IV. LABOR MARKETS, HUMAN RESOURCES, AND INTERNATIONAL REFEREED PAPER

Networks That Matter: The Impact of Recruiting Source versus Organizational Demography on Turnover

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Abstract

We argue that gender and race organizational demography are more important than recruiting source in predicting employee turnover. This study analyzes data on employees of a U.S.-based products and services company to determine the differential contributions of organizational demography and recruiting source to employee retention.

We find that, strikingly, both gender and race organizational demography have a greater effect on turnover than does recruiting source use. Employees hired via employee referrals into buildings where they are not the majority are more likely to exit than employees hired via formal sources into buildings where they are the majority.

Although recruiting source is important in hiring satisfied employees who remain with the organization, we argue that gender and race organizational demography are more important than recruiting source in predicting employee

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turnover. How one enters the organization is less important than the socialization process, and organizational demography is more important than recruiting source in explaining the socialization process.

In this paper, we examine the relative effects of recruiting source and organization demography on employee retention. Marsden (1994) found that employee referrals are used more than any other recruiting source. From a pragmatic perspective, the increasing reliance on employee referrals may be causing organizations to neglect what is more important for retention, the socialization process. The conventional wisdom is that using employee referrals provides a shortcut through the socialization process; however, even the most realistic job preview is not a substitute for socialization in an increasingly diverse work force.

Theoretical Perspectives

Both recruiting source and gender and race organizational demography are believed to affect employee turnover. The use of informal recruitment sources (employee referrals, self-initiated walk-ins) compared to formal sources (campus recruiting, advertisements) is positively correlated with lower turnover (Decker and Cornelius 1979; Gannon 1971; Reid 1972; Saks 1994; Ullman 1966). Having a greater percentage of employees of the same race and gender as the new hire is believed to increase the likelihood that the new hire will remain with the organization (Pfeffer 1983). Both the recruiting source and organizational demography models assume that social networks and information acquisition have important roles in explaining employee retention. Research has tended to treat the effects of recruiting source and gender and race organizational demography as two separate models. The theoretical reasoning behind each model, however, is similar.

Employee referrals are thought to provide better, more accurate information about the organization, enabling the job candidates to determine, before entry into the organization, whether they are good matches for the organization (Rees 1966; Ullman 1966). Employees recruited via referrals also are expected to remain longer with the organization because they are believed to be more likely to have an informal social network already in place on entry into the organization.

Consistent with this is the idea that organizational demography influences turnover. Previous research indicates that the demographic fit of an employee to the organization's demographics affects posthire outcomes. First, it is likely that organizational demographic composition affects the probability of recruits having obtained realistic, relevant information about the job and organization. The larger the percentage of current employees similar to potential employees, the greater the likelihood of there being a comparable

framework for assessing one another and one another's information. Second, people tend to network with people like themselves. The greater the percentage of employees of the same gender and race as the new hires, the greater the likelihood the new hires will find networks of people to help them with the adjusting process.

Recruiting source and organizational demographic explanations of employee turnover have similar theoretical underpinnings. Previous research indicates that both recruiting source (Breaugh 1981; Breaugh and Mann 1984; Reid 1972; Taylor and Schmidt 1983) and organizational demography (O'Reilly, Caldwell, and Barnett 1989; Pfeffer 1983; Tsui, Egan, and O'Reilly 1992) have an impact on retention. None of these studies, however, has examined both variables.

Disentangling Employee Referral and Organizational Demography Effects

Given that similar theoretical reasoning can be applied to hypothesizing the effects of employee referrals and organizational demography on employee turnover, it is important to disentangle the impact of each. We argue that gender and race organizational demography is more important than recruiting source in predicting employee turnover.

Louis (1980) suggests that having knowledge about a job may help a new hire accurately anticipate external events, but does not necessarily help anticipate the internal experience of "how it will feel." Cognitive understanding is not the same as real experience. In addition, Louis suggests that new hires have inadequate sense-making skills because of a lack of "local interpretation schemes" and "others' interpretations." Louis notes the importance of new hires having "insiders" to act as sounding boards and guides to important background information for diagnosing, interpreting, and assigning meaning to events and surprises.

Use of employee referrals attempts to insure that new hires do have access to "others' interpretations." While being recruited via an employee referral may increase the likelihood that the new hire has a network in the organization, it does not guarantee the existence of a network. The recruiting source literature assumes that new recruits hired via employee referrals are able to adjust more quickly to the organization and job because they have the employee who referred them to help them adjust. The new hires, appreciative of being referred, however, may be reluctant to discuss negative experiences or impressions with the employees who referred them. Further, one employee is not a network. In addition, it cannot be assumed that the new hire will have access to the employee who did the referring throughout the crucial socialization period. In view of these limitations with recruiting source theories, we believe that gender and race organizational demography are more

important in predicting employee turnover. The following discussion reflects our hypotheses:

Hypothesis 1: The percentage of employees of the same gender as the new hire will have a greater effect than recruiting source on employee turnover.

