

# **PUBLIC-SECTOR INNOVATION AND PREDISPOSING SITUATIONAL FEATURES: TESTING COVARIANTS OF SUCCESSFUL QWL APPLICATIONS**

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## **INTRODUCTION**

The planned change literatures prescribe numerous general guides for practice, but we still lack knowledge about the specific situational features that lead to high success rates. Hence this test of the association of 12 situational features with outcomes in 44 Quality of Working Life (QWL) applications in the public sector. These cases come from a large panel of applications ( $N = 213$ ), mostly in business contexts.

Nine of these 12 situational features reflect a profile of prominent associations with the success or failure of QWL applications in the public sector. These findings may provide the basis for the development of a tested set of guides for facilitating organization change.

The pattern of associations is essentially the same for two measures of success. One is based on hard or objective criteria and the second encompasses both hard and soft criteria such as self-reports of attitudes concerning work.

This article seeks to address both progress and stuckness in organization change. Both of two most popular approaches to planned change--Organization Development (OD) and Quality of Working Life (QWL)--seem to "work" in a high-enough percentage of cases to imply that their underlying guides for action are tolerably serviceable (Golembiewski, Proehl, and Sink. 1981, 1982; Nicholas,

1982; Sun, 1988). However, among other factors, we lack knowledge about the specific situational features that enhance (or depress) success rates. Rather, as Beer (1988:6) notes, OD research has been infatuated with consultants and their intervention methods. He concludes (*Ibid.*) that this neglect of situational features is significant, even momentous: "... the external environment and the internal organizational features that lead to the felt need for change ... are far more important than the intervention method."

This research also seeks to remedy stuckness and hence contributes to further progress in planned change. This effort involves a test of 12 situational features often alleged to encourage or act as predispositions to successful change, employing a large batch of QWL studies to test for their salience. A brief rationale for this analysis usefully sets the stage for presenting methods and findings.

### RATIONALE FOR SITUATIONAL ANALYSIS

These factors help explain why we still lack relatively-convincing evidence about the situational features that encourage favorable outcomes in programs of organizational change. First, a satisfactory assessment of situational features must rest upon an incredible amount of theory and experience. The required critical mass in OD and QWL has only recently come into being and even its burgeoning bulk is not sufficient for many analytical purposes.

Second, relatedly, most survey studies of QWL or OD applications deal with small batches of cases. For example, Cummings, Molloy, and Glen (1975) use 57 total cases and Cummings (1978) makes do with 16. Moreover, the number of public-sector-applications is proportionally low.

Third, with but a few exceptions (*e.g.*, Golembiewski, 1980; Nicholas, 1982), surveys of both OD and QWL applications rely on "soft" or self-reported outcomes. For some observers, only "hard" or "objective" measures of outcomes will deter charges of artifactuality.

These contributions to stuckness set the agenda for this analysis. Briefly, this article relies on 44 public-sector applications isolated from a panel of 231 total cases to test twelve hypotheses about the conditions associated with favorable outcomes of QWL efforts. The large number of business applications permits a useful replication of public-sector findings.

Analysis of the full panel was underway (Golembiewski and Sun, 1990), but the sub-sample of applications from the public sector has

a high intrinsic interest. The need for worksite innovation is nowhere greater than in public administration, for one thing, and effort there does not set the pace for such analysis. Ammonds (1984) provides convincing evidence on both counts.

Moreover, the sub-sample (N = 44) represents the largest available population of public-sector QWL applications, and hence presents an unusual opportunity to test for situational predispositions of effective organizational change. In addition, the only available survey study of situational features in planned change (Dunn and Swierczek, 1977) finds sparse evidence of associations between situational variables and success rates in planned change. Moreover, that analysis does not distinguish sectors of application. Finally, no empirical work known to the authors deals with the issue of situational features related to the success of QWL interventions in either sector.

Acting on this agenda requires four major steps. They include: a brief introduction to methods; a description of twelve hypotheses linking situational features with the success of QWL outcomes; the detailing of results; and a discussion of the findings as well as their implications.

## METHODS

Five sets of details provide a working familiarity with the methods of this simple if tedious research. Thus following sections introduce: the search for the panel of QWL applications; the 12 situational features or independent variables; estimates of the outcomes of QWL applications or the dependent variables; certain measurement conventions as well as their reliabilities; and analytic procedures.

1. *Panel of QWL Applications.* A comprehensive collection of applications, 1965-1986, comes from five sources. For details, see Sun (1988). The sources include:

- electronic searches that isolated 39 existing survey studies and bibliographical sources
- visual inspection of nearly 90 journals and periodicals over the 20-year period of observation
- an analysis of over 100 books
- a mailing to about 100 QWL practitioners
- various professional sources: *e.g.*, *Dissertation Abstracts*, and proceedings of professional meetings.

