine of the 141 ($11 \times 13$) individual difference coefficients were significant at $p < .05$. This is almost exactly the number that would be expected to result from Type I errors alone. Moreover, the addition of these variables had only a small impact on general response tendencies (average $\beta$ was reduced by only .03 to .34), suggesting that response tendencies are not predictable on the basis of easily-observed demographic or background characteristics.

By far the strongest predictors of attitudes toward the thirteen scenarios were the specific beliefs about each procedure. Of particular importance was faith in scoring ($\beta = .54$), followed by perceived need to know ($\beta = .23$) and expected self-performance ($\beta = .08$). It is also interesting to note that the addition of these variables substantially decreased the coefficients for individual response tendencies (to an average of $\beta = .15$), although all remained significant at $p < .05$. This finding suggests that individuals' attitudes toward selection devices can be predicted, in part, on the basis of their general faith in scoring procedures and their general beliefs about how much employers need to know about applicants.

## DISCUSSION

For organizations concerned about the impressions created by their selection procedures, the most important finding concerns the payoff to using job-content-based devices. Of the thirteen scenarios, the three with the clearest job-relatedness all ranked in the top four positions. Thus, present results expand upon earlier findings of favorable reactions to content-valid devices, extending them beyond work samples (e.g., Schmidt, et al., 1977; Cascio & Phillips, 1979) to simulation-based interviews, scenario-based essays, and business-related achievement tests.

Moreover, two of the three (written simulation and business-related test) involved written formats, which are typically more disliked than face-to-face exchanges (Hakel, 1982; Linn, 1982). Given that the simulation scenarios presented in this questionnaire were described as "complex" and also that simulation questions are less predictable than many other selection procedures, it would appear that applicants are not averse to difficult procedures so long as they are couched in content-valid terms. The speculation that applicants do not automatically dislike hard questions is consistent with evidence from Connerley and Rynes (1992), who found that recruiters who asked hard questions were perceived more favorably than those who did not.

Another interesting result concerns the finding that reactions to ability tests were substantially improved by framing items around business-related topics. This is important because even though test usage continues to grow, applicants remain somewhat skeptical of test validity. Thus, present findings lend support to Anastasi's (1988) recommendation that test developers work to increase the contextual relevance of ability tests for employment purposes.

In making this recommendation, however, we concur with Smither and Pearlman's (1991) caution that to make test content *too* specific might have a number of negative consequences (such as sending the wrong signal about what is being selected for, disqualifying bright applicants who have not had specific training, reducing validity generalizability across job types, or increasing applicants' abilities to artificially inflate scores through coaching). Still, there would not appear to be any inherent reason why items could not be developed to tap the full range of mathematical, inferential, and deductive abilities (Colberg, 1985) in more contextually relevant ways.

Another central finding concerns applicants' general neutrality toward personality inventories, drug testing and honesty tests. The absence of distinctly negative mean reactions is consistent with prior evidence concerning drug testing and, to a more limited extent, honesty testing (e.g., Ryan & Sackett, 1987a). Having said this, however, it should be noted that the scenarios described in this study were quite "straightforward" relative to some of the procedures currently in use. For example, while our personality scenario indicated that individuals would be evaluated on the "big-five" personality dimensions (e.g., conscientiousness, stability), some of the devices currently under litigation contain items about such characteristics as bowel functioning, sexual deviance, and misogyny (Bible, 1990). As such, the best way of interpreting our results is probably to say that the typical applicant does not have strong inherent prejudices against these procedures, at least in the abstract.

Beyond descriptive results concerning particular devices, our find-

ings also yield preliminary evidence concerning characteristics that differentiate liked from disliked procedures. Specifically, of the characteristics most frequently mentioned by the 41 original pretest subjects, results suggested that the most important differentiator was faith in the evaluation system, followed by perceptions of employers' need to know and, at a distant third, beliefs about likely self-performance.

