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RESOLVING INDUSTRIAL CONFLICT—AN EXPERIMENTAL STUDY OF THE EFFECTS OF ATTITUDES AND PRECEDENT

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Unions and management confront and test each other endlessly. There is a basic fabric of cooperation in union-management relations but it is heavily interlaced with conflict. Each continually disputes with the other about wages, wage increments, work assignments, layoff decisions and so on. Bendix observes that ". . . employees continue to 'bargain' silently over the rules governing their employment, long after they have signed the contract which stipulates these rules in a seemingly unambiguous manner." [1]

Our interest in this paper is to understand better an important form of day-to-day union-management conflict—the grievance. Our purpose is to report the results of an experiment that attempted to test several hypotheses about how attitudes toward unionism and how knowledge of consonant or dissonant precedents might affect the decisions a unionist or a manager would make to resolve a grievance.

We follow Slichter et. al. in our definition of a complaint and a grievance.[2] A complaint is anything done by an employer that is not approved by an employee or the union. A grievance is a complaint that involves a charge that one or several provisions of the union-management contract have been violated.

William F. Whyte has pointed out that grievances are a significant form of conflict because they may affect the relationship far beyond the limited incident that precipitated the complaint.[3]

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[1] Reinhardt Bendix, *Work and Authority in Industry* (New York: Harper & Row, 1959), p. 247.

[2] Sumner H. Slichter, James J. Healy and Robert E. Livernash, *The Impact of Collective Bargaining on Management* (Wash., D.C.: The Brookings Institution, 1960).

[3] William F. Whyte, "The Impact of the Union on the Management Organization," in Conrad M. Arensberg *et al.* (Eds.), *Research in Industrial Human Relations* (New York: Harper & Bros., 1957), p. 174.

Two Concepts of Grievance Disputes

Our interest in the two variables attitude and precedent stems from two widely held beliefs about what factors influence the position a person is likely to take on a grievance.

One belief is that the group one identifies with will determine one's attitudes toward unionism, one's attitudes will determine one's perception of facts which will in turn determine the position one takes on a grievance.[4]

In the area of labor disputes, Ross Stagner's work is probably most representative of the view that attitudes affect actions.[5,6]

A second concept argues that precedents—agreements and past grievance decisions—will override attitudes and bring order and rationality to the union-management relationship. Dubin expresses this view as follows: Union and company both have major stakes in developing systematic rules governing work behavior ... both sides seek the stabilizing effects of established rules and precedents.[7]

Social Judgment Theory

The relationship between attitudes, precedents and grievance positions is more complex than is suggested by the two sets of beliefs just described. Social psychological research into how people form evaluative judgments is especially informative. Sherif and Hovland[8] conclude that the more ambiguous a stimulus, the more will a person's attitudes determine his judgments. Thus, if we consider a grievance to be an ambiguous stimulus we would hypothesize that the individual's attitude toward unionism would determine his grievance decision.

To understand how the introduction of a precedent might affect a person's judgments, we turn to Sherif and Sherif's "social judgment-involvement" theory.[9] This theory states that the acceptance

[4] Daniel Katz, "The Functional Approach to the Study of Attitudes," *Public Opinion Quarterly* (1960), Vol. 24, No. 2, pp. 163–204.

[5] Ross Stagner, *Psychology of Industrial Conflict* (New York: Wiley & Sons, 1956), p. 46.

[6] Ross Stagner, "Psychological Aspects of Industrial Conflict," *Personnel Psychology* (1948), Vol. 1, pp. 131–143.

[7] Robert Dubin, *Working Union-Management Relations* (New Jersey: Prentice-Hall, 1958), pp. 24–25.

[8] Muzafer Sherif and Carl I. Hovland, *Social Judgment* (New Haven: Yale Univ. Press, 1961).

[9] Carolyn W. Sherif and Muzafer Sherif, *Attitude and Attitude Change: The Social Judgment-Involvement Approach* (Philadelphia: W. B. Saunders Co., 1965).

or rejection of information about a controversial issue depends on the person's subjective evaluation of how discrepant the information is from his own attitude, and how extreme or moderate the person's attitude is.[10]

These researchers assert that judgments are affected as follows:

(1) Persons with *extreme attitudes tend to magnify the discrepancy of any divergent communication,* evaluate it unfavorably, and reject it.

(2) Persons with *moderate (neutral) attitudes do not magnify the discrepancy of information* from their personnel positions on issues. They will accept and use a wider range of divergent information than the extremist when making a judgment.

