

**RECRUITMENT RESEARCH AND
APPLICANT ATTRACTION:
WHAT HAVE WE LEARNED?**

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Abstract

Developing labor shortages are increasing the importance of recruitment to organizations. However, previous recruitment research has provided few operational guidelines for persuading high quality candidates to apply for, and to accept, job offers. This is because most recruitment research has either ignored major independent variables (e.g., vacancy characteristics), and/or focused on dependent variables other than applicant attraction or job choice (e.g., turnover). Suggestions are made for increasing the relevance of future recruitment research to applicant attraction.

INTRODUCTION

As anyone who follows staffing research knows, recruitment has received far less attention than selection (Guion, 1976; Rynes, Heneman & Schwab, 1980; Schmitt & Coyle, 1976). In part, this result reflects the generally loose labor market conditions that prevailed over the past twenty years; with an excess of applicants, employers spent most of their time "sifting and winnowing" rather than attracting.

Today, however, the situation has changed. Recent demographic developments (e.g., the baby bust, slowed increases in female labor force participation rates) are expected to lead to widespread labor shortages well into the twenty-first century (Johnston, 1987). Indeed, shortages are already apparent in certain sectors of the economy (Bernstein, 1987).

Along with tighter labor markets has come renewed interest in recruitment. Employers have been experimenting with a variety of attraction techniques, such as upgrading campus recruitment programs (Hanigan, 1987), enhancing employment inducements (e.g., Merrill, 1987; Tannen, 1987), and conducting marketing research to attract job applicants (Krett & Stright, 1985; Stoops, 1985).

Given the renewed emphasis on organizational recruiting, it is an appropriate time to assess what previous recruitment research has revealed about applicant attraction. However, as will soon become apparent, previous research leaves many major questions unanswered. Thus, suggestions are made for increasing the relevance of future research with respect to applicant attraction.

PREVIOUS RESEARCH

The vast majority of previous recruitment research has examined one of three variables: recruiters, recruiting sources, or realistic job previews (Rynes, in press; Schwab, 1982). Each of these literatures is summarized below in terms of its implications for applicant attraction.

Recruiters

In recent years, a large number of field surveys have been conducted in which recruiter characteristics are correlated with a variety of dependent variables designed to reflect applicant attraction (e.g., perceived job attractiveness, likelihood of further job pursuit, likelihood of accepting an offer; e.g., Harris & Fink, 1987; Schmitt & Coyle, 1976). However, the variables in these studies have almost invariably been perceptual, rather than behavioral, in nature. As such, recruiter behaviors have not been explicitly linked to actual job choice decisions. Nevertheless, it is instructive to review the evidence concerning recruiter characteristics and applicant perceptions and intentions.

On the independent variable side, the most frequently studied recruiter characteristics have been recruiter demographics and applicant perceptions of recruiter personality and/or behavior. In terms of demographics, recruiter age, sex, and race have occasionally been associated with overall impressions of recruiters per se (Rogers & Sincoff, 1978; Wyse, 1972).

However, there is little evidence that demographics have important effects on other dependent variables, such as job

attractiveness (e.g., Harris & Fink, 1987). Indeed, only one study (Taylor & Bergmann, 1987) reported a relationship between any recruiter demographic (in this case, sex) and any outcome other than overall recruiter impression.

In comparison with demographics, perceived recruiter personality and behaviors appear to have a greater impact on applicants' overall impressions of recruiters (Rynes, in press). Moreover, they also correlate more strongly with broader outcomes (e.g., perceived job attractiveness) as well.

Still, as with demographics, there are reasons to doubt whether recruiter personality or behaviors have substantial impacts on actual job choices. First, most of the studies showing significant effects have been conducted at the point where recruiters would be expected to have their greatest impact (i.e., immediately following the initial employment interview). It seems likely that recruiter effects recede later in the choice process, as applicants learn more about actual vacancy characteristics. Indeed, the only longitudinal study of this type found that the few significant recruiter effects following the initial interview were no longer significant at subsequent recruitment stages (Taylor & Bergmann, 1987).

Second, although recruiter studies have not assessed behavioral outcomes, the closer the dependent variables get to actual job choice (e.g., choice intentions), the smaller the effect sizes become. As one example, Schmitt & Coyle (1976) reported that six factor-analytically derived recruiter traits explained 46% of

the variance in perceived recruiter pleasantness, 23% in likelihood of further job pursuit, but only 11% in likelihood of offer acceptance. Similarly, Harn & Thornton (1985) found that recruiter counseling behaviors explained 47% of the variance in perceived recruiter warmth, but only 13% in willingness to accept a job offer. Similar patterns have been observed in other studies as well (e.g., Harris & Fink, 1987; Rynes & Miller, 1983).

