Union Membership, Facet Satisfaction, and Intent to Leave: Further Evidence on the Voice Face of Unions

BARRY A. FRIEDMAN
State University of New York at Oswego

Steven E. Abraham State University of New York at Oswego

RANDALL K. THOMAS Harris Interactive, Inc.

Abstract

This study examines the impact of union membership on employees' intent to leave their jobs across a number of facets of satisfaction, as a further test of unions' "voice face." Among the findings are that there are significant relationships between intent to leave one's job and five facets of satisfaction for non-union employees. In contrast, only the relationship between one facet of satisfaction and intent to leave is significant for union employees. Further, over the facets of satisfaction where one would expect unions to have the most influence, the relationship between intent to leave one's job and satisfaction is greater for non-union employees than for union employees. These results provide support for the effect of unions' voice face.

Introduction

One stream of research pertaining to employee turnover has demonstrated that unions and unionization are associated with reduced turnover among employees. This finding is often used to support the contention that unions have a "voice face." Another stream of research has demonstrated that job satisfaction and turnover are related. While this relationship is complex, it is generally true that more satisfied employees tend to have lower turnover

Author's address: Dept. of Marketing and Management, 247 Rich Hall, Oswego, NY 13126

and less intent to leave than less satisfied employees. Recently, several papers have combined these two streams of research and examined the influence of both unions and job satisfaction on turnover. This research shows an interaction among unions, job satisfaction, and turnover. Specifically, there is a much stronger relationship between job dissatisfaction and turnover among non-union employees than among union employees. In addition, dissatisfied non-union members are much more likely to intend to leave their jobs than are dissatisfied union members.

In this paper we examine further the relationship among unions, satisfaction, and intent to leave. Specifically, we look at specific facets of satisfaction, rather than a global measure of employee satisfaction, and assess the influence of union membership on employees' intent to leave across different facets of overall employee satisfaction. (In this paper "overall employee satisfaction" is used to mean employees' overall satisfaction with their work, jobs, and workplaces. "Job satisfaction" is used to describe employees' satisfaction with the work itself.) The rest of the paper is organized as follows: section one contains a literature review, section two discusses the hypotheses to be tested, section three describes the method, and the final section reports and discusses the results.

Literature Review

A great deal of research has examined the impact of unionization on turnover, and the reported papers show consistently that, holding wages constant, turnover is reduced and tenure is increased among unionized workers. A number of early studies are summarized by Freeman and Medoff in chapter 6 of What Do Unions Do? (Freeman and Medoff 1984). Freeman and Medoff discuss the reduction of turnover under unionization in support of their contention that unions have a voice face. The exit-voice theory posits that employees can address dissatisfaction with their workplace in one of two ways: by expressing their dissatisfaction (that is, voice) or by leaving the organization (that is, exit) (Hirshman 1970; Freeman and Medoff 1984). According to exit-voice theory, turnover will be less for union employees since unions provide a "voice" that allows employees to express their dissatisfaction and obviates their having to exit the firm. Since Freeman and Medoff originally advanced their theory, a number of studies in different contexts have shown that turnover is reduced in union settings and among union workers (Batt, Colvin, and Keefe 2002; Rees 1991; Groothuis 1994).

Another stream of research has looked at the relationship between overall employee satisfaction and turnover; this research shows that overall employee satisfaction is an important determinant of employee turnover (Mobley et al. 1979, Price 1977). This holds true over a wide variety of occupations (Dole

and Schroeder 2001; Ghiselli, LaLopa, and Bai 2001; Karsh, Booske, and Sainfort 2005).

