

AD-A093 137

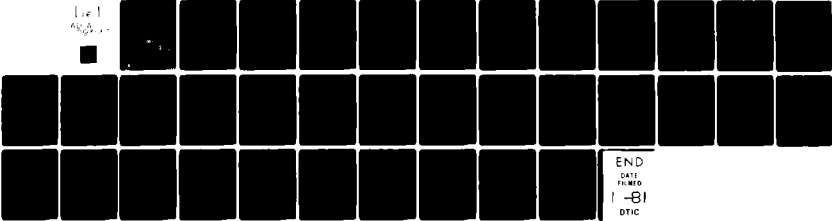
MAXWELL SCHOOL OF CITIZENSHIP AND PUBLIC AFFAIRS SYR--ETC F/G 5/4
BOUNDARY-SPANNING AND PERCEIVED POLITICAL ENVIRONMENTS IN TECHN--ETC(U)
SEP 80 B BOZEMAN, R MCGOWAN N00014-76-C-0912

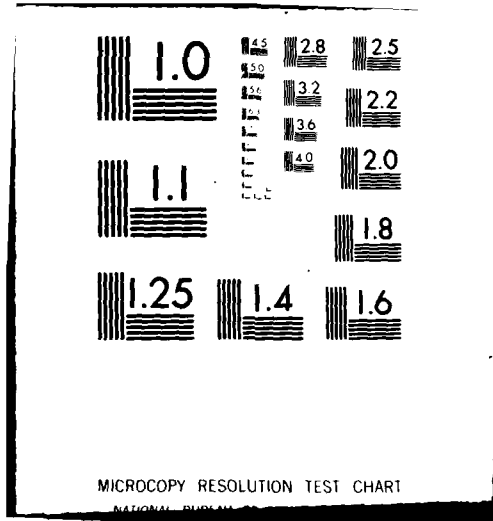
UNCLASSIFIED

TR-8

ML

1 of 1
4/2/81





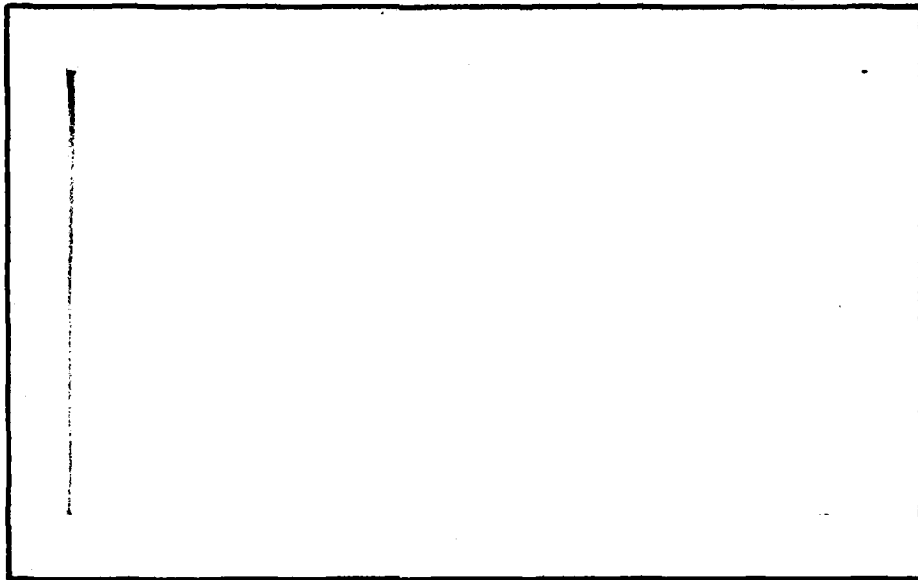
MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS

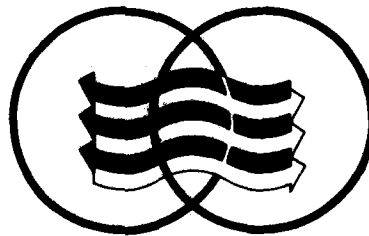
LEVEL II

12
NW

AD A 093137



MAXWELL TRAINING AND DEVELOPMENT PROGRAMS



DTIC
ELECTE
DEC 23 1980
S **D**
F

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

THE MAXWELL SCHOOL OF CITIZENSHIP AND PUBLIC AFFAIRS
SYRACUSE UNIVERSITY

FILE COPY

80 12 22 1980

BOUNDARY-SPANNING AND PERCEIVED POLITICAL
ENVIRONMENTS IN TECHNOLOGICALLY-INTENSIVE
PUBLIC AGENCIES*

Barry Bozeman Robert McGowan
The Maxwell School Institute of Public Administration
Syracuse University Pennsylvania State University

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	

This research was sponsored by the Organization Effectiveness
Research Programs, Office of Naval Research, under contract No.
N0001476-C-0912.

Approved for public release: distribution unlimited.

Reproduction in whole or part is permitted for any purpose of
the United States Government.

*Invited paper to be presented at the International Institute
of Management Science (Germany) Conference on Technology
Transfer, Berlin Germany, December 8-10, 1980.