Third, most recruiter research has ignored the impact of vacancy characteristics (e.g., pay, advancement opportunities) on applicants' perceptions and intentions. Because job and organizational attributes clearly play an important role in job choice, their omission may result in serious inflation of estimated recruiter effects (James, Mulaik & Brett, 1982).

Indeed, in the few cases where recruiters and job attributes have been jointly investigated for their impact on choice intentions, results show that effect sizes for job attributes substantially exceed those for recruiters (e.g., Powell, 1984; Rynes & Miller, 1983; Taylor & Bergmann, 1987). In fact, after controlling for job attributes, only Harris and Fink (1987) reported significant relationships between recruiter behaviors and job choice intentions.

Finally, previous field researchers may well have attributed more variance to recruiters than actually warranted. Specifically, field data have been gathered following employment interviews, which obviously present information about job attributes as well as recruiters. Because recruiter and job attribute information are

acquired simultaneously, they are completely confounded as potential "causes" of choice intentions.

Despite this confound, previous researchers have assumed (via their analyses and interpretations) that recruiters influence perceptions of job attractiveness, but not vice versa. For example, the typical analysis regresses a series of dependent variables (e.g., perceived job attractiveness, pursuit intentions) on perceived recruiter personality and behaviors, thus implying that recruiters "influence" each of these outcomes.

An alternative possibility, of course, is that perceptions of job attractiveness spill over onto perceptions of recruiters. If so, previous researchers may well have attributed variance to recruiters that was actually attributable to job attributes.¹

In summary, evidence suggests that recruiters influence applicants' perceptions and stated intentions with respect to job opportunities. However, the dependent variables that are most strongly associated with recruiter characteristics are conceptually far removed from actual job choice, and share substantial common method variance with the independent variables. Moreover, when applicant reactions are measured (1) late in the recruitment process or (2) in concert with job attributes, recruiter effects decline or disappear entirely.

Thus, the employer wishing to attract more (or better) job applicants will not find much support for the notion that improved recruiter performance will enhance applicant attraction. It should

be noted, however, that prior research has not directly tested this proposition.

Specifically, recruiters have been studied as "naturally occurring phenomena", rather than as strategic recruitment variables subject to improvement through selection, training, and feedback. Thus, field experiments designed explicitly to improve recruiter performance would be particularly helpful in determining whether recruiters can indeed influence job choices, over and above vacancy characteristics.

Recruitment Sources

At least two distinct hypotheses have been proposed as to why recruitment sources (e.g., college campuses, newspaper advertisements, employee referrals) might influence recruiting outcomes. First, it has been suggested that some sources provide better information to applicants than others (Ullman, 1966; Breaugh, 1981). Presumably, such sources permit better matching between individual abilities and job requirements, and between individual work preferences and organizational climates (Wanous, 1980). Thus, sources that provide accurate, detailed information may yield different kinds of applicants and acceptees than less informative sources.

A second possibility is that different sources yield applicants with differing personal characteristics (Schwab, 1982). For example, employee referrals may provide more highly motivated applicants because employees "pre-screen" individuals to a greater extent than do other sources (e.g., Ullman, 1966).

Although several attempts have been made to test these hypotheses, results have been inconsistent across studies (Rynes, in press; Wanous & Colella, 1988). More importantly, the methodologies employed to date have been inadequate for testing either hypothesis.

Specifically, source studies have been concerned with explaining post-hire rather than pre-hire outcomes (i.e., turnover, satisfaction, performance), and have been based on selectee samples rather than applicant samples. Thus, presumed differences across sources on pre-hire variables (individual differences, differential pre-hire information) have merely been inferred from differences in (1) post-hire outcomes (e.g., turnover) by source, (2) post-hire selectee characteristics (e.g., prior work experience) by source, or (3) retrospective perceptions of information acquired at the time of choice.

Unfortunately, inferences to applicant pools cannot be made on the basis of selectee characteristics (Boudreau & Rynes, 1985); nor can post-hire outcomes be used to infer pre-hire processes. Moreover, it should be recognized that lack of information about pre-hire effects precludes unambiguous determination of the reasons for differences in post-hire outcomes as well.

For example, even if selectees from different sources differ in job performance, we do not know whether the original applicants from those same sources differed in performance potential. Similarly, when turnover differences are observed across sources, one cannot distinguish between source-related differences in: (a)

initial applicant pool characteristics, (b) employer hiring selectivity, (c) applicant job choice selectivity, (d) information transmitted, or (e) post-hire treatment of new hires by employers.

In summary, the focus of prior research on "recruitment sources" has not been recruitment, but rather retention, performance, and satisfaction. Moreover, the failure to examine relationships between recruitment sources and pre-hire variables has resulted in ambiguity concerning post-hire findings as well. Consequently, recruitment sources should be investigated in terms of the characteristics of applicants generated, not only selectees retained.

