

# **IMPACT OF UNIONIZATION ON FACULTY RESISTANCE TO CHANGE, JUSTICE, TRUST, CONFLICT, AND CLIMATE FOR INNOVATION**

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## **IMPACT OF UNIONIZATION ON FACULTY RESISTANCE TO CHANGE, JUSTICE, TRUST, CONFLICT, AND CLIMATE FOR INNOVATION**

### **ABSTRACT**

**Objective:** We surveyed differences in trust, perceptions of justice, perception of conflict, attitudes toward change, and innovation between unionized and non-unionized faculty at chiropractic colleges.

**Methods:** Survey respondents were full-time chiropractic college faculty. Data analysis included independent T-Tests and linear regression. Scaled means for resistance to change, justice, trust, conflict and climate for innovation were utilized based on the factor structures resulting from factor analysis.

**Results:** Independent T-Tests found significant differences in resistance to change, trust and perceptions of conflict between unionized and non-unionized faculty. Unionized faculty exhibited higher supervisor trust, routine seeking, and perceived higher faculty-administrative conflict when compared to their non-unionized counterparts. Non-unionized faculty perceived higher faculty-to-faculty conflict. Linear regression showed significant differences in resistance to change (routine seeking), trust in the supervisor, conflict between faculty members and conflict between faculty and administration. Although significant relationships were observed, union status accounted for only a minor amount of variance in the dependent variables.

**Discussion:** The results indicate unionized faculty within chiropractic colleges significantly differ in that they are more resistant to change, perceive greater trust in their supervisor, perceive less conflict between faculty members, but perceive more conflict between faculty and administration. Union status accounted for minor variance in the dependent variables.

**Conclusion:** This study found a significant difference between union and non-union employees and their appraisal of resistance to change, trust in their supervisor, and conflict. Union status predicted respondents' appraisal of resistance to change, trust, and conflict. (Chiropr J Australia 2016;44:254-264)

Key Indexing Terms: Chiropractic; Medical Education;

## **INTRODUCTION**

Faculty positions at institutions of higher education have been associated with academic freedom and autonomy for a long time. This contrasts with industrial jobs with more highly defined roles and less autonomy. Imposition of a collective bargaining agreement to each world may have different outcomes. Collective bargaining agreements define the role of the worker; they spell out work expectations, working conditions, wages and benefits. Unionization largely removes supervisor and employee discretion. It provides a known set of rules, in which management and employees must abide. Unionization within higher education has a more limited history and may have a different impact on its institution as opposed to unionization in industrial organizations. Cameron's (1) analysis of 4-year unionized versus nonunionized colleges and universities showed unionized schools to be less effective overall. Lott and Kenny (2) showed a significant, inverse relationship between state teacher union strength and student achievement. After reviewing several decades of evidence related to unionization in higher education, Wickens stated, "it is fair to conclude that inter-faculty relationships in a unionized environment may be more strained than those in a non-unionized environment." (3, p.556). Yet it is still relatively unclear how union status within higher education affects institutional climates. Patterson et al defined an organizational climate as "employees' shared perceptions of organizational events, practices, and procedures." (4, p. 380). This implies a shared psychology within the organization where employees share perceived meaning of what happens at the workplace. The purpose of this study is to investigate the impact of union status on the organizational climate of chiropractic colleges/health science universities by examining union versus non-union faculty perceptions of trust, justice, conflict, change and climate for innovation.

## **METHODS**

This study was approved by Palmer College of Chiropractic's Institutional Review Board. Survey respondents for this study were full-time college faculty employed at United States chiropractic colleges, United States health sciences universities offering a doctor of chiropractic program and the Canadian Memorial Chiropractic College. Only chiropractic faculty members were included within our analysis. Respondents indicating administrative status were excluded from the analysis. The survey was sent to 1003 chiropractic faculty within all U.S. chiropractic institutions and Canadian Memorial Chiropractic College. Lists of faculty were obtained from each institution and unique emails were sent to control for non-duplicated response as well as targeted reminder emails for those who did not respond. Participants could have received up to 4 reminder email messages.

Union status, the independent variable, was obtained by having respondents choose between belonging to a union or not. The dependent variables of interest (resistance to change, perceptions of justice, trust, organizational climate, and conflict) are not directly observable and are therefore best described as "latent variables." To assess these latent variables, we used instruments whose resulting data has been validated through various studies within the literature. Oreg's *Resistance to Change Scale* was used to

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measure personal disposition for change. (5) Faculty perceptions of justice were assessed using Colquitt's *Dimensionality of Organizational Justice* instrument. (6) Trust was assessed using Nyhan and Marlowe's *Organizational Trust Inventory Scale*. (7) Finally, climate for innovation was measured using Scott and Bruce's instrument. (8) Faculty perception of conflict was not assessed with an established instrument. Faculty were asked to subjectively rate the level of conflict for faculty-to-faculty interactions and between faculty and administration interactions within their organization. Two questions guided the current study.