Recently, research has examined the relationship among unions, overall employee satisfaction, and turnover in an attempt to explore in greater depth the contention that unions have a voice face. The connection among those three elements is straightforward. Since the contention is that the voice provided by unions is a mechanism that allows employees to address job dissatisfaction without leaving the firm, one would expect the satisfactionturnover relationship to be stronger for non-union workers than for unionized employees. Two reported papers have confirmed these expectations. Iverson and Currivan (2003) found that job satisfaction, union participation (activity of each teacher in the union), and the interaction of those two had significant, negative effects on turnover. Specifically, union participation had a significant, negative effect on turnover for employees who were both very satisfied and very unsatisfied. A study by Abraham, Friedman, and Thomas (2005) found a significant negative correlation between union membership and employees' intent to leave their organizations. Further, the data they tested showed that, at low levels of job satisfaction, non-union members are much more likely to intend to leave their jobs than are union members. As job satisfaction increases, however, the difference in intent to leave between union members and non-union members is much less pronounced.

This research expands on the two papers just discussed. Iverson and Currivan (2003) looked only at overall employee satisfaction. Abraham et al. (2005) looked only at one facet of satisfaction—job satisfaction—in their research. Research suggests, however, that satisfaction is multifaceted, encompassing many aspects of employees' experience with their work and the workplace (Smith, Kendall, and Hulin 1969). The Job Descriptive Index (JDI) measures five facets of work experience: pay, promotion, supervision, the work itself, and co-workers (Hanisch 1992). Schleicher, Greguras, and Watt (2004) found that the following five dimensions were associated with satisfaction: perceived pay equity, interesting job content, promotional opportunities, the nature of supervision received, and co-workers' supportiveness and competence. Further, research has shown that several of the facets of satisfaction are associated with employee turnover. Cottons and Tuttle's (1986) review of turnover research shows that both global and facet measures of job satisfaction are consistent correlates of turnover intent and actual turnover behavior. Thus, this research expands on both of these papers by looking at the impact of unions on employees' intent to leave across a number of different facets of satisfaction. In general, we expect to find that overall, unionized employees will have less intent to leave their organizations than non-union employees across most, if not all, facets of overall employee satisfaction. The reduction in

intent to leave under unionism will be greater for some facets of satisfaction that others, however. Specific hypotheses are offered below.

Hypotheses

This paper provides a comprehensive examination of the relationship among unions, facets of satisfaction, and employees' intent to leave their organizations. Similar to Abraham et al. (2005), this paper looks at "intent to leave" as the measure of turnover. Intent to leave is an employee's decision to leave the organization voluntarily (Tett and Meyer 1993). As pointed out by Lee and Mitchell (1994) and Lee et al. (1999), the turnover process is a complex one that may proceed through a number of different psychological paths. Since employees who intend to leave may be prevented from doing so by factors beyond their control (for example, a weak labor market) testing whether union membership moderates the relationship between job satisfaction and employees' intention to leave will give a more accurate test of whether the collective voice provided by unions has an effect on the workplace.

Specifically, the following hypotheses are tested:

Hypothesis 1: Union employees will be less likely to intend to leave their organizations than will non-union employees. This is a basic test of unions' voice face (Freeman and Medoff 1984, Abraham et al. 2005).

Hypothesis 2: In general, the relationship between facets of satisfaction and intent to leave will be negative, and the relationship will be stronger for non-union employees than for union employees. This hypothesis is another test of the results reported by Iverson and Currivan (2003) and Abraham et al. (2005), albeit using slightly different variables. As discussed above, the relationship between satisfaction and intent to leave is negative. The exit-voice theory suggests that, without the collective voice provided by unions, non-union employees who experience dissatisfaction across all facets of employment will gave a greater intent to leave their organizations than unionized employees.

Hypothesis 3a: With respect to job, compensation, benefits, working conditions, and immediate supervisors, the negative satisfaction—intent to leave relationship will be greater for non-union employees than for unionized employees. Dissatisfied non-union employees will have a greater intent to leave their organizations than will dissatisfied union employees.

Hypothesis 3b: With respect to communication and senior leadership, the satisfaction—intent to leave relationship will be similar between union members and non-union employees.