Realistic Job Previews

Realistic job preview (RJP) research has also focused more on post-hire than pre-hire outcomes. Indeed, the major premise of this research is that certain attraction tactics (e.g., "overselling" a vacancy) may create difficulties in the longer run (e.g., low satisfaction, increased turnover; Schneider, 1976; Wanous, 1980). Thus, the main question in realistic preview research has been whether (and why) the presentation of more "realistic" pre-hire information might reduce subsequent turnover.

Two broad categories of explanations have been offered as to why RJPs might lead to reduced turnover. One category focuses on post-hire employee adjustment processes, including coping, commitment, and met expectations hypotheses (e.g., Reilly, Brown, Blood & Malatesta, 1981). However, we focus here on pre-hire

processes (e.g., applicant self-selection), as they are the only ones relevant to applicant attraction.

The self-selection hypothesis suggests that when employers provide realistic and detailed information, applicants are in a better position to assess the fit between vacancy characteristics and their own personal needs, qualifications, and motivations. This in turn enables those whose needs are unlikely to be met to self-select (i.e., withdraw) from the application process. Thus, those applicants who remain are presumably better suited to the organization, and hence less likely to quit.

To date, the self-selection hypothesis has not been adequately tested. First, only about half of previous RJP studies have even attempted to assess self-selection; the rest have focused solely on post-hire outcomes. Second, meta-analyses of these studies appear to be highly sensitive to sampling variations.

For example, in an initial meta-analysis of ten RJP studies that measured job acceptance rates, Premack and Wanous (1985) observed no differences (in acceptances) across RJP and control conditions. However, after omitting an "outlier" study with 1260 subjects, the mean effect size increased from .00 to .12. Thus, although Premack and Wanous concluded that realistic previews do cause applicant self-selection (1985, pp. 706 & 712), this conclusion would appear to be somewhat tenuous.

Third, even if one accepts the above conclusion, job acceptance rates are inadequate operationalizations for determining the psychological processes behind withdrawal decisions. This is

because acceptance rates, by themselves, reveal nothing about the characteristics or motivations of those who drop out or reject job offers versus those who accept them. This is an important point, in that the precise nature of self-selection decisions has important implications for the overall utility of RJPs.

RJP proponents assume that self-selection and subsequent employee retention are driven primarily by the match between individual tastes and organizational climates (Wanous, 1980). An alternative possibility, however, is that applicants match themselves to organizations on the basis of perceived personal marketability and perceived quality of the vacancy. In other words, "good" applicants may pursue organizations with high pay, good growth potential, and desirable working conditions, while less qualified applicants pursue less desirable, but more attainable, alternatives (e.g., e.g., Weiss, 1980).

If so, realistic previews may have the strongest self-selection (i.e., withdrawal) effects on those applicants who have the most viable alternatives, particularly when the jobs in question (and hence, the corresponding RJPs) are objectively unattractive (e.g., tedious work, low pay, few advancement opportunities). To the extent that matching occurs on the basis of marketability rather than tastes, lower observed turnover among selectees would represent adverse self-selection on applicant qualifications, rather than better matching of tastes and climates.

Unfortunately, this possibility has not been tested, as previous researchers have not measured specific characteristics of

offer recipients versus nonrecipients, or job acceptors versus rejectors.² However, these issues are of obvious importance to employers who want to know the implications of RJPs for attraction of high-quality applicants. Obviously, improved employee retention adds less to overall utility when acceptees are inferior to candidates lost earlier from the applicant pool.

Descriptive survey research has shown that the vast majority of employers use "marketing" (rather than realistic) approaches to recruitment precisely because they hope to obtain maximum job acceptance rates from desirable candidates (e.g., Stoops, 1984). Understandably, employers are wary of what will happen to their recruitment programs if they are the only ones who "tell the whole truth, and nothing but the truth." To date, realistic preview research has not assuaged their fears.

What is being suggested here is not that RJPs cause adverse self-selection on applicant quality; the requisite evidence simply does not exist. Rather, the point is that the ultimate costs and benefits of realistic previews depend on both pre- and post-hire outcomes. As such, more careful attention to the impact of RJPs on applicant and acceptee characteristics is warranted.

Summary of Previous Research

A review of previous recruitment research suggests that many important questions about recruitment and applicant attraction remain unaddressed. For example, virtually no guidance exists concerning: (1) the implications for applicant attraction of recruiting through top-tier versus lesser-ranked sources, (2) the

relationship between pay levels and applicant quantity and quality, (3) the effects on job offer acceptance of manipulating vacancy characteristics (e.g., starting salary, career paths, hours of work), (4) whether systematic recruiter selection and training improves the quantity or quality of job takers, or (5) whether RJPs work differently with applicants of differing quality, or with highly desirable versus less desirable jobs.