The social judgment-involvement theory suggests that a precedent introduced in a grievance situation can have several different effects on a person's judgment. The effect would seem to depend on whether a person has an extreme or a moderate attitude on the relevent issues and whether the precedent is dissonant or consonant with the person's own position.

Hypotheses

On the basis of the foregoing concepts and research we derived the following hypotheses:

H-1. Given a grievance situation and relevant contract clauses but no information about precedents a person will make grievance decisions that are consistent with his attitudes toward unionism.

This means that in the absence of precedents a person with pro-union attitudes will make pro-union grievance decisions; a person with neutral attitudes toward unionism will make neutral grievance decisions and so on.

In the next three hypotheses we deal with the interaction of precedents and attitudes.

H-2. Given a grievance situation and relevant contract clauses and either a pro-union precedent, a pro-management precedent

[10] *Ibid.*

or no precedent (neutral condition), persons with *neutral attitudes* will make grievance decisions that are consistent with the precedent they receive. In short, persons with neutral attitudes will make decisions in the direction of the precedent they receive.

H-3. Given a grievance situation and relevant contract clauses and a *consonant precedent,* persons with *extreme attitudes* toward unionism will make more extreme grievance decisions than persons with the same extreme attitudes who receive no precedent.

For example, persons with a pro-union attitude given a pro-union precedent will make grievance decisions that are more pro-union than the decisions made by persons with pro-union attitudes who receive no precedent. This says that persons with extreme attitudes will accept and use consonant information.

H-4. Given a grievance situation and relevant contract clauses and a *dissonant precedent,* persons with *extreme attitudes* toward unionism will reject the precedent and will make grievance decisions no different from persons with similar extreme attitudes who receive no precedent. This means that persons with extreme attitudes who receive dissonant information will behave as if they received no information.

Experimental Design

The independent variables in this study were (1) S's attitudes toward unionism, and (2) precedent condition. Using Weaver's[11] validated test for attitudes toward unionism and his norms for scores we separated our subjects into three attitude subgroups: pro-union, neutral, pro-management. Each subgroup was further subdivided into thirds, each receiving one of three different precedent conditions—pro-union, no precedent, pro-management.

There were a total of 180 subjects. Ninety were active union members and ninety were practicing managers. They had been matched in terms of age, years of work experience and years of formal education.

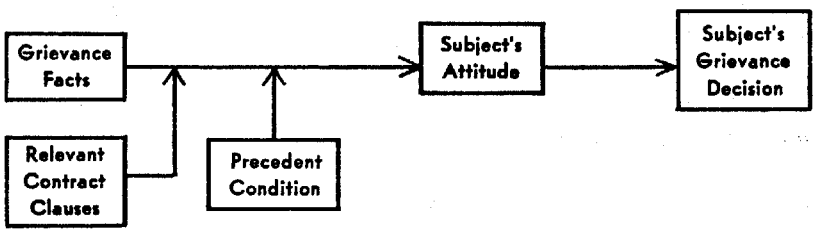
[11] Carl H. Weaver, "The Quantification of the Frame of Reference in Labor-Management Communication," *Journal of Applied Psychology* (1958), Vol. 42, pp. 1–9.

The design can be pictured by a 3X3 matrix as follows:

Precedent Condition	Subject's Attitudes: Pro-union	Neutral	Pro-mgt.	
Pro-management	n = 20	n = 20	n = 20	n = 60
No-precedent	n = 20	n = 20	n = 20	n = 60
Pro-union	n = 20	n = 20	n = 20	n = 60
	n = 60	n = 60	n = 60	N = 180

Each subject was classified into an attitude subgroup on the basis of his Weaver test score and then was randomly assigned to one of the three precedent conditions.

A model of the decision situation is shown below.



Every subject received identical grievance descriptions and contract clauses. The grievances consisted of three cases based on genuine industrial disputes reported in the literature, all had genuine arbitration rulings. The three disputes covered common issues in industrial relations. The issues were: (1) industrial discipline, (2) seniority versus ability as the criterion for promotion, (3) technological displacement of a worker.

We gave each subject three cases to minimize the likelihood that the type of grievance might become a spurious variable. Also, all the cases, contract clauses and precedents were rewritten so that they were classified as easy reading according to the Flesch method. This was done to reduce the likelihood that language difficulty might become a spurious variable. The precedents given were based on actual arbitration rulings.