In other words, unions will have a greater effect on dissatisfied employees' intent to leave for some facets of satisfaction than others. The National Labor Relations Act (NLRA) requires employers to bargain with unions over only "wages, hours and other terms and conditions of employment." Thus, collective bargaining agreements traditionally focus on wages and benefits (for example, economic concerns), working conditions, and the reduction of discretionary behavior of immediate supervisors toward employees. In these areas, where unions have impact, we expect larger differences between non-union and union employees with respect to the strength of the satisfaction-intent to leave relationship. Looking at the facets of satisfaction being studied in this research, we would expect unions to provide voice to employees who are dissatisfied in the areas of their job (their work duties), compensation, benefits, working conditions, and immediate supervisor. Therefore, unionization should reduce the intent to leave of employees who are dissatisfied with these facets of their employment. We would expect unions' voice to be less effective in reducing employees' dissatisfaction with communication and senior leadership, and, as a result, unionization would not greatly reduce the intent to leave of employees who are dissatisfied with these facets of their employment.

Method

Sample

The data were collected in June 2001 as part of a national Harris Poll® job satisfaction survey. Survey respondents were members of the Harris Poll Online multimillion member panel who were eighteen years of age or older and from the United States. Data obtained from Harris Poll Online respondents have been found to provide results equivalent to those obtained in random digit dial telephone surveys (Krosnick, Nie, and Rivers 2005; Thomas, Krane, and Taylor 2004). Potential respondents were randomly selected by strata (age, gender, and region of country) and invited by email to participate in a survey on attitudes toward work. Of the 10,436 individuals who responded to the survey, 10,191 were employed in either a full-time or a part-time job; 7,280 held secretarial/ clerical, production/hourly, or professional/technical positions. We excluded supervisory and management positions since employees in these positions cannot join unions. Of these respondents, 5,610 indicated that they were not planning to retire in the next few years. We excluded employees close to retirement from the study, since their responses would not be meaningful. Eighty-nine percent were employed full-time. Table 1 reports descriptive statistics for the sample. Males made up 51 percent of the sample; 16 percent were minorities, and the average age was 39.39 (s.d. = 10.19). Respondents from organizations with fewer than 500 employees constituted 44.6 percent of the sample, and 17.7

percent were from organizations with greater than 10,000 employees. Respondents who reported having annual incomes of between \$25,000 and \$75,000 were 57.6 percent of the sample; 58.6 percent reported 1 to 10 years with their company, and 22.9 percent indicated 10 or more years. The sample consisted of secretarial/clerical (19.7 percent), production/hourly (36.9 percent), and professional/technical (43.4 percent) employees. The respondents were from the service (53.3 percent), manufacturing (9.2 percent), transportation/communication (8.6 percent), finance (6.6 percent), publication administration/military (6.3 percent), and retail (4.8 percent) industries.

Similar to prior research regarding differences between union and non-union employees, union members tended to be older ($t=5.09,\,p<0.001$), employed by larger organizations ($t=8.64,\,p<0.001$), and have longer tenure ($t=16.65,\,p<0.001$). There were no significant differences between union and non-union members with respect to industry.

Measures

Control variables. We measured and controlled for employees' gender, age, education, minority status, household income, years employed by current employer, company size (number of employees at company), and industry. Previous research on unionism has found these variables and turnover to be related. For example, turnover rates, firm size, unionization, and their interaction are related (Groothuis 1994). It appears that unionization lowers the likelihood of an individual quitting or being dismissed at large firms but that layoffs tend to be more likely in larger and smaller firms. Faber and Saks (1980) found that higher wage earners were less likely to perceive union advantages than lower wage earners were, a finding replicated often. Faber and Saks (1980) also found that black employees were more likely to vote for unionization and that older employees were less likely to vote for unionization. Business sectors may also differ with respect to labor supply, outsourcing, and availability of alternative employment opportunities, thus influencing employees' intention to leave. As a result, industry was included as a control variable.