In order to answer these and other neglected questions, recruitment research will have to branch out in new directions. More specifically, future research must: (1) place more explicit emphasis on pre-hire outcomes (e.g., job application, withdrawal, and choice behaviors) as important dependent variables; (2) examine a broader range of determinants (i.e., independent variables) of job search and choice decisions, and (3) pay more attention to the cognitive processes involved in job search and choice decisions. These points are elaborated throughout the remainder of the paper, using Figure 1 as a guide.

(Insert Figure 1 about here)

NEEDED RESEARCH

Overview

At the most general level, it is recommended that future researchers place a higher priority on studying the effects of recruitment on pre-hire decisions and behaviors. Although turnover and other post-hire variables are also of obvious importance to overall utility calculations, the nature of their relationship to recruitment should be kept in perspective.

First, recruitment is not the primary management technique for influencing post-hire outcomes such as turnover or performance. However, it is the major technique for influencing applicants' job choices.

Second, it needs to be recognized that even post-hire effects cannot be fully understood unless pre-hire processes are also taken into account. For example, in most previous studies of post-hire outcomes, differences in application, dropout, or job choice behaviors among different kinds of applicants represent plausible competing explanations to (assumed) differences in post-hire adjustment processes (see also Meglino, et al., 1988).

Third, it is quite true that attempts to attract high-quality applicants through "marketing" tactics might prove counterproductive if such practices merely lead to earlier, more frequent turnover. However, observed effect sizes for post-hire behavioral outcomes (i.e., performance and turnover) have been very modest. For example, Premack and Wanous (1985) report corrected mean correlations of .03 between RJPs and performance, and .06 between RJPs and job survival. These correlations are hardly so large that they render pre-hire processes and outcomes unimportant or uninteresting.

As such, future recruitment research should place greater emphasis on attraction-related (pre-hire) dependent variables.

Dependent Variables

As the previous review indicated, diverse dependent variables have been employed as indicants of applicant attraction (e.g.,

impressions of recruiters, job acceptance intentions). Generally speaking, however, the vast majority of previous research has examined either applicant perceptions or behavioral intentions. Thus, almost no recruitment research has focused on the attraction variables of greatest interest to employers (i.e., decisions to apply, to withdraw, or to accept or reject job offers; Figure 1).³

To date, researchers have implicitly assumed that conclusions about job choices can be drawn on the basis of information about perceptions and intentions. However, perceptions and intentions are actually quite different from real job choices (see also Rynes, Schwab, & Heneman, 1983). For example, stating one's perceptions or intentions is a completely "costless" exercise. In contrast, real job choices involve serious opportunity costs: accepting one offer precludes accepting others. Unfortunately, we have virtually no information about how preferences or intentions are converted into actual choices.⁴

Another suggestion in the area of dependent variables would be to break down the "multicollinearity" that has developed between independent and dependent variables in previous recruitment research. That is, studies of recruiters have examined pre-hire outcomes, while source and RJP studies have focused primarily on post-hire ones. The ideal solution would be to incorporate both pre- and post-hire measures into single investigations. Of course, this would also necessitate a shift from one-shot research designs to longitudinal ones (e.g., Taylor & Bergmann, 1987).

At the most general level, evaluation of recruitment outcomes requires comprehensive utility calculations. Such calculations require far more information than has typically been collected in recruitment research, including: (1) recruitment costs, (2) both pre-hire and post-hire outcomes, and (3) numbers and productivity-related characteristics of job applicants, acceptors, and rejectors. However, because the first two considerations have been elaborated elsewhere (Boudreau & Rynes, 1985), the present paper focuses primarily on the third (see also Figure 1).

Independent Variables

To really understand the effects of recruitment on applicant attraction, independent variables other than recruiters, recruitment sources, and RJPs must also be taken into account. In particular, research is needed on variables that (1) might have sizable effects on the quantity or quality of applicants attracted, and (2) are at least partially subject to employer control. Three such variables are suggested here: vacancy characteristics, selection standards, and recruitment timing (Figure 1).

Vacancy Characteristics. With only a few recent exceptions (see Harris & Fink, 1987; Powell, 1984; Rynes & Miller, 1983; Taylor & Bergmann, 1987), recruitment researchers have ignored the role of vacancy characteristics (i.e., job and organizational attributes) in applicant attraction. This is rather puzzling, given that all major theories of job choice, as well as available empirical evidence, suggest that job and organizational attributes

are the major determinants of job search and choice behaviors (Schwab, et al., 1987).

