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ORGANIZATIONAL CULTURE AND EMPLOYEE RETENTION

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This study investigated the retention rates of 904 college graduates hired in six public accounting firms over a six-year period. Organizational culture values varied significantly among the firms. The variation in cultural values had a significant effect on the rates at which the newly hired employees voluntarily terminated employment. The relationship between the employees' job performance and their retention also varied significantly with organizational culture values. The cultural effects were stronger than the combined exogenous influences of the labor market and the new employees' demographic characteristics. The cultural effects are estimated to have resulted in over six million dollars' difference in human resource costs between firms with different cultural values. Implications for research on person-organization fit are discussed.

The publication of *Organizational Climate and Culture* (Schneider, 1990) provided a thoughtful analysis and integration of the development of organizational culture theory and research. A decade after Pettigrew (1979) first introduced the concept of organizational culture to the literature, his conclusions in that book were, "The most serious cause for concern is the lack of empirical study of organization culture in the 1980's" (Pettigrew, 1990: 417). This article reports the results of such an empirical study examining an important cultural effect thought to influence organizations' productivity (Kopelman, Brief, & Guzzo, 1990). The research investigated whether particular cultural values help or hinder organizations in retaining their most productive employees.

BACKGROUND AND HYPOTHESES

Previous studies of employee turnover have suggested the importance of taking a macro perspective in studying human resource retention. Baysinger and Mobley (1983) criticized the traditional research focus on relationships between individual variables and job terminations. They argued that human

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resource managers cannot attempt to manage employee turnover by influencing the termination decisions of each employee. Instead, the overall termination rate is an organizational number that must be effectively controlled.

Others (Abelson & Baysinger, 1984; Boudreau & Berger, 1985) have suggested that an effective human resource management strategy should balance the cost of replacing the employees who leave against the cost of retaining those who stay. Since it is generally more expensive to replace highly productive employees than to replace weak performers (Cascio, 1982), a cost-effective human resource management strategy will attempt to minimize turnover among strong performers. Furthermore, since all employees will eventually leave an organization, the strategy should induce new employees who perform well to stay longer while encouraging weaker performers to leave at earlier seniority (Peters & Sheridan, 1988).

Unfortunately, there is little research evidence on how organizations can best accomplish these goals. McEvoy and Cascio's (1985) meta-analysis of 20 turnover studies indicated that some human resource management practices, such as job enrichment programs, have consistent but only moderate effects ($\phi = .17$) on turnover rates across organizations. Other practices, such as realistic job previews, have very weak ($\phi = .09$) and inconsistent effects on turnover rates. Terborg and Lee (1984) found that the variation in annual turnover rates across organizations was related to local labor market conditions and the demographic characteristics of employees but that organizational climate variables had very weak relationships with turnover rates.

McEvoy and Cascio's (1987) meta-analysis of another 24 turnover studies indicated that an organization's stronger performers tend to have lower turnover rates than weaker performers during particular calendar periods ($r^c = -.28$). They found that the strength of the inverse relationship between job performance and turnover varied significantly with the length of the calendar period investigated and labor market unemployment rates but reported no moderating effects for organizational variables. Peters and Sheridan (1988) and Barkman, Sheridan, and Peters (1992) also indicated that new employees' job performance was significantly related to their retention rates. The difference in the retention rates of strong and weak performers varied widely across organizations, but no human resource management moderating variables were identified.

Kerr and Slocum (1987) and Kopelman and colleagues (1990) argued that the variation in employee retention across organizations may be related to organizational culture values. Those authors suggested that an organization's cultural values influence its human resource strategies, including selection and placement policies, promotion and development procedures, and reward systems. Different strategies result in psychological climates that foster varying levels of commitment and retention among employees working in different organizations.

Kerr and Slocum (1987) further suggested that organizational culture values may moderate differences in the retention rates of strong and weak performers. They reported that some organizations have cultures that emphasize values of teamwork, security, and respect for individual members. These values foster loyalty and long-term commitment to the organizations among all employees, regardless of their job performance. Other organizations have cultures that emphasize personal initiative and individual rewards for accomplishing specific work objectives. These values foster an entrepreneurial norm whereby the organization does not offer long-term security and the employees do not promise loyalty. They suggested that weaker performers would soon leave such a culture, and stronger performers would stay in order to "exploit the organization until better rewards could be gotten elsewhere" (Kerr & Slocum, 1987: 103). Consequently, employee retention rates may be uniformly high for both strong and weak performers in some organizational cultures but in other cultures may vary greatly depending on employees' job performance.

Since this study was conducted in the public accounting industry, employee gender and marital status, as well as market factors such as labor supply and starting salary levels, were considered important exogenous influences on professional staff retention (Bullen & Martin, 1987; Doll, 1983; Gaertner, Hemmeter, & Pittman, 1987; Walkup & Fenzau, 1980). I controlled for those exogenous variables in testing the following hypotheses regarding organizational culture effects on employee retention:

Hypothesis 1: Organizational culture values will have a significant influence on retention rates, after the exogenous effects of labor market factors and employee gender and marital status have been accounted for.