Dummy codes were used for gender (male = 0, female = 1) and minority status (nonminority = 0, minority = 1). Job category (secretarial/clerical, production or hourly, professional/technical) was also dummy coded, with clerical/clerical as the omitted category. The authors also dummy coded industry using Standard Industry Codes (SIC) as follows: services, agricultural, finance, transportation/communication, construction, manufacturing, public administration/military, mining, retail, and wholesale trade. Household income, age, and education were continuous variables.

Independent variables. We measured each facet of satisfaction by asking

TABLE 1
Sample Descriptive Characteristics

	Total		otal	Non-u	ınion	Union	
Variable	Category	N	%	N	%	N	%
Gender	Male	2,840	51	2,385	51	455	51
	Female	2,770	49	2,326	49	444	49
Minority	Nonminority	4,780	85	4,022	85	758	84
Status	Minority	830	15	689	15	141	16
Education	Less than high school	8	0.1	7	0.1	1	0.1
	Completed some high school	58	1	44	0.9	14	1.6
	High school grad/equivalent	736	13.1	611	13	125	13.9
	Completed some college	2,105	37.5	1,784	37.9	321	35.7
	College graduate	1,607	28.6	1,413	30	194	21.6
	Some graduate school	409	7.3	313	6.6	96	10.7
	Completed graduate school	687	12.2	539	11.4	148	16.5
Total	Less than \$15,000	230	4.1	215	4.6	15	1.7
Household	\$15,000 to \$24,999	571	10.2	519	11	52	9.1
Income	\$25,000 to \$34,999	853	15.2	731	15.5	122	13.6
	\$35,000 to \$49,999	1,136	20.2	912	19.4	224	24.9
	\$50,000 to \$74,999	1,246	22.2	999	21.2	247	27.5
	\$75,000 to \$99,999	581	10.4	477	10.1	104	11.6
	\$100,000 to \$124,999	216	3.9	183	3.9	33	3.7
	\$125,000 to \$149,999	83	1.5	71	1.5	12	1.3
	\$150,000 to \$199,999	40	0.7	36	0.8	4	0.4
	\$200,000 to \$249,999	19	0.3	19	0.4	0	0
**	\$250,000 or more	11	0.2	11	0.2	0	0
Years	Less than 6 months	427	7.6	396 562	8.4	31 52	3.4 5.8
Employed	6 months to less than 1 year	614	10.9		11.9		5.8 7.1
by Current	1 year to less than 2 years	836	14.9	772	16.4 20	64	$\frac{7.1}{14.7}$
Employer	2 years to less than 4 years	1,075 703	19.2 12.5	943 592	12.6	132 111	14.7
	4 years to less than 6 years	396	7.1	324	6.9	$\frac{111}{72}$	12.3
	6 years to less than 8 years	276	4.9	208	3.7	68	1.2
	8 years to less than 10 years More than 10 years	1,283	22.9	914	19.4	369	41
Job	Secretarial/Clerical	1,103	19.7	971	20.6	132	14.7
Category	Production/Hourly employee	2,072	36.9	1,642	34.9	430	47.8
Category	Professional/Technical	2,435	43.4	2,098	44.5	337	37.5
Company	Less than 500	2,501	44.6	2,235	47.5	266	29.6
Size	500 to 999	626	11.2	500	10.6	126	14
(employees)	1,000 to 2,999	713	12.7	570	12.1	143	15.9
(e	3,000 to 9,999	775	13.8	618	13.1	157	17.5
	More than 10,000	995	17.7	788	16.7	207	23
Industry	Services	2,991	53.3	2,527	53.6	464	51.6
	Agricultural	32	0.6	29	0.6	3	0.3
	Finance	369	6.6	366	7.8	3	0.1
	Transportation/					-	
	Communication	482	8.6	365	7.7	117	13