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Technical Report 8	2. GOVT ACCESSION NO. AD-A093137	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Boundary-spanning and perceived political environments in technologically-intensive public agencies.	5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) Barry/Bozeman, Robert/McGowan	6. PERFORMING ORG. REPORT NUMBER Technical Report 8	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Maxwell Training & Development Programs Syracuse University Syracuse, New York 13210	8. CONTRACT OR GRANT NUMBER(s) N0001476-C-0912	
11. CONTROLLING OFFICE NAME AND ADDRESS N00014-76-C-0912	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 12 36	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) 14 TR-9	13. REPORT DATE 11 Sep 1980	
	15. SECURITY CLASS. (of this report) Unclassified	
	16. DISTRIBUTION STATEMENT (of this Report)	
	17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)	
	18. SUPPLEMENTARY NOTES	
	19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Boundary-spanning, organizational environments, external politics, interorganizational conflict.	
	20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This study seeks to test a number of hypotheses pertaining to boundary spanning in public organizations. The focus is on boundary-spanning behavior within state government with data drawn from questionnaire responses of a sample of individuals employed in technologically-intensive programs of New York State government (n=650). Hypothesized predictions of boundary spanning activity include: ———>	

DD FORM 1473
1 JAN 73

EDITION OF 1 NOV 68 IS OBSOLETE
S/N 0102-LF-014-6601

Unclassified
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

222100

JOB

> Interorganizational conflict;
Perception of the importance of external political change;
Program stability;
"Organicness" organizations structure; and
Job satisfaction. >

A factor analysis yielded clustering patterns closely conforming to the predictor variables and scores on a boundary-spanning scale were correlated with factor scores for one dimension. Four of the independent variables factors are significantly associated with boundary - spanning activity. The dominant factor among the six dimension was Consultative (eigenvalue = 4.07, indicating greater explanatory power than any four for the original correlation matrix than any four variables), but its importance relative to boundary - spanning is the least of the four significantly related factors. The best predictors were External Politics and Program Growth; Interorganizational Conflict was also significantly associated with boundary - spanning.

Taken together, the findings provide a profile of public sector boundary - spanning. The boundary spanner's organization is enjoying growth but at the expense of some external conflict. In such circumstances it is especially important that political change be closely monitored since any future growth can be expected to be closely tied to developments in the external political environment. 9

Unclassified

ABSTRACT

This study seeks to test a number of hypotheses pertaining to boundary spanning in public organizations. The focus is on boundary - spanning behavior within state government with data drawn from questionnaire responses of a sample of individuals employed in technologically-intensive programs of New York State government (n=650). Hypothesized predictions of boundary spanning activity include:

Interorganizational conflict,
Perception of the importance of external political change,
Program stability,
"Organicness", organizations structure, and
Job satisfaction.

A factor analysis yielded clustering patterns closely conforming to the predictor variables and scores on a boundary - spanning scale were correlated with factor scores for one dimension. Four of the independent variables factors are significantly associated with boundary - spanning activity. The dominant factor among the six dimension was Consultative (eigenvalue = 4.07, indicating greater explanatory power than any four for the original correlation matrix than any four variables), but its importance relative to boundary - spanning is the least of the four significantly related factors. The best predictors were External Politics and Program Growth; Interorganizational Conflict was also significantly associated with boundary - spanning.

Taken together, the findings provide a profile of public sector boundary-spanning. The boundary spanner's organization is enjoying growth but at the expense of some external conflict. In such circumstances it is especially important that political change be closely monitored since any future growth can be expected to be closely tied to developments in the external political environment.

BOUNDARY-SPANNING AND PERCEIVED POLITICAL
ENVIRONMENTS IN TECHNOLOGICALLY-INTENSIVE PUBLIC AGENCIES

Two of the more compelling trends in contemporary organization theory are the ascendance of environmental approaches and concepts and the "rediscovery" of politics. The market is bullish for studies of inter-organizational relations, political exchange, adaptation to organizational "ecology" and related topics; approaches viewing organizations as insulated and solitary actors (or reactors) are less common. Even the concept of "bureaucracy," once viewed as epitomizing rigidity and impenetrability, is perhaps taking new meaning. As one leading theorist opines: "A characteristic of bureaucracies, I shall argue, is that most decisions result from administrative or political judgments rather than technological imperative; for this reason, contrary to stereotypes, bureaus tend to be very open or vulnerable to their immediate environments" (Meyer, 1979: 5).

While environmental and political concepts are neither redundant nor coterminous (one may, for example, focus on the politics of intraorganizational coalitions), they are often complementary. This is especially the case in the study of public organizations where external dependencies are set by statute and political intercourse is unavoidable. In this study of boundary-spanning activity in state government agencies the objective is to assess the relevance of perceived political environments for boundary-spanning.

Boundary-spanning is widely viewed as a means to effectively mitigate the uncertainties of the environment (Wren, 1967; Thompson, 1967; Pruden and Reese, 1972; Organ and Green, 1972; Aldrich, 1979), especially in those

instances where the environment is dynamic and the organization's dependency on the environment is acute (Bozeman and Slusher, 1979). While the arguments of political theorists are well taken, (Rourke, 1969; Gawthrop, 1971; Warwick, 1975), it is not clear that public organizations' environments are characteristically more turbulent or uncertain than private or "third sector" organizations. Strong elements of incrementalism in policy-making generally (Braybrooke and Lindblom, 1963), and in budgetary policy (Wildavsky, 1974; Wanat, 1974), ensure a degree of predicatability. Whether or not the environment for public agencies is more or less turbulent than for other organizations, the stakes in political change are inevitably high and, thus, it is possible that boundary-spanning activity in public agencies will be sensitive to perceptions of political dimensions of the environment.

In addition to exploring the relationship of perceptions of political environments to boundary-spanning, this study seeks to test a number of hypotheses derived from previous boundary-spanning studies, the bureaucratic politics literature and related sources. Of particular interest are the impacts of job satisfaction, "organicness," and programmatic growth. It is hoped that the investigation of a number of possible determinants of boundary-spanning activity will lead to a more comprehensive model of boundary-spanning.

