

## Correlates of Employee Satisfaction With Stock Ownership: Who Likes an ESOP Most?

Katherine J. Klein and Rosalie J. Hall  
University of Maryland, College Park

In this study, we examined the correlates of individual employee satisfaction with stock ownership in a sample of 37 employee stock ownership plan (ESOP) companies. The results indicated that ESOP satisfaction is a function of five factors: (a) characteristics of the company ESOP, (b) employee status within the ESOP, (c) employee values, (d) interactions between employee and ESOP characteristics, and (e) employees' general attitude toward the organization as a whole (organizational commitment). Together, these five factors accounted for 58% of the variance in ESOP satisfaction. The results both support and extend previous employee stock ownership research and theory.

Despite increasing research attention (e.g., Conte & Tannenbaum, 1978; French & Rosenstein, 1984; Hammer & Stern, 1980; Hochner & Granrose, 1985; Klein, 1987; Long, 1978; Rosen, Klein, & Young, 1986), important questions about the nature and determinants of employee attitudes toward stock ownership remain unanswered. Are all employees equally satisfied with stock ownership? If not, which factors distinguish the more satisfied from the less satisfied employees? How much do company-level factors explain differences in employee satisfaction with stock ownership? Are more highly paid employees more satisfied with stock ownership than lower paid employees? Are more educated employees more satisfied with ownership than less educated employees?

To answer these questions, we proposed and tested a model of individual employee satisfaction with stock ownership. Before describing this model, we provide a brief introduction to employee stock ownership plans (ESOPs).

### Employee Stock Ownership Plans

ESOPs have been adopted by more than 8,000 firms nationwide (Rosen et al., 1986). Fundamentally, an ESOP is a mechanism by which management gives employees stock. Employees do not buy the stock in the ESOP, nor do they typically forfeit wages in exchange for stock.

In an ESOP company, the company annually donates stock, or cash to buy stock, to an ESOP trust. Stock held in the trust is allocated to individual employees on the basis of employee salary. All company employees are typically included in the plan after a year of service with the company. Through vesting, employees earn a gradually increasing right to their ESOP stock. Employees receive their vested shares when they leave the

company or, in some companies, only when they reach retirement age. Employees in publicly held companies must be allowed to vote their stock. Privately held companies are not legally required to grant employees general stock voting rights.

Companies establish ESOPs for different reasons. Many establish an ESOP for the tax savings that ESOPs offer. In addition, ESOPs can be used to fulfill management's commitment to employee participation, to increase employee commitment and productivity, to raise capital, to transfer ownership from a company founder to employees, to offset wage concessions, to avert a plant shutdown, or to transfer from public to private ownership. ESOP companies are, thus, a diverse lot. Most, however, are relatively small (500 or fewer employees), privately held, and financially successful (Marsh & McAllister, 1981; Rosen & Klein, 1983; Rosen et al., 1986). Worker buyouts to avoid plant shutdowns receive substantial popular media attention (e.g., Labich, 1983), but in fact they account for only 4% or less of all ESOPs (General Accounting Office, 1986; Rosen et al., 1986). (For more detailed descriptions of ESOPs, see Kaplan & Ludwig, 1985; Rosen et al., 1986; and Weyher & Knott, 1985.)

### Predictors of Individual ESOP Satisfaction

The employee ownership literature suggests that employee ESOP satisfaction depends on the extent to which the ESOP meets employee needs and expectations for financial gain, influence in company decision making, and a sense of greater involvement in the company (French, 1987; Klein, 1987; Long, 1979; Tannenbaum, 1983). We hypothesize that the meeting of these expectations, in turn, depends on five factors: (a) characteristics of the company ESOP, (b) employee status within, and understanding of, the ESOP, (c) employee values, (d) interactions between employee and ESOP characteristics, and (e) halo, the employee's general attitude toward the organization as a whole.

*ESOP characteristics.* Klein's (1987) research documented the importance of both the financial benefits of the ESOP and management's employee ownership policies and practices in explaining between-company differences in average employee satisfaction with the ESOP. In company-level analyses, mean ESOP satisfaction was highest in companies in which (a) the

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Rosalie J. Hall is now at the University of Akron, Ohio.

Correspondence concerning this article should be addressed to Katherine J. Klein, Department of Psychology, University of Maryland, College Park, Maryland 20742.

company made relatively large annual contributions to the ESOP, (b) management was highly committed to employee ownership, and (c) company communications about the ESOP were extensive. (Mean ESOP satisfaction was not significantly related to the percentage of company stock owned by employees, the return on company stock, the reason the company established its ESOP, or the provision of employee stock voting rights.)

Insofar as several of the ESOP characteristics significantly predict between-company differences in average ESOP satisfaction, they are also likely to predict between-company differences in individual employee ESOP satisfaction. Thus, we retested—at the individual rather than the company level of analysis—the effects of the ESOP characteristics tested in Klein (1987). In addition, we included two other ESOP characteristics that may also influence individual ESOP satisfaction: the age of the ESOP and whether the company gives employees their vested ESOP stock whenever they leave the company or only at retirement. These two variables affect the size of the employee's account (ESOP accounts are uniformly small if the ESOP is a new plan) and the delay before the account is actually available to the employee, respectively.

