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Recruiting through advertising or employee referrals: Costs, yields, and the effects of geographic focus

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Research on recruiting has generally considered the effects of recruiting source on employee tenure or performance, and has argued that formal employment ads are inferior to informal sources, notably employee referrals. We test two dimensions for evaluating the effects of recruiting sources on the recruiting process—cost per new hire and yield ratio. We also suggest a new dimension for distinguishing between different types of employment ads—*geographical focus*—which we define as the clarity and distinctiveness of the labour market that an ad is likely to reach. Geographically focused ads are shown to cost less and yield more appropriate applicants than unfocused ads. Considering the cost, yield, and focus of ads can promote the effectiveness of recruiting processes. The study therefore has both practical applications and implications for further research on recruiting sources.

Recruiting sources have typically been considered in terms of their impact on the job performance or turnover of new hires (Decker & Cornelius, 1979; Kirnan, Farley, & Geisinger, 1989; Saks, 1994; Swaroff,

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Barclay, & Bass, 1985; Vecchio, 1995; Williams, Labig, & Stone, 1993). We suggest that in addition to examining the effects of recruiting sources on the quality of the employees selected, sources can be evaluated in terms of the recruiting process involved. We suggest two parameters for analysing the recruiting process—cost per new hire, and yield ratio—and we show that in these criteria some ads can be more effective than other ads, and that some ads may be quite similar to employee referrals. Thus, while performance and turnover of new hires are clearly important criteria for evaluating the outcome of a recruiting practice (Breaugh, 1992; Wanous, 1992; Wanous & Colella, 1989), additional parameters that examine the recruitment process rather than the employees selected may also deserve attention. Our study of the recruiting process ends when people have been hired into the organization; this adds to most previous research on recruiting sources, which has monitored employees after they had been hired into the organization (cf. Swaroff et al., 1985; Williams et al., 1993).

COST AND YIELD RATIO AS CRITERIA OF A RECRUITING PROCESS

A first criterion we suggest is cost, suggesting that the direct dollar cost of hiring an employee is likely different for different recruiting sources. Higher costs may be justified for special employees with unique skills, but still need to be a recognized consideration in a recruiting process. Assumptions are often made about costs of recruitment (cf. Boudreau & Rynes, 1985), but little empirical research has verified them. The critical issue is the cost of recruiting a new hire, which is the cost required for each recruiting source to bring a new employee into the organization.

Costs of new hires vary among recruiting sources because it is highly normative to pay for some sources (e.g., formal newspaper ads) but not necessarily normative to pay for other sources (e.g., informal employee referrals). Even when successful employee referrals are rewarded such payments rarely reach the cost magnitude of placement agencies or media advertising. Thus, recruiting through employee referrals is likely to be less costly than recruiting through employment advertising. However, the costs of recruiting through ads may vary depending on where an ad is posted. A consideration of costs therefore calls for recognizing different ads as different recruiting sources rather than assuming that all recruiting through an ad is identical.

A second criterion we suggest is *yield ratio*, which is defined as the *proportion of new hires from the complete pool of applicants produced by a recruiting source*. Yield ratio is recognized in the practice of human resources management (e.g., Bohlander & Snell, 2004), but academic attention and empirical research on the yield ratio of different sources is

scant. Researchers tend to follow the assumption that the bottom line of recruitment success is the number of *successful* placements (cf. Cascio, 1982, p. 188) and therefore, to focus on the performance and tenure of new hires. Yet bottom line considerations in organizations should also minimize the costs of processing *unsuitable applications*; which means that they should search for recruitment tools that produce fewer applicants who are declined, or for recruitment sources that have a higher yield ratio. A low yield ratio means some organizational investments in screening applicants are in vain, so a higher yield ratio can be assumed to be managerially desirable.¹

Taylor and Schmidt (1983) examined some aspects of the recruitment process to show that recruitment sources varied in the types of individuals they reached. Swaroff et al. (1985) further showed that when age, experience, and marital status of applicants were held constant recruiting source did not relate to tenure of recruited employees. However, these studies did not examine whether applicants from some sources are more likely to be hired, thus did not examine differences in yield ratio among recruitment sources. Our examination of yield ratio extends the idea of Swaroff et al. (1985) and Taylor and Schmidt (1983) that different recruiting sources may reach different people by suggesting that some sources may reach people who are better fit for the organization, and therefore more likely to be offered a job.