- Is there a significant difference between union and non-union employees and their appraisal of resistance to change, justice, trust, conflict and climate for innovation?
- Does union status predict respondents' appraisal of resistance to change, justice, trust, conflict and climate for innovation?

## Instrumentation

The instruments used to measure resistance to change, perception of justice, trust and climate for innovation were developed and validated by prior research using factor analysis. Factor analysis is useful in grouping similar variables into single categories (factors) within the latent variable. For example, there are many survey questions assessing perceptions of justice. Prior research using factor analysis grouped items (survey questions) into factors including procedural justice, interpersonal justice and distributive justice. These justice factors are unique and come together to fully describe the larger latent variable "justice." Data for the justice factor structure has been validated. (9) The factor structures utilized in the current study were derived and validated in a prior study. (9)

## Data Analysis

Data evaluation for this study occurred using independent T-Tests and follow-up linear regression analysis. T-tests assessed whether the means of 2 groups (union and non-union faculty) were statistically different from each another with respect to the latent variables. Linear regression was used to assess predictive models. Effect size ( $r$ ) was used to understand the magnitude of impact for the regression analysis (i.e., amount of variance accounted for by the criterion variable). Interpretation of effect size conformed to conventional standards (i.e., .10 = small effect; .30 = medium effect; and .50 = large effect). (10)

## RESULTS

Five hundred survey responses were received, yielding a response rate of 50%. A number of incomplete responses were received which altered the overall numbers reported in the data tables. The responding sample was predominately white; 62% were male, 60% were between the ages of 40-60, and 74% held a clinical doctorate degree

(i.e., DC, MD, DO, DPT, etc.). Table 1 reports all demographic information by union status.

Table 2 displays the factors for each variable and reports T-test and regression analysis. T-test analysis indicated significant differences between unionized faculty and non-unionized faculty for supervisor trust, resistance to change factors (routine seeking and emotional reaction), and perceptions of conflict between faculty and conflict between faculty and administration. Unionized faculty had higher mean scores for supervisor trust, routine seeking and faculty-administration conflict, whereas non-union faculty had higher mean scores for faculty-faculty conflict.

Follow-up linear regression analysis further indicated inverse linear relationships between union status and supervisor trust, resistance to change (routine seeking), and faculty-administration conflict, whereas a positive linear relationship was indicated for faculty-faculty conflict. In other words, unionization predicted higher levels of supervisor trust, routine seeking, and faculty-administration conflict, whereas non-unionization predicted higher amounts of faculty-faculty conflict. Despite the significant relationships found, the small effect sizes indicate that the union status was a trivial predictor given the insubstantial amount of variance accounted for by the criterion variable.

## **DISCUSSION**

The history of organized labor in the United States predates the Revolutionary War, yet the history of organized labor within higher education is relatively new. In the time period following passage of the 1935 National Labor Relations Act (NLRA), few employees of private, nonprofit colleges and universities won the right to collectively bargain. Those first allowed to unionize were non-faculty positions. Dining hall and maintenance workers at Yale were the first to unionize in the 1940's. In 1951, the National Labor Relations Board (NLRB) ruled that the NLRA did not protect employees of private institutions of higher education. For nearly 20 years, college employees engaging in commercial activities were the only ones covered by the NLRA. (11)

Two major events in the late 1960s contributed to the surge of unionization in higher education. First, state legislation gave public employees the opportunity to bargain collectively. (12) Second, the number of students attending college increased due to the baby boom experienced 25 years earlier. Increasing student populations led to the proliferation of community colleges, thereby increasing the number of faculty. Subsequently, community colleges made up the majority of early unionized public institutions. (11,12) Paralleling these events were increasing salaries and benefits of unionized blue-collar workers. Low faculty wages, along with threats to tenure, led many faculties to renew a push for unionization.

Table 1: Respondent Demographic Information by Union Status.