For example, in every field survey (e.g., Harris & Fink, 1987; Powell, 1984; Taylor & Bergmann, 1987) or laboratory experiment (Rynes & Miller, 1983) that has simultaneously investigated recruiters and job attributes, attributes have been more strongly associated with choice intentions than have recruiters. In fact, recruiter effects have typically faded to nonsignificance once job attributes are taken into account (e.g., Powell, 1984; Rynes & Miller, 1983; Taylor & Bergmann, 1987; for an exception see Harris & Fink, 1987).

There is also experimental field evidence that modifying job attributes dramatically affects employers' ability to attract labor. For example, both the quantity and quality (as measured by aptitude test scores) of Armed Forces recruits have been shown to be highly sensitive to changes in such attributes as salaries, recruitment and retention bonuses, and educational incentives (Hanssens & Levien, 1983; Lakhani, 1988; Tannen, 1987).

Given that job attributes appear to be the major determinants of job choices, failure to include them (even as controls) in prior recruitment research has probably led to serious omitted variable biases (James, et al., 1982). Indeed, this bias is already apparent in comparisons of recruiter effect sizes where job attributes are, or are not, taken into account (Rynes, in press).

It seems so obvious that job attributes influence applicant attraction that it is difficult to understand why they have

received so little attention in prior recruitment research. One possibility is that vacancy characteristics are difficult to ascertain via applicant (as opposed to applicant and employer) samples. However, this does not not explain why more researchers have not examined applicants' perceptions of job attributes, much as they have examined their perceptions of recruiter behaviors.

A second possibility is that researchers have viewed job attributes as less theoretically interesting than other aspects of recruitment and attraction. Actually, however, many interesting psychological processes have been proposed concerning the relationships between job attributes and job choice. These include such phenomena as reservation level-setting (Reynolds, 1951), compensatory versus noncompensatory evaluation of job alternatives (Rynes et al., 1983), attribute signalling models (Spence, 1973), and applicant sorting models (e.g., Sheppard & Belitsky, 1966; Thurow, 1975; Weiss, 1980).

A third possibility is that researchers have simply assumed that job attributes are "givens" in the recruitment process. As an example, Wanous and Colella (1988) argue that it is not very useful to examine relative attribute and recruiter effect sizes in various contexts, because it is more difficult "to change the entire organization (or at least its image)" than to change recruiters through selection and training (p. 45).

It is certainly true that "entire organizations" are more expensive to modify than, say, recruiter presentations or recruiting brochures. However, many changes in vacancy

characteristics do not require changes in entire organizations. Moreover, not all changes in job or organizational attributes are equally expensive.

In fact, some relatively inexpensive modifications may reap large returns in terms of applicant attraction (not to mention employee retention). For example, provision of inducements such as flextime or on-site day care (even at the employee's expense) might attract more and better workers at rather minimal cost, because such nonstandard inducements clearly distinguish an employer from its competitors (see Rynes et al., 1983; Schwab et al., 1987).

Moreover, even in the case of "expensive" inducements (e.g., salary), it must be kept in mind that it is unit costs (i.e., productivity-adjusted costs) that determine cost competitiveness. Thus, employers can offer higher wages (or flexible hours, or child care) without suffering a cost disadvantage, so long as their other personnel policies (e.g., selection practices, performance standards) are structured to insure that they obtain better workers or higher effort in return (Weiss, 1980).

In the end, the net utility of modifying vacancy characteristics (or any other recruitment variable) rests on a comparison of relative costs and benefits (Boudreau & Rynes, 1985; Wanous & Colella, 1988). As such, it is an empirical question whether the expenses associated with modifying job attributes to varying degrees are more than compensated by increases in job acceptance rates, worker quality, or retention levels. Similarly, it is also an empirical question whether the net utility from

modifying various job attributes is greater, or less than, the net utility of modifying other recruitment practices (e.g., recruiters, RJPs). Such questions are critical to both theory and application; as such, they deserve greater attention in future research.

In summary, the limited attention paid to vacancy characteristics in recruitment research has had several unfortunate consequences. First, we have very little specific information about how vacancy characteristics, as the major determinants of job choice, actually figure into application, withdrawal, and job choice decisions. More specifically, we still do not know which job and organizational characteristics matter most in job choices, which are most cost-effectively manipulated for attraction purposes, or to what extent they must be manipulated in order to obtain desired outcomes under various conditions.

Similarly, we do not know the extent to which other recruitment variables (e.g., recruiters) make a difference in job choice, over and above vacancy characteristics per se. As mentioned earlier, the omission of job attributes from recruiter, recruitment source, and RJP research has probably led to inflated attributions of variance to these variables (for discussion of this point with respect to RJPs, see also Miceli, 1986; Reilly, Brown, Blood & Malatesta, 1981; Rynes, in press). Because vacancy characteristics are such dominant factors in job search and choice, they must be controlled or otherwise accounted for, even when researchers are not explicitly interested in manipulating them or

examining their impacts. Failure to do so will almost certainly lead to serious biases in obtained results (James et al., 1982).

