

ORGANIZATIONAL RECRUITMENT ENHANCING THE INTERSECTION OF RESEARCH AND PRACTICE

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"In the old days, hiring was a leisurely affair. The resumes would dribble in by mail and the first candidates wouldn't be called for weeks. It might take two months for the whole process to run its course. The new era is about speed. Resumes are sent by fax. Managers rush through the applications. Employees are hired within a week." (White, 1998)

"Cambridge, Mass. - Totally Apocryphal Technologies (TAT), a fast-rising player in the rapidly expanding field of genetic engineering, recently announced that it would proceed with a controversial program to take tissue samples from top-performing members of its engineering, sales, and management staff. Rather than using the samples to screen for illegal drug use or pre-existing medical conditions, TAT hopes to use its recently developed human-cloning technology to address a critical lack of available talent. In a recent statement, TAT CEO Hugh R Keating described the project as 'a logical application of our core technology in what continues to be an extremely tight labor market'." (Caggiano, 1998)

The expanding economy of the 1990s is experiencing its ninth straight year of growth in the United States (Smart and Berselli, 1998). Unemployment levels have fallen to their lowest levels in the last 25 years, and the ratio of probable workers to probable retirees is predicted to fall from its current rate of 4:1 to 3:1 by 2020 (Caggiano, 1998). In the midst of these significant environmental changes, recruitment has emerged as arguably the most critical human resource function for organizational survival and success. Firms in a variety of sectors, including banking, and food service, in addition to the well-recognized high technology industries, are finding themselves engaged in fierce, and continuing battles with their competitors for the recruitment of the best and brightest new hires. By definition, these individuals must possess state-of-the-art knowledge and skills that will allow their firms to compete effectively in an increasingly global and sophisticated marketplace. In addition, they also must possess the potential to shape a future where human resource demands are largely unknown at this point. For many companies, recruiting has become an essential tool in ensuring that they have the human resources necessary to achieve their current strategic direction and to continue innovating and growing in the future.

Perhaps not surprisingly given these developments, the bar has been raised significantly for organizational recruitment programs. Employer after employer has found that established recruitment sources are no longer adequate to compete for talented employees in a highly competitive and sophisticated marketplace (White, 1998). Thus, growing numbers of organizations are experimenting with new methods and sources of recruitment, although to the best of our knowledge, none has attempted the employee cloning strategy noted in the second lead quotation (a spoof vignette published by *INC. Magazine*).

How have recruitment practices changed in response to the tight labor market pressures? A few brief examples will suffice for the present. Cisco Systems, a rapidly growing California-based networking firm, has replaced virtually all of its

prior recruitment advertising (for example, newspaper, radio, etc.) with the Internet-based recruiting programs that are specially targeted to the desired applicant population. Based on their own market research that most job-related web entries are received from employed candidates searching the Internet during work hours, Cisco provides job browsers easy to access fake computer screens in case a boss or co-worker enters the room unexpectedly. However, web-based recruiting is not Cisco's only foray into non-traditional recruitment sources. The firm routinely acquires five to six new companies per year in order to fuel its rapid growth with the proven and talented employees of other firms. Recognizing that acquisitions in and of themselves do nothing to prevent valued talent from walking out the door when another employer takes over, Cisco has identified a method of orientation, accommodation, and enculturation that allows them to retain virtually the entire technical staffs of its acquisitions (Nakache, 1997). Another example of innovative recruitment can be found in the practices of the well-known McKinsey Consulting Group. In response to the chronically tight consulting market, McKinsey now places "open" advertisements in international business publications, such as *The Economist* (1997). The ads state that in order to obtain the "right candidate" (whose characteristics are described in detail in the ad), McKinsey will now accommodate the candidate's own availability, rather than its own timetable for recruitment.

The previous examples encourage one to ask whether organizations struggling to revamp their recruitment programs can receive much assistance from the existing conceptual and empirical recruitment literature. Specifically, how closely do newly evolving recruitment practices follow the body of existing? What is known about the strategic impact that recruiting has on organizations as entities? Looking toward the future, what can be done to bring the domains of recruitment research and practice closer together? These are some of the questions addressed in this chapter.

DEFINITION, CHAPTER SCOPE, AND ROADMAP

In examining the intersection of recruitment research and practice, we have followed a common practice of limiting our discussion to the topic of external recruitment, the attraction of those not yet employed by the organization to apply for membership (Barber, 1998; Rynes, 1991; Taylor and Giannantonio, 1993). We also exclude the topic of employee selection, which is covered in another chapter within this text (see chapter 10). We incorporated these boundaries in order to provide a more in-depth discussion of external recruitment (hereafter referred to as, simply, recruitment), rather than a relatively weaker coverage of a larger body of content.

Concurring with Barber (1998) that it is more appropriate to define recruitment by its intent, rather than by its effects, we propose the following definition:

Recruitment includes the set of activities undertaken by the organization for the primary purpose of identifying a desirable group of applicants, attracting them into its employee ranks, and retaining them at least for the short term.

This definition borrows heavily from Barber's (1998) own while also incorporating our belief that at least short-term, if not long-term, employee retention is a recruitment objective.

A roadmap of the chapter shows it beginning with a summary of academic recruitment literature in order to establish what is known about the effects of recruitment practices and what remains unknown. However, in light of the recent publication of a major and comprehensive research book on recruitment (Barber, 1998), we have chosen not to develop this review in the depth and detail that already appears elsewhere. In the following section, we provide several examples of recruitment practices developed in the last three years by organizations operating in highly competitive marketplaces and in the midst of an expanding economy. The latter part of this section examines the relationship between newly emerging recruitment practices and the body of existing research

findings, drawing conclusions about how closely related the two are and the desirability of strengthening their interrelationship. The third section of the chapter proposes a change in perspective for recruitment research, recommending that it become more macro and strategic in nature. Using the resource-based view of the firm as a theoretical foundation, we address the question of why the practice of recruitment might be expected to add value to organizations by providing them with a sustained competitive advantage. This section also reviews existing empirical evidence relevant to this analysis. Finally, the chapter concludes with a series of recommendations for both recruitment research and practice that are intended to bring the two domains closer together in the future. We turn now to a summary of the research literature.

RECRUITMENT RESEARCH IN THE LAST DECADE

Much like the practice of recruitment, the volume and nature of recruitment research has changed dramatically in the last two decades. As Rynes noted in a 1991 handbook chapter, the volume of empirical literature on recruitment at that time required a 50-page review paper that far exceeded the single page of coverage given to the topic in the 1976 handbook (Rynes, 1991). She also concluded that in the 15-year interim between the two publications researchers had made great strides in explaining how recruitment may impact applicant and employee behavior.

Table 12.1 Evaluation of current knowledge base

Major topics		Activity	
<i>Actor</i>			
Applicants		Substantial information available; generally the focal point of research	
Organizations		Little understanding of their actions; better understanding of how they are affected	
Organizational agents		Often treated as passive; rarely considered as unique actors	
Outsiders		Minimal knowledge of potential effects	
<i>Activity</i>			
Defining a target population		Almost no information	
Choice of source/medium		Some knowledge of consequences of choice	
Message delivery		Substantial information on some topics	
Closing the deal		Some knowledge of why and how applicants choose job, little understanding of recruitment activities dealing with job offers/choice	
Administrative processes		Limited knowledge on some issues	
<i>Outcomes</i>			
Attraction		Good understanding of effects of some aspects of recruitment, e.g. reactions to recruiters; little understanding of effects, other aspects, e.g. image	
Post-hire outcomes		Good understanding of effects of some aspects of recruitment, e.g. RJPs and sources; little understanding of effects, other aspects, e.g. recruitment activities subsequent to initial job interviews	
Organizational performance		Little knowledge	
Other outcomes		Relatively little knowledge of long-term impact on agents or other employees	
<i>Context issues</i>			
Internal		Almost no knowledge	
External		Almost no knowledge	
<i>Phases</i>			
Generating applicants		Significant knowledge of some issues, e.g. recruitment source effects; little or no knowledge of others, e.g. image	
Maintaining applicant status		Focus of most recruitment research, but little attention to anything beyond the initial interview	
Influencing job choice		Significant knowledge of some issues, e.g. choice process; little or no knowledge of others, e.g. impact of post-offer recruitment activities	

Source: Used with permission, Barber (1998).