EXHIBIT 1  
SOME FEATURES OF PUBLIC-SECTOR QWL APPLICATIONS. N = 44

I.	<u>Locus</u>	<u>N =</u>
	1. Federal	10
	2. Sub-Federal, usually Local Government	32
	3. Combined	2
	<u>Function Involved</u>	<u>N =</u>
	1. Civil	33
	2. Military	4
	3. Police	1
	4. Schools	2
	5. Combined	4

EXHIBIT 1 (cont.)

	<u>N =</u>
III. <u>Primary Level of Application</u>	
1. Operators	14
2. First-line supervisors and subordinates	5
3. Supervisors only	1
4. Executives and mid-managers	2
5. Multiple	21
IV. <u>Primary Designs</u>	<u>N =</u>
1. Alternative work schedules	9
2. Job enrichment	7
3. Feedback, usually using surveys	5
4. Union/management collaboration	2
5. Team building	3
6. Incentive plans	2
7. Management by objectives	2
8. Combined	12

The last two approaches seek unpublished cases--dissertations, in-house consulting reports, and so on--which constitute 13 percent of the panel.

This search isolated 44 public-sector cases labeled as "QWL" by authors. Basically, these cases share a "dual focus" which in Goodman's (1979:7-8) terms requires

improving both productivity and quality of work life dimensions. The latter includes physical and psychological safety at work as well as opportunities to learn new skills, to accept greater responsibility, and for more satisfaction from work, and so on. The focus is not on either productivity or on the psychological outcomes of work, but rather jointly improving both of these dimensions.

Of course, this description also applies substantially to work in the Organization Development (OD) tradition, but differences in emphasis deserve note. Among others, one can distinguish these developmental central tendencies between OD and QWL (e.g., Shelley, in press)

QWL Applications Tend to Emphasize	OD Applications Tend to Emphasize
-shop floor and operations	-executive suite and managerial realms
-unionized or ununionized grades	-managerial or exempt grades
-jobs and work systems	-interpersonal and group relationships

Exhibit 1 details a number of features of the 44 cases in the public-sector batch. Overall, four classes of QWL interventions suggest the reach of this technology-cum-values:

- Human - Processual interventions which emphasize training experiences that focus on interpersonal and group processes to induce learning transferable to work settings (e.g., DeMeuse and Liebowitz, 1981; Schein, 1988)
- Sociotechnical System interventions which seek to integrate social and technological sub-systems as via structural designs using autonomous work groups (e.g., Cummings, 1978)

- Technostructural interventions which focus on job content (e.g., job enrichment), the conditions of work (e.g., flexible hours), participative compensation plans (e.g., Improshare), or broad structural designs
- Combined interventions which variously utilize two or more of the approaches sketched above as in Management by Objectives (e.g., McConkie, 1979), Quality Circles or in other multi-faceted approaches.

2. *Situational Features.* This study focuses on 12 hypotheses about situational features predisposing QWL success with details appearing in the next major section. Here note that 12 situational features are scored by three raters, using the coding categories for each variable/hypothesis reflected in Table 3 and discussed below in the sub-section on Measurement Conventions and Reliabilities.

3. *Outcome Measures.* Two classes of outcomes are assessed in this research: hard criteria and global. Inclusion of a case in the panel *requires* the measurement of hard or objective outcomes. But all included studies also provide soft or self-report outcomes and these are factored into a "global" assessment along with objective outcomes.

Each QWL case receives two ratings as to outcomes, then, one for hard criteria and the other for hard as well as soft criteria. "Hard" outcomes include objectively-rated productivity, costs, absenteeism, and so on. "Soft" outcomes include various self-reports concerning satisfaction, perceived collaboration, and so on. In total, some thirty specific outcomes are coded.

Four ratings of each type are possible: 1) highly positive and intended effects; 2) definite balance of positive and intended effects; 3) no appreciable effects; and 4) negative effects. Assignments to categories 1 and 2 require that many  $T_2$  vs.  $T_1$  differences on target variables are "large" and fall in the intended direction. "Large" here refers to  $T_2 - T_1$  differences that attain the .05 level of significance on statistical tests or, alternatively, that show 10 percent or greater intended change  $T_2$  vs.  $T_1$ . Category 1 assignments meet these requirements for at least 2 of every 3 variables measured in a particular study, in general, and Category 2 assignments average perhaps 30-40 percent large and intended differences plus little or no evidence of negative effects or of changes in an unintended direction. Category 4 includes applications meeting one or both of two requirements: one-third or more of the target variables change in

TABLE 1  
DIVISION OF PANEL INTO THE FOUR CATEGORIES

	1	2	3	4
	Highly Positive and Intended <u>Effects</u>	Balance of Positive and Intended <u>Effects</u>	No Appreciable <u>Effects</u>	Negative <u>Effects</u>
<u>Public Sector</u> N = 44	59.1%	27.3%	9.1%	4.6
<u>Business Sector</u> N = 185	71.4%	20.5%	4.9%	3.2%



unintended ways, even if the differences are small and even if a few changes fall in an unintended direction and attain statistical significance or are greater than 10 percent when no statistical tests are reported. All other applications get assigned to Category 3--no appreciable effects.