Third, the failure to actively manipulate vacancy characteristics in recruitment research has slowed recognition of the fact that, at least within limits, job attributes are subject to strategic manipulation and cost-benefit evaluation. Indeed, employers appear to be far more aware of this fact than recruitment researchers (e.g., Bernstein, 1987; Merrill, 1987).

As labor shortages increase, employers will have to take more substantial actions than merely training recruiters or modifying recruitment brochures if they hope to compete for scarce, high-quality human resources. In short, they will somehow have to make their vacancies more attractive. By focusing more directly on the relationships between job attributes and applicant attraction, recruitment researchers could play a more useful role in helping organizations to determine the most cost-effective ways of increasing vacancy attractiveness.

Selection Standards. It also seems obvious that the ease of attracting new employees depends, at least in part, on the employers' selectivity with respect to such things as previous work experience, educational background, or socioeconomic status.⁵ Nevertheless, previous research has completely neglected employer selectivity as a determinant of recruitment outcomes.

According to institutional economists, employers raise and lower selection standards in accordance with changes in market conditions. Specifically, employers are assumed to initially

target recruitment activities toward the most desirable individuals they think they can get. However, if such individuals prove difficult to attract, employers are hypothesized to progressively relax their standards until all vacancies are filled.

Empirical evidence supports the notion that employers modify selection standards to fit market conditions (e.g., Kerr & Fisher, 1950; Malm, 1955; Thurow, 1975). For example, during World War II, employers sought women and handicapped applicants for jobs formerly filled by able-bodied male draftees. More recently, immigrants have been recruited for jobs that native-born citizens refuse to accept.

Thus, so long as there is some positive level of unemployment, employers appear likely to be able to fill most of their vacancies with somebody (see also Rynes & Boudreau, 1986). As such, the most critical measures of attraction success are not whether vacancies are filled, but rather with whom they are filled, and at what cost.

Thus, there is a need to move beyond purely quantitative assessments of attraction success (e.g., percent vacancies filled, job acceptance rates), to assessments of the productivity- and cost-related characteristics of those attracted. Even more specifically, applicant and acceptee characteristics should be evaluated in relation to (1) original (hoped-for) selection standards, and (2) characteristics of applicants who accept competitors' offers.

Unfortunately, attempts to measure specific applicant characteristics present considerable difficulties, the first of

which is deciding what characteristics to measure. Obviously, productivity-related characteristics (e.g., general abilities, prior job-related achievements) are critical to overall utility calculations. In addition, however, it may be important to measure other characteristics that, although not clearly linked to productivity, seem likely to influence the relative marketability of job applicants and hence, the ease and cost of attracting them (e.g., demographics, school prestige; Arrow, 1972; Spence, 1973).

Additional difficulties are encountered in attempting to compare applicant and acceptee characteristics with original selection standards, or with those of competing employers. Nevertheless, employers might attempt to determine (1) how applicant and acceptee characteristics change in response to changing position specifications, (2) whether acceptee characteristics exceed or fall short of a priori selection standards, (3) whether eventual acceptees are the candidates deemed most desirable by recruiters and hiring managers, (4) whether the best, or worst, candidates are attracted from various sources (e.g., more versus less expensive or prestigious), and (5) whether applicants who accept job offers differ in significant ways from those who reject them.

In summary, previous theory and research suggest that employer selection standards affect job acceptance rates, and that acceptance rates per se are inadequate measures of applicant attraction. Thus, studies that incorporate both selection standards and specific applicant/acceptee characteristics would

considerably enhance knowledge of the relationships between recruitment practices and applicant attraction.

Recruitment timing. A third little-studied variable that may influence recruiting outcomes is recruitment timing. For example, it has been hypothesized that long delays between recruiting phases may increase applicant dropout rates by (1) decreasing applicants' expectations of receiving a job offer, or (2) increasing financial pressures to accept other offers.

Consistent with these hypotheses, Arvey, Gordon, Massengill & Mussio (1975) reported a significant increase in applicant withdrawals over time, particularly among minority applicants. However, Taylor and Bergman (1987) found no relationships between recruitment delays and any of their dependent variables.

Indirect evidence suggests that other timing issues may be important as well. For example, Reynolds (1951) and others (e.g., Soelberg, 1967) have argued that job seekers develop inherent preferences for first job offers, provided they do not contain some minimally unacceptable feature (e.g., insufficient salary). Job search is costly, time-consuming, and anxiety-producing; as such, applicants are hypothesized to favor "sure" alternatives over uncertain ones, all else equal.