The finding that expected self-performance is less important to subjects' attitudes than other characteristics is consistent with findings by Reilly, Stoffey and Millsap (1991). In their study, (real) applicants' test results had less effect on their attitudes toward the employing organization than did their perceptions of the test's fairness. In other words, both studies suggest that perceived characteristics of the procedures themselves overshadow applicants' self-interest in forming their opinions. Although attitudinal studies are always susceptible to social desirability biases, the fact that Reilly and colleagues' study involved real applicants and actual test feedback makes these conclusions considerably less suspect.

Finally, our results suggest that attitudes toward selection devices do not vary much by demographic and background characteristics. However, this result should not be overgeneralized to vastly different populations (e.g., Arvey et al., 1990), or across all possible variants of a given procedure. For example, it is possible that women or minorities might object to *particular* personality tests or interview questions, while not feeling any differently than white males toward such procedures in general.

## FUTURE RESEARCH

One of most basic research needs is to integrate future studies of applicant acceptability into a broader selection framework. For example, utility analysis would suggest that any gains in applicant attraction (for example, through stepped-up content validation efforts) must be balanced off against possible increases in developmental or administrative costs (e.g., Boudreau & Rynes, 1985). Similarly, it is important to develop a better understanding of the relationship between applicant acceptability and empirical validity. Fortunately, the present study suggests that validity and attraction are often consistent and that where they are not (e.g., ability tests), they might possibly be made more consistent by increasing contextual relevance. However, more explicit and far-ranging investigations are needed to determine whether there is some point at which increasing acceptability becomes counterproductive in terms of predictability.

Additional experimental research on applicant reactions would also be helpful. Of particular help would be experimental designs that exam-

ine alternative forms of the same procedure under carefully controlled conditions. For example, to date we know very little about applicant reactions (liking, perceived fakeability or difficulty) to different types of interviews (generic, past-oriented behavior description, future-oriented simulation). Additional research on interviews would be very helpful, given their near-universal application and the wide variety of procedures currently in use (Lyness, 1991).

Another fruitful area would be to conduct additional research into *who* is attracted by particular selection procedures, and who is repelled. The present study, like others before it, showed wide individual differences in attitudes toward certain procedures, but yielded little in the way of reliable personal predictors of those differences. Clearly, in some cases employers use particular selection devices (e.g., drug or honesty testing) to *discourage* certain types of applicants. Moreover, there is at least minimal evidence that these procedures are having the desired effects. For example, Murphy and colleagues (1990) reported that drug users have less favorable attitudes toward drug tests, while Smither and Pearlman (1991) reported that high-ability applicants perceived ability tests to have higher validities.

However, our pretest suggested that there are some highly desirable applicants (with high grade point averages and multiple job offers) who react very negatively to devices such as drug testing, honesty testing, and psychological assessment. Perhaps our understanding of the sources of individual differences would be hastened by focusing more intensively on those subsets of people who dislike a procedure. An alternative approach might be to examine whether the way in which selection devices are presented and communicated to applicants makes a difference.

Finally, future research should be devoted to examining not only pre-hire effects on applicant pools, but also post-hire experiences after jobs have been chosen. For example, our pretest revealed a small subset of subjects who had very positive reactions to drug testing because they believed it signalled a high-efficiency orientation on the part of the employer. In a sense, these applicants regarded the presence of a drug test as a reliable signal about the day-to-day work environment. However, to the extent that organizations are screening applicants for drugs but doing little else to improve efficiency, new hires may become disillusioned in much the same way as when jobs are oversold by zealous recruiters. In short, it would be valuable for applicants (and employers) to understand just how much "signalling value" there really is in the use of selection procedures.

Demographic projections suggest that applicant attraction will become more important in the future, particularly at high education and skill levels. Regardless of market conditions, however, attraction is always important when you are trying to acquire the very best candi-

dates. Our research provides initial clues as to how to make the selection process maximally attractive to job applicants.

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