Overall, the 231 QWL cases in the present panel have substantial success rates. Table 1 summarizes the division of the panel into the four categories noted above. Business applications contain a greater proportion of the most successful outcomes, in sum. But public-sector applications have fewer negative results.

4. *Measurement Conventions and Reliabilities.* A high degree of confidence seems appropriate about the inter-observer consistency in scoring outcomes as well as situational features. Three raters read each QWL application and made independent judgments.

Training and discussion resulted in a substantial agreement. For the situational features, pairs of inter-rater reliabilities range from 92 to 98 percent with a mean of 94 percent. All three raters coded every situational variable for all cases.

Reliability of the outcome assessments relied on a random selection of 120 cases of the total of 231. The mean reliability approximated 94 percent with the paired-comparisons of the three raters ranging from 92-96 percent agreement.

All differences in coding are discussed after reliability estimates were made and any cases that remained in dispute were assigned to the lower or lowest rating in contention. This is a conservative convention, patently.

5. *Analytic Procedures.* Both global and hard=criteria assessments are tested for association with 12 situational features and the measure of association used in this exploratory analysis is Cramer's V, especially to facilitate comparisons with an earlier study (Dunn and Swierczek, 1977). Cramer's V provides not only a measure of the strength of any association in an asymmetric table but also avoids chi-square's sensitivity to small cells. Cramer's V ranges from 0 to +1: a large value of V merely signifies that a high degree of association exists *without expressing direction*.

Following an earlier study (Dunn and Swierczek, 1977), a value of V between 0 and .20 will be considered a negligible to weak relationship; .21 to .30 is treated as weak; .31 to .50 is moderate; and .51 to 1.0 is rated as strong. Since the square of Cramer's V provides an estimate of the explained variance, a "weak" association in this study accounts for 4.4 to 9 percent of the variance in the association of a

EXHIBIT 2  
TWELVE HYPOTHESES UNDERLYING QWL PRAXIS

1. QWL tends to be less successful in an existing organization than in a start-up.
2. It is easier to develop a successful QWL program in a small organization than in a medium-sized or large organization.
3. QWL efforts in business organizations are generally more effective than those in public-sector organizations.
4. QWL efforts in economic or profit-based organizations will be more successful than efforts carried out in other types or organizations.
5. QWL programs have a greater likelihood of success in nonunion settings.
6. Multiple QWL interventions are more likely to be successful than a single intervention.

## EXHIBIT 2 (cont.)

7. QWL efforts which focus on more than one level in an organization will be more successful than those which focus on one level only.
8. QWL programs introduced throughout the whole organization probably will be more successful than programs limited to part of the organization.
9. QWL programs which involve high levels of participation generally lead to better performance than those involving low levels of participation.
10. QWL programs introduced by both internal and external consultants are more likely to be successful than QWL programs introduced by either one or the other.
11. QWL programs introduced with the help of internal consultants are more likely to be successful than QWL programs introduced by external consultants, if the choice is either/or.
12. The longer the system exposure to QWL activities, the greater the intended changes.

specific situational feature and an outcome measure. Similarly, a "moderate" case accounts for 9.6 to 25 percent of the variance. This also is a conservative standard, obviously.

In cases where  $V > .20$ , the direction of the paired-associations will be individually assessed.

All hypotheses in which  $V$  falls below  $.20$  will be considered "rejected," even though other tests might indicate "statistical significance."

## TWELVE HYPOTHESES AND THEIR RATIONALES

Basically, this study tests aspects of the common wisdom underlying QWL praxis. For convenience, Exhibit 2 refers to these twelve propositions as "hypotheses."

1. *Brief Rationale for the Hypotheses.* Each hypothesis, or rule-of-the-thumb, can claim a solid supporting rationale.

### Hypothesis 1

QWL tends to be less successful when initiated in an existing organization than when started from scratch in an entirely new one (e.g., Sashkin *et al.*, 1985; Schrank, 1974).

QWL applications are undertaken in many contexts. Some are initiated in new settings, others in established contexts, while some embrace both existing and new organizations (Walton, 1985). Of course, interveners are well-advised to emphasize high-probability cases when they have a choice.

Under which conditions is a QWL project more likely to succeed?

The literature definitely leans toward start-up situations. In existing sites, it often is not feasible--and certainly is more difficult--to revamp all the elements of the organization, such as existing norms and practices (Walton, 1982). In contrast, start-up organizations do not have the combat entrenched values and methods (Connor and Lake, 1988), and they can plan a congruent total system--selecting people who complement one another, developing policy systems to encourage and reward desired behavior, and involving employees in building the organizational infrastructure consistent with QWL values (e.g., Perkins, Nieva, and Lawler, 1983).

By definition, no one has a vested interest in the *status quo* at start-up. Moreover, designing the whole organization avoids the

myopia of a "participative island" within a larger non-participative host (e.g., Lawler, 1983; Walton, 1976) where any effects may be considered "Hawthorne effects" deriving from the special attention of being an experimental site.