The dependent variable in this experimental design was the subject's grievance decision. We developed five decision possibilities for each case ranging from extremely pro-union to extremely pro-man-

agement. We tested the validity of the decision scale by having two professional arbitrators independently rank and scale the decision possibilities. We also had thirty subjects, who were not used in the final experiment, independently rank and scale the five decision possibilities for each case. There was a .93 correlation between the decision scaling of the pilot subjects and the professional arbitrators so we could assume the decision alternatives for each case were properly orderly into a clear and valid scale.

A subject's grievance decision score was the average of his score on the three cases. It could range from 1 (extremely pro-union) to 5 (extremely pro-management).

Results

We shall now examine the responses of the subjects for confirmation or non-confirmation of our hypotheses. A statistical summary of the mean grievance decision scores and standard deviations for all subgroups of subjects and precedent conditions appears in Table 1.

H-1, the hypothesis that subjects who received no precedent would make grievance decisions consistent with their attitudes toward unionism, was confirmed. The data for the no-precedent condition appear in the second row of Table 1. Statistical analysis, Table 2, shows a significant difference ($p<.001$) between the decisions of subjects with pro-union attitudes and subjects with neutral attitudes. There is also a significant difference ($p<.01$) between the decisions of subjects with neutral attitudes and subjects with pro-management attitudes.

Actually, the relationship between attitudes and grievance decisions was much stronger than we had anticipated, for it holds true even when subjects are given a pro-union or a pro-management precedent. If we scan horizontally across each row of Table 1 we see that for each precedent condition, as subjects' attitudes move toward pro-management, the grievance decision scores become more pro-management. This direct relationship between attitude and grievance decision score occurred in the predicted direction for all three precedent conditions.

H-1 was confirmed not only for the no-precedent condition but for all conditions of precedent. We grouped the decision scores of all subjects with similar attitudes even though they received different precedents. These are the column means in Table 1. Sta-

TABLE 1

Pattern of Subgroup Means of the Dependent Variable—Subject's Decision Scores

Type of Precedent	Column 1 Pro-Union Subjects	Column 2 Neutral Subjects	Column 3 Pro-Mgt. Subjects	
Pro-Management Abritration Ruling	Cell-11 $\overline{Y}$ 11 = 1.91 S.D.11 = .55	Cell-12 $\overline{Y}$ 12 = 3.33 S.D.12 = .63	Cell-13 $\overline{Y}$ 13 = 3.86 S.D.13 = .71	Row 1—(n = 60) $\overline{Y}$ 1 = 3.03 S.D.1 = 1.04
No Abritration Ruling	Cell 21 $\overline{Y}$ 21 = 1.94 S.D.21 = .70	Cell 22 $\overline{Y}$ 22 = 2.95 S.D.22 = .75	Cell 23 $\overline{Y}$ 23 = 3.50 S.D.23 = .74	Row 2—(n = 60) $\overline{Y}$ 2 = 2.80 S.D.2 = .97
Pro-Union Abritration Ruling	Cell 31 $\overline{Y}$ 31 = 1.48 S.D.31 = .39	Cell 32 $\overline{Y}$ 32 = 2.45 S.D.32 = .66	Cell 33 $\overline{Y}$ 33 = 2.70 S.D.33 = .91	Row 3—(n = 60) $\overline{Y}$ 3 = 2.21 S.D.3 = .87
	Column 1: $\overline{Y}$ = 1.78 S.D. = .60	Column 2: $\overline{Y}$ = 2.91 S.D. = .77	Column 3: $\overline{Y}$ = 3.35 S.D. = .93	Grand Y = 2.68
The mean of 20 subjects' decision scores for each combination of independent variables = $\overline{Y}$ of the cell.	Attitude Score Range: 1–3.0 (n = 60)	Attitude Score Range: 3.1–4.5 (n = 60)	Attitude Score Range: 4.6–7 (n = 60)	Sample N = 180 —each subject's score = the mean value of three decisional choices all made on the decision scale shown here.*

DECISION SCALE:*

Pro-Union 1 2 3 4 5 Pro-Mgt.

Neutral

* Numerical values of the alternatives in each of three issues decided by the subjects.