ESOP characteristics are relatively gross predictors of individual ESOP satisfaction; they vary only between, not within, companies. Nonetheless, they are fundamental for understanding individual ESOP satisfaction because they effectively set limits on the ESOP's capacity to satisfy individual employees. If, for example, the company contribution to the ESOP is very small, then even the most highly paid employees will have small ESOP accounts. (Other things being equal, a \$100,000-a-year executive in a company contributing 1% of payroll to the ESOP will own less stock than a \$10,000-a-year janitor in a company contributing 15% of payroll to the ESOP.) Similarly, if a company does little to publicize its ESOP, employees in the company will lack awareness and understanding of the plan, compared with employees in firms with more active ESOP communication programs.

*Individual characteristics: Employee status within, and understanding of, the plan.* Within the parameters set by ESOP characteristics, individual-level variables may explain within-company variance in ESOP satisfaction. One key individual-level factor is an individual employee's financial status within the plan. That is, an employee's ESOP satisfaction may reflect how much money he or she has personally earned through the employee ownership plan. This hypothesis is consistent with previous employee ownership research (French & Rosenstein, 1984; Hochner & Granrose, 1985; Klein, 1987; Rosen et al., 1986) and with research on pay and other benefit plans that documents the positive correlation between the size of the benefit and employee satisfaction with that benefit (Berger & Schwab, 1980; Heneman, 1984; Lawler, 1971, 1981; Schwab & Wallace, 1974).

An individual's financial status in the ESOP is determined by salary, tenure, and vesting. Salary is an important determinant because stock is typically awarded in proportion to employee salary. Tenure also affects the size of an employee's ESOP account because the total amount of stock held in an employee's ESOP account grows with every annual company contribution to the ESOP. Finally, vesting influences an individual's financial status in the ESOP insofar as employees typically have only a

partial claim to the stock in their ESOP accounts until they have been employed by the company for several years. We thus hypothesize that ESOP satisfaction is positively related to employee salary, tenure, and vesting. (Employee tenure and the degree to which an employee's ESOP account is vested are closely related but not identical variables because of the variety of vesting schedules used in different ESOP companies; Rosen et al., 1986.)

Our discussion of the probable impact of ESOP characteristics and individual ESOP status on ESOP satisfaction assumes that employees have a basic understanding and appreciation of the plan. However, employee understanding and appreciation of the ESOP may vary with employee education and age. As ESOPs are complicated legal plans, employees with more education may have a better understanding of, and thus a greater appreciation of, the ESOP than do less educated employees. As ESOPs are deferred benefit plans that offer few if any immediate rewards, older employees—who are more likely to appreciate the need for a retirement nest egg and who are more likely to actually receive their ESOP stock relatively soon—may be more satisfied with the ESOP than are younger employees. Employee age and education should thus be positively correlated with ESOP satisfaction.

*Employee values.* Some employees may expect more than just financial gain from participation in the ESOP; they may expect to gain a voice in company decision making as well (Elberman, 1984; French, 1987). Previous research, however, suggests that employees who expect to gain influence through an ESOP may be disappointed. Only 10%–15% of privately held ESOP companies allow their employee stockholders to vote their stock, and in publicly held companies, employees rarely own a large enough portion of company stock to influence company decision making (Rosen et al., 1986). Further, ESOP participants typically report that stock ownership does not increase their influence in the company (Rosen et al., 1986). Therefore, we hypothesize that the strength of an employee's desired influence in the company will be negatively related to ESOP satisfaction.

*Interactions between employee and ESOP characteristics.* Thus far, we have suggested that both ESOP and employee characteristics may shape employee satisfaction with stock ownership. These factors may interact, however, with ESOP characteristics moderating the relation between employee characteristics and ESOP satisfaction. For example, the relations between ESOP satisfaction and employee salary, tenure, and vesting may be moderated by company-level factors that limit the value of the ESOP for all participants, regardless of their financial standing in the plan. ESOP accounts are likely to be universally small if (a) the ESOP is a new plan, (b) the company contribution to the ESOP is small, or (c) company stock has performed poorly. Thus, we predict that the relations between ESOP satisfaction and employee salary, tenure, and vesting will be weaker in companies in which any of these conditions prevail.

In a similar vein, the correlations between ESOP satisfaction and employee education and age may be attenuated by company-level factors that lessen the importance of education and age for employee understanding and appreciation of the ESOP. For example, in companies that maintain extensive ESOP communications programs (e.g., company newsletters about the ESOP, annual employee shareholder meetings), all of the em-

employees may more fully understand the ESOP and education may thus be a less powerful determinant of ESOP satisfaction. Employee age may be a relatively strong determinant of ESOP satisfaction in companies that require employees to wait until they reach retirement age to receive their vested ESOP shares and a relatively weak determinant in companies that simply give employees their vested shares when they leave the company.