More recently, Barber (1998), found sufficient conceptual and empirical literature to devote an entire book to the topic of recruitment. Organizing her review around five

dimensions of recruitment (actors, activities, outcomes, context, and phases), she concluded the text with a summary of what is known and what knowledge is needed in each of the five areas (see table 12.1 for a summary). As table 12.1 indicates, recruitment researchers have amassed a great deal of knowledge about the way applicants respond to particular recruitment activities (especially about recruiter effects in the early stages of the process), about recruitment source effects, and about the impact of realism in recruitment message (primarily the realism they contain). There is also a limited amount of information on how and why applicants choose a job. However, there is little or no research at the macro or organizational level of analysis, as opposed to the individual applicant level, and virtually no attention has been given to the impact that contextual issues (for example, the level of unemployment) may have on recruitment practice effectiveness. Using Barber's conclusions as a starting point, in table 12.2 we summarize the knowledge principles underlying these findings, as well as the degree of confidence that appears warranted at this stage of the research. For a further explanation of these findings, we refer the reader to Barber (1998).

Despite clear advances in recruitment research findings, however, it is important to realize that both Rynes (1991) and Barber (1998) independently noted that recruitment research had generally fallen short in terms of its contribution to practice.

Concluding that recruitment research has ignored central issues of critical importance to employers, Rynes (1991) identified the following unanswered questions:

1. How to invest a limited amount of money to spend on recruitment so as to reap the greatest return?
2. What content to include in recruiter training in order to recoup the investment in training expense through enhanced acceptance rates or higher applicant quality?
3. How to attract high quality applicants despite a firm's inability to pay market wages and salaries?
4. How to enhance the organization's distinctiveness in the recruitment market for applicants?
5. What is the utility of recruiting for applicants at first, rather than second tier universities?
6. When to begin campus recruiting in order to attract the greatest number of quality applicants?
7. What are the components of organizational image, and how does a firm go about changing a poor one?

Similarly, Barber's summary of the known and unknown recruitment areas (see table 12.1) reveals a paucity of research about how organizations:

1. Make recruitment decisions or are affected by them;
2. Define applicant populations and motivate applicants to apply;
3. Persuade applicants to accept offers once the hiring decision is made;
4. Initiate recruitment activities in order to affect their own performance;
5. Respond to the external and internal context for recruitment such as the external labor market or their own business strategies.

In summary, two major reviews of the recruitment literature published in the last decade indicate that the majority of research to date has focused on applicants and their reactions, rather than on organizations, their external or internal context factors, or their performance. While agreeing with Barber (1998) that some level of focus on applicants' reactions is appropriate and important for recruitment research, we are alarmed by a continuing preoccupation with this level of analysis. Research focused around how applicants react to individual recruitment practices, rather than the effects of practices at the organizational level seems to us to hold strong negative implications for the practical usefulness of recruitment research findings. If so, we might expect to find evidence to this effect in a review of current recruitment practices and a comparison of these practices to the recruitment knowledge prin-

ciples in table 12.2, taken from research findings. We turn now to a review of the applied recruitment literature during last three years.

Table 12.2 Principles obtained from recruitment research

<i>Finding</i>	<i>Confidence level</i>
<i>Attracting applicants</i>	
1. Informal recruitment sources yield more positive outcomes than do formal sources with respect to performance, job satisfaction, absenteeism, and turnover	Low
2. Recruitment sources have an effect on the characteristics of applicants' attracted	Medium
3. Recruitment materials have a more positive impact on applicants' reactions when they contain more, rather than less, specific information about job and organizational characteristics, such as salary, location, and diversity/fairness	Medium
4. Organizational image influences applicants' initial reactions to potential employers	Medium
<i>Maintaining applicants' interest and involvement</i>	
5. The effects of initial recruitment activities are likely to be strongest for applicants who have a greater number of job market opportunities	Medium
6. Recruiter demographics have a relatively small effect on applicants' attraction to the organization	Medium
7. Selection predictors used during recruitment influence applicants' reaction to the organization, with more invasive (e.g., personality, drug tests), and seemingly less accurate predictors yielding more negative effects	Medium
8. Realistic job previews (RJPs) have a negative effect on subsequent turnover	High
9. RJP Effects on turnover are stronger for more intelligent, more committed and more experienced applicants	Medium
10. Applicants' early recruitment experiences with activities and recruiters provide signals about hidden or missing job and organizational information	High
<i>Influencing job choice</i>	
11. RJPs negatively affect job acceptance decisions although whether this is due to the intended self-selection effect is unknown	Medium
12. Recruiter warmth has a large and positive effect on applicants' decisions to accept a job	High
<i>Conceptual</i>	
13. Both the individual differences and realistic information hypotheses seem to explain part of the recruitment source effects	Medium
14. RJP effects are explained at least in part by the fact that employees become more committed to employers who are honest enough to provide them with realistic information and enable them to make their job decision based on a complete set of information	Medium
15. Applicants' beliefs about the existence of a "good fit" between their subjective factors as needs, values, and interests and personality influence their job choice decisions	High
16. Both compensatory and non compensatory decision models explain applicants' job acceptance decisions, indicating that situational factors may be moderating when a particular model is used	Medium

CURRENT RECRUITMENT PRACTICE

Without question, one of the most important contextual issue facing US employers today is the tightness of the labor market. After more than nine straight years of economic expansion, the US unemployment rate has fallen to its lowest level in 25 years, hovering around 4.5 percent, with some areas characterized by rates below 3 percent (May, 1998). Because tremendous economic growth has occurred in high technology industrial sectors, these firms were some of the first to feel the pinch of a labor market that was under-supplied with critical skilled employees (such as computer scientists, engineers, software programmers). However, the high-tech sector is far from the only industry experiencing recruitment problems. In a recent article on recruiting in a tight labor market, May (1998), an industrial psychologist working in the private sector, identified several new strategies that employers have developed to better cope with these contextual factors, including: (1) casting a wider net to hire applicants; (2) capitalizing on technology; (3) using financial incentives; and (4) creating better places to work. In the following sections, we examine a

variety of recruitment practices that companies have devised within each strategy.

Casting a wider net

This strategy typically includes targeting a broader range of potential applicants than has previously been considered, and the use of new, innovative practices to reach potential applicants whose existing qualifications meet position requirements.

Joe Martineq, the CEO of Productive Data Systems, an IT staffing and services company in Colorado, provides an example of the first type of "casting a wider net" strategy. Martineq formed a non-profit company called Technology Transfer Solutions that helps high school-equivalency students obtain entry-level IT jobs. Although Martineq's company does not directly benefit from the non-profit organization because it does not hire entry-level IT employees, he recognizes that a strong recruitment program requires a long-term effort (Caggiano, 1998).

Similarly, Tracor, a defense contractor, has undertaken a more instrumental approach to casting a wider net. Experiencing difficulties in hiring database programmers at its Maryland facilities because of the extremely tight labor market, Tracor now takes unskilled workers and teaches them database skills in a newly developed training program (Behr, 1997). Bosch, an auto parts manufacturer in Charleston developed a two-year apprenticeship program for high school students. Successful completion of the program provides them with an associate degree and the skills needed to manufacture sophisticated products (Siekman, 1998). Targeting a different non-traditional group, Protek Electronics, a \$9 million electronics designer and manufacturer in Florida, found that, with some additional training, physically and mentally challenged individuals obtained through a local Easter Seals office became tremendous assets on the assembly line. Ultimately the demand for these employees grew so high over time that it exceeded the supply in the local Sarasota Florida area.

Still other companies have developed recruitment practices for attracting applicants across large geographical areas. Tired of struggling to recruit new production employees in an already tight Arizona labor market, Allied Signal targeted qualified workers currently living in cold weather cities and plied them with stories about the warmth of Arizona (Siekman, 1998). The firm placed advertisements in newspapers in several cold weather cities and then paid for the relocation of qualified production employees who were willing to make the move.

In perhaps the most sophisticated approaches to long-distance applicant attraction, Boston-based Fleet Inc. decided to broaden its geographic net by choosing new metropolitan statistical areas (MSAs) from which to recruit. The company used a four-factor model to select appropriate MSAs from which to recruit: high concentrations of desired knowledge and skills; existing favorable migration patterns from the targeted area to Fleet's home location in Boston; higher than average unemployment levels; and comparable housing costs. Fleet's results revealed that the best yielding areas were those having a large employment base with strong target SIC concentrations, high total northeastern mover ranks, above-average unemployment, and housing costs comparable to the northeast (McBride, 1997).