		To	tal	Non-u	nion	Union	
Variable	Category	N	%	N	%	N	%
Industry	Construction	88	1.6	69	1.5	19	2.1
(cont.)	Manufacturing	518	9.2	435	9.4	75	8.3
	Public administration/						
	Military	352	6.3	231	4.9	121	13.5
	Mining	11	0.2	10	0.2	1	0.1
	Retail	267	4.8	237	5	30	3.3
	Wholesale trade	45	0.8	42	0.9	3	0.3
	Other industry	455	8.1	392	8.3	63	7

TABLE 1 (cont.)

respondents "Using a scale of 1 to 10 where '1' means 'Poor' and '10' means 'Excellent,' overall, how would you rate your satisfaction with [facet]?" Seven facets of satisfaction were included in this study: job (interesting work and the opportunity to use valued skills), compensation, benefits, working conditions (safety, comfort), immediate supervisor (values employee opinions, fairness), communications (information is provided to do one's work), and senior leadership (makes sound decisions, clear goals). This study used a single-item approach to measuring facets of satisfaction based on previous research (Nagy 2002).

Dependent variable. The dependent variable in the regression analysis was employees' intention to leave their organizations. We asked respondents "Using a scale of 1 to 10 where '1' means very unlikely and '10' means very likely, how likely are you to voluntarily leave your company within the next year?"

Results

Table 2 presents descriptive statistics for the dependent and independent variables of interest. The mean intent to leave was 4.14 for non-union members and 2.87 for union members. This difference (t=10.67) was highly significant (p<0.001). Compared to union members, non-union employees reported significantly higher levels of satisfaction with communication, working conditions, immediate supervisor, and senior leadership. Union members were more satisfied with their benefits than were non-union employees. While not directly relevant to the issues being tested here, these results confirm previous findings on the union–employee satisfaction relationship (see, for example, Bryson, Cappellari, and Lucifora 2004; Bender and Sloane 1998).

We conducted separate regression analyses for non-union and union employees. Intent to leave, the dependent variable, was regressed on the control vari-

	Non-union $(N = 4,711)$		Uni (N =	ion 899)					
	Mean	s.d.	Mean	s.d.	Difference	t			
Intention to Leave ^a	4.14	3.33	2.87	2.80	1.26	10.67	000		
Job ^b	6.68	2.33	6.51	2.34	0.18	2.06	00		
Compensation	5.57	2.47	5.41	2.38	0.17	1.84			
Benefits	6.44	2.76	7.24	2.29	-0.80	-8.12	000		
Working Conditions	7.12	2.10	6.33	2.25	0.79	10.19	000		
Immediate Supervisor	6.73	2.56	6.16	2.67	0.58	6.11	000		
Communication	6.02	2.41	5.43	2.43	0.59	6.71	000		
Senior Leadership	5.99	2.58	5.00	2.64	0.99	10.57	000		

TABLE 2.

Mean Employee Intention to Leave and Facets of Satisfaction for Non-union and Union Employees

ables and the seven facet satisfaction independent variables in two stages. The control variables were entered into the regression equation in the first stage, and the seven facet satisfaction variables were entered in the next stage. To test the hypotheses stated above, we examined the coefficients on the facet satisfaction regression variables and the increases in the R^2 after the facet satisfaction variables were added. Table 3 summarizes the results for the regression analyses. For non-union employees, several of the control variables were associated with intent to leave. The demographic control variables associated with higher intent to leave were gender (males), minorities, age (younger employees), employees with more education, employees with fewer years on the job, and those employed at companies with fewer employees. With regard to the industry categories, employees involved in public administration and mining were less likely to intend to leave their organizations. The incremental R^2 was 0.22 $(F_{(7,4925)} = 203.80, p < 0.001)$ and the adjusted R^2 was 0.30 (p > 0.001) with all control and facet satisfaction variables entered into the equations. Turning to the variables of interest and looking at non-union employees, the relationship between satisfaction and intent to leave was negative and significant for five of the facets of satisfaction that were included in the regression model (job, compensation, benefits, working conditions, and immediate supervisor). No relationship between intent to leave and satisfaction with communication or senior leadership was found.