Hypothesis 2: An employee's job performance will significantly interact with organizational culture values in influencing retention rates. The difference between the retention rates of strong and weak performers will vary significantly depending on the cultural values of an organization, after the exogenous effects of labor market factors and employee gender and marital status have been accounted for.

Organizational Culture Values

Various questionnaire instruments have been developed to measure an organization's cultural values. Most have been based on a priori assumptions regarding the types of values organization members share (Enz, 1986; Glaser, 1983; Sashkin & Fullmer, 1985) or the behavioral norms in organizations (Allen & Dyer, 1980; Cooke & Lafferty, 1989; Hofstede, Neuijen, Ohayv, & Sanders, 1990; Kilmann & Saxton, 1983). Viewpoints regarding the validity of using such dimensions to measure organizational culture values vary

(Rousseau, 1990a; Schein, 1985). O'Reilly, Chatman, and Caldwell (1991) proposed a more descriptive approach whereby respondents use a Q-sort procedure to develop a profile of values describing their organization. Over 50 specific dimensions of cultural values have been proposed in the various questionnaire instruments researchers have designed. Rousseau (1990a) grouped all these dimensions into three broad categories describing organizational values and norms regarding (1) the completion of work tasks, (2) interpersonal relationships, and (3) individual behavior.

Many of the empirical studies of organizational culture values have focused on individual or group and department levels of analysis (Brightman & Sayeed, 1990; Chatman, 1991; Enz, 1986; Meglino, Ravlin, & Adkins, 1989; Rentsch, 1990). These within-organization analyses have limited scope since they fail to consider the macro-level effects of varying cultural values across firms (Dansereau & Alutto, 1990). Other researchers (Cooke & Rousseau, 1988; Hofstede et al., 1990; Kerr & Slocum, 1987) have examined variation in cultural values across firms but have typically sampled organizations from widely different industries. Some of these authors have noted that such a design has a potential problem of confounding variation in organizational culture values with what may be broad industry-wide differences in organizations' strategies and management practices. With few exceptions (Rousseau, 1990b), there is little evidence as to what varying cultural values distinguish one organization from another in a particular industry.

This limitation is important since others (Gordon, 1991; Joyce & Slocum, 1990; Martin, Feldman, Hatch, & Sitkin, 1983; Woods, 1989) have argued that there may be only minor within-industry variation in organizational culture values because firms apply similar standards and similar environmental constraints shape the range of corporate strategies. Saffold (1988) therefore suggested that researchers can infer macro organization-level effects on employee behavior only to the extent that they demonstrate that particular cultural values are unique to certain organizations and qualitatively different from the values found in other organizations. The behavioral effect under investigation should be associated with the presence of a unique profile of cultural values found only in those organizations where the effect was observed. The same profile should not be found in organizations in which the behavioral effect was not observed or in which different effects were observed. Before testing the posited influence of cultural values on employee retention, I therefore considered it important to demonstrate that there were significant differences between the profiles of cultural values reported in different public accounting firms.

METHODS

Data

This study was conducted with the cooperation of six international accounting firms having offices located in a large western city. Focusing on

a specific industry in a particular city had the advantage of controlling for variation in regional labor market conditions that could influence retention rates in different cities.

Retention data were collected for all the firms' professional employees hired in this city during a six-year period. The firms hired a total of 1,014 professionals in their tax and audit departments. The study group included only the 904 recent graduates hired for entry-level positions during the study period. I excluded the 110 experienced professionals hired at senior management levels during the period since their mobility patterns would likely be different from those of inexperienced college graduates just entering the profession. Personnel records indicated that 315 of these new employees (34.8%) voluntarily left their firms during the study period. Another 108 (12%) were dismissed or encouraged to leave because of low job performance or limited career potential. I classified these terminations as involuntary. There were 18 new employees (2%) who transferred to different geographical locations of the same firms for which they had been working. The remaining 463 (51.2%) were still actively employed in their initial offices when the study period concluded.

The retention time for each newly hired employee was computed as the number of months that elapsed between his or her hiring and exit dates. The exit date could be a date on which employment terminated, a date on which a transfer occurred, or the last day of the study period. The voluntary retention time for transferred or active employees is a "censored" measure since their total length of employment was not known. Likewise, the voluntary retention time for involuntarily terminated employees is a censored measure since it was not known how long those employees would have voluntarily stayed with the firms had they not left involuntarily. These censored measures are still useful since I knew that the employees had not voluntarily left prior to the censored retention time.