HYPOTHESES

Hypotheses for this study were chiefly drawn from previous theory and research on boundary-spanning, as well as (less directly) works concerning bureaucratic politics and organizational communication. The formulation of

of hypotheses was preceded, however, by exposition of a basic model of boundary-spanning, a model grounded in certain axioms pertaining to motivation for boundary-spanning in public organizations.

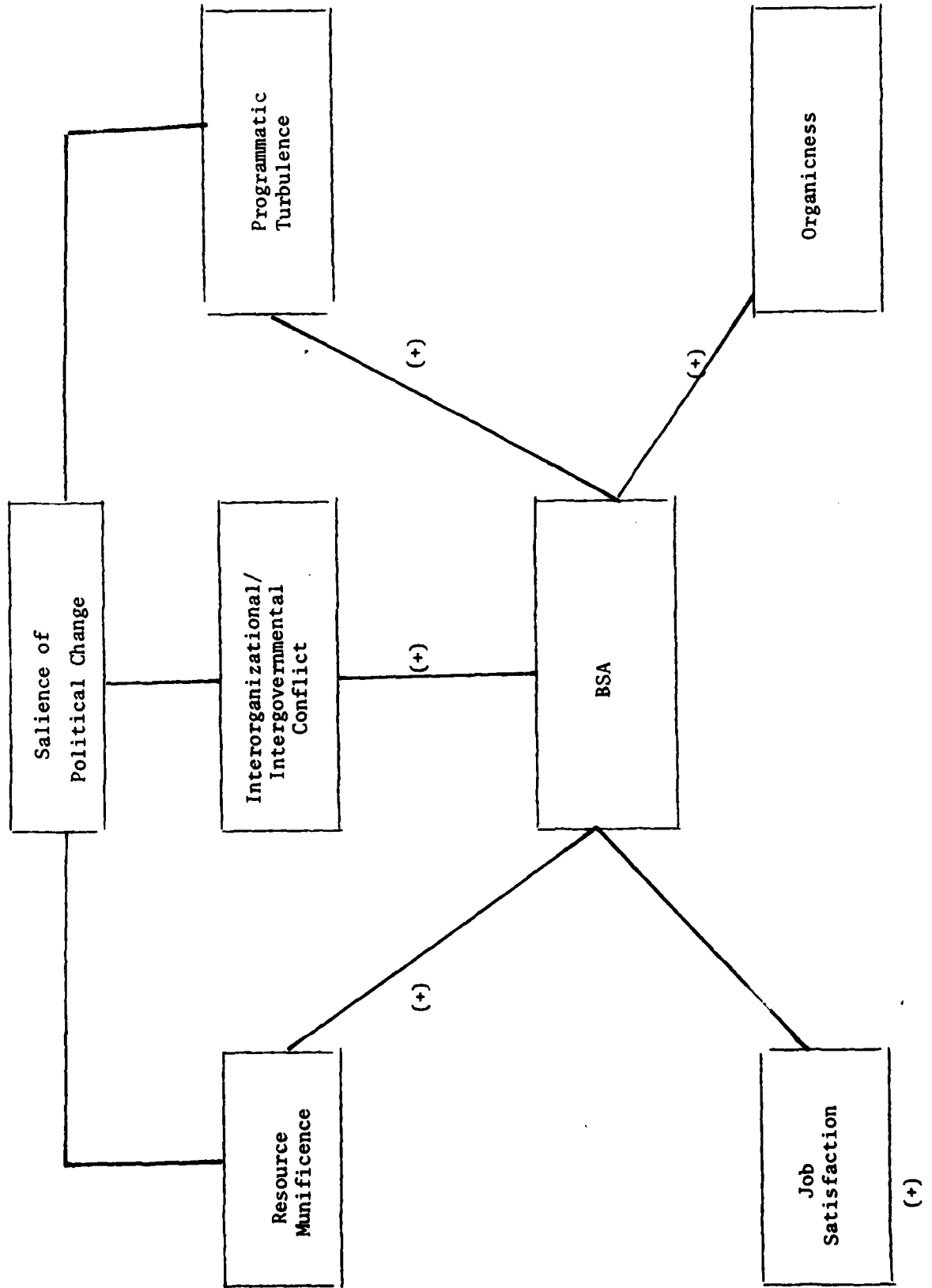
It is assumed that public organizations engage in boundary-spanning activity for much the same reasons as other organizations, though there is an expectation that public organizations might differ in regard to the relative importance of particular boundary-spanning motives. These motives include (1) reduction of environmental (political) turbulence; (2) program expansion and effectiveness; (3) facilitation of resource acquisition and growth; (4) job satisfaction and, (5) mitigation of interorganizational conflict. Such motives may be highly interrelated. Figure One represents determinants of boundary-spanning activities in public organizations.

-- Figure One Goes Here --

According to this model, both internal and environmental factors independently influence boundary-spanning. The salience of political change is an encompassing factor that includes resource munificence, interorganizational and intergovernmental conflict and programmatic turbulence. It is assumed, then, that boundary-spanning is a means of coping with political change and that political change is more salient under conditions of resource change, external conflict and programmatic turbulence.

Having presented the broad features of organization boundary-spanning determinants, individual hypotheses may be more conveniently presented.