The main reason to expect some sources to produce a higher yield ratio than others is self screening. Judge and Cable (1996) and Schneider (1987) noted that informal sources involve more self screening of applicants. In informal recruiting applicants obtain more and better information about the organizational culture so individuals who do not fit are less likely to apply (Chatman, Bell, & Staw, 1986; Wanous, 1992; Wanous & Colella, 1989). Such self-screening is less likely where only formal information is offered. Thus, preliminary self-screening in informal sources is likely to improve the fit between job applicants and the organization, and therefore likely to produce a higher yield ratio. Our first goal here is to verify this by comparing the yield ratios of formal (advertising) and informal (employee referral) recruiting sources.²

¹It could be argued that this assumption is not valid if high-validity tools are being used, since such tools operate better in cases of low rather than high yield ratios. But assuming that organizations seek to avoid unnecessary expenditures, a higher yield ratio can be presumed to be a desired goal.

²It is possible, of course, that employment ads will trigger people to seek information from current organizational employees, in which case a form of preliminary self-screening will occur. This would be an instance of multiple recruiting sources, where formal (advertising) and informal (employee referral) are combined (Williams et al., 1993) that our analysis could not address.

GEOGRAPHICAL FOCUS OF EMPLOYMENT ADVERTISING

We further suggest that different employment ads should be compared on their geographical focus. *Focus* is the clarity and distinctiveness of the labour market that an ad is likely to reach. *Geographical focus* separates between ads appearing in a local newspaper (e.g., the *San Jose Mercury News* in the USA or the *East Grinstead Courier* in the UK) and a national or international newspaper (*USA Today* or *International Herald Tribune*). Swaroff et al. (1985) and Taylor and Schmidt (1983) suggested that recruitment sources varied in the types of individuals they reached. But these authors only compared multiple sources, contrasting for example employment ads to employee referrals or rehires; they did not consider differences among different ads which is our goal here. We empirically argue below that geographically focused advertising involve lower costs and higher yield ratios than unfocused advertising.

Advertising with high geographic focus (i.e., in local or regional newspaper) is likely to be less expensive because it follows the logic of product advertising which is priced according to the number of people an ad can reach (cf. Inland Press Association, 1996). More geographically focused ads are less costly because they reach less people (Aaker & Myers, 1987; Newspaper Advertising Bureau, 1992; Ogilvy, 1985). For example, at the time the data for this study were collected, ads in a local newspaper in Jerusalem, Israel (*Kol Ha'ir*) cost \$65 per column inch, while ads in the national newspaper *Yediot Aharonot* cost \$307 per column inch. When differences in reach between local and national media are larger (e.g., in Europe or the USA), cost differences are even larger. An open question is, however, how these cost differences translate to the cost of new hires since reaching more people may not necessarily mean having more new hires. Thus, our next research question regards the cost of new hires recruited through geographically focused versus unfocused advertising.

Higher costs of geographically unfocused product advertising are justified by greater exposure which presumably leads to greater potential sales. Yet greater exposure of employment ads does not necessarily mean more new hires. A geographically unfocused ad may reach people who are less likely to apply for the advertised job, because they live far away from the posting organization and do not want to move. Even if such people (who live far away) apply for a posted job they may be less likely to be offered the job because the organization is likely to try to avoid high moving costs. Geographic focus of ads can also enhance self-selection of applicants because of greater access to nonmediated information about the posting organization. Such self-selection would reduce applications from people who are unfit for the job or the organization. We therefore expect that ads

with more geographical focus (e.g., in local rather than national newspapers) have a higher yield ratio because they draw applicants who are better fit.

In short, this study suggests two additional criteria for evaluating recruiting processes: cost of new hire and yield ratio and suggests differentiating between geographically focused and unfocused advertising to save costs and improve the yield ratio.