For union employees fewer controls were associated with intent to leave

^a Intention to leave was measured using a ten-category scale where "1" meant "Very Unlikely" and "10" meant "Very Likely."

 $^{^{\}rm b}$ Facets of satisfaction were measured using a ten-category scale where "1" was "Poor" and "10" was "Excellent."

p < 0.01, p < 0.001

(age, education, years with the organization, and public administrative industry sector all had significant coefficients). The incremental R^2 was only 0.08 $(F_{(7,859)} = 13.09, p < 0.001)$ and the adjusted R^2 was 0.16 (p > 0.001) with all control and facet satisfaction variables entered into the equations.

In contrast to non-union employees, only union employees' job satisfaction was significantly related to intent to leave. There was no relationship between

TABLE 3. Intention to Leave Regressed on Facets of Work Satisfaction and Control Variables for Non-union (N = 4,552) and Union (N = 886) employees

	No	on-union ^a		Ur	Union ^b	
Variables	β	t		β	t	
Control Variables						
Gender	-0.04	-3.10	• •	0.04	1.18	
Minority Status	0.02	2.11	۰	0.01	0.31	
Education	0.03	2.22	۰	0.06	1.57	
Age	-0.12	-9.05	000	-0.10	-2.86	۰
Total Household Income	-0.01	-0.54		-0.04	-1.25	
Years Employed (current employer)	-0.15	-10.96	000	-0.16	-4.57	000
Production/Hourly	0.01	0.13		-0.10	-1.95	
Professional/Technical	0.01	0.55		-0.07	-1.41	
Number of Employees at Company	-0.05	-3.98	000	-0.06	-1.73	
Services	-0.01	-0.57		-0.05	-0.77	
Agricultural	-0.02	-1.52		0.01	0.32	
Finance	-0.01	-0.56		-0.01	-0.07	
Transportation/Communication	-0.01	-0.65		-0.08	-1.69	
Construction	-0.01	-0.89		0.02	0.70	
Manufacturing	-0.02	-1.40		-0.06	-1.46	
Public Administration/Military	-0.06	-3.85	000	-0.10	-2.03	۰
Mining	-0.02	-2.26	۰	-0.01	-0.48	
Retail	0.01	0.33		-0.02	-0.65	
Wholesale Trade	0.01	0.32		0.02	0.80	
Facets of Satisfaction						
Iop	36	-18.00	000	32	-6.34	000
Compensation	09	-5.39	•••	01	23	
Benefits	10	-6.62	000	03	95	
Working Conditions	.06	3.23	000	0	.03	
Immediate Supervisor	05	-3.29	000	01	29	
Communication	01	97		.06	1.35	
Senior Leadership	01	31		015	35	

 $^{^{\}circ}p<0.05,^{**}p<0.01,^{***}p<0.001$ a R = 0.55, adjusted R^{2} = 0.30. R^{2} change = 0.22, with addition of facet satisfaction variables $(F_{7,4525} = 203.80, p < 0.001).$

 $[\]stackrel{\text{i. 7.022}}{R}$ = 0.40, adjusted R^2 = 0.16. R^2 change = 0.08, with addition of facet satisfaction variables $(F_{7.859} = 13.09, p < 0.001).$

intent to leave and satisfaction with any of the other facets of satisfaction that were tested.

Discussion

The results reported provide strong support for all three hypotheses. In support of unions' voice face (Hypothesis 1), union members reported being less likely to intend to leave their organizations than non-union employees reported. Union employees experienced greater dissatisfaction with several facets of their work situation yet reported less intention to leave their organizations relative to non-union employees. Regarding Hypothesis 2, the adjusted R^2 was larger for non-union employees (0.30) than for union employees (0.16), indicating that the relationship between the control and independent variables with intent to leave was stronger for non-union employees than for union employees. The incremental variance accounted for by the addition of the facets of satisfaction variables was higher for non-union employees, indicating a stronger relationship between facets of satisfaction and intent to leave for non-union employees than for union employees. As additional support for Hypothesis 2, the coefficients were negative and significant on five of the seven facets of satisfaction variables for non-union employees' intent to leave but on only one facet of satisfaction for union employees. In other words, the extent of dissatisfaction is much more likely to induce non-union employees to intend to leave their organizations.