FIGURE ONE: Determinants of Boundary-Spanning Activity (BSA) in Public Organizations



H1: Interorganizational Conflict is Positively
Associated with Boundary-Spanning

Conflict among public organizations can arise from a variety of sources. As Meyer (1975) has observed, organizations select and, to a point, "defend" domains and conflict often occurs under conditions where organizations choose to enact a common domain. While one might suppose that public organizations and similar not-for-profit organizations might be less prone to domain-centered conflict than the profit-oriented, intrinsically competitive private firms, public organizations aggressively defend their "turf" (Downs, 1967, Brewer, 1973; Rourke, 1976). Likewise, "bureaucratic imperialism" is a well known phenomenon (Holden, 1966; Rourke, 1976). Whether the public organization seeks to defend its domain or to expand its programmatic responsibilities and/or clients, boundary-spanning may be an important tactic. In addition to facilitating co-optation (Aldrich, 1979; Aldrich and Herker, 1977; Thompson, 1967), boundary-spanning can abet bureaucratic imperialism or programmatic growth by contributing to the organization's store of information concerning its clients' attributes and demands (Freeman, 1965; Klein and Romani, 1966); potential objections and counter-strategies of competitor organizations (Jones, 1972; Selznick, 1949; Wildavsky, 1962); and interest and perceived stakes of legislative and executive superiors (Hammond, 1965; Hilsman, 1958). In public organizations there is a high potential for conflict among organizational actors at different levels of government (e.g. state, local, federal), and it is hypothesized that organizations perceiving high degrees of conflict with other levels of government will be especially active in boundary-spanning.

H2: Perception of the Importance of External Political
Change is Positively Associated with Boundary-Spanning

Distinctions among private and public organizations are increasingly

blurred, but one straightforward point of difference is the relative significance of broad political and partisan change (Seidman, 1970; Mainzer, 1973). While sweeping changes in occupants of public office (changes such as those occurring after the election of a new governor or after a change in the majority party of a legislative body) can have far-reaching effects on all types of organizations, public organizations typically are most directly and dramatically affected. We can expect, however, that there are differences in degree of salience of external politics among public organizations. Since monitoring the environment can be a means of keeping abreast of political developments and can be helpful in preparing strategies for coping with political change (Downs, 1967; Thompson, 1967), it may be hypothesized that organizations viewing external political change as especially significant will be more active in boundary-spanning.

H3: Program Stability is Negatively Associated with Boundary-Spanning

Not only may the rate of program growth be a predictor of boundary-spanning, it is quite possible that it is frequently a result of boundary-spanning: innovation studies have consistently pointed to the importance of boundary-spanning as a spur to not only organizational innovation but also product/service innovation. While limitations of the data for this study will not permit statements about the direction of causality, it is felt that program stability is for this study best conceived as an independent variable. While there are indeed cases where boundary-spanning leads to programmatic changes, the connection (especially for public organizations) is less direct and more tenuous with a number of variables often playing a more important role.

If we view program stability as an independent variable, the reasoning is more direct and less dependent on complicated intervening variables: (1) sharp increases in the level of programs will lead to information search (and boundary-spanning) as public managers seek information that will facilitate implementation of the programs (Nakamura and Smallwood, 1980; Bardach, 1977; Elmore, 1979), that provides evidence of the success/failure of similar programs implemented in other agencies (Bardach, 1977), or that simply adds to their (the public managers') knowledge of the substance of the program; (2) sharp declines in the level of programs will lead to information search and boundary-spanning as public managers seek to spur productivity, recoup lost programs or expand the clientele for remaining programs (Bozeman and Slusher, 1979).

H4: "Organicness" of the Agency's Organization Structure is Positively Associated with Boundary-Spanning

Perceptions of the environment, especially environmental uncertainty, have long been viewed as a significant determinant of boundary-spanning. In a recent study, Leifer and Huber (1977) suggest that structure -- especially "organicness" -- may be a prior variable, with perceived environmental uncertainty mediating the effects of structure on boundary-spanning. It is hypothesized that public agencies with more organic structures will be more active in boundary-spanning. Such familiar studies as those of Burns and Stalker (1966) and Emery and Trist (1965) provide rationales for the assumption of greater boundary-spanning among more organic organizations; Aiken and Hage (1971) provide empirical support for the assumption.

H5: Job Satisfaction is Positively Associated with Boundary-Spanning

Existing evidence for the relation of job satisfaction to boundary-spanning is mixed (Keller and Holland, 1975; Keller, et al., 1976; Miles, 1977), but the balance seems to be on the side of a positive relationship. It is likely that different elements of job satisfaction are differently associated with boundary-spanning. A recent study (Bozeman and Cole, in press), indicated that public managers reporting that they were generally satisfied with their job were more likely to be active in acquiring scientific information from external sources, but that these same individuals tended to have a lower opinion of co-workers.

DATA AND METHODS:

The Sample

The research design focuses on boundary-spanning behavior within state government -- specifically, the state government of New York. As a highly-differentiated state government serving a heterogeneous population, New York State provides the diversity in public agency size and structure necessary for an adequate testing of the model.

Table One lists the agencies selected for the sample. Selection was non-random to include those agencies whose goal is scientific research or technical operations (an indication of the need to be information-intensive); agencies that handle large quantities of processed information in providing services to clients; agencies that engage in research and analysis; and organizations that oversee these activities.

-- Table One Goes Here --

In order to determine the total number of New York executive agencies, the New York State Directory was consulted. The Directory, arranged by organizational members as well as by structural units, helped determine agencies which, by definition, are assumed to process scientific or technical information. A second, more detailed, scan of internal organizational structure determined those units which acquire and utilize scientific and technical information yet are either located within a non-scientific/technically-oriented agency, or otherwise lack visibility.