Finally, the hypothesized negative relation between desired employee influence in the company and ESOP satisfaction may be moderated by ESOP characteristics that increase employee influence in company decision making. If the ESOP appears to increase employee influence, then employees who desire such influence in the company are less likely to be disappointed. In accordance with Klein's (1987) research, therefore, the negative relation between desired influence and ESOP satisfaction should be weaker in companies in which (a) participants are granted voting rights, (b) management is highly committed to employee ownership, and (c) the ESOP communications program is very active.

*Halo: General attitude toward the organization.* The last factor that may influence employee satisfaction with the ESOP is halo: Does the employee tend to view the organization as a whole in a positive or negative light? Because an ESOP may not be a highly salient aspect of the individual's daily experience of the organization, the employee's general attitude about the company may color his or her specific assessment of the plan. If the employee is highly satisfied with the company, he or she may view the ESOP as one more indication of the merits of the organization. Conversely, if an employee is highly dissatisfied with the company, he or she may view the ESOP as an example of a self-serving management ploy. Therefore, we hypothesize that the more positive an employee's view of the organization is, the higher the employee's satisfaction with the ESOP will be.

### Summary of Hypotheses

Our model suggests that individual ESOP satisfaction is a function of five sets of variables, summarized in the hypotheses listed below:

*Hypothesis 1.* ESOP characteristics (percentage of company stock owned by the ESOP, size of the company contribution to the ESOP, stock return, ESOP voting rights, management's employee ownership philosophy, ESOP communications, ESOP reason, ESOP age, and ESOP stock distribution schedule) are positively related to individual ESOP satisfaction.

*Hypothesis 2.* Employee characteristics related to employee status in and understanding of the ESOP (salary, tenure, vesting, education, and age) are positively related to individual ESOP satisfaction.

*Hypothesis 3.* Desired influence in company decision making is negatively related to individual ESOP satisfaction.

*Hypothesis 4.* Interactions between individual characteristics and ESOP characteristics (salary, tenure, and vesting by ESOP age, ESOP contribution, and stock return; education by ESOP communications; age by ESOP distribution schedule; desired influence by voting rights, management's employee ownership philosophy, and ESOP communications) are related to individual ESOP satisfaction.

*Hypothesis 5.* General attitude toward the company is positively related to ESOP satisfaction.

In addition, a sixth hypothesis is implicit in Hypotheses 1–5 and throughout our discussion:

*Hypothesis 6.* In a hierarchical regression analysis, each successive set of predictors identified in Hypotheses 1–5 adds a significant increment to the explained variance in ESOP satisfaction.

## Method

### Participants

Data analyses are based on the responses of 2,804 ESOP participants in 37 companies. The data were collected between May 1982 and November 1984 under the auspices of the National Center for Employee Ownership. The companies ranged in size from 15 to 7,080 employees. The sample is described in greater detail in Rosen et al. (1986) and Klein (1987).

### Procedures

Surveys measuring employee characteristics (e.g., salary and age) and attitudes (e.g., ESOP satisfaction and organizational commitment) were distributed to all of the company employees or, in companies with more than 400 employees, to a random sample of employees. The average employee response rate was 55.13% ( $SD = 17.15$ ). Company sample size ranged from 10 to 268 employees ( $M = 75.43$ ,  $SD = 64.75$ ). In addition, a key managerial respondent (the chief executive officer, vice president, or personnel director) in each company was interviewed for background information about the company and the ESOP.

### ESOP Characteristics

The percentage of company stock owned by the ESOP was the number of shares owned by the ESOP divided by the total number of company shares in circulation at the time of the survey ( $M = 42.33\%$ ,  $SD = 33.11\%$ ).

The size of the company contribution to the ESOP was the average amount of cash or stock the company contributed to the ESOP trust in the 3 years preceding the employee survey. The measure is expressed as a percentage of covered employee payroll ( $M = 9.46\%$ ,  $SD = 6.28\%$ ). Contribution data are missing for two companies.

Company stock return was the percentage change in the market or appraised value of company stock during the 2-year period preceding the employee survey ( $M = 37.05\%$ ,  $SD = 81.25\%$ ). (None of the companies distributed dividends.) Stock return data are missing for four companies.

Companies that gave employees full voting rights (based upon their stock ownership) were coded 1 ( $n = 13$ ), whereas companies that did not give full voting rights were coded 0 ( $n = 24$ ).

The company's employee ownership philosophy score was the mean response to three items (e.g., "Employee ownership is a central part of our management philosophy"). Response categories ranged from *strongly disagree* (1) to *strongly agree* (7). The scale reliability was .83 ( $M = 5.19$ ,  $SD = 1.48$ ). Employee ownership philosophy data are missing for three companies.