Hypothesis 3a was strongly supported, as job, compensation, benefits, working conditions, and immediate supervisor satisfaction were related to intent to leave for non-union employees, while only job satisfaction was related to intent to leave for union employees. In support for Hypothesis 3b, communication and senior leadership facets of satisfaction were not related to intent to leave for non-union or union employees. This is virtually identical to what was predicted in Hypotheses 3a and 3b.

Unions provide voice to employees who are dissatisfied with "wages, hours and other terms and conditions of employment" (the areas over which unions are authorized to bargain under the NLRA). This voice will obviate dissatisfied unionized employees' need to leave the organization. By contrast, non-union employees who are dissatisfied with these facets of their work do not have the collective voice provided by unions to express their dissatisfaction. Therefore, their dissatisfaction is more likely to induce an intent to leave for these employees. The coefficients on the satisfaction variables shown in table 3 confirm this expectation.

The results just reported are important from both a theoretical and practical perspective. The findings provide additional evidence for the exit-voice theory that adds to our knowledge of how employees make decisions regarding

leaving their organizations and how the voice provided by unions may enable dissatisfied employees to stay with their organizations despite their dissatisfaction. On a more practical level, the study provides implications for unions and management regarding employee retention. Given the decline in union membership experienced in the United States, unions must provide compelling reasons to motivate employees to organize. Similarly, unions need to retain the employees who are organized currently. The results reported here show that the voice unions provide for employees gives them an alternative to leaving the organization if they are dissatisfied. In today's economy, it may be difficult for employees to find new jobs. Similarly, it is costly for management to replace employees who leave. Therefore, any reduction in turnover that is associated with unionism benefits employees and management at the same time.

References

- Abraham, Steven E., Barry A. Friedman, and Randall K. Thomas. 2005. "The Impact of Union Membership on Intent to Leave: Additional Evidence for the Voice Face of Unions." *Employee Rights and Responsibilities Journal*, Vol. 17, no. 4 (December), pp. 201–213.
- Batt, Rosemary, Alexander J. S. Colvin, and Jeffrey Keefe. 2002. "Employee Voice, Human Resource Practices and Quit Rates: Evidence from the Telecommunications Industry." Industrial and Labor Relations Review, Vol. 55, no. 4 (July), pp. 573–594.
- Bender, Keith A., and Peter J. Sloane. 1998. "Job Satisfaction, Trade Unions and Exit-Voice Revisited." Industrial and Labor Relations Review, Vol. 51, no. 2 (January), pp. 222–241.
- Bryson, Alex, Lorenzo Cappellari, and Claudio Lucifora. 2004. "Does Union Membership Really Reduce Job Satisfaction?" *British Journal of Industrial Relations*, Vol. 42, no. 3 (September), pp. 439–457.
- Cotton, John L., and Jeffrey M. Tuttle. 1986. "Employee Turnover: A Meta-Analysis and Review with Implications for Research." *Academy of Management Review*, Vol. 11, no. 1 (January), pp. 55–70.
- Dole, Carol, and Richard G. Schroeder. 2001. "The Impact of Various Factors on the Personality, Job Satisfaction and Turnover Intentions of Professional Accountants." Managerial Auditing Journal, Vol. 16, no. 4, pp. 234–246.
- Faber, Henry S., and Daniel H. Saks. 1980. "Why Workers Want Unions: The Role of Relative Wages and Job Characteristics." *Journal of Political Economy*, Vol. 88, no. 2 (April), pp. 349–369.
- Freeman, Richard B., and James L. Medoff. 1984. What Do Unions Do? New York: Basic Books.
- Ghiselli, Richard F., Joseph M. LaLopa, and Billy Bai. 2001. "Job Satisfaction, Life Satisfaction and Turnover Intent among Food Service Managers." Cornell Hotel and Restaurant Administration Quarterly, Vol. 42, no 2 (April), pp. 28–37.
- Groothuis, Peter A. 1994. "Turnover: The Implication of Establishment Size and Unionization." *Quarterly Journal of Business and Economics*, Vol. 33 (Spring), pp. 41–53.