Administration of Questionnaire

A detailed questionnaire instrument was developed to test hypotheses about boundary-spanning activity. The survey population consisted of those who, either by job title or by the nature of their duties, would be considered

full-time professional managers, scientists, engineers, or technicians. The selecting of individuals for the survey population was accomplished by using three procedures. First, key managers and administrative officials located in the various organizations were asked, to provide a comprehensive listing of people within their organizational units who could be regarded as "professional." A "professional" was defined as one who engages in a non-routine, non-processing activity or series of activities which are often directed toward problem-solving. Prerequisites for a professional position would include a college degree in addition to work experience. Such positions and positional requirements are tied to state civil service guidelines. Second, the managers were asked to provide names of individuals outside the formal organizational-unit structure with whom they frequently interacted, both formally and and informally. This procedure successfully provided some outline of interorganizational linkages. Third, to facilitate the selection process, organizational directories were consulted which included specific titles and names.

A survey population of 1014 professionals was constructed using the above techniques. All the individuals included in the survey population were selected to receive the questionnaire by mail. The mailing of the questionnaires was performed in a systematic fashion: a sampling interval of 10 was adopted concomitant with a sampling ratio of .05 (i.e. approximately 50 questionnaires mailed at a given time). Any potential bias stemming from the completing of the instrument by people within the same organizational unit would thereby be minimized (Oppenheim, 1966; Erdos, 1970). The response rate from the mailing of the questionnaire instrument was 65% yielding a sample of 650 individuals.

The "average respondent," determined from frequency tables of the returns, was male and 38 years of age. This individual also possessed a Master's degree

in the physical sciences and worked in New York State government for 10 years -- within the present organization. An analysis of non-responses on 118 additional returns indicated a small mean difference on age and years of service while the remaining questionnaire items revealed no significant differences.

The Dependent Variable

Leifer and Huber's (1977) measure of boundary-spanning activity was employed for the dependent variable. The measure consists of a number of questions requiring respondents to indicate/report the average number of hours per week devoted to interaction and communication with groups in other parts of the subject's organization and with individuals affiliated with other (than the subject's) organizations and groups (see Table Two).

-- Table Two Goes Here --

Leifer and Huber performed a factor analysis of the items composing the boundary-spanning activity measure and determined that each of the questions loaded on the first factor to an extent ranging from .44 to .83, with three factors extracted at one eigenvalue. A factor analysis for the present study, employing exactly the same items, resulted in extraction of two factors at an eigenvalue of one with the loadings on the first factor (which explained 66% of the variance in the original correlation matrix) ranging from .66 to .83. The results are given in Table Three. Following Huber and Leifer, the resulting scores were added together and their sum used as the boundary-spanning activity score for each individual. The values ranged from 0 to 227 with a median score of 30 and an average of 47.

-- Table Three Goes Here --

The Independent Variables

The independent variables are taken from questionnaire items; the items were chosen for their relevance to the hypotheses for the study. There are a number of items for each hypothesis in order that multiple item scales might be created. The items and their code names are given in the Appendix according

to the hypothesis with which they were initially associated.

A factor analysis was performed on the independent variables. The factor analysis serves a number of objectives. In addition to serving as an empirical test of the interrelationship among the questionnaire items, it was decided that the factor dimensions would serve as independent variables provided the factors generated could be interpreted in terms of the hypotheses and the model of boundary-spanning determinants. Employing the factor dimensions (more precise factor scores calculated from the dimensions) has a number of advantages. Most obviously there is greater convenience in working with multidimensional variables as opposed to a large number of single item variables. More important, however, is the fact that orthogonal factors could be extracted that avoid problems posed by possible multicollinearity. The factor analysis and the resulting independent variables are discussed in greater detail below.

Data Analysis

Independent variables were created by an orthogonal factor analysis of a Gamma correlation matrix of the questionnaire items given in the Appendix. Gamma was employed for the initial correlation matrix because the data could not be assumed to have interval properties. Varimax rotation procedures were employed and factors were extracted to an eigenvalue of 1.0. Factor scores

(relating the subjects to the dimensions) were calculated in order that the statistical relationship of the predictor variables to the boundary-spanning activities variable might be determined.

The chief means of hypothesis testing involved the (Gamma) correlation of the factor scores for the respective dimensions with the boundary-spanning

activities dependent variable. There is a singular advantage to this approach. Since the factors were extracted by an orthogonal solution, problems of multicollinearity are avoided and interpretation is thus facilitated. Relatedly, variance explained is unique variance and a broader more comprehensive test of the initial boundary-spanning activity model is made possible.

FINDINGS:

Table Four gives the results of a factor analysis of the independent variables.

-- Table Four Goes Here --

It is clear that the clustering of items on the factors resembles the variable cluster patterns posited for the hypotheses (as given in the Appendix), though some rethinking is necessitated. Perhaps, the most important finding in the factor analysis of the independent variables is the high degree of covariation in variables pertaining to (in terms of the model of boundary-spanning activity) organicness and job satisfaction. While this collapsing of two components of the model into the single factor SATISFACTION: CONSULTATIVE requires the rethinking of the hypotheses, the results are very much in line with those of a recent study. Meadows (1980), employing items similar to those used here, found a strong relationship between job satisfaction and organic structure. Furthermore, the separation of job satisfaction into two or more components (represented here by the loading of the job satisfaction item on both Factor I and Factor IV) is an issue explored in a number of familiar studies (Herzberg, 1966; Dunnette, Campbell and Hakel, 1967; Hulin and Smith, 1967).

The factors generated are sufficiently representative of the hypotheses and the preliminary model of boundary-spanning determinants to encourage the use of factor scores in the analysis.

Table Five gives the Gamma correlations for the boundary-spanning activity variable and the factor scores for the six factor dimensions that comprise the independent variables. Each of the correlations is examined in connection with the hypotheses that have been developed.

