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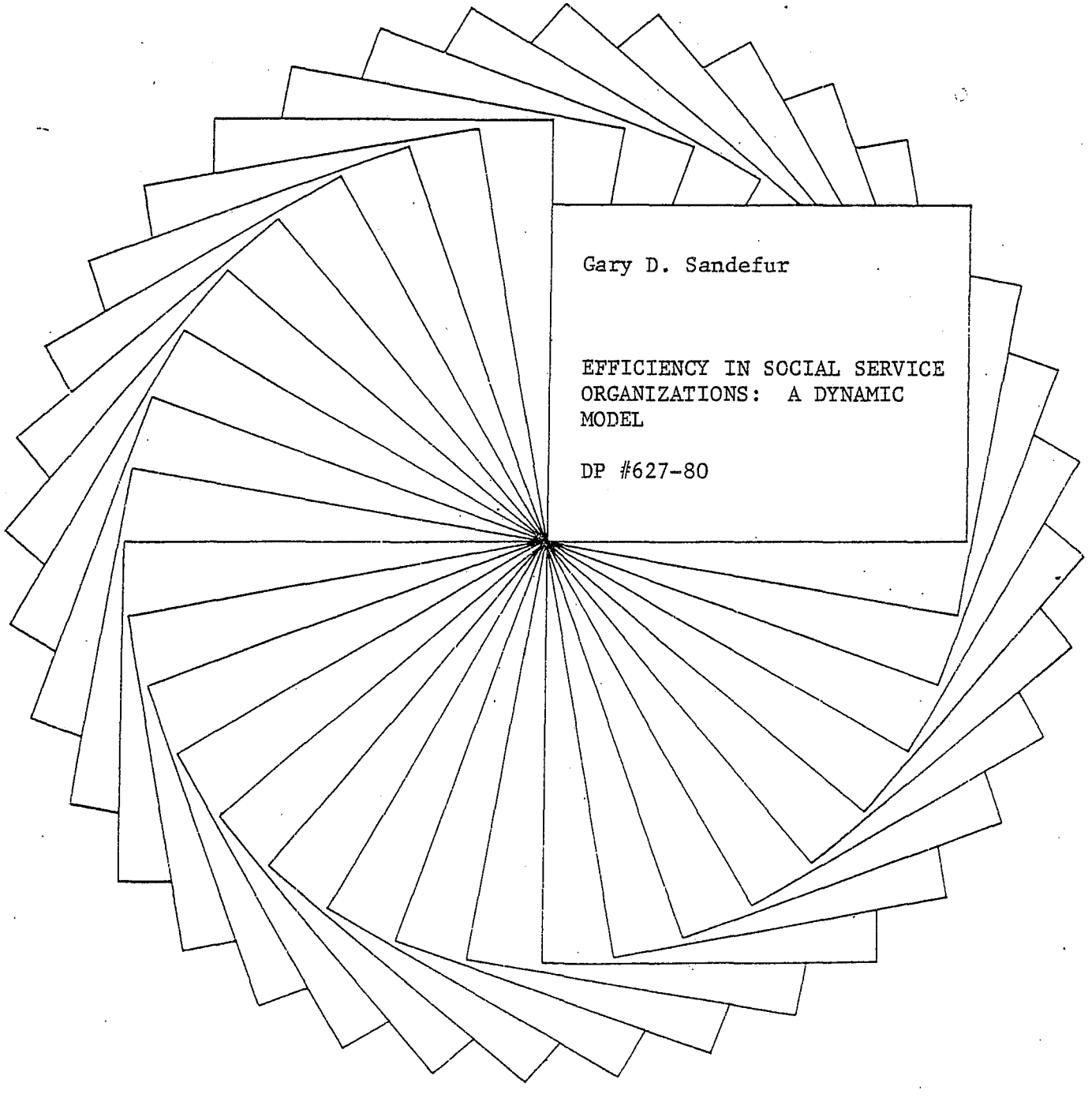

Gary D. Sandefur

EFFICIENCY IN SOCIAL SERVICE ORGANIZATIONS: A DYNAMIC MODEL

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Efficiency in Social Service Organizations: A Dynamic Model

Gary D. Sandefur

Department of Sociology,
University of Oklahoma

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ABSTRACT

This paper addresses two unresolved issues in the study of organizational efficiency. First, I consider the problem of evaluating organizations. Second, I discuss the interrelationships of efficiency, structure, and organizational environments. Answering these questions requires careful consideration of the divergent concerns of various organizational interest groups.