The managerial respondent was asked to indicate the single, primary reason the ESOP was established from a list of seven reasons: (a) employee benefit, (b) employee incentive, (c) financial and tax purposes, (d) philosophical commitment, (e) avoiding a shutdown, (f) business transfer from existing shareholder(s) to employees, and (g) purchase of the company during a corporate divestiture. (These responses were dummy coded for the regression analyses.) The top three responses were philosophical commitment ( $n = 9$ ), employee benefit ( $n = 8$ ), and busi-

Table 1  
Correlations Among ESOP Characteristics

Variable	1	2	3	4	5	6	7	8	9
1. Percentage	—								
2. Voting	-.13	—							
3. Philosophy	.02	.47**	—						
4. Communications	.15	.33	.53**	—					
5. Contribution	.17	.05	.06	.01	—				
6. Stock return	-.28	.26	.27	.24	-.08	—			
7. ESOP age	-.19	-.19	-.08	-.03	-.33*	.28	—		
8. Distribution	-.05	-.28	.02	-.27	.06	-.12	-.14	—	
9. ESOP reason	.67**	.35	.62*	.42	.46	.39	.15	.21	—

Note. These analyses are at the company level of analysis. Maximum *N* = 37. ESOP reason relations are described using *eta*. ESOP = employee stock ownership plan.  
\**p* < .05. \*\**p* < .01.

ness transfer (*n* = 7). One company established an ESOP to avoid a shutdown.

To measure ESOP communications, the key managerial respondent noted which ESOP communications strategies the company used from a checklist of 12 strategies (e.g., employee ownership mentioned in company letterhead, annual meeting for employee stockholders). The score was the number of communications strategies the company used (*M* = 5.58, *SD* = 1.99). ESOP communications data are missing for four companies.

The age of the ESOP was the number of years between the date the ESOP was established and the date of the employee survey in the company (*M* = 6.05, *SD* = 2.85).

The ESOP distribution schedule was binary coded to indicate the time at which employees received their vested ESOP shares—when they left the company, coded 1 (*n* = 29), or when they reached retirement age (even if they had left the company prior to retirement), coded 0 (*n* = 4). Distribution data are missing for four companies.

Employee Survey Measures

The ESOP satisfaction measure consisted of the mean response to eight satisfaction items (e.g., “It is very important to me that this company has an employee stock ownership plan”), rated on a 7-point Likert scale with responses ranging from *strongly disagree* (1) to *strongly agree* (7). The scale reliability was .91 (*M* = 5.00, *SD* = 1.23).

Survey respondents indicated their tenure and age in years (*M* = 7.04, *SD* = 7.53, and *M* = 37.07, *SD* = 11.75, respectively).

Vesting was not directly measured but was calculated using employee tenure and the company vesting schedule. For example, if an employee

had been in the ESOP for 4 years and participants vested 20% each year, the employee received a score of 80% (*M* = 44.0%, *SD* = 39.3%).

Survey respondents indicated their education and salary in increments. Education ranged from *some elementary school* (1) through *graduate degree* (8) (*M* = 5.10, *SD* = 1.35). Salary ranged from *less than \$10,000 a year* (1), increasing in \$10,000 increments to *\$50,000 or more* (6) (*M* = 2.96, *SD* = 1.28).

To measure desired influence, respondents were asked to indicate how much influence in decision making they thought that nonmanagerial workers should have over (a) social events, (b) working conditions, (c) the way workers perform their jobs, (d) pay and other compensation, (e) hiring, firing, and other personnel decisions, (f) selection of supervisors and management, and (g) company policy (e.g., investment in new equipment). The five response categories indicate an increasing degree of desired influence from *Workers should have no say* (1) to *Workers should decide alone* (5). The scale score was the mean of the seven items (*M* = 3.09, *SD* = .57). Reliability for the desired influence scale was .80.

The organizational commitment score consisted of the mean response to the nine positively worded items of the Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979; e.g., “For me, this is the best of all possible organizations for which to work”). This scale was used as a general indicator of the employee’s satisfaction with the company as a whole in the tests of the halo hypothesis. The commitment items were rated on a 7-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7) (*M* = 5.17, *SD* = 1.11). Reliability for the scale was .89.

In the post hoc analyses (described in the Results section), we used an 8-item semantic differential measure of life satisfaction (Campbell,

Table 2  
Correlations Among Employee Characteristics and Attitudes

Variable	1	2	3	4	5	6	7
1. Salary	—						
2. Tenure	.22*	—					
3. Vesting	.23*	.70*	—				
4. Age	.33*	.54*	.41*	—			
5. Education	.46*	-.17*	-.12*	-.02	—		
6. Desired influence	-.12*	-.11*	-.10*	-.17*	.04	—	
7. Organizational commitment	.10*	.10*	.06*	.13*	-.18*	-.18*	—

Note. Sample size varies from 2,606 to 2,773.  
\**p* < .01.