The influence of organizational culture values on voluntary retention rates was examined through survival analysis (Morita, Lee, & Mowday, 1989; Peters & Sheridan, 1988). Survival analysis provides actuarial estimates of the survival and hazard rates of new hires at increasing seniority. The survival rate function indicates the portion of new employees who voluntarily stay in an organization after reaching a particular month in their employment. The hazard rate function describes how the probability of voluntary terminations changes with increasing seniority. The hazard rate estimates the probability of employees leaving during a particular month of seniority, given that they have survived to the beginning of that month.

Cox's (1972) proportional hazards model was used in this study. The advantage of this model is that researchers do not need to make a priori assumptions regarding the distribution of terminal events in a study population (Allison, 1984; Kalbfleisch & Prentice, 1980). The model can be written as:

$$\lambda(t|X, P, C) = \lambda_0(t) \exp[\beta_i X_i + \beta_j P + \beta_k C + \beta_l (P \times C)],$$

where

- β_i = the estimated regression weights,
- t = a seniority month during which voluntary terminations occur, subject to right-censoring,
- λ_0 = an arbitrary baseline hazard function,
- X_i = five exogenous variables measuring labor market conditions and employee gender and marital status,
- C = a measure of the contrast between organizational culture profiles,

and

- P = employee job performance.

I tested the significance of each variable by examining the difference in the model's cumulative likelihood ratio added by that variable (Harrell, 1990; Yamaguchi, 1991). The statistical analyses was performed with the BMDP SOLO software (Hintze, 1989).

Variables

The new employees' job performance was periodically evaluated through their supervisors' written reviews on multiple performance dimensions, such as technical competence, coordinating ability, and communication skills. In estimating relationships between job performance and hazard rates, researchers must assume that the performance measure used is valid at the exit date. I therefore obtained the most recent evaluations from the firms' personnel records. The performance of terminated or transferred employees was recorded as the evaluation made prior to their exit dates.¹

The performance dimensions and the criteria used to assess performance on each dimension were nearly identical in the six firms studied. Each firm also used a descriptive scale to arrive at a composite ordinal measure of an employee's overall performance based on the written evaluations on each dimension. Supervisors' composite ratings were the basis for the employees' merit salary adjustments and career advancement decisions. The raw composite ratings were not, however, directly comparable since the range on these composite scales varied across firms. The standard deviation of the composite ratings ranged from .67 to 1.27 for the different firms.

Given the uniformity of the performance evaluation criteria and procedures in the firms studied, it was reasonable to assume that performance standards were consistent across them. I therefore derived comparable performance ratings by standardizing each employee's composite rating relative to the mean rating given all other employees hired in the focal employee's office. The distribution of the standardized performance ratings ranged from -3.66 to +3.26 across the six firms. This distribution indicates how many

¹ A limitation of this measurement design is that the survival analysis fails to consider the possibility that earlier changes in an employee's performance could have influenced the job termination.

standard deviations an employee's present performance rating was above or below the mean performance score recorded for all employees hired in an office.

Three exogenous labor market factors could have influenced hazard rates in this city. First, the six firms were very competitive to recruit college graduates with accounting and finance majors. Those who graduated near the tops of their classes continued to have attractive job opportunities available to them even after they started employment. I therefore included each new employee's cumulative grade point average (GPA) in the model as a control variable. The GPA was above 3.00 for 92 percent of the new employees, and the median GPA was 3.50.

Second, starting salaries in this market increased approximately 4 percent annually during the study period. I measured new employees' economic incentives to accept particular jobs by standardizing starting salaries relative to the mean starting salary paid across all firms during a particular calendar year. The standard deviation of the starting salaries ranged from \$833 to \$2,361 in different years. The standardized salary indicates how many standard deviations a salary was above or below the average starting salary paid in the city during a particular year.

Third, each firm focused its recruiting in this market at in-state universities located in or near the focal city. The relocation stress suffered by graduates moving from out-of-state universities to start work in this new city could have influenced hazard rates. The location of a new employee's university was included in the model as a control variable (1 = in-state, 2 = out-of-state). Sixty-two percent of the new employees had graduated from in-state universities, and 38 percent had graduated from out-of-state universities.²

Gender and current marital status were also included in the model as exogenous variables reflecting family responsibilities. Of the new employees, 453 (50%) were women and 451 were men. Gender was coded as 0 for women and 1 for men. Current marital status, measured at the end of the study period or at the exit dates of those who transferred or terminated, indicated that 355 employees (39%) were married and 549 were not married (1 = single, 2 = married). Table 1 reports correlations among the employee variables.

The organizational culture values in each firm were measured using the Organizational Culture Profile (OCP) instrument developed by O'Reilly, Chatman, and Caldwell (1991). This Q-sort instrument contains 54 value statements. Each statement is placed in a bell-shaped distribution, with the two statements most characteristic of important values in an organization (OCP score = 9) placed at one end and the two statements least characteristic of the organization's values (OCP score = 1) at the other.

² The potential confounding error in this university location measure is that it was not known how many of the out-of-state graduates may have actually had home addresses in the focal city.