- - Table Five Goes Here - -

It is apparent that four of the independent variables are significantly associated with boundary-spanning activity, but the findings are more impressive considering the orthogonality of the variables. While the use of Gamma for correlation (as opposed to Pearson's r) means that it is not correct to calculate total explained variance by squaring and summing the coefficients, it is nonetheless important that statistical confluence has been eliminated. Disadvantages of employing orthogonal factors are, in this case, more apparent than real. One might wish to explore the interrelationship among boundary-spanning determinants, perhaps employing partial Gamma, in order to develop a more sophisticated model. In this instance, however, the simple model implicitly represented in Table Five appears the most appropriate. An orthogonal factor analysis imposes a degree of artificiality as the factors are rotated in such a fashion as to solve for an orthogonal solution to the factor analytical equation. A simple test of the degree of artificiality is to examine bivariate correlations among the heaviest loading variables for the six dimensions. An earlier examination of Gamma correlations among the seventeen items composing the factors revealed only significant across-cluster correlations (indicating that a very small

price is paid for the convenience of an orthogonal solution). A second test is the comparison of an oblique solution to an orthogonal solution. An oblique analysis was performed (otherwise employing the same parameters) that revealed very little discrepancy in patterns of loading; only one additional item (turnover) loaded on more than one factor. In sum, the implication is that a relatively simple model of boundary-spanning activity is indicated from the results of the analysis, with four determinants of boundary-spanning activity is indicated from the results of the analysis, with four determinants of boundary-spanning each making a relatively independent (at least in terms of endogenous variables) contribution.

The dominant factor among the six dimensions was CONSULTATIVE (eigenvalue= 4.07, indicating greater explanatory power than any four for the original correlation matrix than any four variables), but its importance relative to boundary-spanning is the least of the four significantly related factors. While this finding appears somewhat at odds with Leifer and Huber's (1977) interpretation, in which organicness was found a major determinant of boundary-spanning and, indeed, accounted for much of the joint variance explained by environmental variables -- it must be remembered that the CONSULTATIVE variable employed here is now (in light of the results of the factor analysis) somewhat removed from organicness. Thus, the data do not provide for a test of research hypothesis four but, instead, point out that the type of job satisfaction created by organic structure and a consultative work climate is a modest determinant of boundary-spanning.

A better test is provided in the case of research hypothesis one, though the items are general and not sufficiently precise to allow more than the

grossest influence. It does appear, however, that individuals perceiving a high degree of conflict between their organization and external organizations are more likely to be active in boundary-spanning. The size of the coefficient for INTERORGANIZATIONAL again suggests only a modest contribution to explanation of boundary-spanning.

The magnitude of relationship for EXTERNAL POLITICS and PROGRAM GROWTH with the boundary-spanning variable is sufficient to suggest that a two factor explanation of boundary-spanning may be quite powerful. Thus, individuals perceiving that external political change is salient and reporting increasing programs are highly likely to devote more time than others to boundary-spanning. This may also say something about the function of boundary-spanning in public organizations. Since public organizations are often dependent on quality political information for growth or even survival, boundary-spanners may seek political information from the environment in much the same way that boundary-spanners in production-oriented firms seek information about markets. Just as innovative growth-oriented private firms constantly monitor the environment for cues about competitors' activities and to anticipate shifts in the market, public agencies, having quite different dependency relations, find political information equally crucial.

Taken together, the findings provide a profile of the public sector boundary-spanning. The boundary-spanner's organization is (or, more accurately, is perceived to be) enjoying growth but at the expense of some external conflict. In such circumstance it is especially important that political change be closely monitored since any future growth can be expected to be closely tied to developments in the external political environment.

SUMMARY

A chief assumption of this research was that boundary-spanning in public organizations could be understood in part as a strategy for anticipatory and mitigating environmental change. Further, it was expected that public organizations would have particular interest in monitoring changes in the political environment since they are directly dependent upon a "political market" in much the same way that private organizations are dependent upon the economic market. Likewise, public organizations were expected to be engaged in monitoring activities of political competitors in much the same fashion as private firms seek to stay abreast of their competition.

These preliminary results indicate that perceptions of the importance of political actions and political change are, in fact, strongly associated with level of boundary-spanning activity. Of lesser importance, though still significant, is the degree of satisfaction as it pertains to a consultative organizational climate. Satisfaction with compensation was not significantly associated.

A second and related part of the "two-factor" explanation of boundary-spanning concerned program growth. A strong positive association was discovered between a factor dimension representing gains in new programs and boundary-spanning activity.

It is worth noticing that the individual determinants of boundary-spanning activity do not appear strongly related to one another. An examination of an all item correlation matrix and factors generated from an oblique factor analysis indicated a considerable degree of independence among boundary-spanning determinants.

REFERENCES

- Aiken, M. and J. Hage. "Organizational Interdependence and Intraorganizational Structure." American Sociological Review, 33 (1968), 912-930.
- Aldrich, Howard. Organizations and Environments. Englewood Cliff, N.J.: Prentice-Hall.
- Aldrich, Howard and D. Herker. "Boundary Spanning Roles and Organization Structure." Academy of Management Review, 2 (1977), 147-154.
- Bardach, Eugene. The Implementation Game. Cambridge: M.I.T. Press, 1977.
- Bozeman, Barry and E. Cole. "Public Managers and Scientific and Technical Information." Administration and Society (in press).
- Bozeman, Barry and E.A. Slusher. "Scarcity and Environmental Stress in Public Organizations: A Conjectural Essay." Administration and Society, 11 (1979), 335-355.
- Braybrooke, David and C.E. Lindblom. The Strategy of Decisions. New York: The Free Press, 1963.
- Brewer, Gary. Politicians, Bureaucrats and the Consultant. New York: Basic Books, 1973.
- Burns, T. and G. Stalker. The Management of Innovation. London: Tavistock, 1961.
- Downs, Anthony. Inside Bureaucracy. Boston: Little, Brown and Co., 1967.