Hypothesis 2: The percentage of employees of the same race as the new hire will have a greater effect than recruiting source on employee turnover.

Methods

These hypotheses are tested using data on employees from a U.S.-based, international, products and services company. The data consist of 14,535 cases, all of the company's employees in the United States who were hired between 1989 and 1994. Of the 14,535 employees, 30.9 percent are white males, 34.6 percent are white females, 7.4 percent are black males, 8.7 percent are black females, 3.7 percent are Asian males, 3.9 percent are Asian females, 5.5 percent are Hispanic males, and 5.4 percent are Hispanic females.

Tenure, measured in months, is the dependent variable for testing these hypotheses. It is the months from date of entry to either date of exit or until July 31, 1994, the data truncation date. The tenure variable ranges from .03 to 66.90 months with a mean of 20.89 and a standard deviation of 16.85.

The data contains information on the hiring source for each employee. In the analysis that follows, the term "recruiting source" indicates the primary recruiting source used by the employee of the firm. The primary source used for 21.4 percent of the employees was employee referral. The recruiting sources used for other employees were as follows: 31.2 percent formal (i.e., private agency, campus recruiting, state or federal agency), 13.8 percent other informal (i.e., advertisement, walk/write-in), 17.9 percent temp-to-regular, and 15.8 percent general/other. The "general/other" recruiting source category, unfortunately, is a catchall for when the recruiting source was either unknown or other than the recruiting sources listed. Thus, in this analysis the independent variable recruiting source has five categories, with employee referral as the comparison category.

The variation in the gender and race makeup of the workplace is measured at the building level. This follows Tsui, Egan, and O'Reilly (1992), who use the building as a measure of the work unit. They argue that individuals can identify with and derive positive self-identity from groups without interacting with all or any members of the groups.

To test for the effect of the gender and race composition on recruiting source, we used two variables computed from the building information: (1) percentage of employees in the building of the same race as the new recruit and (2) percentage of employees in the building of the same gender as the new recruit at time of hire. Using a breakdown suggested by Kanter (1977), the

percentage variables are collapsed into four categories: 0 percent–15 percent, 16 percent–39 percent, 40 percent–60 percent, and 61 percent–100 percent. Kanter labels the first three categories as tokens, minorities, and potential subgroup, respectively. The 61 percent–100 percent category comprises what Kanter refers to as the majority (those in the approximately 60 percent–80 percent range) and the dominants (those in the approximately 80 percent–100 percent range). Of the 14,535 employees, 51.7 percent were hired into workplaces where they were the "majority" or "dominant" race, 21.2 percent were the "potential subgroup," 12.2 percent were "minorities," and 14.9 percent were "tokens." Of the 14,535 employees, 37.1 percent were hired into workplaces where they were the "majority" or "dominant" gender, 44.2 percent were the "potential subgroup," 18.4 percent were "minorities," and .25 percent were "tokens."

Control variables include the natural log of the wage, hours worked, job, education, age hired, year hired, whether the employee was temporary, building size, and region of the United States where the employee was hired. Region is coded into eight categories, with industrial Midwest serving as the reference group. Education is coded into four groups, with high school as the reference group.

To test the hypotheses, regarding the effects of recruiting source and organizational demographic composition on tenure, we use survival analysis. This is appropriate because the dependent variable is months tenure which has right-hand side truncation.

Specifically, we estimate a Cox proportional hazard model which can be expressed as

$$h(t) = h_0(t)e^{B_1x_1 + \ldots + B_kx_k}$$

where e denotes the base of the natural logarithm, the Bs are the coefficients associated with each independent variable, the x's are the independent variables, and $h_0(t)$ is the baseline hazard (StataCorp 1997).

Each hypothesis is tested by comparing use of employee referrals to all formal sources combined, all other informal sources combined, and temp-to-regular. Temp-to-regular, which can be thought of as "self-referral," represents a more complete realistic job preview.