In a different version of this "cast a wider net" strategy, other firms have chosen to move their manufacturing plants to locations where an abundant and qualified workforce already exists. Siemens Automotive moved one of its manifold assembly plants from Windsor, Ontario to Lima, Ohio because this area had a large pool of skilled manufacturing employees who were looking for work after their employer lost its government defense contract (Siekman, 1998).

In yet another version of the "cast a wider net" strategy, employers are now initiating the intense networking activities that formerly were left up to an abundant applicant population in times of looser labor markets. Kathi Jones, a recruiting manager at Aventain Corp., arrives at the airport an hour early when traveling for

business in order to search the business luggage tags of other travelers for competitors' names. She then attempts to involve the luggage owners in employment-related conversations. Barry Brodson, co-founder of Domino Equipment Co., constantly searches for talented construction specialists, one of his firm's core positions. He gathers as much information as possible about appropriate individuals and searches for opportunities to become acquainted and entice the person into changing companies (Munk, 1998).

Cisco Systems, the rapidly growing San Jose networking company mentioned earlier in this chapter, treats its recruitment program as a marketing campaign, where it pulls out all stops to market its jobs to talented outsiders. This approach has apparently worked well since Cisco has been able to grow at the rate of 1,000 new employees per quarter in the last two years. Targeting passive people who are happy and successful in their present companies, the firm has carefully studied this population to learn the nature of individuals' hobbies, when they would look for work, whose recommendations they would trust with respect to accepting a new position, and so on. Based on this research Cisco relies heavily on the Internet as a recruiting source, supplemented by newspaper ads that list the Internet address. The firm's recruiters frequently visit micro brewery festivals and antique shows (identified as hobbies of the target applicant pool) and hand out business cards with the company's web address. Although Cisco's innovative recruitment practices are now being copied by many of its competitors, the company's human resources staff report that they are not worried because, much like Cisco's regular customer products, it is common practice to make HR practices obsolete in six to twelve months (Nakache, 1997).

Another aspect of taking a marketing orientation to recruiting is to treat it as a continuing ongoing activity that never stops. Cathy Lanier, president and owner of Technology Solutions Inc., a \$3.3 million technology-staffing firm in South Carolina, never discards a resume once received. Rather, every resume is entered into a database and updated every two years via a mailed query to the potential applicant in order to see what knowledge and skills individuals have added to their repertoire, along with current location, salary range, references, and a permanent contact address (Caggiano, 1998).

Other organizations are casting a wider net by varying either the content or source of their recruitment advertisements. Signal Corp., an information-technology services provider in Fairfax, Virginia, places humorous ads poking fun at its founder (for example, getting hit in the face with a pie to emphasize casual day, etc.) in the *Washington Post*. i-Cube, an IT consulting firm located in Boston, dropped its traditional recruitment ads in the *Boston Globe* in favor of renting billboard space right outside Logan Airport. Touting the company as a great place to work, the billboards have yielded many more applicants than did the far less visible, one time newspaper ads (Caggiano, 1998).

Finally, firms like Indus Corporation, a Vienna Virginia systems integration company, have chosen to cast a wider net through acquisitions in order to obtain desired high-tech talent. In 1996 alone, Cisco acquired 12 companies, retaining virtually all their employees, including 1,300 from one company alone. However, Indus CEO Shiv Krishnan warns that the cultural fit between the two firms has to be right, or newly acquired employees will leave, sticking the employer with nothing but huge acquisition costs (Caggiano, 1998; Nakache, 1997).

Capitalizing on technology

This strategy uses previously unknown recruitment sources, such as the company's web page, Internet-based job search services, specialized chat rooms (for example, those for Java programmers), etc., to recruit highly sought after professionals. Often these techniques can tap into applicants who were difficult or impossible to reach with

traditional recruitment methods. Cisco Networking has been a leader in this respect, developing a "push-pull" technology to attract potential applicants. Through a combination of computer programs and hardware, the firm can determine where visitors to its web site have logged on from and direct those from rival companies to a special site announcing job openings at Cisco. Once further advanced, the technology could be applied to any one of a number of popular web sites (such as ESPN, Dilbert, and the like).

Note, however, that employers do not have to be from high-tech industries to benefit from computer-based recruitment technologies. Tiffany and Co. recently recruited applicants for two corporate sales positions by using a computer-based search of an online database in addition to running traditional newspaper advertisements. The database source yielded over 600 potential fits, which were later narrowed down to 25 ideal candidates. Overall, the computer-based search yielded a very workable pool of applicants in a much more efficient and timely manner than the more traditional newspaper advertisements (Weingarten, 1998).

Use of financial incentives

This strategy attempts to attract potential employees through the payment of financial incentives to new employees themselves, current employees who refer them to the company for hire, or to third parties who help make contact with desirable applicants. Many firms are using derivatives of this strategy. Schneider National, a Green Bay Wisconsin trucking firm, pays a \$1,000 signing bonus to new recruits in areas with tight labor markets, such as Baltimore. Schneider also allows its best (safest and most productive) drivers to choose the company's dedicated accounts, thus giving them a more regular work schedule than its other drivers. Revenue Systems Inc., a Georgia software firm, has leased new BMW roadsters for its entire workforce of 40-odd employees as well as the 30 or so new employees it will hire this year. Why? The prestigious, highly visible, and fun-to-drive bonus will provide employees with a daily reminder that "life in general and their jobs at RSI are G-O-O-D" (Smart and Berselli, 1998). In the MBA labor market, signing bonuses are a well-institutionalized means of attracting sought after MBAs to a company's workforce. Recently a top graduate from Harvard received his choice of either a \$40,000 sign-on bonus or full tuition remission from a recruiting company. High-tech organizations that cannot afford to pay high starting salaries are using a different type of incentive, stock options offering employees the potential to become millionaires if the company is successful and goes public. This particular recruitment strategy has been so effective that the large consulting firms have been losing top MBA candidates to high-tech startups (Taylor, 1998).

Other companies are simply using higher pay levels to attract potential employees (Siekman, 1998). Proctor and Gamble relies on its higher wage level, which pays about \$4 above the local market average, to build a huge pool of potential employees and thus be more selective in hiring. Nucor Steel which pays well above the market average in its regional area, recently received 3,700 applications in five days for 90 openings. Carpenter Technology, a stainless steel producer in Pennsylvania, credits its wage level (paying \$3 above market average) as the primary determinant of its ability to attract a large pool of potential applicants.

Better place to work

Increasingly firms are also focusing on enhancing their desirability as places to work as a recruitment strategy. This may be done in a variety of ways: by matching people to jobs more carefully to increase their likelihood of success; enhancing the intrinsic rewards present in the work itself; training managers to lead more effectively; helping people cope with workplace change; increasing employee involvement in organ-

izational decisions; creating more career opportunities within the firm; and facilitating employees' ability to balance life and work such as telecommuting and casual dress. Bill Ziercher, CEO of Sterling Direct Inc., a direct-marketing and communications company in Missouri, successfully made his firm a fun place to work with the help of ongoing "contests" that promoted cooperation and teamwork. Brett Brewster of Mitec Controls repeatedly lost high-tech recruits to larger firms. He responded by dividing the firm into five limited-liability corporations headed by a single account manager who worked with one to three test teams. Brewster paid teams based on the profitability of their contracts, a process that gave employees greater insights into how profits are produced in the business and thus, greater control over their own income levels (Caggiano, 1998). Progressive Car Insurance, based in Mayfield Village, Ohio, drastically increased its pool of interested applicants by changing to a casual dress environment allowing employees to work flexible hours, and offering telecommuting options (Munk, 1998). Finally, Corning has successfully lured workers away from higher paying jobs to work in its Charleston, South Carolina, fused silica production facility because of its work environment and potential long-term career opportunities (Siekman, 1998).

HAS RECRUITMENT RESEARCH INFORMED RECENT PRACTICE?

The creativity and persistence displayed in many of the above recruitment practices are quite impressive. Yet, to what extent have these employers been able to draw on recruitment research findings in development? Our bottom-line assessment is "some but not nearly enough." In the following paragraphs, we explain the basis for this conclusion.

