

SOURCES OF REFERRAL AND EMPLOYEE TURNOVER¹

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In this study seven methods or sources that are used to obtain new workers are compared in terms of their influence on employee turnover. Four sources are shown to be predictors of stable employment, namely, the reemployment of former workers who left but now desire to return, the hiring of individuals referred by their high schools, the hiring of individuals referred by present employees, and others (primarily walk-ins). Conversely, three sources are associated with high employee turnover, namely, the utilization of hiring agencies other than the major one under contract with the firm, newspaper advertising, and the use of the major hiring agency.

One of the persistent theoretical and practical problems facing industrial psychologists is employee turnover. The literature on this problem stresses a variety of predictors such as age, relations with supervisors, and interest tests (Schuh, 1967; Vroom, 1964). One possible explanation of employee turnover may be the sources from which employees are drawn. In this regard, previous published research has primarily delineated sources of referral or recruiting patterns without relating them to employee turnover. For example, Mandell (1956) shows that companies with 500 or fewer employees tend to favor employment agencies while larger firms generally have recourse to newspaper advertisements (Mandell, 1956; Malm, 1954).

The objective of this article is to test the hypothesis that recruiting patterns or sources of referral are predictive of employee turnover. If the hypothesis is valid, it should be possible to eliminate unstable employees even before the application of interest and psychological tests through the use of particular sources of referral.

METHOD

The personnel department of a New York bank has been studying the problem of employee referral for several years; the data presented in this article have been supplied by this bank. This department categorizes their seven sources of referral as follows: (a) The employee saw an advertisement for work in a newspaper.

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(b) The employee was hired by the major hiring agency under contract with the bank. (c) The employee was hired by hiring agencies other than the major one under contract with the bank. (d) The employee was referred to the bank by a present employee. (e) The employee has been reemployed after a period of time away from the job. (f) The employee was referred by his high school. and (g) The employee came to the bank through some other method, mainly by walking into the personnel office and asking for work. For each source of referral, the bank then develops a quit rate, that is, the number of employees hired through a particular source within a specific year divided into the number of employees from that source who were hired but quit within that year. Thus, the quit rates can be compared in order to discover the best and worst sources of referral.

In order to ascertain if the differences in the quit rates were significant, 2×2 tables were constructed, the rows of which were two sources of referral and the columns of which were the number of employees not quitting and the number who quit. Chi-square was then used to test the significance of the differences (see Table 2).

RESULTS

Four years are investigated: 1961-1964. In Table 1, the quit rates for each of the seven sources of referral are presented. A total of 6,390 employees were hired during this period, and 1,934 terminated before completing their first year of service with the bank.

As shown in Table 1, the quit rates range from a low of 21.3% for employees who were reemployed to a high of 40.0% for employees who came to the bank through the major hiring agency. Table 2 is a matrix of chi-square values showing the association between the sources of referral. Clear and significant differences between the sources of referral were discovered. Thus, four sources of referral were uniformly and significantly different from three other sources of referral ($p \leq .001$). The four sources are the reemployment of former workers of the

bank, the hiring of individuals referred by their high schools, the hiring of individuals referred by present employees, and others (primarily walk-ins). These four sources of referral have low quit rates ranging from 21.3% to 28.8% and can be considered as suppliers of stable employees. Conversely, the three sources of referral which have quit rates ranging from 37.8% to 40.0% can be viewed as suppliers of unstable employees. These three sources are the employment of individuals who come to the bank through the major hiring agency, the employment of individuals who come because of newspaper advertising, and the employment of individuals who are contacted through hiring agencies other than the major one.

There are no significant within-group differences for the three poor sources of referral. However, within the group of good sources there are three significant differences. "Others, mainly walk-ins" is a poorer method for recruiting employees than reemployment ($p \leq .05$) or recommendations by high school administrators ($p \leq .01$), although it does not significantly differ from recommendations by fellow employees. Reference by present employees is a poorer source than recommendations by high school administrators ($p \leq .05$).