Demographic Information	Overall		Union		Non-Union	
	n	%	n	%	n	%
<b>Age</b>						
20-30	12	3.0	4	3.8	8	2.7
30-40	66	16.3	15	14.3	51	17.3
40-50	107	26.4	27	25.7	80	27.1
50-60	132	32.6	27	25.7	103	34.9
61+	88	21.7	32	30.5	53	18.0
<b>Gender</b>						
Male	249	61.8	64	61.5	182	61.9
Female	154	38.2	40	38.5	112	38.1
<b>Race</b>						
Hispanic or Latino	5	1.3	1	1.0	4	1.4
American Indian or Alaska Native	1	.3			1	.3
Asian	20	5.0	3	2.9	17	5.8
African American	5	1.3	1	1.0	4	1.4
White	368	92.2	98	95.1	265	91.1
<b>Education</b>						
Associate's Degree	1	.2			1	.3
Bachelor's Degree	4	1.0			4	1.4
Master's Degree	29	7.2	7	6.7	22	7.5
Academic Doctorate (e.g. PhD or EdD)	40	9.9	8	7.6	31	10.6
Clinical Doctorate (DC, MD, DPT, DO, etc)	299	74.2	82	78.1	213	72.7
Both Clinical and Academic Doctorate	30	7.4	8	7.6	22	7.5
<b>Assignment</b>						
Basic Science	77	19.0	16	15.2	60	20.3
Clinical Science	217	53.4	56	53.3	159	53.7
Patient Care	64	15.8	24	22.9	40	13.5
Research	27	6.7	4	3.8	22	7.4
Other	21	5.2	5	4.8	15	5.1
<b>Rank</b>						
No Academic Rank	17	4.3	3	2.9	13	4.5
Instructor	52	13.0	8	7.8	44	15.1
Assistant Professor	113	28.3	26	25.2	87	29.8
Associate Professor	125	31.3	40	38.8	83	28.4
Professor	93	23.3	26	25.2	65	22.3

Table 2. Scaled Mean *t*-test Comparison and Regression Statistics by Union and Non-Union Status.

Latent Construct (LC)	Means		<i>t</i> -test statistics			Linear Regression Statistics <sup>a</sup>				
	Union (2)	Non- Union (1)	<i>t</i>	Df	<i>p</i>	C	B	<i>t</i>	<i>p</i>	<i>r</i>
Justice Constructs										
Distributive Justice	3.51	3.54	-0.30 2	362	0.76 3	3.4 78	.03 2	.302	.763	.0 16
Procedural Justice	2.85	2.84	0.11 9	222. 26 <sup>±</sup>	0.90 6	2.8 66	.01 1	- .108	.914	.0 06
Interpersonal Justice	3.90	3.97	-0.64 7	206. 85 <sup>±</sup>	0.51 8	3.8 34	.07 0	.607	.544	.0 31
Trust Constructs										
Organizational Trust	4.68	4.62	0.59 6	225. 36 <sup>±</sup>	0.55 2	4.7 51	.06 7	- .544	.586	.0 28
Supervisor Trust	5.48	5.08	3.14 6	228. 58 <sup>±</sup>	0.00 2 <sup>**</sup>	5.8 75	.39 5	2.83 9	.005 **	.1 43
Resistance to Change Constructs										
Routine Seeking	3.01	2.81	2.84 6	399	0.00 5 <sup>**</sup>	3.2 13	.20 0	2.84 6	.005 **	.1 41
Emotional Reaction	3.55	3.37	1.95 5	398	0.05 1	3.7 33	.18 3	1.95 5	.051	.0 98
Climate for Innovation										
Support for Innovation	3.20	3.18	0.20 6	235. 92 <sup>±</sup>	0.83 6	3.2 15	.01 8	- .181	.856	.0 10
Resource Supply	2.57	2.60	-0.29 4	352	0.94 7	2.5 67	.00 6	.067	.947	.0 04
Conflict										
Faculty-Faculty Conflict	2.57	2.82	-2.09 8	358	0.03 7 <sup>*</sup>	2.3 26	.24 5	2.09 8	.037 *	.1 10

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Faculty- Administration Conflict			3.21	203.	0.00	4.3	-	-	.003	.1
	3.93	3.50	3	22 <sup>±</sup>	2 <sup>**</sup>	55	.42	2.97	**	55

Note: <sup>a</sup> linear regression formula is Predicted LC = B<sub>Slope</sub> (union status) + B<sub>constant</sub>; Df = degrees of freedom; <sup>±</sup> equal variances not assumed; C = Constant; B = unstandardized beta weight; \* p < .05, \*\* p < .01, \*\*\* p < .001

In 1970, the NLRB, through its *Cornell* (14) decision, overturned its previous ruling denying private institutions of higher education protection under the NLRA. Private, nonprofit colleges and universities began to unionize. (15) Determining union membership eligibility became a major point of contention during this decade. In 1980, the U.S. Supreme Court ruled that professors at Yeshiva University were considered bosses, not workers, due to their participation in personnel and academic decisions. (16) This determination prohibited Yeshiva's unionization and largely stifled union growth through the turn of the century. Collective bargaining within higher education continues to primarily be a phenomenon of public-sector institutions. (11,17)

Collective bargaining and faculty unionization in higher education increased during the 1990's. During this period, many campuses underwent restructuring resulting in the elimination of academic programs and increases in part-time and adjunct faculty positions. Changes in the academic landscape and workforce led faculty on many campuses to consider unionization as means to protect faculty positions and academic interests. (18-24) Arnold (25) claims faculty unionism was a response to the lessening of a shared vision of academic life between faculty and administrative authority.