TABLE 1
Descriptive Statistics and Correlations for New
Employees' Characteristics^a

Variables	Means	s.d.	1	2	3	4	5	6
1. Gender	0.51	0.50						
2. Marital status	1.41	0.49	.04					
3. Salary	0.00	0.97	.06	.12**				
4. Grade point average	3.54	0.31	-.12**	.11**	.02			
5. University location	1.34	0.47	.03	.01	.10**	.04		
6. Performance	0.00	1.02	-.05	.15**	.07	.21**	.01	
7. Voluntary termination	0.36	0.48	-.06	.04	-.04	.07	.07	.02

^a N = 904.

** p < .01

Senior employees, including partners, managers, and senior staff members, were chosen as raters to assure that the OCP profiles reflected the relative importance of organizational values evident during the entire study period. There were 14 to 19 raters in each firm. The raters' seniorities in particular offices ranged from 30 to 264 months, with the median being 58 months. All but one rater had worked in a specific office for over half the six-year study period. An important limitation of this study design, however, is that I did not know whether the terminated employees or those hired near the end of the study period would have agreed with the senior members' perceptions of cultural values.

Using OCP responses from the six offices in the present study as well as data describing nine other organizations, O'Reilly and colleagues (1991) examined the reliability and factor structure of the OCP instrument. They reported alpha coefficients for the entire 54-item Q-sort instrument ranging from .84 to .90 in different organizations. Their factor analysis of the OCP responses from a total of 828 members of 15 different organizations indicated seven common dimensions in the OCP value statements. The seven dimensions were composed of 27 of the 54 value statements.

Three OCP dimensions described norms regarding the completion of work tasks: *Detail*—This dimension includes three value statements describing an organization as having norms stressing the values of being highly analytical, with an orientation toward precision and accuracy. *Stability*—This dimension includes five value statements describing an organization's norms of predictability and rule orientation. *Innovation*—This dimension includes six value statements describing an organization's emphasis on risk taking, responsiveness to new opportunities, and being experimental rather than careful.

Two dimensions described norms regarding interpersonal relationships: *Team orientation*—This dimension includes three value statements describing norms of collaboration and teamwork in the organization. *Respect for*

people—This dimension includes three value statements describing norms of fairness and tolerance.

The final two dimensions described norms regarding individual actions: *Outcome*—This dimension includes four value statements describing organizational norms of high expectations for performance and personal achievement and emphasizing action and results. *Aggressiveness*—This dimension includes three value statements describing norms of competition in an organization.

Individuals' ratings for each OCP dimension were computed as their mean Q-sort scores on all the value statements included in a particular dimension. I estimated the interrater agreement by the interclass correlation for each OCP dimension (Bartko, 1976; James, 1982). The interclass correlations ranged from .09 to .36, with the median value being .23. Although the magnitude of these values does not indicate extremely high interrater agreement, these correlations compare favorably with the results reported for other measures of organizational climate. Interrater agreement on various climate dimensions has ranged from .00 to .50 in 15 previous studies, with the median value being .12 (James, 1982).

The correlations between the raters' seniority and their OCP dimension ratings were very low within each office, ranging from .04 to .18. This pattern suggests that the cultural values remained relatively uniform during the study period since the OCP scores were not associated with the date the rater started employment in an office.³ Table 2 reports the correlations among the OCP dimensions.

RESULTS

Table 3 reports a multivariate analysis of variance (MANOVA) examining the extent to which cultural values varied among the six firms studied. There were significant differences in organizational culture values (multivariate $F = 3.09$, $p < .01$). The stepdown F tests the unique variance explained by each dimension. These results indicated that the work task values of detail and stability and the interpersonal relationship values of team orientation and respect for people explained most of the variance across firms.

Figure 1 illustrates the profile of mean scores for the OCP dimensions in each firm studied. Consistent with the stepdown F values reported in Table 3, the mean scores in each office were nearly identical for the innovation, outcome, and aggressiveness values. Among the work task values, innovation was perceived as being least important in all firms. This finding is not

³ It should be noted that the OCP measures were obtained prior to the merger activity that occurred among public accounting firms in 1989. The subsequent merger of several of the participating firms would likely have had an effect on the cultural values in the offices.

TABLE 2
Descriptive Statistics and Correlations for Organizational Culture Variables^a

Variables	Means	s.d.	1	2	3	4	5	6
1. Detail	6.31	1.01						
2. Stability	4.88	1.02	.30**					
3. Innovation	4.14	0.80	-.19	-.56**				
4. Team orientation	5.27	1.10	-.31**	-.12	-.05			
5. Respect for people	4.17	0.90	-.17	-.10	-.17	.27**		
6. Outcome	6.50	0.82	-.24*	-.26*	.25*	-.18	.18	
7. Aggressiveness	5.56	1.12	.18	-.08	.15	-.39**	-.27**	.26*

^a N = 96.