The stimuli for much of the development of new recruitment practices has been rapid and large-scale changes in the contextual or environmental factors that firms face while trying to compete in their marketplaces. A growth economy, record low unemployment rates, and increasingly sophisticated job requirements are all examples of such contextual factors. Yet as Barber (1998) concluded, there has been virtually no research on the way various contextual factors affect the nature of recruitment activities or whether they moderate the impact of various practices on organizational-level performance. It should be noted that several of the recruitment strategies cited in the practice section of this chapter were proposed in prior conceptual papers on recruitment. For example, a paper by Rynes and Barber (1990) proposed that organizations may rely on both special applicant groups (for example, physically or mentally challenged, high school equivalency applicants) and the broad use of financial incentives to enhance their ability to fill position vacancies. These strategies are clearly present in the "cast a wider net" and "use of financial incentives" practices mentioned earlier. Yet despite the fact that they were advanced almost a decade earlier, Rynes and Barber's (1990) proposals have stimulated virtually no research. Nor does existing research provide much insight into the relative utility of recruiting less qualified applicants and training them on the job versus recruiting fully qualified ones, or recruiting proven employees currently working in other areas of the firm and retraining them to meet position requirements in tight labor markets.

Similarly, while there is a moderate body of work on the effectiveness of different recruitment sources (for example, Blau, 1990; Breaugh and Mann, 1984; Williams et al., 1993), many findings about source effectiveness are weak and inconsistent across studies (Barber, 1998). Furthermore, the effects of new sources, such as web-based recruiting or the searching of resume databases have not been examined, much less compared to those of more traditional sources (such as search firms, newspaper). In summary, we are aware of no empirical research that has examined the vast majority of recruitment practices described earlier. Further, existing research does not inform practitioners about the relative utility of using one particular strategy over any of the others or over a combination of different strategies.

Nevertheless, it is quite possible and very likely that the knowledge principles identified from recruitment research may explain why some of the newly emerging recruitment practices are reportedly so successful. For example, from past research findings we know that providing more, rather than less, information about job vacancies and about life inside the organization tends to result in more positive or favorable applicant reactions, both attitudinal and behavioral (see table 12.2, principle 3). Further, such effects are often strongest for highly sought after applicants who have greater job market opportunities, such as those in high technology industries (see table 12.2, principle 5). In addition, the networking activities undertaken by recruiters like Kathi Jones at Aventain Corp., seem likely to stimulate strong applicant perceptions of recruiter warmth, perceptions repeatedly found to yield positive applicant reactions in a number of studies (see table 12.2, principle 12). It is also true that recruitment activities have been shown to affect applicants' reactions and their subsequent job decisions, by providing signals about the status of other, as of yet, unseen job attributes (see table 12.2, principle 10).

The effects of many of the recruitment practices described above may also be explained by the fact that they build awareness of, and/or an initial attraction to, the organization among a population of applicants who were previously unaware of it. For example, Barber and Roehling (1993) found that postings containing extreme or unusual information about job attributes were more likely to attract individuals' attention, causing them to pay attention to the relevant attributes. This finding may account for the success of tactics like Signal Corp.'s humorous ads stressing the casual nature of its work place or i-Cube's use of recruitment billboards outside Logan Airport in Boston.

The new recruitment practices discussed above also may be successful because they provide potential applicants with complete or unique information about attributes that, in turn, increase their interest and desire to pursue the company. Research findings suggest that this may be particularly true for incentive-based recruitment strategies or better place to work ones. At least three studies (Cable and Judge, 1994; Rynes et al., 1983; Williams and Dreher, 1992) found that pay policies had a significant effect on the decision to apply. Honeycutt and Rosen (1997) reported that companies promoting a flexible career path were seen as more attractive by executive MBAs and MBA alumni. Thus, it appears that recruitment practices depicting unusually good working conditions may increase applicants' attraction to a given organization.

In summary, although findings from recruitment research have potential for explaining the effects of many of the newer recruitment practices reviewed in this section, there is virtually no direct empirical evidence. Thus, the research-practice gap continues to loom large in the area of recruitment, with very little actually known about the effects of these practices on applicants' reactions and/or on company performance, the types of companies that tend to implement them or about the environmental contexts that they face. A discrepancy of this size in a practical, rather than a basic, research area such as recruitment is simply unacceptable. Thus, we propose that a change of noticeable scope is long overdue for recruitment research, a change that is reflected in the level of analysis, conceptual background, and methodology of this area. The following section develops the logic behind our recommendation that researchers begin to view recruitment from a macro or organizational perspective, study the ways in which recruitment practices add value to the organization and help it sustain an advantage over competing firms, and examine a wider variety of practices from different organizations and environmental contexts in order to identify relative and combined effects. These proposals are explained more fully in the next section of the chapter.

STRATEGIC RECRUITMENT

Increasingly, managers and human resource professionals have become interested in the ways in which an organization's employees may contribute to its performance and in

how human resource practices may be used to develop the employee attributes that subsequently yield strategic advantage for the firm (Pfeffer, 1998). During the last decade, this area of research, termed strategic human resource management, has flourished. It examines human resource systems from a macro or organizational perspective and asks whether the set or bundle of human resource systems that organizations design and implement subsequently impacts their financial performance, and if so, how.

A growing number of strategic human resource researchers (Barney and Wright, 1998; Becker and Huselid, 1998; Wright et al., 1994; Lado and Wilson, 1994) have argued that this area of study is best grounded theoretically in a resource-based view of the firm (Barney, 1991; Wernerfelt, 1984). This view focuses on how resources and competencies internal to the firm can be a source of sustained competitive advantage. Thus, it is arguably an appropriate conceptual framework for understanding recruitment effects at a macro or organizational level of analysis. According to the resource-based view, the resources of a firm can lead to competitive advantage when they create value for customers by lowering costs, providing something of unique value for them, or some combination of the two (Porter, 1985). Thus, if the programs, policies, and practices that firms use in managing their human resources are able to create value, they must do so by either decreasing the costs of its products/services, enhancing product/service differentiation in the eyes of customers or both (Barney, 1991).

Resources that lead to strategic advantage can be either tangible or intangible and include any number of assets, capabilities or processes that are both within the firm's control and capable of increasing either its efficiency or effectiveness in producing value for customers (Barney, 1991). Three distinct types of resources have been identified - physical and capital resources (for example, manufacturing plants, equipment, and finances), organizational capital resources (for example, systems of planning, controlling, and coordinating), and human capital. The organization's human capital, generally conceptualized as its employees, may add value through their skill levels, experience, judgment, intelligence, social relationships, insights, and so on. Wright and McMahan (1992) argued that systems or "bundles" of human resource practices can lead to sustained competitive advantage by helping firms to develop, integrate, and leverage their human resources in a manner that is consistent with the firm's business strategy. However, a resource can only be a source of sustained competitive advantage if the benefits it generates for a firm's customers cannot be duplicated or replaced by another resource held by a competitor (Barney, 1991). To more fully understand how a practice like recruitment can lead to sustained competitive advantage, we must consider the characteristics that are hypothesized to underlie this process. Barney (1991) originally proposed that in order to provide an organization with sustainable competitive advantage, a resource must satisfy four criteria: value; imitability; rareness; and substitutability. Recently, in extending the resource-based view to human resource management practices, Barney and Wright (1998) added a fifth criterion, organization. While concurring with the importance of viewing human resource practices as congruent bundles, rather than just as independent practices (Becker and Gerhart, 1996; Becker and Huselid, 1998), we also believe that recruitment must be studied as one of, if not the, most important human resource systems. Note that by occurring early in the temporal chain of interactions that applicants have with a firm, recruitment becomes, in effect, a gatekeeper, influencing whether individuals have the opportunity or the desire to continue their relationship with the organization, and thus whether they ever experience any other human resource systems (such as selection, compensation, or training and development). Furthermore, several studies have now demonstrated that recruitment activities and the agents who conduct them provide both direct information (Bretz and Judge, 1994) and signals about the nature of the firm's other human resource systems (Rynes and Miller, 1983; Goltz and Giannantonio, 1995; Harris and Fink, 1987; Rynes et al., 1991). These signals undoubtedly shape new employees' initial reactions toward the firm's other HR systems, once encountered (Bretz and Judge, 1994). Thus, we argue that it is quite important to consider how recruitment activities, in and of themselves, may be

a source of competitive advantage.