METHOD

Overview

Data were collected in one plant of an international, Fortune 500, high-tech organization located in Israel. At the time of the study, the organization experienced rapid growth and was considered a highly desirable place to work so it attracted a large number of job applicants, and all job offers were accepted. Data were available for the 3766 applicants who applied for employment in this organization during 1995.

People who contacted the organization for employment were asked how they had heard about the employment opportunity. Applicants' responses included local employment advertising, national employment advertising, employee referral, employment agency ("head-hunter"), HR fair, university employment fair, and "walk-in". Applicants who mentioned sources other than national advertising, local advertising, or employee referral (2221), or mentioned multiple sources (33), were excluded from the analysis, producing a final study sample of 1545 applicants.

During the period of the study, the company spent \$521,000 on recruiting activities, which is a significant but not atypical expenditure for large organizations (Rosse & Levin, 1997). Of the 1545 applicants, 131 (8.5%) were offered a job and all these accepted the offer. The organization could not reveal to us any additional data about the demographic, salary, or job performance of these new recruits.

Independent variable

All applicants were asked: "How did you learn about the employment opportunity in NAME-OF-ORGANIZATION?" We analysed only the data regarding applicants who indicated one of the following three responses:

1. *Geographically unfocused advertising* (national newspaper). Ads for a full range of positions in the organization appeared every Friday (the prime day for employment advertising in Israel) over the course of the year in all national newspapers in Israel (*Haaretz*, *Yediot Aharonot*,

and *Maariv*). Ads were in prime (upper left-hand) positions (cf. Bovee & Arens, 1992), and were designed with text, colour, and catchy slogans, to be highly attractive.³

2. *Geographically-focused advertising* (local newspaper). Identical ads were also placed in the leading local newspaper in the organization's home city every Friday over the course of the year. These ads as well were for a full range of positions, were posted in prime (upper left-hand) positions in the newspaper, and comprised the same text, colour, and catchy slogans.
3. *Employee referrals*. At the time of the study the organization had no formal employee referral policy, so employees were not rewarded for bringing in new hires. But employees did voluntarily engage in employee referrals, as our data reveal. There was no organizational information about the nature of the relationship between applicants and referring employees.

Dependent variables

Two parameters were calculated for each of these recruiting sources: *Yield ratio* was the proportion of new hires from the total number of applications through a given source; *cost per new hire* was the direct cost of hiring an applicant, which was computed by dividing the total expenditure per hiring source by the number of new hires recruited through the source. This is an underestimate because indirect costs of processing applications, interviewing, etc. could not be quantified.

RESULTS

As is evident in Table 1, the average cost of hiring through advertising was significantly higher than hiring through employee referrals (\$22,652 per new hire, compared to nothing for hires recruited through referrals). This may not be surprising given that employee referrals are cost-free, yet the average cost of recruiting employees through national advertising is a striking \$81,000 per hire, confirming the importance of considering cost-per-new-hire in evaluations of recruitment processes. Furthermore, consistent with our analysis geographically focused ads were far less expensive than unfocused ads costing \$1140 per hire as compared to the striking \$81,000 per hire.

³These newspapers are also distributed internationally, suggesting an extremely broad focus.

TABLE 1
Costs and yields of recruiting sources according to formality and geographical focus

<i>Recruiting source</i>	<i>Direct annual cost</i>	<i>Number of applicants</i>	<i>Number of new hires</i>	<i>Yield ratio*</i>	<i>Cost per new hire</i>
Formal and unfocused source: National newspaper advertising	\$405,000	277	5	.018	\$81,000
Formal and focused source: Local newspaper advertising	\$116,000	447	17	.073	\$1,149
Total formal sources: National and local advertising	\$521,000	724	23	.032	\$22,652
Informal and focused source: Employee referrals	\$0	821	109	.133	\$0
Total	\$521,000	1545	131	.085	\$627

*Values in this column are percentages of applicants who were hired from the pool of applicants from a given source.

All proportions in this column are significantly different from each other ($p < .01$).

Paradoxically the yield ratio of the less costly employee referrals was significantly greater than that of employment advertising: .133 (109 new hires out of 821 applicants) as compared to .032 (23 new hires out of 724 applicants). The yield ratio of geographically focused (local) advertising (.073) was also better than that of geographically unfocused (national) advertising (.018). Thus, the lower cost of geographically focused advertising was coupled with a higher yield ratio that was close to the most effective recruiting source—employee referral. This analysis suggests that the use of geographically focused advertising can help improve the effectiveness of formal recruiting while keeping the costs down.