- Hanisch, Kathy A. 1992. "The Job Descriptive Index Revisited: Questions about the Question Mark." *Journal of Applied Psychology*, Vol. 77, no 3 (June), pp. 377–382.
- Hirshman, A. O. 1970. Exit, Voice and Loyalty. Cambridge, MA: Harvard University Press.
- Iverson, Roderick D., and Douglass B. Currivan. 2003. "Union Participation, Job Satisfaction and Employee Turnover: An Event History Analysis of the Exit-Voice Hypothesis." *Industrial Relations*, Vol. 42, no. 1 (January), pp. 101–105.
- Karsh, Ben-Tzion, Bridget Booske, and Francois Sainfort. 2005. "Job and Organizational Determinants of Nursing Home Employee Commitment, Job Satisfaction and Intent to Turnover." *Ergonomics*, Vol. 48, no. 10 (August), pp. 1260–1282.
- Krosnick, Jon, Norman Nie, and Douglas Rivers. 2005. "Web Survey Methodologies: A Comparison of Survey Accuracy." Paper presented at the 60th Annual Conference of the American Association for Public Opinion Research, Miami Beach, FL.
- Lee, Thomas W., and Terence R. Mitchell. 1994. "An Alternative Approach: The Unfolding Model of Voluntary Turnover." *Academy of Management Review*, Vol. 19, no. 1 (January), pp. 51–89.
- Lee, Thomas W., Terence R. Mitchell, Brooks C. Holtom, Linda S. McDaniel, and John W. Hill. 1999. "The Unfolding Model of Voluntary Turnover: A Replication and Extension." Academy of Management Journal, Vol. 42, no. 4 (August), pp. 450–463.
- Mobley, William H., Robert W. Griffeth, Herbert H. Hand, and Bruce M. Meglino. 1979. "Review of Conceptual Analysis of the Employee Turnover Process." *Psychological Bulletin*, Vol. 86, no. 3 (May), pp. 493–522.
- Nagy, Mark S. 2002. "Using Single-Item Approach to Measure Facet Job Satisfaction." Journal of Occupational Psychology, Vol. 75, no. 1 (October), pp. 77–86.
- Price, James L. 1977. The Study of Turnover. Ames: Iowa State University Press.
- Rees, Daniel I. 1991. "Grievance Procedure Strength and Teacher Quits." *Industrial and Labor Relations Review*, Vol. 45, pp. 31–43.
- Schleicher, Deidra J., Gary J. Greguras, and John D. Watt. 2004. "Reexamining the Job Satisfaction-Performance Relationship: The Complexity of Attitudes." *Journal of Applied Psychology*, Vol. 89, no. 1, pp. 165–177.
- Smith, Patrica C., L. M. Kendall, and Charles L. Hulin. 1969. The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally.
- Tett, R.P. and J.P. Meyer. 1993. "Job Satisfaction, Organizational Commitment, Turnover Intention, and Turnover: Path Analyses Based on Meta-analytic Findings." *Personnel Psychology*, Vol. 46, no. 2, pp. 259–293.
- Thomas, Randall K., David Krane, and Humphrey Taylor. 2004. "On the Convergent Validity of Attitude Measurement in Phone and Online Surveys." Paper presented at the 59th Annual Conference of the American Association for Public Opinion Research, Phoenix, AZ.