TABLE 1
PERCENTAGE QUIT RATE BY SOURCE OF
REFERRAL: 1961-1964

Source of referral	No. hired	No. quit	% quit
Reemployed	253	54	21.3
Referred by high school	602	131	21.8
Referred by present employees	2320	615	26.5
Others (mainly walk-ins)	1212	349	28.8
Hiring agencies except "major"	637	241	37.8
Newspaper advertising	512	202	39.4
Major hiring agency	854	342	40.0
Total	6390	1934	

The final methodological point of importance concerns the stability of quit rates for each method over time. In the analysis thus far the total figures for the period 1961-1964 have been presented. It is entirely possible that a particular recruiting method is characterized by a low quit rate one year but a high quit rate the next. Such inconsistencies would tend to undermine the analysis. However, as shown in Table 3, there are no inconsistencies when the

TABLE 2
MATRIX OF CHI-SQUARE VALUES SHOWING THE ASSOCIATION BETWEEN THE SOURCES OF REFERRAL

Source of referral	Lower quit rates ^a				Higher quit rates ^b		
	Reemployed	Referred by high school	Referred by present employees	Others (mainly walk-ins)	Hiring agencies except "major"	Newspaper advertising	Major hiring agency
Reemployed		.04	3.40	6.14***	22.83*	25.57*	30.46*
Referred by high school			5.67***	10.23**	38.06*	41.33*	53.83*
Referred by present employees				2.10	31.16*	34.24*	54.32*
Others (mainly walk-ins)					15.70*	18.80*	28.49*
Hiring agencies except "major"						.31	.75
Newspaper advertising							.05
Major hiring agency							

^a 21.3%-28.8%.

^b 37.8%-40.0%.

* $p \leq .001$.

** $p \leq .01$.

*** $p \leq .05$.

TABLE 3

CONVERSION OF THE QUIT RATES FOR EACH RECRUITING METHOD TO RANKS FOR EACH YEAR

Recruiting method	Ranked data			
	1961	1962	1963	1964
Newspapers	7	6	5	5
Major hiring agency	6	7	7	— ^a
Other agencies	5	5	6	— ^a
Referred by fellow employee	3	2	2	3
Reemployed	1	1	3	2
Referred by high school	2	4	1	1
Others (mainly walk-ins)	4	3	4	4

^a No employees were hired through these sources in 1964.

quit rates are analyzed by year. In this table the quit rates for each year have been converted to ranks. In each year the three poor methods of recruitment uniformly have higher quit rates than the four good methods of recruitment. While there are some differences within groups—for example, newspapers ranked seventh in 1961 but sixth in 1962—there are no exceptions when the two groups of good and poor recruiting methods are compared.

DISCUSSION

Even before an employee approaches a firm in order to fill out the application form, it is possible to improve the selection process by utilizing some sources of referral rather than others. This study has demonstrated that four sources of referral are predictive of stable employees, namely, the reemployment of former workers of the bank, the hiring of individuals referred by their high schools, the hiring of individuals referred by present employees, and others (primarily walk-ins). However, three sources of referral are predictive of unstable employees, namely, the use of hiring agencies other than the major one, newspaper advertisements, and the major hiring agency.

The practical significance of this study is relevant for many firms. There has been some research into the cost of hiring and training new employees (see Canfield, 1959, Gaudet, 1958; and McManemin, 1960). A conservative

estimate of such costs is \$1,000 per employee. The significant difference in the quit rates for the seven sources is 9.0%, since the two groups of sources identified as good and poor in reference to employee turnover are divided into their respective components by "others (mainly walk-ins)" (28.8%) and "hiring agencies other than the major one" (37.8%). In the 4 yr. under examination, approximately 2,000 employees left the bank without completing their first year of employment. Given a quit rate of nine per 100 that could have been avoided if the three poor sources had not been used, the total cost to the bank is \$180,000 ($9 \times 20 \times \$1,000$).

This analysis assumes that enough employees could be gathered through the four good sources of referral. In a tight labor market, such an assumption may be unrealistic. However, the analysis does suggest that, even if a firm were to spend \$40,000 or \$50,000 in increasing the number of individuals hired through the four good sources rather than through the three poor sources, the investment would probably be a good one.

Although further research into the sources of referral is necessary so that the demographic and attitudinal characteristics of these workers can be assessed, the present analysis indicates that a substantial proportion of employee turnover can be eliminated through the judicious use of various procedures for attracting employees.

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