DISCUSSION

This article makes two key contributions to the literature: (1) It suggests two criteria for analysing a recruitment process—cost per new hire and yield ratio; and (2) it documents the merit of considering the geographical focus of employment ads in analysing a recruitment process. These parameters add to commonly cited parameters for evaluations of recruiting sources, notably performance or turnover of new hires. Our analysis suggests parameters to be evaluated at a different point in time—during the recruiting process itself, rather than several months or years after employees have been hired. Thus, our analysis complements previous research to suggest a more complete understanding of the recruitment process.

Our analysis suggests that distinguishing among different types of advertisements—those in geographically focused versus unfocused newspapers—recruitment can be more efficient. In previous research, ads were assumed to be a unilaterally formal and therefore ineffective recruiting source (cf. Wanous, 1992). This was the case even in studies that suggested that recruiting sources may vary in the people that they reach (e.g., Swaroff et al., 1985; Taylor & Schmidt, 1983). Examining the recruitment process rather than the employees hired reveals that ads with geographical focus (local ads) can bring in a good yield ratio of new hires at a reasonable cost, and may approximate the costs and yields of employee referral.

Limitations

There are several limitations to our analysis. First, a higher yield ratio is not necessarily always better. For personnel selection procedures a low yield ratio may be preferable as it minimizes the ratio of selection successes to failures. For example, with highly valid selection procedures the improvement in selection success is steeper with low rather than high yield ratios (cf. Ghiselli & Brown, 1955, p. 147). Higher costs of national advertising may therefore pay off in terms of utility of selection procedures. In particular this may be the case for management positions, or other positions requiring high levels of qualification where the proficiency (i.e., ratio of the best to the poorest worker) is likely to be higher (Ghiselli & Brown, 1955).⁴

We were unable here to obtain selection or job performance data so we could not consider the validity or utility of various selection procedures. We also could not verify whether the more costly new hires that our data identified were employees with less common skills, or with more responsibilities, such as senior managers. Special qualifications of certain new recruits could justify the extra expenditure. In addition, if certain demographic groups may be reached more effectively through high-exposure, nonfocused advertising, then legal or ethical considerations may justify extra costs (cf. Kirnan et al., 1989).

Second is the question of generalizing our findings. The organization we studied duplicated the ads it posted, so that the same ads appeared in both local and national media. This may not always be the case. It could be, for example, that organizations advertise nonexempt (lower level) positions in local media, while higher level management or executive positions require extra expenditures on geographically unfocused advertising. Follow-up research should look at yield ratios for different jobs and different job levels.

⁴We are indebted to an anonymous reviewer for bringing this point to our attention.

But in the context of previous research on recruiting sources, this study suggests that geographical focus can help control the yield and costs of a recruitment effort. Previous research typically did not ask job applicants which ads drew them to apply, and did not consider the possibility that separating between applicants attracted by different ads might reveal important insights (cf. Swaroff et al., 1985; Williams et al., 1993). We show that geographically focused ads can approach the effectiveness of employee referrals in yielding new hires, and not at a prohibitive cost. We also suggest that it is primarily geographically unfocused advertising that may be problematic. Considering the distinction between local and national advertising can thus improve recruitment processes.

Third, the organization we studied did not reward employees for new referrals. The relative cost estimates reported here for informal recruiting sources will be higher in organizations that reward employees who bring in new hires. Following our findings the organization we studied began to reward employees who referred new hires, with a modest bonus to the employee for any new hire who stayed with the organization for more than a year. Such reward programmes increase the costs of informal recruiting and may change the dynamics of employee referrals.