### Hypothesis 2

It is far easier to develop a successful QWL program in a small organization than in a medium-sized or large organization (e.g., Schrank, 1974).

One can be bold here for the literature offers all-but-universal support for this second situational feature. That is, large organizations are commonly assumed to inhibit the kind of openness and informality which can exist "naturally" in a small organization. Since large size can create problems of coordination and communication, new functions and additional hierarchical levels tend to emerge. These common ways of responding to size can complicate change.

### Hypothesis 3

QWL efforts in private organizations are generally more effective than those in public-sector organizations (e.g., Cacioppe and Mock, 1984).

The classic argument derives from von Mises and gets contemporary practical expression in Reaganesque rhetoric and policies. Von Mises (1969) associates innovation with survival in market-driven organizations. In contrast, innovation in public-sector organizations is seen as multiply-constrained--by legal restrictions, the lack of economic incentives, and the "habit background" (Golembiewski, 1985). Constraints loom so large, to some observers, indeed, that they propose that planned change is all-but-impossible in the public sector (e.g., Gibling, 1976; Warrick, 1976).

Here the full panel of 231 applications will test this third presumed situational feature affecting the success of outcomes.

### Hypothesis 4

QWL efforts in economic or profit-based organizations will be more successful than efforts carried out in other types of organizations (e.g., Hinings, Greenwood, and Ranson, 1975).

Hypothesis 4 distinguishes four types of organizations: economic,

service, commonweal, and mutual benefit. Economic organizations include industrial and manufacturing firms, retail establishments, insurance companies, banks, and other commercial organizations providing goods and services to clients for money or payment in kind. Service organizations--e.g., public hospitals, schools, voluntary agencies--provide services to clients without direct monetary payment or payment in kind. Commonweal organizations are government agencies (e.g., national, state, and local government departments) which provide service to the public-at-large, usually without charge. Finally, mutual benefit organizations (e.g., political parties, unions, professional associations, churches, and clubs) provide members with opportunities for social interaction, mutual support, and symbolic identification without direct monetary payment.

Most expect that QWL outcomes will vary with the market sensitivity of the four organizations. Thus, economic organizations are often said to be most receptive to change (e.g., Jones, 1969; Porter, Lawler, and Hackman, 1975). In order, service, commonweal, and mutual benefit organizations should host QWL efforts having decreasingly-positive outcomes, if the common wisdom applies.

Again, the full panel of 231 cases will test these common expectations.

#### Hypothesis 5

QWL programs have a greater likelihood of success in nonunion settings (e.g., Ashkenas and Jick, 1982; Glaser, 1976).

This hypothesis reflects a dominant but admittedly-arguable rationale. Unions complicate change, goes the majority view, by requiring additional consensus-seeking efforts, affecting the preconditions for change or limiting the nature of change (e.g., Walton, 1975). The majority proposes that unions encourage productive operations, as by putting pressure on inefficient managements (e.g., Driscoll, 1981).

#### Hypothesis 6

Multiple QWL interventions are more likely to be successful in increasing productivity and employee well-being than a single intervention (e.g., Katzell and Yankelovich 1975; Quinn and McGrath, 1982).

QWL efforts employing only a single intervention cannot address

systemic elements, goes the rationale accompanying this situational feature. Consequently, for instance, where inappropriate role definition as well as poor interpersonal dynamics exist, a change program using (*e.g.*) team building should prove less effective than one using (*e.g.*) team building plus a sociotechnical intervention.

This is a gross hypothesis, obviously, for it leaves open the issue of whether multiple interventions are well-matched or not. Nonetheless, it frequently appears in the literature,

#### Hypothesis 7

QWL efforts which focus on more than one level in an organization will be more successful than those which focus on one level only (*e.g.*, Argyris, 1972; Porter, Lawler, and Hackman, 1975).

Although some researchers suggest that change focusing primarily on the highest management level has the greatest chance of success, most argue that organization interdependencies give a definite priority to multi-level designs (Lawrence and Lorsch, 1969).

Hence "multiple level" codings on Hypothesis 7 are expected to be associated with the most positive QWL outcomes. Beyond that, the four other coding categories in Table 3 are arrayed in hierarchical order--managers, staff, first-line supervisors, and line employees.

#### Hypothesis 8

QWL programs that are introduced throughout the whole organization are more successful than programs limited to part of the organization (*e.g.*, Bullock, 1986; Clark, 1972).

From a somewhat different perspective than its immediate predecessor, Hypothesis 8 also relates to the common wisdom that particularistic change efforts probably will be ineffective (Bennis, 1973). Sub-systemic approaches can encourage interference from those not on the "participative island" (*e.g.*, Walton, 1975). Targeting the total organization or some substantial segment of it may harness greater energies, commitment, and support for successful change.

#### Hypothesis 9

QWL programs which involve high levels of participation generally lead to better performance than those involving low levels of participation (*e.g.*, Burden, 1975; Crawford, Thomas, and Fink,

1980).