* $p < .05$

** $p < .01$

TABLE 3
Results of MANOVA for Organizational Culture Profiles

Cultural Dimensions	Stepdown <i>F</i>	Multivariate <i>F</i>
Detail	7.80**	
Stability	3.30**	
Team orientation	4.97**	
Respect for people	5.51**	
Outcome	1.74	
Aggressiveness	1.03	
Innovation	0.37	
All dimensions		3.09**

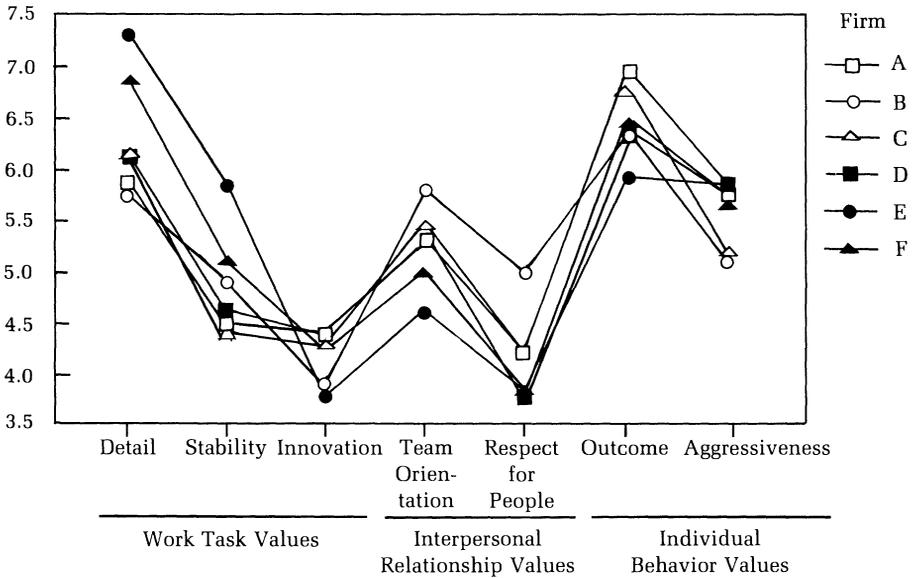
** $p < .01$

surprising, given the close regulation of the tax and audit work performed in public accounting. The individual behavioral norms were also very similar in each firm, with outcome values being more important than aggressiveness values. This similarity may be attributable to the "P² form" of strategic management found in public accounting partnerships (Greenwood, Hinings, & Brown, 1990).⁴

Discriminant function analysis was used to classify firms having different cultural values. Two discriminant functions explained 90 percent of the variance in the seven cultural dimensions. The first function explained 61

⁴ Greenwood and colleagues described the P² form as one having a clear separation between strategic and operating responsibilities. Partners, who often had temporary assignments in the firm's headquarters, were responsible for strategic planning. Partners in the regional offices were responsible for operations and marketing services to clients. Headquarters held regional offices accountable through a well-understood but loose set of financial and market outcomes expected from each region. Moreover, since all the partners were personally liable for the firm's legal and fiduciary responsibilities, there was less emphasis placed on aggressiveness values in regional offices in favor of employee norms to follow established codes of professional behavior.

FIGURE 1
Mean Scores on Organizational Culture Values



percent of the variance and placed strong weight on the detail and stability dimensions. The pooled within-office correlations indicate that detail and stability values were significantly correlated with the first function's scores in each office. The second function explained 29 percent of the variance and placed strong weight on the interpersonal relationship values of respect for people and team orientation. The pooled within-office correlations indicate that team orientation and respect for people had significant positive correlations with the second function's scores in each office, and detail, aggressiveness, and innovation were inversely correlated with that function's scores.

Table 4 depicts the classification of firms having different cultural profiles. Offices A, B, and C had positive mean scores on function two, indicating a culture emphasizing the interpersonal relationship values of team orientation and respect for people. Offices E and F had positive mean scores on function one, indicating a culture emphasizing work task values of detail and stability. Office D had negative mean scores on both functions.

The classification analysis shows the percentage of the firm's actual raters who were predicted to be members of a particular firm based on the similarity of their individual OCP ratings compared to other raters. The distinction between the raters' perceptions of different types of cultures is illustrated by the A,B,C and E,F boxes highlighted in Table 4. The mean percentage on the diagonal in the A,B,C box indicates that only 38.0 percent of the A, B, and C raters were predicted to be members in their correct firm. The mean percentage off the diagonal in the A,B,C box indicates that nearly

TABLE 4
Results of Discriminant Function Analysis

Actual Firm	Number of Raters	Firms' Mean Values		Percent of Raters Predicted to Be Members in Firm					
		Function 1	Function 2	A	B	C	D	E	F
A	19	-0.77	0.40	26.3	15.8	21.1	15.8	15.8	5.3
B	18	-0.24	1.16	5.6	61.1	16.7	5.6	5.6	5.6
C	15	-0.67	0.12	33.3	20.0	26.7	13.3	6.7	0.0
D	14	-0.32	-0.50	14.3	14.3	14.3	35.7	14.3	7.1
E	16	1.75	-0.01	0.0	0.0	0.0	6.3	68.7	25.0
F	14	0.45	-0.51	16.7	8.3	0.0	8.3	25.0	41.7

the same percent (37.5%) were incorrectly predicted to be members in the other two firms in the A,B,C box. This finding suggests that there was little discrimination among the culture value profiles in firms A, B, or C.