Efficiency in Social Service Organizations: A Dynamic Model

Organizational efficiency may, in general, be defined as the value of benefits relative to the costs of acquiring those benefits.[1] As such, it is an important problem both for those who in some way are affected by a particular organization and for those who wish to study and understand organizations. Though the word "efficiency" conjures up notions of profit-motivated corporations seeking to maximize earnings and minimize costs, the issue of efficiency is also becoming an increasingly urgent concern for public and private social service organizations.[2] Members of Congress and citizen's lobbies are demanding that federal, state and local bureaucracies "trim their fat." Hospitals are expected to reduce costs and simultaneously improve care. Educational institutions, and programs for the poor and for minority groups, are confronted with shrinking real funding and with demands that they demonstrate the effectiveness and efficiency of their programs.

The study of efficiency in social service organizations is one area in which there is a need for overlap between organizational research and evaluation research. For example, studies of efficiency in public programs would benefit from a theoretically informed examination of the impact of organizational politics on efficiency. On the other hand, theories of organizational structure and environment would benefit from an explicit, rather than implicit, consideration of the pursuit of efficiency as a determinant of organizational change. Unfortunately, this potential overlap has not been exploited.

In this paper I explore the connections between evaluation research and organizational theory through addressing two specific questions. I argue that successful pursuit of both questions requires the study of organizational interest groups. First, I examine the ways in which organizational theory can be used in evaluating the efficiency of organizations. Evaluating efficiency requires adopting a perspective from which to define costs and benefits, and each organizational interest

group has a somewhat different perspective. Though most studies of efficiency use the perspective of the owner or entrepreneur (Becker and Gordon, 1966; Becker and Neuhauser, 1975), this is often not the most appropriate perspective for evaluating social service organizations (Scott, 1977).

Second, I examine the interrelationships of efficiency, organizational structure and environment. This requires consideration of the process through which the costs and benefits of importance to different interest groups determine organizational change over time. Though previous empirical analyses of organizational structure and efficiency have sometimes indicated that their relationship is small or in the unexpected direction (Perrow, 1977), and that the goodness of fit between structure and environment is not necessarily associated with organizational efficiency (Pennings, 1975), I believe these findings are due to a focus on prescribed efficiency, or official efficiency, rather than operative efficiency.[3] The last will most likely have the strongest relationship with organizational change.

ORGANIZATIONAL INTEREST GROUPS

In the study of organizational efficiency, (and effectiveness) the specification of organizational interest groups has received little rigorous attention. For example, Keeley (1978: 288) assumes that "for most purposes, commonly recognized interest categories may do as in the case of a firm: investors, employees, customers, suppliers and a residual category such as the community." Goodman and Pennings (1977) examine the perspective of owners, employees, managers, and the public at large. Scott (1977) asserts we should examine effectiveness from the perspectives of clients, the rank-and-file, and managers. In sum, interest groups have not been specified carefully.

In spite of this lack of attention, there are several reasons for believing that understanding interest groups is a very important part of the study of efficiency. First, the criteria proposed by any particular group include costs and

benefits that are relevant to their own interests (Keeley, 1978; Scott, 1977). Second, "given a set of actors pursuing their own self-interests and a situation of scarce resources, we would expect little commonality or convergence and some conflict" over what costs and benefits are really important (Scott, 1977). Third, though arbitrarily choosing a small number of categories may simplify matters, such a choice may ignore divergent interests within each of the categories (Keeley, 1978).

In order to identify interest groups, I assume that organizations can be viewed as "intentional human constructions wherein people and groups within and without the organization compete for outputs of interest to them under conditions of unequal power" (Perrow, 1977: 111). I broaden outputs to include costs and benefits. I define benefits as the perceived positive value of an organizational output, or set of outputs, from the perspective of a particular interest group. I define costs as the negative value of organizational outputs from the perspective of a particular interest group. Furthermore, I assume that an interest group is only interested in the costs and benefits that accrue to it--that it is a utility-maximizer (March and Simon, 1958; Weisbrod, 1968). In economic terms, I assume that each interest group is only interested in benefits and costs (economies or diseconomies) that are internal. External economies and diseconomies, those that accrue to others, are only taken into consideration if the others are potentially able to affect internal costs and benefits.