Can recruitment be a source of sustained competitive advantage?

In this section, we explore recruitment's contribution to organizations' sustained competitive advantage in greater detail by showing how it satisfies the five criteria proposed by Barney (1991) and Barney and Wright (1998).

Value

According to resource-based researchers, human resource practices can create value for an organization if they create greater efficiencies in labor costs or impact customers' perceptions of the product or service that they are receiving. Seemingly, recruitment has the potential to create value through both mechanisms. In the case of costs, published estimates of recruitment costs routinely place them in the thousands of dollars per hire (for example, Martin and Raju, 1992). Yet literature reviews and anecdotal evidence have frequently shown that a rigorous evaluation of recruitment, one going beyond the assessment of whether vacancies have been filled (Rynes and Barber, 1990), is apparently rarely conducted. Thus, survey research (Ostroff, 1995; Rynes and Boudreau, 1986) offers little evidence that recruitment source effectiveness is routinely assessed or that recruiters receive training on how to accomplish their tasks or feedback on their success in generating talented applicants. In short, it appears quite likely that organizations might enrich the quality of their applicant pools while simultaneously reducing their staffing costs through the more thoughtful design and follow-up assessment of their recruitment activities.

What might a thoughtfully designed recruitment system look like? Seemingly, it should focus on practices such as the efficient targeting of particular applicant populations, the identification of convenient, credible, and economical sources, the provision of abundant information about the firm that is desired by targeted applicants in order to make a job decision, and the rapid processing and evaluation of applicants so that job offers can be generated quickly, while the best candidates remain in the labor pool. Certainly, anecdotal evidence provided about the recruitment programs at highly touted firms such as Cisco Networking Systems, and Fleet Mortgage support this conjecture.

Similarly, it is likely that organizations also can reduce the typical costs of their recruitment programs by targeting applicant populations who are most likely to fit a given context and thus remain and succeed in that organization. Recently, a Center of Creative Leadership study reported that about 40 percent of all new management hires fail within the first 18 months on the job because of poor personal chemistry and cultural incompatibility (Fisher, 1998). Such job failures are clearly costly to both the organization and the individual managers. Anecdotal evidence from the study suggests strong recruitment influences. Many of the "failing" managers had multiple job offers from which to choose, and a strong vested interest in succeeding at the new position, rather than being back on the job market in 18 months. Yet they apparently failed to recognize that the new job was a poor fit in terms of personal chemistry and cultural compatibility. Given literally volumes of research on the effects of realistic job previews (that is, information such as how they work, what media make them work best, and so forth), it seems that a thoughtfully developed recruitment program also might reduce the costs associated with job failure.

Beyond the reduction of staffing costs, an organization's recruitment systems may create value indirectly, by attracting employees who are capable of enhancing the differentiation of the organization's products/services. This effect may be most likely in the case of service firms, where separating the service from its provider is recognized as a difficult discrimination for customers to make. The service provided by Southwest

Airlines provides a good example. Additionally, such product/service differentiation is also likely to result from recruitment programs in firms that rely heavily on product innovation for their continuing growth and success. In summary, recruitment programs that market an organization's jobs to targeted applicant populations chosen specifically because they possess the attributes considered central to the implementation of its strategy seem likely to enhance the level of differentiation present in its products and services and, thereby, its performance. Investors apparently recognize this linkage between product differentiation capability and recruitment program effectiveness. A recent Ernst and Young study reported that institutional investors are now more likely to buy stock based on a company's ability to attract talented people (Grant, 1998).

Furthermore, over time, one might also expect synergies to occur between strong recruitment programs yielding desirable candidates, and the organization's ability to recruit effectively in the future. That is, developing a reputation as an employer of choice should make it easier for firms to recruit other new applicants with these specialties, due to both word-of-mouth and the social networks of current employees.

Rareness

According to a resource-based view of the firm, value creation, although important, is insufficient to yield sustained competitive advantage. Human resource practices also must enable a firm to acquire or develop a rare set of attributes in its workforce that are not possessed by the employees of the firm's major competitors. Otherwise, the application of such characteristics would simply enable the organization to maintain parity with major competitors, not to outperform them.

As described previously, a firm's recruitment practices may allow it to both attract, and retain, at least in the short term, a workforce possessing rare combinations of valuable attributes. As an example, consider the labor shortages among high technology positions in the Silicon Valley. Some sources report as many as 50,000 openings in Silicon Valley firms, despite the fact that these are some of the highest paid positions in the nation (Chandrasekaran, 1997). Firms that have effectively developed a strategic set of recruitment practices are able to attract this rare talent, fill positions with qualified employees, and retain these individuals over time, in order to meet growth objectives. Cisco Systems has a current vacancy rate in technology positions of only 3 percent, very low compared to the regional average of 10 percent. The ability to attract rare talent at a much greater rate than its competitors allows Cisco to continue developing new innovations and to grow at a phenomenal rate.

Imitability

Both value creation and rareness are considered insufficient to increase competitive advantage in the long term, unless rare and valuable human resource characteristics prove difficult for competitors to imitate. A number of factors determine the imitability of a firm's human resources. These include the availability of unique attributes in the labor market, the causal ambiguity surrounding which human resource practices contribute most strongly to the acquisition or development of rare employee characteristics, the difficulty of replicating human resource practices that are deeply embedded in social relationships, such as team-based appraisal or compensation, and the impact of the organization's unique history in shaping its culture.

As an example of the role played by a combination of these factors, Southwest Airlines uses a multitude of recruitment practices including advertisements in their own inflight magazine, job fairs, the Internet, and employee referrals in order to generate huge applicant pools (over 126,000 applications last year). While any of these individual practices are easily imitated by competitors, the combined set of activities, including the way they are implemented by Southwest and the nature of the company's culture, yields an overall recruitment strategy that is virtually impossible to imitate. Thus, Southwest's

recruitment program is a source of sustained competitive advantage. Employment managers at Southwest carefully select a group of recruitment tools that are matched to the types of employees they are trying to target. In addition, the firm relies on its reputation as a "fun and challenging place to work" to attract individuals who will be well fitted to the customer-oriented culture that drives the company's success. Further, Southwest's reputation as a growing company that is very committed to its employees (no layoffs in its history) convinces potential employees that making an investment in this firm will be reciprocated on the part of the employer. Thus, while competitors may imitate some aspects of Southwest's recruitment activities, they are unable to integrate them with the other contextual elements, such as culture or reputation, that make Southwest's strategy so successful (Sunoo, 1995).

Substitutability

In order to be a source of sustained competitive advantage, there can be no strategically equivalent substitute for the relevant resource (Barney, 1991). This is the case because substitutes may be used by competitors to complete the same function or implement the same strategy. However, even when competitors are unable to duplicate the exact skills and abilities of a given firm, they can sometimes develop another resource and achieve the same advantage (for example, an employee decision-making ability may be replaced by an artificial intelligence system).

Recruitment appears to meet the criteria of non-substitutability in several ways. First, it seems unlikely that firms will be able to develop other resources to core skills and abilities that are particularly rare and valuable. For example, high-technology firms will be unable, at least in the foreseeable future, to develop replacements for software engineers or research scientists. Thus, the substitutability issue for these types of positions seems to depend on a firm's ability to develop a set of innovative practices that are equally as effective as their competitors. However, it may be proposed that the ability of a firm to develop an effective recruiting strategy for its context is, of itself, a unique competency requiring considerable effort and innovation. Thus, we expect that few firms are willing to make the investment necessary to develop innovative recruitment practices well-fitted to their context. Rather, most simply adopt fadish practices that appear to have worked effectively for other organizations. Therefore, by making a high initial investment in the development of appropriate recruitment practices, continuing to experiment with new practices chosen in light of the particular environmental context, and being willing to replace obsolete practices over time, firms should be able to avoid threats from competitors searching for substitutable practices.