There was also little discrimination in the culture value profiles between firms E and F. The mean percentage on the diagonal in the E,F box indicates that 55.2 percent of the E and F raters were predicted to be members in their correct firm. The mean percentage off the diagonal in the E,F box indicates that 25 percent were incorrectly predicted to be members in the other firm in the E,F box.

There was a clear distinction, however, between the profiles in firms A, B, and C compared to the profiles in firms E and F. Only an average 6.5 percent of the A, B, and C raters were predicted to be members in firms E or F. Likewise, only an average 4.2 percent of the E and F raters were predicted to be members in firms A, B, or C. As illustrated in Figure 1, the profiles in firms A, B, and C indicate a strong interpersonal relationship culture that emphasized team orientation and respect for people values. The profiles in firms E and F indicate a strong work task culture that emphasized detail and stability values.

The classification results indicated that the profile of culture values in firm D was nondistinguishable from the profiles in other firms. Firm D raters were often incorrectly predicted to be members in some other firm.

For analytical purposes, I coded the qualitative difference among cultural profiles as a contrast effect in the proportional hazards model. The strong interpersonal relationship culture in offices A, B, and C was coded +1, and the strong work task culture in offices E and F was coded -1. The culture variable was coded as neutral 0 for office D.

Table 5 reports the results for the proportional hazards model. The model explained a small but significant portion of the variance in the voluntary hazard rates across all seniority months ($D = .09$).⁵ A large portion of variance went unexplained, indicating an obvious need for further model

⁵ D is similar to the R^2 value used in regression models: $D = \chi^2 / (n - K + \chi^2)$, where n = sample size and K = number of variables (Hintze, 1989).

TABLE 5
Proportional Hazards Model

Independent Variables	β	χ^2	<i>D</i>	χ^2
Gender	-.30	5.14*		
Marital status	-.13	0.99		
Salary	.01	0.30		
Grade point average	.04	0.18		
University location	.22	2.79		
Total control model ^a			.02	8.81
Performance	-.32	19.97**		
Culture	-.22	7.35**		
Performance by culture	.14	3.90*		
Total model ^b			.09	35.90**

^a *df* = 5.

^b *df* = 8.

* *p* < .05

** *p* < .01

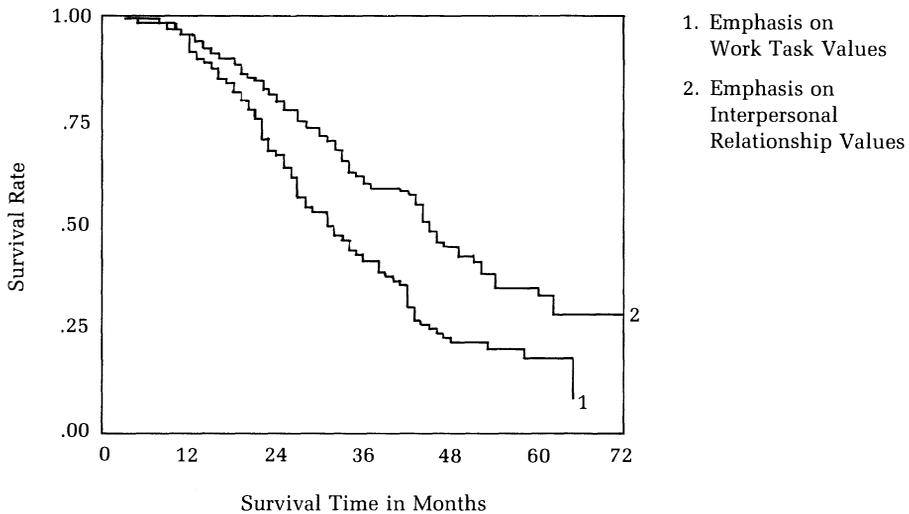
development. Although the explained variance is somewhat lower than that in previous regression models of employee turnover, it is important to remember that the hazards model was an attempt to explain variation in the probability of newly hired employees leaving voluntarily during specific months of seniority, not simply variation in whether employees stayed or left the firms (Peters & Sheridan, 1988).

Most of the variance was explained by performance and culture rather than by the exogenous control variables, which accounted for only 2 percent of the variance (*D* = .02). Gender was the only exogenous variable having a significant effect in the model ($\beta = -.30$), indicating that women had higher hazard rates than men.