Table 3  
Relations Between ESOP Satisfaction and  
ESOP Characteristics

Variable	Correlation with ESOP satisfaction	$\beta$ from simultaneous regression
Percentage	-.08**	-.03
Voting	.02	-.16**
Philosophy	.28**	.13**
Communications	.25**	.22**
Contribution	.23**	.29**
Stock return	.16**	.02
ESOP age	.15**	.17**
Distribution	-.04*	.04
ESOP reason	.04**	—
<i>R</i>		.400**
<i>R</i> <sup>2</sup>		.160**
Adjusted <i>R</i> <sup>2</sup>		.155

Note. Eta is used to describe the relation of ESOP (employee stock ownership plan) reason with ESOP satisfaction. Because ESOP reason is dummy coded,  $\beta$  is not listed for ESOP reason. Mean ESOP satisfaction for each of the seven ESOP reasons are as follows: philosophical (5.29), business transfer (5.13), incentive (4.99), benefit (4.86), shutdown (4.82), financial (4.63), and divestiture (4.61).  
\* $p < .05$ . \*\* $p < .01$ .

Converse, & Rodgers, 1976). Scale scores ranged from 1 (indicating low life satisfaction) to 8 (indicating high life satisfaction) ( $M = 5.14$ ,  $SD = .85$ ). Reliability for the scale was .71.

### Statistical Analyses

To test Hypotheses 1, 2, 3, and 5, we calculated the first order correlation between each predictor listed in the hypothesis and ESOP satisfaction. Using four separate regression models, we regressed ESOP satisfaction upon each set of predictor variables specified in each hypothesis. To test each interaction in Hypothesis 4, we used a regression model containing two main effects (e.g., ESOP age and employee salary) and a multiplicative interaction term (e.g., ESOP Age  $\times$  Salary).

Finally, to test Hypothesis 6, we used a hierarchical regression analysis to examine the increment in the squared multiple correlation attributable to each set of predictors. Each set of standardized predictors was entered as a block into the regression equation. On the basis of our theoretical model, the five blocks were entered in the following order: ESOP characteristics, individual characteristics, employee values, interactions between employee and ESOP characteristics, and halo. This analysis strategy is consistent with guidelines suggested by Cohen and Cohen (1983) in that blocks of predictor variables are not expected to be causally affected by blocks added later and that variables of greater relevance or priority are entered earlier.

All of the tests (with the exception of the correlations among the ESOP characteristics) are at the individual level of analysis. In analyses that examined the relation between the ESOP characteristics and ESOP satisfaction, the same ESOP characteristic score (a company-level variable) was assigned to each individual within a given company. This is consistent with our desire to predict individual ESOP satisfaction. (For a contrasting approach, see the company-level analyses in Klein, 1987.)

### Results

Tables 1 and 2 list the Pearson product-moment correlations among the ESOP characteristics and among the individual-level employee characteristics and attitudes, respectively. Although

all of our subsequent analyses are at the individual level of analysis, the correlations between the ESOP characteristics (Table 1) are at the company level of analysis because the ESOP characteristics describe each company, not each individual participant.

### Hypothesis 1: ESOP Characteristics

Table 3 presents the results of correlational and regression tests of Hypothesis 1. Each ESOP characteristic, with the exception of stock voting rights, is significantly correlated with ESOP satisfaction. Together, the ESOP characteristics explain 16% of the variance in ESOP satisfaction ( $F = 29.77$ ,  $p < .01$ ). In the simultaneous regression model, the significant ESOP characteristic predictors of ESOP satisfaction are stock voting rights, management's employee ownership philosophy, ESOP communications, company contribution to the ESOP, and ESOP age. (Given the nonsignificant correlation between ESOP satisfaction and voting rights, the significant  $\beta$  for voting rights appears to be an artifact.)

### Hypothesis 2: Employee Characteristics

Table 4 summarizes the results of tests of Hypothesis 2. ESOP satisfaction is significantly positively related to salary, tenure, vesting, and age. Contrary to our hypothesis, education is significantly negatively related to ESOP satisfaction. Together, the employee characteristics explain 9% of the variance in ESOP satisfaction ( $F = 50.30$ ,  $p < .01$ ). Because of the multicollinearity among employee age, tenure, and vesting (see Table 2), neither tenure nor vesting is significantly related to ESOP satisfaction within the simultaneous regression equation.

### Hypothesis 3: Employee Values

ESOP satisfaction is significantly negatively related to the level of employees' desired influence in company decision making ( $r = -.15$ ,  $R^2 = .023$ ,  $F = 62.71$ ,  $p < .01$ ). The more influence an employee believes nonmanagerial employees should have in company decision making, the less satisfied he or she is with the company ESOP.

Table 4  
Relations Between ESOP Satisfaction and  
Employee Characteristics

Variable	Correlation with ESOP satisfaction	$\beta$ from simultaneous regression
Salary	.08*	.17*
Tenure	.16*	.04
Vesting	.12*	-.01
Age	.17*	.09*
Education	-.20*	-.27*
<i>R</i>		.295*
<i>R</i> <sup>2</sup>		.087*
Adjusted <i>R</i> <sup>2</sup>		.085

Note. ESOP = employee stock ownership plan.  
\* $p < .01$ .