Organization

Finally, if human resources are to be a source of sustained competitive advantage, firms must be organized to make full use of the value-creating, rare, and inimitable human resources that they employ. As Barney and Wright (1998) noted, it is common to find inconsistencies in the set of human resource activities implemented by organizations (for example, between the recruitment, selection, compensation, and appraisal systems used). Yet, a poor fit between practices often causes them to work at cross-purposes to one another. As an example, if recruitment practices target bright, motivated, team-oriented professional employees, while reward systems are individually-based, such a combination of structure and HR practices is likely to constrain an organizations' ability to fully utilize the valuable and rare human resources that it is able to recruit. As Barney and Wright (1998) concluded, the horizontal integration of human resource systems (such as compensation, selection, appraisal), rather than their isolated development and administration, is a critical requirement of the organization component of the resource-based view. At Cisco Systems, it appears that recruitment, an organizational culture stressing independ-

ence and achievement, and a supportive reward structure all contribute to the firm's ability to attract some of the most talented individuals in the networking industry, retain these individuals over time, and maintain high levels of performance. As company leaders describe it, "Our philosophy is very simple - if you get the best people in the industry to fit into your culture and you motivate them properly, then you're going to be an industry leader" (Nakache, 1997).

In summary, this section utilized the resource-based view of the firm as a conceptual framework for explaining how an organization's recruitment practices may contribute to its sustained competitive advantage. Although these proposals may be theoretically supported, it is also important to determine how well supported they are within the small but significant body of empirical research examining recruitment from the organization's perspective.

Empirical research on recruitment from an organizational perspective

A growing number of studies have empirically examined the impact of recruitment activities, often in conjunction with other HR practices, on measures of organizational performance. Because these studies have generally not investigated the ways in which recruitment or other HR practices affect performance, they cannot offer any evidence regarding the validity of our analysis of recruitment's contribution to organizations' sustained competitive advantage. However, they do provide a test of the overall impact of these practices at the organizational level.

Terpstra and Rozell (1993) conducted one of the first such studies. Assuming that key staffing practices yield better employees, who in turn contribute to higher levels of organizational performance, these researchers investigated the relationship of five staffing practices, including one in the area of recruitment (the use of follow-up studies of recruitment source effectiveness) to four indices of firm performance (annual profit, profit growth, sales growth, and an overall combined performance). Findings showed that firms conducting studies of recruitment source effectiveness also tended to display higher levels of performance in three separate industries, manufacturing (annual profit), service (sales growth, and overall performance), and wholesale/retail (annual profit and overall performance). Thus, the findings of Terpstra and Rozell (1993) provide some evidence that one recruitment practice (the evaluation of recruitment source effectiveness) is related to a firm's overall performance. It also suggests that recruitment effects may be stronger in some industries than others, perhaps due to contextual factors that limit how well recruitment practices are able to satisfy the criteria of sustained competitive advantage.

A study by Koch and McGrath (1996) proposed that organizations may gain competitive advantage from HR practices that lead to the development of a superior workforce with knowledge, skills, abilities, and personal traits that are more closely aligned with the firm's strategy. Using a cross-industry sample selected at the business level, the researchers examined the relationships between labor productivity and three HR practice sets: (1) investments in planning (operationalized as the use of procedures to identify the number of workers and skills needed to meet future business plans and as a firm's evaluation of its recruitment and selection systems); (2) investments in hiring (measured as the selection ratio and screening techniques to yield better individual-job fit); and (3) investments in employee development and productivity (measured as net sale/number of employees). Results revealed that of the three bundles of activities, planning had the greatest impact on productivity (measured as net sales/number of employees) although the effects of hiring were also significant. Overall, findings indicated that front-end HR activities such as planning, recruitment, and selection explained a significant percentage of variance in firms' productivity.

In a third study, Delaney and Huselid (1996) utilized data from the National

Organizations Survey (NOS) to examine the relationship of five staffing practice clusters to the performance of more than 700 profit and non-profit organizations. The inclusion of profit and non-profit organizations in the same sample necessitated the use of perceptual measures of performance: (1) perceived organizational performance; and (2) perceived market performance. Applicant pool size significantly and positively related to the organization's market performance. Thus, their findings lend further support to our proposition that recruitment practices may influence organizational performance.

Huselid (1995) also conducted a cross-industry, national survey that tested for linkages between a cumulative index of HR practices and organizational performance. He examined a broad array of HR practices, including appraisal, compensation, employee involvement and voice, promotion system policies, staffing (selection ratio, use of formal job analysis, employment testing), and training and development. Clearly, the item closest to recruitment in this set is that concerning the firm's selection ratio, the number of hires to applicants per key position vacancy. Controlling for a number of firm and industry characteristics, Huselid found that the group of practices clustered into two HR system indices, skills/structure and motivation/human resources, each of which was related to different measures of firm performance. The skills/structure index was positively related to turnover and productivity, while the motivation/human resources index was related to productivity. Although examining only combined indices of practices, this study did provide further evidence that recruitment activities, in conjunction with other HR practices, may affect firm performance.

Huselid and Becker conducted a similar study in 1996, refining their measure of HR policies and practices to obtain a more comprehensive picture of the firm's HR system and its relationship to competitive strategy. This study included both the earlier recruitment item (selection ratio) and a second one on the percentage of the workforce covered by a formal written human resource or staffing plan including recruitment and succession (Becker and Huselid, 1998). Results continued to reveal strong and significant relationship between HR practices and performance, again suggesting that recruitment activities, in conjunction with other HR practices, are related to organizational performance.

A final study at the organizational level of analysis, Williams and Dreher (1992), also is relevant because it examined the relationships between pay and benefit levels (recruitment practices that fall under the financial incentives and better place to work strategies) and organizational level measures of recruitment effectiveness (number of applicants attracted to an opening, time taken to fill a position, and job offer acceptance rate). Using a sample of 352 banks with teller position openings, Williams and Dreher (1992) found that both the number of applications received and acceptance rates were positively related to pay level. Although the amount of time a position remained vacant was negatively related to pay level, the authors speculated that this result was caused by a time lag between bank's observation that positions were remaining unfilled and their decision to increase the pay level. The level of benefits offered by the banks was not significantly related to any of the three outcomes. Thus, the research provides strong evidence for the existence of a positive relationship between pay level and several different short-term indicators of recruitment effectiveness at the organizational level.

In summary, six studies (Delaney and Huselid, 1996; Huselid, 1995; Huselid and Becker, 1997; Koch and McGrath, 1996; Terpstra and Rozell, 1993; Williams and Drehrer, 1992) have examined the relationship between recruitment and firm-level measures of performance. Each study provided support for the hypothesized positive effects of recruitment activities, although in two cases recruitment effects were combined with those of other practices as an overall index, rather than assessed separately. Thus, there appears to be fairly strong and consistent evidence regarding the role of recruitment as a correlate of firm performance, including one set of recruitment effectiveness measures. Given this fact, it is somewhat surprising to find that so many of the empirical studies investigating linkages between HR systems and performance have failed to include measures of recruitment activities (for example, Delery and Doty, 1996; Huselid et al., 1997; Wellborne and Andrews,

1996; Youndt et al., 1996). The absence of recruitment measures from such studies is particularly surprising given Becker and Huselid's (1998) conclusion:

"On the one hand ... the conceptual literature strongly suggest that an interrelated system of practices and policies forms an inimitable capability for strategy implementation. There is broad consensus that such HPWS (high performance work systems) would include rigorous recruitment and selection procedures, performance-contingent incentive compensation systems, management development and training activities linked to the needs of the business and significant commitment to employee involvement." (p. 63)

Unfortunately, despite existing support for the contribution of recruitment to firm's strategic advantage, few of the studies cited above actually examined the variables mediating the impact of HR systems such as recruitment on firm-level performance. Only Huselid (1995) has researched this issue and provided evidence that firm performance effects are at least partially mediated through employee turnover and productivity. These interim outcomes are certainly consistent with the notion that recruitment may add value to organizations by both decreasing their labor costs and providing a greater level of product or service differentiation. However, there is still a great need for further research that examines the relationship between recruitment and organizational performance, while also investigating the mediating variables that would provide further evidence on the validity of the "value-added" explanation. In the following section we offer recommendations for both research and practice in the hopes of strengthening the inter-relationship between these two domains.