Results

All of the tables present the results of the survival analyses, showing the likelihood of an employee exiting the organization. The results of models I and II in Table 1 show that recruiting source does influence tenure predictions. For example, the results of model II show that employees recruited

TABLE 1
Results of Survival Analyses: Likelihood[a] of Employee
Exiting the Organization

	Model I	Model II
Race/Gender[b]		
Black male	1.21***	.95
Asian male	.69***	.54***
Hispanic male	.71***	.61***
White female	.99	1.02
Black female	.89*	.75***
Asian female	.52***	.40***
Hispanic female	.59***	.49***
Recruit Source[c]		
Formal	1.19***	1.17***
Other informal	1.01	1.03
Temp to Regular	.79***	.79***
Other	1.15***	1.18***
Like gender[d]		
0%–15%	1.49*	
16%–39%	1.08*	
40%–60%	1.23***	
Like race[d]		
0%–15%	1.49***	
16%–39%	1.21***	
40%–60%	1.19***	

* $p < .05$; ** $p < .01$; *** $p < .001$.

[a]Values reported are hazard ratios; therefore values > 1 should be interpreted as more likely to exit, and values < 1 should be interpreted as less likely to exit.

[b]Base category white male.

[c]Base category employee referral.

[d]Base category 61%–100%.

via formal sources are 17 percent more likely to exit than employees recruited via employee referral. The results of model II in Table 1, when the categorical variables percent like-gender and percent like-race are included, show that race and gender organizational demographic composition do influence tenure predictions.

Compared to situations where new hires are recruited into buildings where their gender is of the clear majority, the exit probabilities of all three groupings where they are not the majority are significantly higher. This is especially true for the token group (0 percent–15 percent), where the probability that

the new hires will exit is 49 percent higher than if they were members of the clear majority (61 percent–100 percent). The results, however, are not consistent with a linear percentage effect. New hires into a building with 16 percent–39 percent of employees of the same gender are only 8 percent more likely to exit than if they were hired into a building where they were in the majority, but they are about 23 percent more likely to exit from a building where 40 percent–60 percent of the employees are of their same gender.

A similar result is found for race. New hires recruited into a building where 0 percent–15 percent, 16 percent–39 percent, or 40 percent–60 percent, compared to 61 percent–100 percent, of the employees are of the same race as the new hire are, respectively, 49 percent, 21 percent, and 19 percent more likely to exit. As the percentage of employees of the same race as the new hire increases, the likelihood decreases that the new hire will exit.

When controlling for organizational demographic composition, there is almost no change in the impact of recruiting source on turnover (compare Model I results with those of Model II). This indicates that there is a low correlation between recruiting source and race-gender composition of the building. This suggests that one is not simply a measure of the other. Recruiting source clearly is a significant factor, independent of organizational demography, in predicting employee turnover.

Results for Hypotheses 1 and 2

Table 2 presents the results of testing hypotheses 1 and 2, the prediction that the percentage of employees of the same gender and race as the new hire

TABLE 2

Results of Survival Analyses: Effect of Interaction between Recruiting Source and Demographic Composition on Employee Turnover

Like gender	Employee Referral	Other Formal	Temp to Informal	Regular	Other
61%–100%	Excluded	1.26***	1.03	.94	1.27***
40%–60%	1.36***	1.53***	1.38***	.90	1.60***
16%–39%	1.14	1.33***	1.25**	1.06	1.24**
0%–15%	1.57	1.81	2.59*	1.78	1.17
Like gender	Employee Referral	Other Formal	Temp to Informal	Regular	Other
61%–100%	Excluded	1.19***	1.05	.80***	1.19**
40%–60%	1.25***	1.31***	1.24**	1.06	1.42***
16%–39%	1.01	1.55***	1.31*	1.05	1.33**
0%–15%	1.65***	1.86***	1.43**	1.03	1.98***

*$p < .05$; **$p < .01$; ***$p < .001$.

will have a greater effect than recruiting source on employee turnover. Whereas the results in Table 1 show that relationships exist between recruiting source and turnover, and gender and race organizational demography and turnover, the results in Table 2 help show whether gender and race organizational demographic composition have a greater effect than recruiting source on employee turnover. Figures 1 and 2 illustrate the results shown in Table 2.

What is striking about the results shown in Figures 1 and 2 is that the effect of gender and race organizational demographic composition on employee turnover is clearly greater than the effect of recruiting source (i.e., the bar heights are more different within recruiting source than across recruiting source). In general, regardless of recruiting source, the employees *most* likely to exit are those recruited into buildings where 0 percent–15 percent of the employees are of their same gender and race (as shown by the tallest bars in Figures 1 and 2). And employees least likely to exit, regardless of recruiting source, are those recruited into buildings where 61 percent–100 percent of the employees are of their same gender and race (as shown by the shortest bars in Figures 1 and 2). This is a particularly important finding, in light of the increasing emphasis placed by employers on using employee referrals. Even employees hired via *formal* sources into buildings where 61 percent–100 percent of the employees are of their gender and race are *less* likely to exit than employees hired via employee referrals into buildings where less than