Perceived threats to tenure, increases in part-time faculty, changes in faculty workloads and the delivery of education through the use of technology may have acted as drivers toward unionization. (26,27)

Our findings indicate unionized faculty within chiropractic colleges significantly differ in that they are more resistant to change (i.e., significantly higher levels of routine seeking), perceive greater trust in their supervisor, perceive less conflict between faculty, but more conflict between faculty and administration. Regression analysis indicates union status is predictive of higher trust in a faculty member's supervisor, greater resistance to change (specifically routine seeking), lesser perceptions of conflict between faculty members and greater perception of conflict between faculty and administration. No significant differences or predictive relationships were found for constructs related to perceptions of justice or climate for innovation. While linear regression is useful for predicting an unknown variable from a known variable, it does not evidence a causal relationship between variables. Our analysis of the data provides a predictive model, but should not be interpreted as a causal relationship. Although we found significant relationships, the minor effect sizes indicate union status is a trivial predictor of the dependent variables.

Union faculty members had higher levels of routine seeking, a factor within the larger variable, resistance to change. Routine seeking measures the extent routines are

incorporated into the person's life. Oreg (5) showed personal disposition to resist change was negatively associated with sensation seeking and tolerance for ambiguity, but positively associated with risk aversion. His research also found resistance to change was not associated with cognitive ability. In addition, resistance to change predicted people's affective reactions to change and their functioning at work prior to the change. (5) Although union status predicted routine seeking within this study, the variance accounted for by union status was minimal. Other variables outside of this study account for the vast majority of routine seeking seen within faculty members. Union faculty members had higher levels of supervisor trust. Nooteboom described trust as a 4-part predicate where, "Someone (1) trusts someone (or something) (2) in some respect (3) depending on conditions such as the context of action (4)." )28, P.38) A possible explanation for faculty having higher levels of trust in their supervisors may be that collective bargaining agreements remove discretion from supervisors. Faculty may believe supervisors are more likely to abide by a well-defined rule system. In other words, faculty trust their supervisor to follow rules negotiated and ratified in a collective bargaining agreement. The addition of a collective bargaining agreement is the fourth predicate in Nooteboom's model, setting the condition under which higher trust is achieved. Again, the minor level of variance accounted for by union status indicates union status has very little influence on supervisor trust.

Perception of conflict between faculty members was less within unionized faculty. Yet, perception of conflict between faculty and administration was higher within unionized faculty. It is possible the increase in faculty administration conflict serves a group-binding function for faculty members within a union. Cozer (29,30) proposed unification as a positive outcome of conflict. Increased conflict with administration may serve to create greater group cohesiveness and better define relationships and boundaries within a union. Although perceptions of conflict were significantly different, union status accounted for only a minor amount of variance in perceptions of conflict. Variables outside this study account for most of the variance seen in faculty perceptions of conflict.

We found statistically different levels of trust, resistance to change and perception of conflict between union and non-union faculty members. We also found union status to be a predictor of trust, resistance to change and perception of conflict between union and non-union faculty members. But, because of the small effect sizes, union status is only a minor predictor given the slight amount of variance accounted for by the variable.

Limitations

Despite the relatively robust response rate and resulting data, the sampling methodology for the current study was one of convenience. Convenience sampling can increase survey errors related to both coverage and sampling. However, coverage error was not an issue within the current study because the survey was sent to all chiropractic faculty within the targeted coverage- range (i.e., all U.S. chiropractic faculty) and comparison of the demographics of survey respondents within the current study indicates a good degree of representativeness within the profession. (31)

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Another limitation of the current study is self-report bias, which is common for self-administered surveys. We deemed self-report bias to be minimal within the current study due to the lack of questions that the respondent might find either personally or socially invasive and or objectionable.

## **CONCLUSION**

The goal of our study was to examine relationships between union status and justice, trust, resistance to change, climate for innovation and conflict. We found significant differences between union and non-union employees and their appraisal of resistance to change, trust in their supervisor, and conflict. Union status predicted respondents' perceived more conflict between faculty and administration, less conflict between faculty, had more trust in their supervisor and were more resistant to change, but only accounted for a small amount of variance in these dependent variables.

While this study provided valuable insight, it did not shed light on the variables most responsible for the differences in the dependent variables. Stable personality traits inherent within individuals may account for trust and/or resistance to change. Structural features within organizations such as organizational size, resource allocation, diversity, and workload were not examined. Neither conflict type or conflict management style was investigated in our study. Antecedents leading to trust intention were not examined. Further exploration is warranted on many fronts with this population.

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