RECOMMENDATIONS: RECRUITMENT RESEARCH AND PRACTICE

Prior sections of this chapter have illustrated that the body of recruitment research findings seems only tangentially related to current recruitment practices, suggesting that existing findings provide few insights for firms attempting to develop innovative practices that enhance employment yields as well as organizational effectiveness. Other sections in the chapter proposed changes in the level of analysis at which researchers study recruitment, and in the conceptual basis around which research is designed. A subsequent section showed that findings from a small number of studies conducted from this perspective consistently support the proposed effect of recruitment practices on organizational performance. Moving forward, the purpose of this section is to advance several specific recommendations for both research and practice that will serve to narrow the gap between the two domains in the future. We turn first to the area of recruitment research.

Research

Change the predominant level of analysis in recruitment research from individual to organizational

In order to make substantial progress in strengthening the linkage between recruitment practice and research, it is critical to switch to the organizational level of analysis in the majority of studies, rather than the small minority as is currently the case. Such a shift would allow researchers to examine recruitment practices across a population of organizations, permitting the assessment of context as a determinant of the kinds of practices implemented, and providing opportunities to determine practice effects on organizational level outcomes. Seemingly, the implementation of this one recommendation, in and of itself, would significantly increase the relevance of recruitment research for those involved in practice. Exactly what percentage of

recruitment studies are we suggesting should be conducted at the organizational level of analysis? If pressed to provide a guideline, we propose a clear trend reversal, 70 percent versus 30 percent. Our intent is not to ignore or minimize the importance of applicant-level research and its accompanying outcomes, but simply to place more emphasis now in identifying knowledge about how organizations recruit and the relative and absolute results of their efforts at the firm level of analysis.

Conduct multi-industry focus groups of organizations emphasizing current and future recruitment issues, problems, and practices

It is telling that there appear to have been only four published surveys of organizational recruitment practices during the last 15 years (Ostroff, 1995; Rynes and Boudreau, 1986; Rynes et al., 1997; Terpstra and Rozelle, 1993). Seemingly, if recruitment researchers are unaware of the way organizations try to attract employees and of the problems they face in this area, it would be very difficult for them to conduct studies that prove relevant for employers. Furthermore, existing surveys have rarely tapped newly emerging but reportedly effective recruitment practices, such as the use of web-based recruiting, the application of a marketing approach, or the acquisition of other firms in order to acquire experienced and rare talent. Our conclusion is that researchers must be brought closer in proximity to recruitment as it is conducted by organizations who increasingly report that it is a key determinant of their survival in an extremely tight marketplace. The use of employer focus groups should not only permit researchers to make more informed choices about the variables they choose to study but also may provide many opportunities for data collection and other collaborations.

Prepare/read case studies of organizations recognized for recruitment excellence/sub-par performance

Firms like Cisco Networking and Southwest Airlines come quickly to mind as excellent candidates in this respect. Researchers can use such case studies as opportunities to gain more in-depth knowledge about the origin of a firm's level of emphasis (or lack thereof) on recruitment, the practices or activities that are believed to contribute to its effectiveness (ineffectiveness), the relationship between the organization's business strategy and its recruitment practices, and the level of consistency existing between different recruitment practices, as well as between other HR systems. Case studies seem a helpful but heretofore rarely used avenue for generating hypotheses about recruitment practices and inter-relationships.

Assess intermediate level outcomes of recruitment systems, as well as firm financial performance

The task of writing this chapter has led us to concur strongly with the recommendations of Rynes and Barber (1990) and Barber (1998) who emphasized the importance of examining intermediate level outcomes of recruitment effects at the organizational level of analysis (for example, the number of applicants yielded per position, the amount of time taken to fill the position, the acceptance rates of job offers, the knowledge skills and abilities of candidates in the applicant pool as well as those possessed by new hires, and the six-month and one-year turnover rates of new employees). The collection of both intermediate outcomes and financial performance at the organizational level should permit researchers and organizations to better track the impact of different recruitment practices, and hopefully, to understand how they may interact with one another in affecting firms' financial performance.

Compare the relative effectiveness of recruitment sources and practices

We also urge recruitment researchers to design studies that permit comparisons between the relative effectiveness of various practices, such as web-based versus newspaper or billboard advertising, traditional versus humorous recruitment messages, on intermediate level outcomes such as applicant pool size, time to fill vacancy, acceptance rate, and applicant characteristics. Thus, researchers may gain insight into the relative efficacy of various recruitment practices.

Use the resource-based view of a firm as a framework for designing multi-industry surveys examining firms' recruitment systems in combination with other HR systems

We also recommend that recruitment researchers utilize the resource-based view of the firm to conduct multi-industry studies of bundles of HR practices, including recruitment, and including measures of hypothesized mediating variables such as reduced labor costs or greater product/service differentiation (Rynes and Barber, 1990).

This more comprehensive approach would enable researchers to examine a more varied set of recruitment practices, examine environmental context as a moderator of both the use and effects of different practices, test the resource-based view of the firm as an explanation for recruitment and other HR practice effects. Following the research of Huselid and Becker (Becker and Huselid, 1998; Huselid, 1995; Huselid and Becker, 1996, 1997) we believe that researchers also must assess recruitment systems at the policy or philosophy level in order to better determine the external consistency between practices and firm's competitive strategy.

Strive to enhance the contribution of micro-level recruitment research to practice

While micro- or individual-level research has led to the development of a fairly extensive knowledge base about recruitment effects, these studies have often been too far removed from the practice of recruitment. We believe the usefulness of micro-level findings would be significantly enhanced by making three distinct changes within this body of work. First, we suggest that researchers examine focus group, case study, and survey data to identify recruitment practices that are of significant interest to practitioners. Second, micro-level studies should place greater emphasis on assessing individual attributes and behaviors (for example, the profile of knowledge, skills, and abilities of new hires; the filing versus not filing of an initial application; the acceptance or non-acceptance of a site visit or a job offer remaining with versus leaving the hiring organization for 6-12 months) as outcomes of recruitment. Correspondingly, we recommend that researchers focus less attention on the prediction of attitudes such as attractiveness and recruiter liking that have previously received heavy emphasis in this literature. Finally, we urge recruitment researchers to increase their efforts to test various conceptual explanations for recruitment effects: the signaling phenomenon (Barber, 1998; Goltz and Giannantonio, 1995), the individual difference versus realistic job preview explanations (Schwab, 1982; Taylor and Schmidt, 1983), etc. Such tests will require the operationalization and measurement of appropriate process variables and the use of causal modeling techniques. Nevertheless these changes appear likely to enhance the usefulness of micro-level research findings for practitioners because of the immediate relevance and future generalizability of these findings.

Publish summaries of academic research in practitioner journals

Even large-scale changes in the nature and perspective of recruitment research are unlikely to affect practice unless they catch the attention of organizational leaders and human resource managers. Yet we suspect few practitioners relish the opportunity to curl up with an issue of the *Academy of Management Journal*, the *Journal of Applied Psychology*, or *Personnel Psychology* in their limited spare time. Researchers must take responsibility for making their work accessible to those who practice recruitment. Thus, they must periodically seek out a variety of forums where recruitment research is most likely to be read or heard by practitioners (for example, by publishing in practitioner journals or newsletters, making presentations at meetings or conferences). While such activities have rarely been directly encouraged by past academic reward systems, this practice is changing in some business schools. Equally as important is the realization that efforts to take research findings to those who can apply them in practice bring their own set of rewards, including: access to research sites; the identification of interesting hypotheses for future research; and the sense of knowing that one's research has made a difference in the lives and work of others.

The above recommendations notwithstanding, the review for this chapter made it even clearer to us that researchers are not the only group who must take more responsibility for bringing recruitment research and practice closer together. We turn now to several additional recommendations for those who practice recruitment.

Practice

Link recruitment to strategic goals of the organization

A primary theme of this chapter has been that recruitment systems can result in sustained competitive advantage for work organizations through stimulating the creation of a valuable, rare, inimitable set of human resources and through organizing to use them effectively. There is consistent evidence, however, that many organizations continue to view recruitment from an institutional perspective ("this is the way we have always done it") that greatly constrains its potential effectiveness and also incurs large and unnecessary costs (Ostroff, 1995; Pfeffer, 1998; Rynes et al., 1997). Our first recommendation urges organizations to consider the potential contribution that recruitment might make to the attainment of their business objectives by carefully considering what they wish to accomplish strategically, and how recruitment may add value to these efforts. Firms are also urged to examine the activities of organizations that are well-recognized as strategically excellent recruiters (such as Nordstroms or Southwest Airlines) as well as those of similar firms within their own industry.