This reflects *the* basic OD and QWL gospel, of course. Directly, participation is said to relate positively a person's cognitive, affective, and behavioral responses to task requirements (e.g., Latham, Steele, and Saari, 1982).

#### Hypothesis 10

QWL programs introduced by both internal and external consultants are more likely to be successful than QWL programs introduced by either one or the other (e.g., Alderfer and Ferris, 1972; Gluckstern and Packard, 1977).

French and Bell (1978) report that using a change agent is often essential to successful change. "Internal" change agents are employees of the host organization and "externals" are under contract from consulting firms, universities, and so on.

The general opinion in QWL circles seems quite definite about the general virtues of internal/external pairs in introducing QWL. Broadly, internal and external consulting roles contain potentially reinforcing dissimilarities. For example, internals specialize in knowledge of the local culture and hence ease entry and increase the "fit" of QWL activities. And external consultants can inhibit the reasonable tendency of internals to "go native."

#### Hypothesis 11

QWL programs introduced with the help of internal consultants are more likely to be successful than QWL programs introduced by outside consultants (e.g., Franklin, 1976; Zaltman, Duncan, and Holbek, 1973).

Hypothesis 11 is a sub-class of its predecessor and discretely focuses on how the two different role types impact the success of QWL programs *if* the choice is either/or.

The dominant opinion seems to favor the internal, if choice between them there must be. The internal change agent can fill the role of "champion," which is critical early in the process of a QWL application.

#### Hypothesis 12

The longer the system is exposed to QWL, the greater will be the



intended changes (e.g., Beckard, 1975).

Virtually all QWL theorists believe that significant change takes substantial time, but "substantial" has different meanings. Thus Maslow (1965) argues that real change in organizations may take up to 50 years, whereas Likert (1961) requires only 5 years.

In order to test Hypothesis 12, this study codes all public-sector cases in one of five categories assessing the duration of direct QWL activities: 1-6 months; 7-12 months; 13-18 months; 19-24 months; and longer than 24 months.

## FINDINGS

This analysis of situational features and QWL outcomes generates three basic conclusions. Overall, first, as Table 2 shows, the 12 hypotheses get a general pattern of support when both kinds of outcomes are considered. Specifically, in 14 of the 22 cases for which data exist, a noteworthy degree of association exists between QWL outcomes and specific situational variables.  $V$  does *not* specify direction, recall, but the 14 cases where  $V > .20$  explain nearly 14.5 percent of the variance, on average. This is a useful contribution to understanding the interaction of situational features and QWL outcomes.

Second, the pattern is very similar when outcome categories (3) and (4) are conflated to test whether the results above are an artifact of small sub-sample size. Table 3 provides the appropriate summary,

Third, the associations between outcomes and most situational variables also trend in the expected directions for both hard criteria as well as global assessments. The two 4 x 12 tables<sup>1</sup> are not reproduced here to conserve space, but they are available from the first-named author. Specifically, for the hard criteria assessment, 67.1 percent of all possible paired-comparisons are in the expected direction, considering all of the hypotheses. When only those hypotheses are considered on which  $V > .20$  in at least 3 of 4 cases in Tables 2 and 3, the percentage of paired-comparisons in the expected direction approximates 76.3 percent. Note that no paired-comparisons are made for calls with no or a few cases.

## DISCUSSION

The results of this study constitute a useful first-cut at providing a profile of the situational features that predispose successful QWL

TABLE 2  
 SUMMARY, TESTS OF TWELVE SITUATIONAL HYPOTHESES  
 VS. FOUR QWL OUTCOMES\*

<u>Degree of Support for Situational Hypotheses</u>		
<u>Hypothesis</u>	<u>Global Assessment of Outcomes</u>	<u>Hard-Criteria Assessment of Outcomes</u>
1.	No cases of start-up are reported	
2.	Weak Support (V=.29)	Moderate support (V=.31)
3.	Rejected (V=.15)	Rejected (V=.11)
4.	Rejected (V=.13)	Rejected (V=.09)
5.	Moderate support (V=.38)	Moderate support (V=.50)

TABLE 2 (cont.)

6.	Rejected (V=.15)	Rejected (V=.14)
7.	Strong support (V=.61)	Moderate support (V=.34)
8.	Moderate support (V=.39)	Moderate support (V=.43)
9.	Rejected (V=.15)	Moderate support (V=.39)
10.	Weak support (V=.24)	Weak support (V=.30)
11.	Moderate support (V=.33)	Weak support (V=.25)
12.	Moderate support (V=.37)	Weak support (V=.26)

\* N.B. "Success" here is estimated in terms of four outcome categories (1) Highly positive and intended effects; (2) Balance of positive and intended effects; (3) No appreciable effects; and (4) Negative effects.