Fourth, although we showed geographical focus to be relevant to cost and yield ratio, it may not be relevant to other goals that ads may accomplish. Ads in national or international newspapers may, for example, help in building an organizational reputation (Rafaeli, 2000; Rafaeli & Oliver, 1998; van Riel, 1997). Fifth, this study did not address the question of multiple recruiting sources which has been argued to be critical to understanding the recruiting process (cf. Williams et al., 1993). It could be, for example, that some of the employees who noted one form of advertising actually saw another ad as well but did not remember to tell the recruiter. It could also be that geographically unfocused (i.e., widely distributed) ads trigger employees to tell their friends and contacts about employment opportunities in the organization. Such dynamics may play an essential part in the recruitment process but could not be examined here.

TOWARDS FUTURE RESEARCH

We examined geographic focus but other forms of focus may be worthy of exploration. For example, advertising in outlets that we can call “professionally focused advertising” may produce a higher yield ratio at lower costs than advertising in the (unfocused) general media. A search for an economist, for example, may gain a better yield through an ad in the *Economist* or *Financial Times* than from an ad in the *Herald Tribune* or a local newspaper. Other forms of recruitment besides employment

advertising may also be examined through the lens of focus. For example, university recruiting may be more or less geographically focused depending on whether a nearby community college or a national university is involved. Similar to employment advertising, university recruiting has been considered as a unidimensional formal source in previous research (cf. Turban & Dougherty, 1992). Adding focus to its analysis may help unravel its effectiveness.

The idea of focus is also relevant to the Internet, which is emerging as a central medium for recruiting. Like employment advertising, Internet recruiting is a formal process that can be more or less focused. National and international websites devoted to matching employers with applicants (e.g., <http://Monster.com>) seem to be Internet versions of traditional general-interest and therefore geographically and professionally unfocused ads. Professional forums offer greater focus (e.g., "The Orthopedic Employment Portal"—<http://www.orthocareers.com/>); ads placed on a general organizational home page (e.g., <http://Intel.com>) also hold greater focus. Our prediction would be that more focused forums will provide better yield ratios at a lower cost, but this is a prediction that requires verification in future research.

Extending the concept of focus to include both geographic and professional focus raises questions about the interplay between different types of focus. Is one type (geographic or professional) more effective than the other? Are they additive or alternative? Alternately, there may be variables that moderate the effectiveness of different types of focus.

One interesting hypothesis is that cultural and socioeconomic factors may moderate the dynamics of geographic focus, since geographic focus may be important in relatively collectivistic societies, such as Israel or Japan but not in individualistic societies such as the US or the UK (cf. Hofstede, 1991; House, Hanges, Javidan, Dorfman, & Gupta, 2004; Schwartz, 2003). In collectivistic societies, access to knowledge about local organizations and the self-screening it can inspire may be more critical than in an individualistic society where individual choice is pronounced. In contrast, professional focus may be more powerful in individualistic societies, where professional development may be a more primary goal. Such cultural biases are suggested by cultural differences in the content of employee advertising (Rafaeli & Oliver, 1998). In cultures that are more collectivistic, local newspapers may be unlikely to carry advertisements for employment in distant locations. Indeed, local newspapers in Israel rarely carry ads for employment outside the range of a reasonable commute, while in the US this is not uncommon. For example, newspapers in Texas and Iowa in the US often include ads for employment in California.

To conclude, it would be unwise for organizations such as the one studied here to terminate their use of unfocused employment advertising.

Broad-reach, geographically unfocused ads may facilitate recruiting of employees with special skills and can promote public relations (Rafaeli, 2000; Rafaeli & Oliver, 1998; Rindova & Fombrun, in press; van Riel, 1997). Eliminating unfocused advertising might also hamper multiple-source recruiting effects. A more appropriate conclusion from this study is that costs, yields, and geographical focus can provide valuable insight to the understanding of recruiting processes.