The findings support Hypothesis 1. The culture contrast variable had a significant effect in the model ($\beta = -.22$). Hazard rates were significantly lower for new employees working in the culture emphasizing interpersonal relationship values than they were for those working in the culture emphasizing work task values.

Figure 2 illustrates this significant effect of culture. The survival curves during the first 12 months of employment were nearly identical in both cultures. After 12 months, individuals voluntarily quit their jobs at a much faster rate in the culture emphasizing work task values than in the culture emphasizing interpersonal relationship values. On the basis of the test discussed in Lee (1980), the difference between the two survival curves was highly significant (Peto-Wilcoxon $\chi^2 = 19.21$, *p* < .01). The findings indicate that new employees voluntarily stayed 14 months longer in the culture emphasizing interpersonal relationship values than in the culture emphasizing work task values. The median survival time was 45 months in the strong interpersonal relationship culture, compared to 31 months in the strong work task culture.

FIGURE 2
Voluntary Survival Rates in Two Organizational Cultures



The data shown in Table 5 also support Hypothesis 2. Both the performance effect ($\beta = -.32, p < .01$) and the performance-by-culture interaction effect ($\beta = .14, p < .05$) were significant. The latter indicates that the inverse relationship between job performance and voluntary hazard rates varied significantly with organizational culture values.

To examine this interaction, I estimated the survival curves for strong and weak performers—employees who had positive and negative standardized performance ratings—in both organizational cultures. The difference between these survival curves was highly significant (Peto-Wilcoxon $\chi^2 = 18.24, p < .01$). The findings indicate that both strong and weak performers had uniformly higher voluntary survival rates in the culture emphasizing interpersonal relationship values. In this culture, there was only a 1 month difference in their median survival times. The median survival time was 44 months for strong performers and 43 months for weak performers. Survival rates were lower in the culture emphasizing work task values, with weak performers terminating at a much higher rate than strong performers. In this culture, strong performers stayed 13 months longer than weak performers. The median survival time was 39 months for strong performers and 26 months for weak performers.

DISCUSSION

Organizational culture has emerged as one of the dominant themes in management studies during the past decade. Although researchers have made theoretical and methodological advances in understanding the development of cultural values in organizations, there has been less progress in

comparing cultural effects on employee behavior across organizations. This study demonstrated that cultural values varied significantly across six public accounting firms with offices located in the same city. Three firms were characterized as having a culture emphasizing the interpersonal relationship values of team orientation and respect for people. Two other firms were characterized as having a culture emphasizing the work task values of detail and stability.

Professionals hired in the firms emphasizing the interpersonal relationship values stayed 14 months longer than those hired in the firms emphasizing the work task values. This large difference in voluntary survival rates has important consequences for organizational effectiveness. Kopelman and colleagues (1990) suggested that cultural values will ultimately influence organizational effectiveness by enhancing the quality of outputs or reducing labor costs. This study cannot demonstrate cultural effects on the quality of firms' tax and audit work for clients. However, it is possible to estimate the effects on human resource costs.

The estimated costs of job terminations have previously been based on the expenses incurred in replacing terminated employees (Cascio, 1982). The survival model suggests an alternative method for estimating termination costs. An organization can never completely avoid replacement expenses but can delay those costs until later seniority periods by increasing the survival rates of new employees. The human resource costs thus represent an opportunity loss of not retaining new people for long. Barkman, Sheridan, and Peters (1992) suggested that this opportunity loss can be estimated by considering the gross profits generated by employees during each month of seniority.

The gross profits per professional employee in public accounting can be determined by subtracting the annual costs of retaining an employee from the annual revenues he or she generates during each year of employment with a firm. Barkman and colleagues (1992) estimated these profits in a city comparable to the one studied here using the firms' average billing fees and hiring, training, and compensation costs from years corresponding to the study period. They estimated that mean profits ranged from \$58,000 per professional employee during the first year of employment to \$67,000 during the second year and \$105,000 during the third year. A firm therefore incurs an opportunity loss of only \$9,000 ($\$67,000 - \$58,000$) when a new employee replaces a two-year employee but incurs a \$47,000 loss ($\$105,000 - \$58,000$) when an employee of three years is replaced.

New employees stayed voluntarily for 45 months in the culture emphasizing interpersonal relationship values and 31 months in the culture emphasizing work task values. I made two simplifying assumptions to estimate the opportunity loss associated with this 14-month difference in median survival times. First, since this difference is based on voluntary survival rates, I assumed that both strong and weak performers were achieving acceptable performance levels and generating the same mean profits in each year of employment. Second, I assumed that the annual profits were distrib-

uted uniformly between 31 and 45 months seniority. Under these assumptions, the 14-month difference in median survival time represents an opportunity loss of approximately \$44,000 per new employee $[(\$47,000 - \$9,000)/12 \times 14]$ between the firms having the two different types of cultural values. Considering the total number of new employees hired in each office during the study period, I estimated that a firm emphasizing work task values incurred opportunity losses of approximately \$6 to \$9 million more than a firm emphasizing interpersonal relationship values.