Table 5  
*Tests for Interactions Between the Employee and ESOP Characteristics in Predicting ESOP Satisfaction*

Moderator variable	Stepwise regression			Moderator variable	Stepwise regression		
	R <sup>2</sup> change	F	Simultaneous β		R <sup>2</sup> change	F	Simultaneous β
ESOP contribution				Stock return (continued)			
Contribution	.051	129.97**	.235**	Stock return	.026	66.76**	.180**
Salary	.011	28.79**	.110**	Vesting	.021	53.64**	.145**
Salary × Contribution	.002	4.01	.040*	Vesting × Stock Return	.000	0.00	-.001
All variables	.064	54.82**	—	All variables	.047	40.60**	—
Age of the ESOP				Stock distribution schedule			
Contribution	.051	130.19**	.227**	Distribution	.001	3.53	-.241**
Tenure	.018	46.03**	.146**	Age	.029	71.64**	.177**
Tenure × Contribution	.005	12.83**	-.074**	Age × Distribution	.003	6.94*	.188**
All variables	.073	64.12**	—	All variables	.033	27.49**	—
Contribution	.051	134.10**	.259**	ESOP communications			
Vesting	.012	31.39**	.108**	Communications	.062	149.59**	.237**
Vesting × Contribution	.008	21.35**	-.097**	Education	.024	57.86**	-.174**
All variables	.071	63.29**	—	Education × Communications	.006	16.05**	.086**
Age of the ESOP				All variables	.092	76.26**	—
ESOP age	.023	63.78**	.152**	Communications	.062	146.01**	.251**
Salary	.007	19.07**	.082**	Desired influence	.024	57.16**	-.164**
Salary × ESOP Age	.001	3.16	.034	Desired Influence × Communications	.001	2.48	.033
All variables	.031	28.84**	—	All variables	.087	69.86**	—
ESOP age	.023	63.85**	.156**	Management employee ownership philosophy			
Tenure	.028	78.60**	.169**	Philosophy	.077	183.34**	.282**
Tenure × ESOP Age	.000	0.56	.014	Desired influence	.024	59.55**	-.167**
All variables	.052	48.30**	—	Desired Influence × Philosophy	.001	1.51	.027
ESOP age	.023	65.79**	.146**	All variables	.102	83.13**	—
Vesting	.013	36.57**	.113**	Voting rights			
Vesting × ESOP Age	.000	0.46	.013	Voting rights	.000	.82	.022
All variables	.036	34.56**	—	Desired influence	.024	64.57**	-.160**
Stock return				Desired Influence × Voting Rights	.000	0.16	.010
Stock return	.026	64.72**	.166**	All variables	.024	21.88**	—
Salary	.006	15.67**	.082**				
Salary × Stock Return	.000	0.57	-.016				
All variables	.033	27.11**	—				
Stock return	.026	64.94**	.188**				
Tenure	.030	75.65**	.178**				
Tenure × Stock Return	.005	12.48**	-.072**				
All variables	.061	51.94**	—				

Note. Because of missing data, N ranges from 2,200 to 2,749; thus, F values for the same moderator variable may vary slightly. ESOP = employee stock ownership plan.  
 \*p < .05. \*\*p < .01.

*Hypothesis 4: Interactions Between Employee and ESOP Characteristics*

The results of the tests of the interaction hypotheses appear in Table 5. Company contribution to the ESOP, stock return, stock distribution schedule, and company communications about the ESOP each significantly moderate the relation between one or more of the employee characteristics and ESOP satisfaction. However, these interactions are not in the hypothesized direction, and the increase in the squared multiple correlation attributable to them is uniformly small. (See the Discussion section for more detail.)

*Hypothesis 5: Halo*

As predicted, organizational commitment (used here as a measure of the employee's general satisfaction with the company as a whole) is strongly and positively related to ESOP satisfaction ( $r = .71, R^2 = .51, F = 2117.75, p < .01$ ).

*Hypothesis 6: The Hierarchical Regression Model*

The hierarchical regression analysis in the upper half of Table 6 lists the results for our test of the full model of the determinants of ESOP satisfaction. Each set of predictors (ESOP char-

Table 6  
Two Hierarchical Regression Analyses of ESOP Satisfaction

Variable	R <sup>2</sup>	R <sup>2</sup> Change	F
Test of Hypothesis 6			
ESOP characteristics	.160	.160	29.77*
Employee characteristics	.219	.059	30.57*
Desired influence	.227	.008	18.59*
Interactions	.259	.032	6.24*
Organizational commitment	.581	.322	1540.04*
Post hoc analysis, entering commitment first			
Organizational commitment	.510	.510	2117.75*
ESOP characteristics	.557	.047	16.62*
Employee characteristics	.567	.010	9.14*
Desired influence	.567	.000	0.61
Interactions	.581	.014	4.79*