Authority and Interest Groups

There are many dimensions suggested by organizational theory along which we could differentiate interest groups. For example, one could differentiate organizational interest groups along the dimension of authority. Dahrendorf (1959) and others suggest this as the most important determinant. We could first separate organizational participants into those who had any authority, and those who had

none. Among those having at least some authority we could distinguish among different degrees of authority. For example, in a nonprofit, nongovernmental social service organization, such as an urban Indian center, we could distinguish between administrators and nonadministrative staff. Within the group of administrators, we could distinguish among those who have a wide range of authority (Director), those with more limited authority (Social Services Coordinator, Legal Aid Coordinator), and those with very limited authority (Employment Counselor Supervisor). We could then explore the costs and benefits that are considered most important by each interest group. The crucial question, of course, is whether this decomposition of the organization results in groups in which there are sufficiently common interests, and across which there are sufficiently divergent interests.

Division of Labor

Another dimension that could be employed is the division of labor in organizations. A Marxist or neo-Marxist approach would involve differentiating organizational interest groups according to their relationships to the means of production. Given the classic separation of ownership and control, we might distinguish owners, managers, and workers, or utilize more recent work that explores multigroup distinctions inherent in contemporary capitalism (Wright, 1976). In the former approach, we would assume that the owners (or directors) of an organization defined costs and benefits in the same way, that managers defined costs and benefits in the same way, and that all workers employed by an organization defined costs and benefits in the same way.

The Marxist critique of capitalist society contains an attack on capitalist organizations as an expression of the prevailing relations of production. One important part of this attack is the assertion that labor, managers, and owners define organizational efficiency differently. Recent Marxist and neo-Marxist studies of modern capitalism have also pointed out the difference betweens owners' and society's

definitions of efficiency by suggesting there is a difference between profitability and productivity (Edwards, 1980).

Recently, quite different approaches to the division of labor have become popular in the organizational literature. Generally, these discussions refer to horizontal differentiation, vertical differentiation and segmentation. Horizontal differentiation refers to major divisions and departments; vertical differentiation to hierarchical levels of authority; segmentation to geographically separated organizational facilities and personnel (Scott, 1975). One could differentiate organizational constituencies along any of these dimensions. Again, this would involve an assumption that there are common interests within units and divergent interests across units.

Organizational and extraorganizational interest groups

A third possible typology is based on open systems theory. This typology rests on those theories that view organizations as systems for input-transformation-output (Thompson, 1967), composed of competing, but also cooperating groups (Perrow, 1977), and relating to an environment of interested, concerned and "interfering" extraorganizational individuals and groups (Aldrich and Pfeffer, 1975).

One interest group is the input set--individuals and organizations that provide products, services or information to the focal organization. For example, in the case of an urban Indian center, this group might include federal agencies, community leaders and commercial office supply companies.[4] The major factor that distinguishes the input set from other interest groups is that "it" evaluates the organization in terms of the efficiency of the input relationship with the organization.

Second are the official goal setters--the owners or board of directors. Here, the organization is evaluated in terms of the pursuit of offical goals relative to incurring official costs. The third group is the managers of the organization.

Though some have argued that the managerial and owner perspectives are identical, I assume that managers evaluate organizations in terms of their own rewards and costs. They will, however, be somewhat interested in the official goals of the organization, and these goals will serve as constraints on their utility maximization efforts (March and Simon, 1958; Goodman and Pennings, 1977).

Fourth are the rank and file--the nonmanagerial employees of the organization. Workers, just as managers, will also be interested in maximizing their earnings, prestige and job satisfaction relative to the time and energy they expend, the opportunities they forego, and the dissatisfaction they endure. However, there is one crucial feature that distinguishes managers from workers. Managers are continually balancing worker desires against owner desires in an attempt to maximize their own benefits relative to their own costs.