TABLE 3  
SUMMARY, TESTS OF TWELVE SITUATIONAL HYPOTHESES  
VS. THREE QWL OUTCOMES\*

<u>Degree of Support for Situational Hypotheses</u>		
<u>Hypothesis</u>	<u>Global Assessment of Outcomes</u>	<u>Hard-Criteria Assessment of Outcomes</u>
1.	No cases of start-up are reported	
2.	Rejected (V=.19)	Weak support (V=.23)
3.	Rejected (V=.15)	Rejected (V=.11)
4.	Rejected (V=.13)	Rejected (V=.10)
5.	Moderate support (V=.38)	Moderate support (V=.50)



applications in the public sector, even though this job is only begun. Indeed, this study is the only one that tests for the impact of situational features on public-sector change.

Replication of these findings has a high priority and a larger batch of public-sector applications will be necessary for this effort. Special motivation for replication derives from the fact that a similar study (Dunn and Swierczak, 1977) finds no pattern of association between situational features and planned organizational intervention labeled "OD" or Organization Development. This inconclusiveness may be due to shortcomings in methods or to the lack of any such relationships in nature. A replication of the present design with a larger population will provide valuable perspective on such inconclusiveness.

Four points highlight other significant features of the present findings. First, as noted, two of the present situational features (#3 and #4), lacking a noteworthy association with QWL success or failure, implies some good news for public management. Public-sector outcomes are *not* significantly less successful than those in business. Specifically, for the hard criteria assessment on #3, business vs. public-sector applications are assigned to the first two categories of outcomes in 96 vs. 86 percent of the cases respectively.

This finding is counter to the common wisdom and provides a counter argument to those who are pessimistic about organizational change in the public sector (*e.g.*, Giblin, 1976). Business applications seem to have an advantage, but the results in no way discourage public-sector applications. Their success rates are lower, but nonetheless formidable.

Second, no test of Hypothesis 1 is possible because no public-sector QWL applications in start-up settings exist in the present panel. This forfeits a useful opportunity for QWL applications because both common opinion and sparse data (*e.g.*, Golembiewski and Sun, 1990) support the view that start-up presents an easier target for intervention than work settings with an ongoing history. In fact, a few examples of start-up in the public sector exist (*e.g.* Golembiewski and Kiepper, 1989), but these are reported under the broader OD, or Organization Development, rubric and are thus excluded from the present sample.

Third, the other cases of situational hypotheses "rejected" in both Tables 2 and 3--#6 and #9--permit no certain explanation, but some reasonable guesses are possible. Hypothesis 6 proposes that multiple QWL interventions have special efficacy, but Tables 2 and 3

find insufficient support for this view for both estimates of outcomes. Why? It seems that public-sector applications involve single interventions in over 90 percent of the cases. Small sub-sample size might distort a test for this hypothesis, in sum.

As for Hypothesis 9, the evidence is mixed. Tables 2 and 3 report that, for the global assessment of outcomes, heightened participation is not associated with superior outcomes. However,  $V$  for the hard criteria estimate of QWL outcomes, in both Table 2 and 3, implies "moderate support" for the view that differences in participation and outcomes encompass non-random variation.

What does this pattern mean? Again, speculation dominates, but close examination of the original data--from 4 x 12 tables not reproduced here to conserve space--reveals no direct association of QWL outcomes and participation. One might argue that most QWL applications seek to induce participation and, consequently, the distribution of scores on that variable might be so attenuated as to permit only an inadequate test of Hypothesis 9. Alternatively, the present operational definition may not be sufficiently sensitive to differentiate QWL outcomes.

Fourth, the final case of a rejected hypothesis--#2 in Table 3, global outcomes--is perhaps best interpreted as an anomaly. The three other tests of #2 provide weak to moderate support and the fourth ( $V = .19$ ) closely approaches our cutting-point for  $V$ .

## NOTES

1. Paired-comparisons are made for outcomes (1), (1) + (2), (3), and (4). Pairs with one  $N = 0$  are not included in the estimate.

## REFERENCES

- Alderfer, Clayton P. and R. Ferris (1972). "Understanding the Impact of Survey Feedback," in Warner W. Burke and Harvey A. Hornstein (eds.). *THE SOCIAL TECHNOLOGY OF ORGANIZATION DEVELOPMENT*. La Jolla, Cal.: University Associates.
- Ammons, D.N. (1984). *MUNICIPAL PRODUCTIVITY*. New York: Praeger.
- Argyris, Chris (1972). *THE APPLICABILITY OF ORGANIZATIONAL SOCIOLOGY*. New York: Cambridge University Press.
- Ashkenas, R.N. and T.D. Jick (1982). "Productivity and QWL Success without Ideal Conditions." *NATIONAL PRODUCTIVITY REVIEW* 1(4):381-388.
- Beckhard, Richard (1975). "Strategies for Large System Change." *SLOAN*