Note. ESOP = employee stock ownership plan.  
\* $p < .01$ .

acteristics, employee characteristics, desired influence in company decision making, interaction effects, and organizational commitment) is entered as a block into the hierarchical model. The ESOP characteristics explain 16% ( $F = 29.77, p < .01$ ) of the variance in ESOP satisfaction. The increment in explained variance attributable to the employee characteristics (salary, tenure, vesting, age, and education) is 6% ( $F = 30.57, p < .01$ ). The level of employees' desired influence in company decision making adds .8% ( $F = 18.59, p < .01$ ) to this amount. The interaction effects account for an additional 3% of explained variance ( $F = 6.24, p < .01$ ). Finally, organizational commitment increases the explained variance by 32% ( $F = 1540.04, p < .01$ ), for a grand total of 58% explained variance for the full regression model (adjusted  $R^2 = .57, F = 81.71, p < .01$ ).

#### Post Hoc Analyses

To gain a better understanding of the meaning of the strong correlation between ESOP satisfaction and organizational commitment, we performed three additional analyses. First, to test whether the correlation was due to common method variance, we performed a partial correlation analysis to test the correlation between ESOP satisfaction and organizational commitment after controlling for life satisfaction, a measure that should not be highly correlated with the two target measures except for common method variance. The partial correlation (controlling for life satisfaction) is .69 ( $p < .01$ ), only .02 less than the original correlation of the two variables, suggesting that the observed correlation is due to factors other than method bias.

Second, to determine whether ESOP satisfaction and organizational commitment share common predictors, we regressed organizational commitment on the remaining independent variables in our full model. ESOP characteristics explain 10% of the variance in organizational commitment ( $F = 17.80, p < .01$ ). The individual characteristics, values, and interaction effects explain an additional 9% (total  $R^2 = .19$ , adjusted  $R^2 = .18, F = 14.28, p < .01$ ). Thus, the predictors of ESOP satisfaction are also significant predictors of organizational commitment.

In the test of Hypothesis 6, organizational commitment is added as the last predictor, despite its high correlation with ESOP satisfaction, because we think that it primarily influences ESOP satisfaction after more concrete or immediate aspects of the ESOP are taken into account. However, as a third post hoc analysis we performed a hierarchical regression, entering organizational commitment first. The results (see the lower half of Table 6) show that ESOP characteristics, employee characteristics, and the interaction terms still significantly increase the explained variance in ESOP satisfaction, although the effects are smaller than when organizational commitment is added last.

#### Discussion

Overall, the results support our hypotheses. ESOP characteristics, employee characteristics, desired influence, ESOP-employee characteristic interactions, and general attitude toward the organization all contribute significantly to the explanation of employee ESOP satisfaction.

#### Summary of the Research Results

*ESOP characteristics and individual ESOP satisfaction.* As predicted, employees are most satisfied with stock ownership when (a) the company makes large annual contributions to the ESOP, (b) the company maintains an extensive ESOP communications program, (c) management is strongly committed to employee ownership, (d) the company established its ESOP for philosophical, business transfer, employee incentive, or employee benefit reasons, and (e) the ESOP is an older plan. Significant within-company individual differences in ESOP satisfaction remain, of course, but company-level ESOP characteristics alone explain a substantial percentage of the variance in individual ESOP satisfaction. (As predicted, these results are consistent with Klein's 1987 results.)

*Employee characteristics, values, and attitudes.* Individual factors add to the explanation of ESOP satisfaction, complementing but not supplanting the ESOP characteristics. As predicted, salary, tenure, vesting, and age are each positively correlated with ESOP satisfaction. Contrary to our predictions, however, employee education is negatively related to ESOP satisfaction, perhaps because more educated employees recognize the financial risks associated with employee ownership. As expected, desired influence in company decision making, the measure of employee values, is negatively related to ESOP satisfaction: Employees who desire a great deal of influence in decision making tend to be less satisfied with the ESOP than employees who desire relatively little influence in decision making. Finally, organizational commitment is strongly positively related to ESOP satisfaction.

*Interactions between individual characteristics and values and ESOP characteristics.* Several of the hypothesized interactions are significant, although not in the hypothesized direction. Furthermore, even the significant interactions do not substantially increase the explained variance in ESOP satisfaction. Nonetheless, two sets of interactions are particularly intriguing.

First, the significant interactions between contribution and tenure, contribution and vesting, and tenure and stock return indicate that when the rewards of the ESOP are poor (because of a low company contribution to the ESOP or a poor stock

return), employees who are highly tenured and vested are more satisfied with stock ownership than are employees with low tenure and vesting. These results suggest that tenure and vesting may compensate for or offset the disappointment of participating in an ESOP that offers relatively small financial benefits. Greater tenure and vesting give the employee a larger absolute ESOP account and greater access to it.