Dunnette, M.D., J.P. Campbell and M.D. Hakel. "Factor Contributing to Job Satisfaction and Job Dissatisfaction in Six Occupational Groups." Organization Behavior and Human Performance.

Elmore, R.F. "Organizational Models of Social Program Implementation." Public Policy, (1979), 186-228.

Emery, F. and E. Trist. "The Causal Texture of Organization Environments." Human Relations, 18 (1965), 21-32.

Freeman, J.L. The Political Process: Executive Bureau-Legislative Committee Relations, second edition. New York: Random House, 1965.

Friedman, R.S., B.W. Klein and J.H. Romani. "Administrative Agencies and the Publics They Serve." Public Administration Review, 26 (1966), 192-204.

Gawthrop, L.C. Administrative Politics and Social Change. New York: St. Martin's Press, 1971.

Hammond, P.Y. "Foreign Policy-Making and Administrative Politics." World Politics, 17 (1965), 656-671.

Herzberg, F. Work and the Nature of Man. Cleveland: World Publishing, 1966.

Hilsman, Roger. "Congressional-Executive Relations and the Foreign Policy Consensus." American Political Science Review, 52 (1958), 725-744.

Holden, Matthew. "Imperialism in Bureaucracy." American Political Science Review, 60 (1966), 943-951.

Hulin, C. and P.A. Smith. "An Empirical Investigation of Two Implications of Two-Factor Theory of Job Satisfaction," Journal of Applied Psychology, 51 (1967), 396-402.

- Jones, C.O. "The Limits of Public Support: Air Pollution Agency Development." Public Administration Review, 26 (1966), 192-204.
- Keller, Robert and Winford Holland. "Boundary-Spanning Roles in an R & D Organization." Academy of Management Journal, 18 (1975), 388-393
- Keller, Robert, A.D. Szilagyi and W.E. Holland. "Boundary Spanning Activity and Employee Relations." Human Relations, 29 (1976), 699-710.
- Leifer, R. and G.P. Huber. "Relations Among Perceived Environmental Uncertainty, Organization Structure and Boundary-Spanning Behavior." Administrative Science Quarterly, 22 (1977), 235-247.
- Meadows, Ian. "Organic Structure, Satisfaction and Personality." Human Relations, 33 (1980), 383-392.
- Meyer, Marshall. Change in Public Bureaucracies. New York: Cambridge University Press, 1979.
- Meyer, Marshall. "Organizational Domains." American Sociological Review, 40 (1975), 599-615.
- Miles, R. "Boundary Relevance: Dimensionality as a Basis for Discrepant Research Findings." Proceedings 36th Annual Meeting of the Academy of Management, (1976), 239-243.
- Nakamura, R.T. and F. Smallwood. The Politics of Policy Implementation. New York: St. Martin's Press, 1980.
- Organ, D.W. and C.N. Greene. "The Boundary-Relevance of the Project Manager's Job." R & D Management, 3 (1972), 7-11.
- Pruden, H.O. and R.M. Reese. "Interorganization Role-Set Relations and the Performance and Satisfaction of Individual Salesmen." Administrative Science Quarterly 17 (1972). 601-609.

Rourke, F.E. Bureaucracy, Politics and Public Policy, Second Edition.

Boston: Little, Brown and Company, 1976.

Seidman, Harold. Politics, Position and Power. New York: Oxford University Press, 1970.

Selznick, Phillip. TVA and the Grass Roots. Berkeley: University of California Press, 1949.

Thompson, James. Organization in Action. New York: McGraw-Hill, 1967.

Wanat, John. "The Bases of Budgetary Incrementalism." American Political Science Review, 68 (1974), 1221 - 1229.

Warwick, D.P. A Theory of Public Bureaucracy. Cambridge: Harvard University Press, 1975.

Wildavsky, Aaron. Dixon-Yates: A Study in Power Politics. New Haven: Yale University Press, 1962.

Wildavsky, Aaron. The Politics of the Budgetary Process, 2nd Edition. Boston: Little, Brown and Company, 1974.

Wren, D.A. "Interface and Interorganizational Coordination." Academy of Management Journal, 10 (1967), 69-81.

TABLE TWO

Measures of Boundary-Spanning Activities (Leifer and Huber, 1977)

Excluding professional or occupational association, in an average week in the performance of your job --

1. How many hours do you attend formal meetings (committees, planning, etc.)
(If not applicable, check here _____)
- a. Outside your work group but within the larger organization (includes regional offices)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?
- b. Outside of your organization altogether (includes clients)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?
2. How many hours do you confer about your work in informal face-to face conversation or telephone conversation with people of other organizations. This refers to informal and verbal contacts only. (If not applicable, check here _____.)
- a. Outside your work group but within the larger organization (includes regional offices)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?
- b. Outside of your organization altogether (includes clients)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?
3. How many times do you send or receive formal, written but work related communications in the form of reports or data from people in other organizations. Please include monthly or similarly scheduled reports in this response. (If not applicable, check here _____.)
- a. Outside your work group but within the larger organization (includes regional offices)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?

Table Two (Cont.)

b. Outside of your organization altogether (includes clients).

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?