- MANAGEMENT REVIEW 16(2):43-55.
- Beer, Michael (1988). "Toward a Redefinition of OD." OD NEWSLETTER (Winter):6-7.
- Bullock, R.J. (1986). "A Meta-Analysis Method for OD Case Studies." GROUP AND ORGANIZATION STUDIES 11(1-2):33-48.
- Burden, D.W. (1975). "Participative Management as a Basis for Improved Quality of Jobs: The Case of Microwax Department, Shell U.K., Ltd.," in L.E. Davis and A.B. Cherns (eds.). THE QUALITY OF WORK LIFE, Vol. II. New York: Free Press.
- Caciopee, R. and P. Mock (1984). "A Comparison of the Quality of Work Experience in Government and Private Organizations." HUMAN RELATIONS 37(11):923-940.
- Clark, L.P. (1972). ACTION RESEARCH AND ORGANIZATIONAL CHANGE. New York: Harper and Row,
- Connor, P.E. and L.K. Lake (1988). MANAGING ORGANIZATIONAL CHANGE. New York: Praeger.
- Crawford, K.S., E.D. Thomas, and J.J. Fink (1980). "Pygmalion at Sea: Improving the Work Effectiveness of Low Performers." JOURNAL OF APPLIED BEHAVIORAL SCIENCE 16(4):482-505.
- Cummings, Thomas G. (1978). "Sociotechnical Experimentation: A Review of Sixteen Studies," in William A. Pasmore and John L. Sherwood (eds.). SOCIO-TECHNICAL SYSTEMS: A SOURCEBOOK. San Diego, Cal.: University Associates.
- Cummings, Thomas G., E.S. Molloy, and R.H. Glen (1975). "Intervention Strategies for Improving Productivity and the Quality of Work Life." ORGANIZATIONAL DYNAMICS 4(1):52-68.
- DeMeuse, K.P. and S.J. Liebowitz (1981). "An Empirical Analysis of Team-Building Research." GROUP AND ORGANIZATION STUDIES 6(3):357-378.
- Discoll, J.W. (1981). "Working with Unions," in H. Meltzer and R. Nord (eds.). MAKING ORGANIZATIONS HUMANE AND PRODUCTIVE: A HANDBOOK FOR PRACTITIONERS. New York: John Wiley and Sons.
- Dunn, W.N. and F.W. Swierczek (1977). "Planned Organizational Change: Toward Grounded Theory." JOURNAL OF APPLIED BEHAVIORAL SCIENCE 13(2):135-157.
- Franklin, J.L. (1976). "Characteristics of Successful and Unsuccessful Organization Development." JOURNAL OF APPLIED BEHAVIORAL SCIENCE 12(4):471-491.
- French, Wendall L. and Cecil H. Bell, Jr. (1978). ORGANIZATIONAL DEVELOPMENT: BEHAVIORAL SCIENCE INTERVENTIONS FOR ORGANIZATION IMPROVEMENT, 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall.
- Giblin, Edward J. (1976). "Organization Development: Public Sector Theory and Practice." PUBLIC PERSONNEL MANAGEMENT 5(2):108-119.



- Glaser, E.M. (1976). *PRODUCTIVITY GAINS THROUGH WORKLIFE IMPROVEMENT*. New York: Psychological Corporation.
- Gluckstern, N.B. and R.W. Packard (1977). "The Internal/External Change-Agent Team: Bringing Change to a 'Closed Institution'." *JOURNAL OF APPLIED BEHAVIORAL SCIENCE* 13(1):41-52.
- Golembiewski, Robert T. (1980). "Public-Sector Productivity and Flexible Work-hours." *SOUTHERN REVIEW OF PUBLIC ADMINISTRATION* 4(3):324-339.
- \_\_\_\_\_. (1985). *HUMANIZING PUBLIC ORGANIZATIONS*. Mt. Airy, MD: Lomond Publications.
- Golembiewski, Robert T. and Alan Kiepper (1989). *HIGH PERFORMANCE AND HUMAN COSTS*. New York: Praeger.
- Golembiewski, Robert T., Carl W. Proehl, Jr., and David Sink (1981). "Success of OD Applications in the Public Sector." *PUBLIC ADMINISTRATION REVIEW* 41(6):679-692.
- \_\_\_\_\_. (1982). "Estimating the Success of OD Applications." *TRAINING AND DEVELOPMENT JOURNAL* 36(4):86-95.
- Golembiewski, Robert T. and Ben-chu Sun (1989). "Testing the Positive-Findings Bias in QWL Studies." *PUBLIC PRODUCTIVITY REVIEW* (in press).
- \_\_\_\_\_. (1990). "Situational Features and QWL Outcomes." Working paper.
- Goodman, Paul S. (1979). *ASSESSING ORGANIZATIONAL CHANGE: THE RUSHTON QUALITY OF WORK EXPERIMENT*. New York: Wiley.
- Hinings, C., Royston Greenwood, and S. Ranson (1975). "Public Organizations and Planned Social Change." Unpublished paper, European Group for Organizational Studies, Breaux-sans-Nappe.
- Jones, G. (1969). *PLANNED ORGANIZATIONAL CHANGE*. New York: Praeger.
- Katzell, R.A., Daniel Yankelovich, and others (1975). *WORK, PRODUCTIVITY, AND JOB SATISFACTION*. New York: Psychological Corporation.
- Latham, G.P., T.P. Steele, and L.M. Saari (1982). "The Effects of Participation and Goal Difficulty on Performance." *PERSONNEL PSYCHOLOGY* 35(3):677-686.
- Lawler, Edward E., III (1982). "Increasing Worker Involvement to Enhance Organizational Effectiveness," in Paul S. Goodman and Associates (eds.). *CHANGE IN ORGANIZATIONS: NEW PERSPECTIVES ON THEORY, RESEARCH, AND PRACTICE*. San Francisco: Jossey-Bass.
- Lawrence, Paul and Jay Lorsch (1969). *DEVELOPING ORGANIZATIONS: DIAGNOSIS AND ACTION*. Reading, Mass.: Addison-Wesley.
- Levine, H.Z. (1984). "Consensus." *PERSONNEL* 61(3):4-13.
- Likert, Rensis (1961). *NEW PATTERNS OF MANAGEMENT*. New York: McGraw-Hill.
- \_\_\_\_\_. (1967). *THE HUMAN ORGANIZATION*. New York: Wiley.
- Maslow, A.H. (1965). *EUPSYCHIAN MANAGEMENT*. Homewood, IL: Irwin-Dorsey.