Second, the significant interaction between education and ESOP communications suggests that an active ESOP communications program may assuage the skepticism of highly educated employees; the more active the company's ESOP communications programs, the stronger and more positive the correlation between employee education and ESOP satisfaction. Here, an ESOP characteristic (ESOP communications) may compensate for or offset an employee characteristic (education) that typically leads to dissatisfaction with the plan.

### *New and Renewed Employee Ownership Lessons*

The results suggest four lessons for employee ownership researchers, theorists, and practitioners.

*Financial rewards are important.* The message that financial rewards are important, suggested in previous employee ownership research and theory (e.g., French, 1987; Hochner & Granrose, 1985; Klein, 1987), is underscored by the present results. Employees are most satisfied with stock ownership when the company contribution to the ESOP is large, when the ESOP is an older plan, and when the employees themselves are highly paid, highly tenured, and highly vested. Furthermore, as the interaction results show, an individual's positive financial status in the ESOP may help compensate for the poor overall financial benefits of the company ESOP. In sum, the more money employees gain through employee ownership, the happier they are with the plan.

*Values and practices matter.* If management is not committed to employee ownership and does little to communicate its benefits to employees, employee ESOP satisfaction tends to be low. Similarly, employees are most satisfied with stock ownership when the company established its ESOP for employee-centered reasons (e.g., because management was philosophically committed to employee ownership) rather than for strategic or financial reasons (e.g., to gain tax savings). Not only do management values influence ESOP satisfaction, however; employee values matter too. The more influence an employee believes nonmanagerial workers should have in company decision making, the less satisfied the employee is with the ESOP.

*A satisfied employee is a satisfied employee.* The correlation between ESOP satisfaction and organizational commitment suggests a close relation between an individual's general satisfaction with the company and satisfaction with the ESOP. The post hoc analyses dispel the notion that this relation is due to common method variance. Rather, we suggest that the relation between ESOP satisfaction and organizational commitment reflects three factors. First, an employee who is highly satisfied with the company in general is likely to view specific policies and practices of the company more positively. Second, ESOP satisfaction can itself increase organizational satisfaction and commitment. Employees may see the ESOP as proof of the company's generosity and commitment to its employees and thus feel greater satisfaction with the company as a whole.

Third, ESOP satisfaction and organizational commitment share a common set of predictors. The same ESOP and individual characteristics that lead to ESOP satisfaction also lead—although somewhat less strongly—to organizational commitment. Thus, the relation between ESOP satisfaction and organizational commitment is reciprocal and complex, but the overall message remains: Satisfaction breeds satisfaction.

*Both company and individual factors shape employee attitudes.* The message that both company and individual factors shape employee attitudes, implicit in our conceptual model, is bolstered by the research findings. Both company- and individual-level variables contribute significantly and substantially to the prediction of ESOP satisfaction. Thus, companies have numerous tools or levers available to them to influence employee attitudes. They may alter their financial policies, their management practices, and their cultural values all in an effort to shape employee attitudes, or they may endeavor to alter employee characteristics and values through selection, training, and socialization. This multidetermination of employee attitudes is a common point in organizational psychology, but it is rarely demonstrated empirically because few researchers measure both individual- and company-level variables within a single study. We thus join with other investigators (e.g., Dansereau, Alutto, & Yammarino, 1984; Roberts, Hulin, & Rousseau, 1978; Rousseau, 1985) in calling for more cross-level research on a variety of organizational topics, including, but not limited to, employee ownership.

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### Split of *JCCP*—New Section on Assessment

Beginning in 1989, APA will publish the *Journal of Consulting and Clinical Psychology (JCCP)* in two sections, one focusing on the traditional domain and one concentrating on the growing area of psychological assessment. Alan E. Kazdin, the current editor, will serve as the editor for both sections in 1989. *JCCP* will continue to be published on a bimonthly basis but will contain up to 1,200 pages per year, an anticipated increase in size of over 40%. The new section, *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, will be published as a separate publication in 1989, with an additional 500 pages in four issues.

#### Assessment Journal—Editorial Policy Statement

*Psychological Assessment: A Journal of Consulting and Clinical Psychology* publishes mainly empirical papers concerning clinical assessment and evaluation. Papers that fall within the publication domain include investigations related to the development, validation, and evaluation of assessment techniques. Diverse modalities (e.g., cognitive, motoric) and methods of assessment (e.g., inventories, interviews, direct observations, psychophysiological measures) are within the domain of the journal especially as they are evaluated in clinical research or practice. Also included are assessment topics that emerge in the context of cross-cultural, ethnic, and minority issues. Case studies occasionally will be considered if they identify novel assessment techniques that permit evaluation of the nature, course, or treatment of clinical dysfunction. Nonempirical papers including highly focused reviews and methodological papers are considered if they facilitate interpretation and valuation of specific assessment techniques. Authors wishing to submit to the assessment section should send manuscripts to

Alan E. Kazdin, Editor  
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