FIGURE 1

Effect of Recruiting Source and Gender Demographic Composition on Turnover
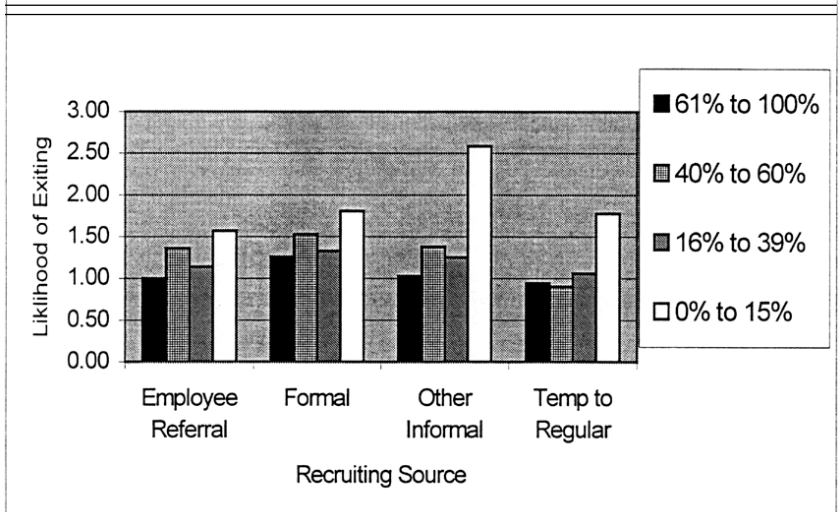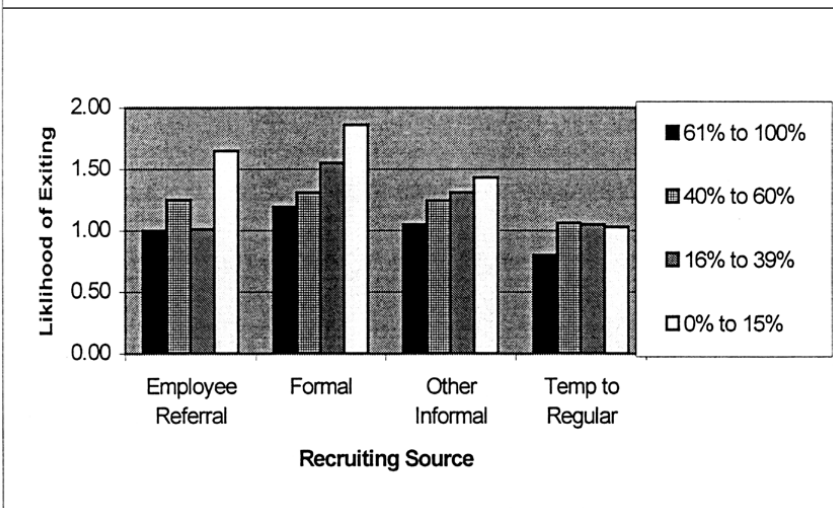
FIGURE 2

Effect of Recruiting Source and Race Demographic Composition on Turnover

61 percent of the employees are of their gender and race. Thus there is strong support for hypotheses 1 and 2.

Conclusion

The results are consistent with past and current beliefs about recruiting source and organizational demographic effects on employee turnover. Both are significant predictors. Clearly one is not simply measuring the other. The use of employee referrals decreases the likelihood of an employee exiting, and the greater the percentage of employees of the same gender and race as the new hires, the less likely they are to exit.

What is most striking about the results, however, is that both gender and race organizational demography have a greater effect on turnover than does recruiting source use. Employee referrals are increasingly used because they are thought to provide better matches, yet employees hired via employee referrals into buildings where they are not the majority are more likely to exit than employees hired via formal sources into buildings where they are the majority. The conventional wisdom has been that employee referrals offer a shortcut through the socialization process. The evidence suggests this is not entirely true.

One might expect that employees hired as temps before becoming per-

manent would be the best matches and the least likely to exit. Temps have more complete information about the job and organization, and the organization has more complete information about the temps with which to make the decision regarding whether the employment relationship should be permanent. Nevertheless, there is not a huge difference in the likelihood of employees exiting if they are hired via temp to regular, but in the numeric minority, compared to being hired via formal sources. Being hired via employee referral does not compensate for being in the numeric minority; however, being a member of the numeric majority can lessen the disadvantage of being hired via formal sources. If an organization tries to diversify its employees by using employee referrals, the new hires will still be more likely to exit than the new hires of the same gender and race as the majority, even when recruited via formal sources.

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