The magnitude of the difference in voluntary survival rates between different organizational cultures raises important questions regarding the significance of person-organization fit in determining employee retention. Other researchers (Chatman, 1989, 1991; O'Reilly, Chatman, & Caldwell, 1991; Schneider, 1987) have argued that the fit between personal and organizational values is very important to employee retention. In his attraction-selection-attrition model, Schneider succinctly described this proposition by suggesting that particular kinds of individuals are attracted to particular organizations and that those who do not fit an organization soon leave. An unresolved research question, however, is whether the match with individual attributes is more important than the retention effects explained by a work situation itself (Davis-Blake & Pfeffer, 1989). The findings of the present study provide two reasons to suggest that person-organization fit may have less influence on employee retention than the situational effects of new employees experiencing particular cultural values.

First, every firm presumably hired some graduates whose personal values made them good "fits" to the firm's cultural values and others who were person-organization "misfits." Those who fit would tend to have significantly higher job satisfaction and intentions to continue working in their firms than those who did not (Chatman, 1991). The retention effects of varying person-organization fit and individual commitment variables found in previous research, however, have been much smaller than the differences attributable to varying organizational culture values in this study. For example, O'Reilly and colleagues (1991) used the same OCP Q-sort method used here to assess the congruence between new employees' personal values and the organizational culture values reported in their offices. Their procedure identified a top quartile of fits, people having the highest congruence between the profiles of personal and cultural values, and a bottom quartile of misfits, those having the least congruence between profiles. The survival curves were nearly identical for the two groups during the first 20 months of employment. The misfits started terminating at a faster rate than the fits only after 20 months. The difference in survival times was a small fraction of the 14-month difference in median survival time found in the present study between firms having different types of cultural values.

The retention effects attributed to varying levels of individual commitment have been somewhat larger, but questions remain regarding the importance of this variable. Kline and Peters (1991) reported that highly commit-

ted clerical employees in a national retail organization had a median survival time nearly three times longer than those having lower commitment. The median survival time for employees with low commitment was 3.8 months, compared to only 10.8 months for those with higher commitment. It would be important to understand the cultural values in this retail organization, since very few new employees stayed for one year, regardless of their organizational commitment.

Lee, Ashford, Walsh, and Mowday (1992) discussed the survival rates of new cadets admitted to the United States Air Force Academy. They partitioned a sample of cadets into comparison groups who reported relatively high and low commitment to the Air Force near the start of their freshman years. Approximately 70 percent of the low-commitment cadets and 90 percent of the high-commitment cadets had survived at the end of the freshman year. The effects of individual commitment, however, diminished after the first year. Nearly 65 percent of the low-commitment cadets and only 78 percent of the high-commitment cadets had survived at graduation. The situational effect of experiencing rigorous cultural values at the academy would appear to have had a stronger influence on cadet retention than the individual commitment levels of entering cadets.

The second reason for questioning the importance of person-organization fit stems from finding a significant interaction effect between job performance and organizational culture. Presumably, new employees who fit should perform better. A relationship between fit and performance would partially explain why stronger performers stayed 13 months longer than weaker performers in the culture emphasizing work task values. Nevertheless, both strong and weak performers stayed much longer in the organizational culture emphasizing interpersonal relationships than in the work task culture. This suggests that the most parsimonious explanation of employee retention may simply be that an organizational culture emphasizing interpersonal relationship values is uniformly more attractive to professionals than a culture emphasizing work task values. Managers may be well advised to foster cultural values that are attractive to most new employees rather than be concerned with the selection and socialization of particular individuals who fit a specific profile of cultural values (Davis-Blake & Pfeffer, 1989).

The question of whether person-organization fit and individual commitment have substantial effects on employee retention not accounted for by the situational influence of particular organizational culture values has important implications for human resource managers. Future research may examine these questions by estimating the survival rates of fits and misfits and of employees with high and low commitment across organizations having different types of cultural values.

The present study was also conducted in a population known to have high career mobility (Lampe & Earnest, 1984). If organizational culture values have an effect on employee retention, it is more likely to appear in this highly mobile accounting profession than in occupations having less mobil-

ity. The generalizability of the research findings may therefore be limited. It remains to be seen whether organizational culture values have as large an effect on retention in other professions and in different types of organizations.

Lastly, it should be noted that the quantitative approach used to measure cultural values in this study has important limitations. Although the findings indicate that perceived cultural values varied among firms, they offer no insight into how or why these cultural differences evolved within the public accounting industry in this particular city. Qualitative assessment of these prior developmental processes may be essential for fully understanding how organizational culture values influence employee retention in specific organizations.

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