- McConkie, Mark L. (1979). "Classifying and Reviewing the Empirical Work on MBO: Some Implications." *GROUP AND ORGANIZATION STUDIES* 4(4):461-475.
- Morrison, Peggy (1978). "Evaluation in OD: A Review and an Assessment." *GROUP AND ORGANIZATION STUDIES* 3(1):42-70.
- Nicholas, J.M. (1982). "The Comparative Impact of Organization Development Interventions on Hard Criteria Measures." *ACADEMY OF MANAGEMENT REVIEW* 7(4):531-542.
- Pasmore, William A., C. Francis, J. Halderman, and A. Shani (1982). "Sociotechnical Systems: A North American Reflection of Empirical Studies for the Seventies." *HUMAN RELATIONS* 35(12):1179-1204.
- Perkins, David N., V.F. Nieva, and Edward E. Lawler, III (1983). *MANAGING CREATION: THE CHALLENGE OF BUILDING A NEW ORGANIZATION*. New York: Wiley.
- Porras, Jerry I. (1979). "The Comparative Impact of Different OD Techniques and Intervention Intensities." *JOURNAL OF APPLIED BEHAVIORAL SCIENCE* 15(2):156-178.
- Porter, L., E. Lawler, and J. Hackman (1975). *BEHAVIOR IN ORGANIZATIONS*. New York: McGraw-Hill.
- Quinn, R.E. and M.R. McGrath (1982). "Moving Beyond the Single-Solution Perspective: The Competing Values Approach as a Diagnostic Tool." *JOURNAL OF APPLIED BEHAVIORAL SCIENCE* 18(4):463-472.
- Sashkin, Marshall, R.J. Burke, Paul R. Lawrence, and William A. Pasmore (1985). "Organization Development Approaches: Analysis and Applications," in D.D. Warrick (ed.). *CONTEMPORARY ORGANIZATION DEVELOPMENT: CURRENT THINKING AND APPLICATIONS*. Glenview, IL: Scott, Foresman.
- Schein, E.H. (1988). *PROCESS CONSULTATION: THE ROLE IN ORGANIZATION DEVELOPMENT*. Reading, MA: Addison-Wesley.
- Schrank, R. (1974). "On Ending Worker Alienation: The Gaines Pet Food Plant," in R.P. Fairfield (ed.). *HUMANIZING THE WORKPLACE*. Buffalo, NY: Prometheus Books.
- Schuster, M.H. (1984). *UNION-MANAGEMENT COOPERATION: STRUCTURE, PROCESS, IMPACT*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Skelley, B.D. (in press). "Workplace Democracy and OD." *PUBLIC ADMINISTRATION QUARTERLY*.
- Sun, B-C. (1988). "Quality of Working Life Programs: An Empirical Assessment of Designs and Outcomes." Unpublished doctoral dissertation, University of Georgia, Athens.
- von Mises, L. (1969). *BUREAUCRACY*. New Rochelle, NY: Arlington House.
- Walton, Richard E. (1975). "The Diffusion of New Work Structures: Explaining Why

Success Didn't Take." ORGANIZATIONAL DYNAMICS 3(3):3-22.

\_\_\_\_\_. (1982). "The Topeka Work System: Optimistic Visions, Pessimistic Hypotheses, and Reality," in R. Zager and M.P. Rosow (eds.). THE INNOVATIVE ORGANIZATION: PRODUCTIVITY PROGRAMS IN ACTION. New York: Pergamon Press.

Warrick, D.D. (1976). "Applying OD to the Public Sector." PUBLIC PERSONNEL MANAGEMENT 5(3):186-190.

Zaltman, G., R. Duncan, and J. Holbek (1973). INNOVATIONS IN ORGANIZATIONS. New York: Wiley Interscience.

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