Note, however, that this recommendation does not suggest that firms endorse and implement recruitment activities simply because they have worked well in other companies. Rather, we urge organizations to carefully avoid the faddish implementation of practices that offer no clear advantage. Unfortunately, we have observed several violations of this recommendation from a painfully close vantage point. One manufacturing firm with which we worked, decided to recruit on the Internet for its production workers, in lieu of its traditional newspaper advertisements, despite the fact that the majority of its past hires were from the local geographic area and rarely had either a home computer or access to the Internet. The Internet recruiting yielded only 20-25 applicants, most of whom lived too far away to make relocation justifiable, while past newspaper yields were generally more than 200 applicants, over 75 percent of whom were qualified for the position and lived close enough to take advantage of employment without relocating. The decision to pursue a recruitment practice because other firms are implementing it is unlikely to offer any strategic advantage but may incur high costs in

terms of poor fitting new employees or unnecessarily high recruitment expenses.

In addition, we urge firms to recognize that recruitment practices must be thoughtfully linked to other key human resource activities (such as selection, compensation, training and development) in order to achieve desired strategic results. Thus, it is very important that they periodically assess the level of consistency between the body of HR practices, making certain that they are not working at cross-purposes with one another.

Involve current employees at all levels in recruitment activities

Our literature review revealed considerable qualitative support for this practice. For example, Pfeffer's (1998) research identified a set of seven best HR principles. He noted that successful companies often involve their top leaders in the recruitment process because it signals to applicants and current employees that the organization considers its recruitment program to be vitally important for its future success. In addition to top-leader involvement, we previously reported that more detailed information about job vacancies and life in the organization (in particular that information provided by current employees) has repeatedly been shown to favorably impact applicant reactions. Finally, results from the recruitment source studies have consistently shown that employee referrals are one of the more effective sources of new hires. Thus, although an organization's human resources staff must take direct responsibility for recruitment, there are a number of good reasons for involving many employees at all levels of the firm in this process.

Regularly track recruitment effectiveness and feedback results

Existing surveys of recruitment practices (Ostoff, 1995; Rynes and Boudreau, 1986) and anecdotal evidence (Rynes et al., 1991) suggest that organizations do very little evaluation of their recruitment systems, although there is some evidence that the number of organizations that do evaluate is increasing (Terpstra and Rozell, 1993). Given the high level of competitiveness in virtually all labor markets, this practice is simply unacceptable. In the prior set of recommendations for research, we identify a number of intermediate level outcomes that are relevant for assessing recruitment effectiveness. In addition to these, we recommend that organizations annually undertake qualitative assessments of the level of fit within its recruitment activities with respect to: (1) the consistency of practices within these systems (for example, the allocation of large referral bonuses to current employees while permitting long lag times before hire decisions are actually made); and (2) the internal fit between the recruitment and other HR systems (for example, aggressive recruitment systems involving top executives, applicant databases and financial incentives, coupled with pay levels that are below market or leadership skills that are recognizably abysmal). Assessments of recruitment effectiveness and the fit between and within recruitment, other HR systems, and the organization's strategic objectives must then be fed back to the appropriate levels of the organization so that rapid improvements can be made.

Experiment thoughtfully but regularly with new recruitment practices

Changing environmental conditions are likely to require accompanying changes in recruitment practices over time. Firms well recognized for their recruitment expertise are continually experimenting with new recruitment practices, because they recognize that competitors will identify and adopt some of their existing practices over time, thus making them less effective for sustained competitive advantage. Thus, organizations that thoughtfully experiment with new practices that seem consistent with their environmental context, strategic objectives, and other recruitment and HR practices, are likely to achieve a great deal of success in responding to changing environmental conditions.

Shape and sponsor relevant academic research

Increasingly organizational leaders are receiving invitations to learn more about and to shape academic research agendas. Not surprisingly, they also receive frequent opportunities to sponsor empirical studies that are relevant to their concerns and interests. These opportunities for input come in a variety of forms: through invitations to participate in surveys and interviews; joining alumni, executive boards or visitor boards that are associated with academic programs or centers; serving as classroom or student organization speakers; by funding academic research that is relevant to their business missions; purchasing membership in university-formed HR research networks, etc. Organizational participation is critical in order to bring research and practice closer together, even though avenues of participation must be chosen carefully. Organizational leaders are urged to investigate the reputations of researchers sponsoring the projects in which they are asked to participate and the purposes of the visitor boards they are asked to join. Nevertheless, by clearly articulating the needs and problems of their organizations and being willing to invest in research that is relevant to their organizational interests, either through the donation of participant time or money, leaders can play a major role in strengthening the relationship between research and practice.

CONCLUSIONS

During the course of this chapter we have examined the evolution of recruitment research over the last two decades and the knowledge principles that have developed out of that body of work. Through the use of the popular media, contacts with recruitment professionals and practitioner journals, we also compared recruitment findings to the set of practices and sources that have been developed by recruiting organizations during a decade-long period of economic expansion. Even though several of the newly emerging recruitment practices are quite consistent with existing knowledge principles gleaned from recruitment research, we suspect that this resulted more from chance factors, rather than from the exchange of information between the two groups. Overall, in assessing the extent to which recruitment practice has been informed by a growing body of recruitment research, we concluded, disappointingly, "not much." Yet, given a practical area such as recruitment, we are unable to believe that such a large disconnect is in any way appropriate or healthy.

Our recommendations for bringing recruitment research and practice closer together centered around conducting recruitment research at the organizational, rather than the individual, level of analysis, and being guided in the design of this research by a resource-based view of the firm that asks how recruitment practices can contribute to an organization's sustained competitive advantage. The foci of prior recruitment research suggests that this view is currently not widely held by recruitment researchers. Further, we suspect that only recently have practitioners, struggling with tight labor pools in a time of rapid economic expansion, become convinced of recruitment's critical role as a determinant of organizational performance. Yet, if both parties adopt a strategic perspective of recruitment, we believe that they will find themselves speaking an appealing and common language that may facilitate more frequent and direct communication. Hopefully these conversations will lead to discussions of future research topics, the implications of recruitment findings, and possibly, to research collaborations.

In looking toward the future, we urge researchers to recognize that there has probably never been a more critical period for recruitment research than the present, in terms of both needs and opportunities. After experiencing the pain of understaffing and the frustration of ineffective recruitment programs, many companies have developed an entirely new set of practices and implemented them side-by-side with more traditional recruitment activities. These naturally occurring experiments are just waiting for an interested researcher to study. Subsequently, study findings that also provide sufficient detail to facilitate adaptive organizational responses have enormous potential for impacting organizational performance during

this period of high growth. Seemingly, organizations have never had a greater incentive to cooperate with and even sponsor such research.

However, even if recommended changes in recruitment research are implemented, they are unlikely to yield significant benefits unless recruiting organizations too undertake some change in their modus operandi. Traditionally, firms have consistently avoided both the evaluation of recruitment results and the feeding back of findings. The continuation of either practice constitutes a significant threat to the potential benefits that might otherwise result from the adoption of recruitment research findings. Thus, we urge organizational leaders to recognize the strategic importance of recruitment and accept responsibility for organizing in a way that enhances its effectiveness.

In researching this chapter, we became aware of an analogy used by public relations executive, Lou Hoffman, to describe the changes he made in his organization's recruitment practices in response to an increasingly tight job market coupled with rapidly escalating business opportunities. By introducing a number of new actors and many new practices, Hoffman essentially transformed his agency from a "hire as needed" organization to a business that is "as much a recruiting firm as a PR agency" (Caggiano, 1998). In speaking about the firm's recruitment process today, Hoffman likens it to the painting of the Golden Gate Bridge - when the painting crews finish the final bridge span, it is time to start the process all over again. We believe that this analogy is also appropriate for describing the appropriate inter-relationship between recruitment research and practice. Recruitment practitioners must assist researchers at the beginning of the research process by identifying relevant practices and issues to study, and during the research process by both participating and sponsoring the activity. Once a given study has been completed, the data analyzed, results interpreted, the implications for recruitment programs returned to participating firms, and responsive changes made, it is time to start the cycle again.

If this process, or a similar one is followed, we believe the next chapter examining the linkages between recruitment research and practice will be far more positive in nature.

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