REFERENCES

- Aaker, D. A., & Myers, J. G. (1987). *Advertising management*. New York: Prentice Hall.
- Bohlander, G., & Snell, S. (2004). *Managing human resources*. Mason, OH: South-Western College Publishing.
- Boudreau, J. W., & Rynes, S. L. (1985). Role of recruitment in staffing utility analysis. *Journal of Applied Psychology*, 70(2), 354–366.
- Bovee, C. L., & Arens, W. F. (1992). *Contemporary advertising*. Boston: Irwin.
- Breaugh, J. A. (1992). *Recruitment: Science and practice*. Boston: PWS Kent.
- Cascio, W. F. (1982). Recruitment and initial screening. In W. F. Cascio (Ed.), *Applied psychology in personnel management*. (pp. 179–203). Reston, VA: Reston Publishing Company.
- Chatman, J. A., Bell, N. E., & Staw, B. M. (1986). The managed thought: The role of self-justification and impression management in organizational setting. In J. H. P. Sims & D. A. Gioia (Eds.), *The thinking organization: Dynamics of social cognition*. (pp. 191–214). San Francisco: Jossey-Bass.
- Decker, P. J., & Cornelius, E. T. (1979). A note on recruiting sources and job survival rates. *Journal of Applied Psychology*, 64, 463–464.
- Ghiselli, E. E., & Brown, C. W. (1955). *Personnel and industrial psychology* (2nd ed.). New York: McGraw-Hill.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London: McGraw-Hill.
- House, R., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership and organizations: The GLOBE study of 62 societies*. Beverly Hills, CA: Sage Publications.
- Inland Press Association. (1996). *National costs and revenues study of daily newspaper advertising*. Park Ridge, IL: Inland Press Association.
- Judge, T. A., & Cable, D. M. (1996). Person–organization fit, job choice, and organization entry. *Organizational Behavior and Human Decision Processes*, 67(3), 294–311.
- Kirnan, J. P., Farley, J. A., & Geisinger, K. F. (1989). The relationship between recruiting source, applicant quality, and hire performance: An analysis by sex, ethnicity, and age. *Personnel Psychology*, 42, 293–308.
- Newspaper Advertising Bureau. (1992). *Classified newspaper advertising expenditure estimates by type*. New York: Newspaper Association of America.
- Ogilvy, D. (1985). *Ogilvy on advertising*. New York: Vintage Books.
- Rafaeli, A. (2000). Projecting an organizational identity: Lessons from employment advertising. *Corporate Reputation Review*, 3(3), 218–240.
- Rafaeli, A., & Oliver, A. (1998). Employment ads: A configurational research agenda. *Journal of Management Inquiry*, 7(4), 342–358.
- Rindova, V. P., & Fombrun, C. J. (in press). Fanning the flame: Corporate reputations as social constructions of performance. In J. Porac & M. Ventresca (Eds.), *Constructing industries and markets*. London: Oxford University Press.

- Rosse, J., & Levin, R. (1997). *High impact hiring: A comprehensive guide to performance based hiring*. San Francisco: Jossey-Bass.
- Saks, A. M. (1994). A psychological process investigation for the effects of recruitment source and organizational information on job survival. *Journal of Organizational Behavior*, 15, 225–244.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437–453.
- Schwartz, S. H. (2003). Mapping and interpreting cultural differences around the world. In H. Vinken, J. Soeters, & P. Ester (Eds.), *Comparing cultures* (pp. 43–73). Leiden, The Netherlands: Brill.
- Swaroff, P. G., Barclay, L. A., & Bass, A. R. (1985). Recruiting sources: Another look. *Journal of Applied Psychology*, 70(4), 720–728.
- Taylor, M. S., & Schmidt, D. W. (1983). A process oriented investigation of recruitment source effectiveness. *Personnel Psychology*, 36, 343–354.
- Turban, D. B., & Dougherty, T. W. (1992). Influences of campus recruiting on applicant attraction to firms. *Academy of Management Journal*, 35(4), 739–765.
- Van Riel, C. B. M. (1997). Research in corporate communication. *Management Communication Quarterly*, 11, 285–295.
- Vecchio, R. P. (1995). The impact of referral sources on employee attitudes: Evidence from a national sample. *Journal of Management*, 21(5), 953–965.
- Wanous, J. P. (1992). *Organizational entry*. New York: Addison-Wesley.
- Wanous, J. P., & Colella, A. (1989). Organizational entry research: Current status and future directions. In K. Rowland & G. Ferris (Eds.), *Research in personnel and human resources management*. (pp. 59–120). Greenwich, CT: JAI Press.
- Williams, C. R., Labig, C. E., & Stone, T. H. (1993). Source of recruiting effects. *Journal of Applied Psychology*, 78(2), 166.

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