TABLE 2

Effect of Different Attitudes on the Mean Decision Scores of Subjects Given No Arbitration Ruling as Precedent for their Decisions

Cell	N	$\overline{X}$ = Mean Attitude Score	Type of Arbitration Ruling	$\overline{Y}$ = Mean Decision Score	S.D. Y	t Ratio* of Y Means (One-Tailed Test)
21	20	2.44 Pro-Union	None	1.94	.70	$\overline{Y}$ 21 : $\overline{Y}$ 23 = 7 ***
22	20	3.82 Neutral	None	2.95	.75	$\overline{Y}$ 21 : $\overline{Y}$ 22 = 4.6 ***
23	20	5.07 Pro.Mgt.	None	3.50	.74	$\overline{Y}$ 22 : $\overline{Y}$ 23 = 2.5 **
N =	60					

*** P < .001
** P < .01
* P < .05

tistical analysis, Table 3, showed significant differences between the decision scores of all three attitude subgroups, and these differences were further confirmed by an F test (ratio 79.2, $p < .01$).

Now, we turn to the effects of precedent conditions.

H-2, the hypothesis that subjects with moderate attitudes would make grievance decisions consistent with the precedent received, was confirmed. The decision scores were all in the direction of the precedent received, with each type of precedent's influence producing subgroup scores that were significantly different from each other (Table 4).

TABLE 3

Overall Effect of the Attitude Variable on Subjects' Mean Decision Scores

Column	N	Attitude Score Range	$\overline{X}$ = Mean Attitude Score	S.D. X	$\overline{Y}$ = Mean Decision Score	S.D. Y	t Ratio* of Y Means (one-tailed test)
1	60	1–3.0 Pro-Union	2.37	.54	1.78	.60	$\overline{Y}$ 1 : $\overline{Y}$ 3 = 12.1 ***
2	60	3.1–4.5 Neutral	3.82	.36	2.91	.77	$\overline{Y}$ 1 : $\overline{Y}$ 2 = 8.7 ***
3	60	4.6–7 Pro-Mgt.	5.08	.40	3.35	.93	$\overline{Y}$ 2 : $\overline{Y}$ 3 = 3.4 **
N = 180							

*** P < .001
** P < .01

TABLE 4

Effect of Varying Related Arbitration Rulings on the Mean Decision Scores of Subjects with Neutral Attitudes+

Cell	N	X = Mean Attitude Score	Type of Ruling (Precedent)	Y = Mean Decision Score	S.D. Y	t Ratio++ of Y Means (One-Tailed Test of Significance)
32	20	3.80	Pro-Union	2.45	.66	$\overline{Y}$ 32 : $\overline{Y}$ 12 = 4.6 ***
22	20	3.82	None	2.95	.75	$\overline{Y}$ 32 : $\overline{Y}$ 22 = 3.6 **
12	20	3.80	Pro-Mgt.	3.33	.63	$\overline{Y}$ 22 : $\overline{Y}$ 12 = 1.7 *
N =	60					

+ These 60 subjects obtained attitude scores ranging between 3.1 and 4.5
*** $P < .001$
** $P < .01$
* $P < .05$

Interestingly, when we grouped all subjects, regardless of attitude, who received the same precedent condition the hypothesis that decisions would be in the direction of the precedent received was confirmed ($p < .01$). The relevant data are the row means in Table 1—2.21, 2.80, and 3.03—which produced an F ratio of 21.4.

If we had not gone on to attempt to study hypotheses 3 and 4 we would have simply confirmed both major contentions about what affects a person's grievance decisions. Attitudes toward unionism affect them and precedents affect them. Our data would show that attitudes are more potent than precedent. But, the particularly enlightening developments are in the different ways that extreme attitudes interact with precedent. We now turn our attention to this refinement in analysis. We shall examine H-3 and H-4 first in terms of the responses of subjects with pro-union attitudes and then in terms of the responses of subjects with pro-management attitudes.

H-3, the hypothesis that subjects with extreme attitudes would accept consonant precedents and would make more extreme grievance decisions, was confirmed for subjects with pro-union attitudes. Referring to Table 5, we see that subjects with pro-union attitudes given pro-union precedents made grievance decisions that were significantly more pro-union than similar subjects who were given no precedents.

H-4, the hypothesis that subjects with extreme attitudes would reject dissonant precedent, was also *confirmed for subjects with pro-union attitudes,* Referring to Table 5, we see that subjects with pro-union attitudes given pro-management precedents made

TABLE 5

Effect of Varying Related Arbitration Rulings on the Mean Decision Scores of Subjects with Pro-Union Attitudes+

Cell	N	$\overline{X}$ = Mean Attitude Score	Type of Ruling (Precedent)	$\overline{Y}$ = Mean Decision Score	S.D. Y	t Ratio++ of Y Means (One-Tailed Test of Significance)
31	20	2.24	Pro-Union	1.48	.39	$\overline{Y}$ 31 : $\overline{Y}$ 11 = 4.3 ***
21	20	2.44	None	1.94	.70	$\overline{Y}$ 31 : $\overline{Y}$ 21 = 2.8 **
11	20	2.43	Pro-Mgt.	1.91	.55	$\overline{Y}$ 21 : $\overline{Y}$ 11 = .22 n.s.
N =	60					