These hypotheses suggest that employers who practice early recruitment may have a competitive advantage in attracting applicants. In cyclical recruiting markets (e.g., college recruitment), this might argue for early entry into the recruitment cycle, perhaps even well before graduation (e.g., hiring student

interns as juniors). In noncyclical markets, it may mean "planting a seed" well in advance of actual vacancies (e.g., calling an already-employed individual to test his or her interest).

Timing may also have implications for applicant quality. For example, if highly qualified candidates generate offers more quickly than others, firms that delay recruitment may find only less qualified individuals still available. Indeed, indirect evidence of a negative relationship between worker quality (proxied by re-employment wages) and length of unemployment has been reported in the economics literature (Lippman & McCall, 1976; Schwab, et al., 1987).

Of course, there may be other factors or boundary conditions that argue against early recruitment. For example, early recruitment may be unwise if employers are unsure of what vacancies will actually exist when applicants are ready to accept job offers. In that case, what is gained from early contact may be lost through perceived recruiter evasiveness or subsequent delays in producing actual offers. Similarly, if efficiency wage theories are correct, highly qualified applicants will not jump at early interviews unless those who offer them are also highly desirable employers.

In summary, there are reasons to believe that recruitment timing might have important effects on the size and quality of the applicant pool. Moreover, timing, like vacancy characteristics, may well be subject to greater employer control than is commonly recognized. Thus, timing issues would seem to merit greater attention in future research.

Decision Processes

Most theoretical speculation about recruitment processes has focused on post-hire rather than pre-hire outcomes (e.g., Reilly et al., 1981; Wanous, 1980). However, if the economics and decision literatures are also taken into account, one can find many interesting hypotheses concerning how applicants seek and choose among job alternatives. Because these issues have recently been reviewed elsewhere (Schwab, et al., 1987), they will be mentioned only briefly here.

Application and Search Behaviors. Before applicants can make job choices, they must first conduct job searches. Thus, one important question concerns how job seekers decide to apply to some organizations, but not others. This is a crucial decision from the organization's perspective: if individuals do not apply, there will be little opportunity to influence their choices through recruitment activities.

Given the lack of specific information early in the job search process, it seems likely that application decisions are based heavily on general impressions of organizational attractiveness. As such, one useful direction for future research would be to determine the major components of organizational image, and whether any of them can be cost-effectively modified or communicated to improve applicant attraction.

A wide range of other variables have also been hypothesized to influence application and job pursuit behaviors. For example, in addition to organizational attractiveness, application decisions

have been hypothesized to depend on job search strategies, expectancies of receiving offers, self esteem, job search anxiety, costs of search, social influences, convenience, timing, and even chance (e.g., Dyer, 1973; Glueck, 1974; Ellis & Taylor, 1983; Kilduff, 1988; Lippman & McCall, 1976; Rynes & Lawler, 1983; Sheppard & Belitsky, 1966; Soelberg, 1967; Ullman & Gutteridge, 1973).

Whatever the true determinants of job pursuit behaviors, application decisions are critical to the employment matches that eventually emerge. As such, researchers should devote more attention to the ways in which these decisions are made.

Withdrawal, Acceptance, and Rejection Decisions. After some period of job search, most applicants generate one or more employment offers. At present, very little is known about how they make decisions to accept or reject these offers.

The following issues are still in contention regarding job choice processes: (1) whether job seekers evaluate alternatives according to absolute or relative standards; (2) whether (or to what extent) attractive vacancy characteristics can compensate for unattractive ones; (3) whether timing of offer receipt causes perceptual distortion of received offers (in relation to offers that may still be forthcoming); (4) whether perceived expectancy of receiving an offer influences perceived attractiveness as well, and (5) whether (or under what conditions) applicants seek to maximize, versus satisfice, in job choice (e.g., Reynolds, 1951; Rynes &

Lawler, 1983; Rynes, et al., 1983; Schwab, et al., 1987; Soelberg, 1967).

In concert, answers to the above questions may hold important implications for recruitment timing, for the design of vacancy characteristics, and for recruitment strategies vis a vis individual applicants (see Schwab et al., 1987). As such, the roles of timing, order effects, evaluation standards, and uncertainty in job choice would appear to merit greater future research attention.

Finally, job seekers confront yet another form of uncertainty that may have important implications for the design of recruitment messages. Specifically, some attributes (e.g., quality of supervision, likelihood of promotion) typically cannot be known with much certainty prior to actual employment. Additionally, information about some vacancy characteristics (e.g., actual starting salary, likely career paths) comes later in the process than others (e.g., industry, company size).

These features suggest that information acquired early in the recruitment process may have a disproportionate impact on applicants' decisions. Another possibility is that attributes that are known with certainty prior to job choice (e.g., industry, pay level, extent of unionization) act as cues regarding unknown characteristics (e.g., assumed financial health of the organization, employee relations climate; Einhorn, Kleinmuntz & Kleinmuntz, 1979; Spence, 1973).