4. How many times do you send or receive informal, written communications in the form of reports, memos or the like from people in other organizations in regard to your work. (If not applicable, check here _____.)

a. Outside your work group but within the larger organization (includes regional offices)

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?

b. Outside of your organization altogether (includes clients).

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 _____ How many more?

TABLE THREE

Factor Matrix for Boundary-Spanning Activity Items

Question	Factor Matrix		
	1	2	h^2
1.a.a	.66	.53	.72
1.a.b	.70	.48	.73
1.b.a.	.67	.28	.53
1.b.b.	.69	.20	.52
1.c.a.	.75	.36	.70
1.c.b.	.76	-.34	.70
1.d.a.	.77	-.33	.70
1.d.b.	.83	-.30	.71
Eigenvalues	4.24	1.10	

Factor I (SATISFACTION: CONSULTATIVE)

Own Decisions Encouraged	.80
Action w/out Supervisor	.78
Exciting Workplace	.61
Personal Goal Progress	.57
Differences of Opinion Encouraged	.53
Job Satisfaction	.53
Clear Goals	.50

Eigenvalue (E) = 4.07

Factor II (INTERORGANIZATIONAL CONFLICT)

At Odds/State	.73
At Odds/Int Groups	.71
At Odds/Feds	.70
Turnover	.54

E = 2.90

Factor III (EXTERNAL POLITICS)

External Politics	.82
Political Savvy	.78
Public Opinion	.53

E = 1.50

Factor IV (SATISFACTION: COMPENSATION)

Compensation ok	.77
Job Satisfaction	.63

E = 1.34

Factor V (PROGRAM GROWTH)

Programs Increasing	.71
Never Enough Time	.59

E = 1.20

Factor VI (REORGANIZATION)

Agency Reorganization Unlikely	.73
Work Group	-.60

E = 1.13

Table Four: Factor Analysis of Independent Variables

(including variables loading $\pm .49$)*

* .50 was chosen as cutoff point for substantive analysis because only one variable loaded at the level $\pm .40 - \pm .49$.

N =	BSA
CONSULTATIVE	.13**
INTERORGANIZATIONAL CONFLICT	.16**
EXTERNAL POLITICS	.42**
COMPENSATION	-.02
PROGRAM GROWTH	.30**
REORGANIZATIONAL	-.06

N = 650

TABLE Five: Correlation (γ) of Boundary-Spanning Activity (BSA) Variable and Factor Scores for Independent Variables

* p - .05
 ** p - .01

APPENDIX

The independent variables for the study are given below according to the hypothesis with which they were originally associated. Since the factor dimensions generated by a factor analysis of the variables ultimately served as the dependent variables, the number of the factor(s) on which the variable loaded $\geq .50$ or greater is given in parentheses along with the variable code name. Unless otherwise note the response scale is "Strongly Agree," "Moderately Agree," "Mildly Agree," "Mildly Disagree," "Moderately Disagree," "Strongly Disagree."

H1: Interorganizational Conflict

- (1) The purposes and goals of my organization are frequently at odds with those of other state agencies. (At Odds/State, FII)
- (2) The purposes and goals of my organization are frequently at odds with those of certain federal agencies. (At Odds/Feds, FII)
- (3) The purposes and goals of my organization are frequently at odds with those of organized interest groups.
- (4) Overall, I feel that the state legislature understands the purposes and goals of my organization (highest loading was .41 on F V).

H2: External Political Change

- (1) I feel that one in my position must be very aware of political developments outside the organization. (External Politics, F III)
- (2) My work is influenced by public opinion. (Public Opinion, F III)
- (3) To be effective in my position one must have quite a bit of political savvy. (Political Savvy, F III)

H3: Program Stability

- (1) There never appears to be enough time to complete all of the assignments that I have been given. (Never Enough Time, F V)
- (2) It seems new programs or services are continually being added to our work group. (Programs Increasing, F V)
- (3) My work unit is unlikely to be abolished in the next five years. (Work Group, F VI)
- (4) My agency is unlikely to undergo a major re-organization soon. (Agency Re-organization Unlikely, F VI)
- (5) To what extent are the goals of your work group clearly set forth? (Response code: "Have been clearly stated," "Have been stated, but only in generalities," "There is no goal statement.") (Clear Goals, F I)
- (6) There is such rapid turnover in middle and upper level positions that this organization sometimes seems to be a "revolving door." (Turnover, F II)

H4: "Organicness"

- (1) A person who wants to make his own decisions is encouraged around here. (Own Decisions Encouraged, F I)
- (2) There can be little action taken around here until a supervisor approves a decision (reverse scored). (Action Without Supervisor, F I)
- (3) In my work unit, difference of opinion is encouraged. (Differences of Opinion Encouraged, F I)

H5: Job Satisfaction

- (1) In comparison with persons in similar positions, I am satisfied with my present job. (Job Satisfaction, F I and F IV)
- (2) I feel that I am making progress toward the goals which I set for myself in my present position. (Personal Goal Progress, F I)

(3) This is an exciting place to work. (Exciting Workplace, F I)

(4) Based on comparisons with individuals in similar positions in government, I am adequately compensated for the work I perform.

(Compensation OK, F IV)

H3A: Resource Munificence is Negatively Associated with Boundary-Spanning.

Aldrich (1978) argues that organizations confronted with declining resources can be expected to increase boundary-spanning activity in an effort to mitigate the effects of decrements. It is hypothesized that agencies with declining resources (measured by percentage change in budgetary appropriations and personnel) will be more active in boundary-spanning; also, the absolute level of resources is expected to be important since, for example, a ten percent cut can be expected to have different effects for a large agency than a small one (Bozeman, 1977).