+ These 60 subjects obtained attitude scores ranging between 1 and 3.0.
*** $P < .001$
** $P < .01$
n.s.—Not significant

grievance decisions that were *no different* from similar subjects who received no precedents. In short, the subjects with extreme pro-union attitudes when given dissonant precedents *behaved as if they received no precedents at all.*

Now we shall examine how subjects with pro-management attitudes responded when given consonant and dissonant precedents. The data are in Table 6.

H-3 is the hypothesis that subjects with extreme attitudes given consonant precedents would make more extreme decisions. The decision scores for H-3 became more pro-management as predicted; but, the results fell short of statistical significance ($p < .15$) for subjects with pro-management attitudes.

H-4, the hypothesis that subjects with extreme attitudes given

TABLE 6

Effect of Varying Related Arbitration Rulings on the Mean Decision Scores of Subjects with Pro-Management Attitudes+

Cell	N	$\overline{X}$ = Mean Attitude Score	Type of Ruling (Precedent)	$\overline{Y}$ = Mean Decision Score	S.D. Y	t Ratio++ of Y Means (One-Tailed Test of Significance)
33	20	5.08	Pro-Union	2.70	.91	$\overline{Y}$ 33 : $\overline{Y}$ 13 = 3.9 ***
23	20	5.07	None	3.50	.74	$\overline{Y}$ 33 : $\overline{Y}$ 23 = 3.3 **
13	20	5.08	Pro-Mgt.	3.86	.71	$\overline{Y}$ 23 : $\overline{Y}$ 13 = 1.2 n.s.
N =	60					

+ These 60 subjects obtained attitude scores ranging between 4.6 and 7.
*** $P < .001$
** $P < .01$
n.s.—not significant

dissonant precedents would reject the precedents, was statistically rejected ($p < .01$) for subjects with pro-management attitudes. Rather than reject the dissonant pro-union precedents, our results show that *subjects with pro-management attitudes accepted the precedents and made grievance decisions that were significantly more pro-union* than those made by similar subjects who received no precedents.

In other words, the subjects with pro-management attitudes dealt with precedents the same way as subjects with neutral attitudes. The subjects with pro-management attitudes accepted and used the full range of precedent conditions from consonant to dissonant.

Discussion

The findings of this experiment strongly indicate that a subject's attitudes toward unionism are an extremely powerful determinant of the position he is likely to take in grievance situations. Subjects with different attitudes maintained their differences from each other in the grievance decisions they made for all conditions of precedent. This can be seen vividly by scanning the rows of Table 1.

Precedents were significant but had much less effect than attitudes on the grievance decisions subjects made. Recall that every subject received identical grievance statements and contract clauses. Let us look at the effect of precedents intended to close the attitude gap. Subjects with pro-union attitudes were given pro-management precedents. They made decisions with a mean decision score of 1.91. Subjects with pro-management attitudes were given pro-union precedents. They made decisions with a mean decision score of 2.70. Although the precedents should have brought the two groups together in their grievance positions on identical facts and clauses, there was still a highly significant gap between them ($p < .001$). *Thus the belief that precedents will bring parties with significantly different attitudes to a common view of a dispute is not supported by the findings of this research.*

We also found significant differences in the way subjects with *extreme attitudes* used precedents. It appears that subjects with pro-management attitudes take a "judicial" view of precedents. For them, precedents seem to take on a binding, legal character that requires they be followed in spite of the subject's attitudes. The decisions of subjects with pro-management attitudes were consistently

more pro-management than the decisions of subjects with pro-union attitudes; but, the pro-management subjects made decisions that were less pro-management when they received pro-union precedents.

The subjects with pro-union attitudes responded exactly as predicted by "social judgment" theory. They seemed to take an ad hoc, "negotiating" view of precedents. If a precedent was consonant with their attitudes, they used it; if it was dissonant, they disregarded it.

In conclusion, this experimental study suggests that attitudes are extremely powerful determinants of personal positions in grievance disputes. Furthermore, precedents do not cause significant convergence in the positions of parties with different attitudes. Finally, the experiment suggests that unionists see grievances and the use of precedents as a negotiating process whereas managers see them as elements in a judicial proceeding.