To the extent that such phenomena occur, certain attributes (e.g., those revealed early, or with greater certainty) may take on greater importance in job choices than they would under perfect information. As such, they may require more careful strategic deliberation in terms of design and communication.

Discussion

At present, very little is known about the processes that lead applicants to apply for, and choose, certain alternatives over others. In part, this is because inadequate methodologies have been employed to investigate process questions.

For example, one-shot correlational field studies have typically been used to test causal hypotheses. Additionally, post-hire outcomes based on current employee samples have been used to infer the pre-employment decision processes of job applicants (including non-selectees and job rejectors, who are no longer in the sample). Finally, differences in outcomes that are devoid of process information (e.g., job acceptance rates) have been interpreted as implying particular mental processes (e.g., applicant matching of tastes and preferences) to the exclusion of others (e.g., matching of employee and employer quality or selectivity).

While some hypotheses have been inadequately investigated, others remain almost entirely uninvestigated. To some extent, this is probably attributable to the fact that recruitment and applicant attraction processes have rarely been conceptualized in comprehensive fashion. For example, prior researchers have tended

to study either the campus interview stage or the initial post-hire period, ignoring all decisions and behaviors that occur before, after, or in-between. Similarly, most investigators have examined only one aspect of recruitment at a time (i.e., only job sources, only RJPs, or only recruiters).

By more explicitly delineating the wide range of independent, dependent, and process variables that affect applicant attraction (Figure 1), it is hoped that future researchers will paint a more complete picture of the recruitment and applicant attraction process.

SUMMARY

The recruiting environment is rapidly changing. Labor shortages are emerging where surpluses have long existed, bringing with them a renewed interest in the question of how to attract high-quality applicants.

A review of previous recruitment research reveals that little is known (in a specific, operational sense) about how to improve one's chances of getting high-quality candidates to apply for, and to accept, job offers. This is the result of a variety of factors: (1) the majority of recruitment research has focused on post-hire rather than pre-hire outcomes; (2) even when research has focused on pre-hire outcomes, actual search and choice behaviors have been dramatically understudied relative to perceptions and intentions; (3) important determinants of search and choice behaviors have been largely ignored (e.g., vacancy characteristics, employer selection standards); (4) most findings have been based on one-shot

correlational field surveys, rather than on laboratory or field experiments or carefully controlled longitudinal research, and (5) the mental processes involved in decisions to apply, withdraw, accept or reject job offers have been largely inferred, rather than explicitly investigated.

Demographic and labor market trends insure that recruitment will continue to grow in importance, regardless of recruitment research. However, future research could be made far more useful by placing at least as much emphasis on applicant attraction as on employee retention, and by studying recruitment in a broader context than has been typical of most prior research.

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Footnotes

1. Harris and Fink (1987) attempted to eliminate the problem by controlling for pre-interview perceptions of job attributes, and then examining only incremental recruiter effects on post-interview attribute perceptions. However, adding a pre-interview control does not alter the fact that interviewer and attribute information were still acquired simultaneously in the interview, but causally interpreted (i.e., with interviewer characteristics as independent variables, and perceived job attributes as dependent variables).

2. Meglino, DeNisi, Youngblood, & Williams (1988) did measure specific characteristics of job quitters (rather than applicant dropouts). However, the "previews" in their study were administered after selectees had already reported to work. As such, the previews did not influence job choices, and were actually socialization (rather than recruitment) devices.

3. These dependent variables have occasionally been addressed in other literatures, particularly the economics and decision literatures (for a review, see Schwab, Rynes & Heneman, 1987). However, because such studies are often designed from the job seeker's perspective (e.g., Reder, 1978; Ullman & Gutteridge, 1973), it is generally difficult to interpret such studies in terms of implications for employers.

4. This issue has been addressed in expectancy theory research, but methodological difficulties (questionable causality, demand characteristics) prohibit concluding that obtained results actually reflect true mental processes (Schwab, et al., 1987).

5. Economists have developed models showing how variables such as race, sex, and socioeconomic status can become "signals" of presumed productivity in the absence of more direct productivity information (Arrow, 1972; Thurow, 1975). As such, non-productivity-related variables may affect applicants' relative marketability, asking price, and ease of attraction.

Independent Variables

Recruiters

Sources

Realistic previews

Vacancy characteristics

Selection standards

Recruitment timing

Decision ProcessesJob application and
pursuit processesJob acceptance, withdrawal
and rejection processesDependent VariablesPerceptions

Organizational image

Job attractiveness

Impressions of recruiters

Likelihood of receiving offers

Intentions

Likelihood of further pursuit

Likelihood of job acceptance

Behaviors

Number and characteristics of:

Applicants

Withdrawals

Acceptees

Rejectors

Figure 1. Recruitment and Applicant Attraction