Fifth are the consumers of the organization's products, or clients for its services--that is, the output set. When they pay for a service or product, consumers will evaluate the efficiency of the organization in terms of its value relative to the economic costs. When the service or product is provided "free of charge," they will evaluate the efficiency of the organization in terms of the benefits they receive relative to the time and energy they expend and the opportunities they forego.

Finally, there is a group of individuals who are involved neither in supplying goods or services to the organizations nor in production, nor consumption of the goods and services, but who are in some way affected by the activities of the organization. For example, taxpayers will be interested in the benefits to them of the activities of the county welfare department relative to the costs accruing to them. Since the costs are more immediate and obvious than the benefits, it is not difficult to see why most taxpayers regard welfare departments as inefficient and ineffective organizations.

EFFICIENCY IN ORGANIZATIONS: UTILIZING AN INTEREST GROUP APPROACH

Two basic problems have marred past attempts to study efficiency in social service organizations. These are: 1) the difficulty involved in distinguishing between evaluative and nonevaluative studies of efficiency; 2) the apparently irresolvable disagreement between goal models of effectiveness and efficiency, the systems resource model of effectivenesss and efficiency, and the participant-satisfaction model of effectiveness and efficiency. These problems are resolved through use of an interest group approach. The first issue is resolved through distinguishing between efficiency from the perspective of a particular interest group and the operative efficiency that motivates the activities of the organization(s) in question. Evaluating efficiency requires adopting a perspective from which to define relevant costs and benefits.[5] Any single-perspective-based notion of efficiency is likely to be quite different from operative efficiency, just as "official" or participant goals are different from operative goals. Operative efficiency will include a variety of costs and benefits of importance to different interest groups. Thus, an interest group approach allows us to make a clear distinction between the evaluative and nonevaluative study of organizational efficiency.

The second issue may seem somewhat more difficult to resolve. The well-known official goal model defines efficiency from the perspective of the official goal setters--generally the owners or board of directors (Perrow, 1961); the prescriptive goal model utilizes the perspective of the evaluator or researcher (Steers, 1975); economic cost-benefit analysis utilizes the perspective of society, at least in principle (Haveman and Weisbrod, 1975); the operative goal model employs the perspective of the operative goal setters--generally members of the dominant coalition (Goodman and Pennings, 1979; Thompson, 1967); the system

resource model relies on the perspective of the organization as a living, acting unit interested primarily in survival and growth (Yuchtman and Seashore, 1967); finally, the participant satisfaction model attempts to use the perspectives of all organizational participants (Barnard, 1938; Keeley, 1978).

I contend that the appropriate model for evaluating organizational efficiency is the prescriptive model, in which the evaluator, relying on a well-defined interest group perspective, defines the criteria, costs, and benefits to be used in measuring the efficiency of the organization or some organizational program. A study of the interrelationships between efficiency, structure, and environment, on the other hand, requires a combination of the participant satisfaction model, goal models, and the system resource model. First, such analyses require a recognition of the different costs and benefits that are important to different interest group or groups of participants. Second, we must recognize that many of these costs and benefits become the operative goals of the organization. Third, we must recognize that successful pursuit of various interest group goals requires acquisition of scarce and valuable resources. As I demonstrate below, it is not difficult for empirical analyses to take these three factors into consideration.

Evaluating organizational efficiency

The major contribution of an interest group approach to outcome evaluations lies in the diversity of perspectives that can be considered. Once a perspective is chosen, evaluating efficiency becomes a matter of measuring the cost-benefit ratio or cost-effectiveness ratio using costs and benefits from that particular perspective. With urban Indian centers, we might be interested in evaluating the efficiency of a set of centers from the perspective of the clients. The relevant benefits and costs could be identified through interviewing a sample of clients, and through examining the programs offered through the centers. For example, one

measure of client-based efficiency would be the average amount of time from intake to referral to the appropriate source of help.

Another interesting aspect of organizational efficiency that can be evaluated is the process through which "official" goals and "official" efficiency are translated into operative goals, efficiency, and actual behavior. In evaluation research such analyses are referred to as process or implementation evaluations. Process evaluations rarely rely on organizational theory to provide insight into this aspect of organizational activities. However, either the literature on dominant coalitions (Pennings and Goodman, 1977; Perrow, 1961; Thompson, 1967), the literature on strategic contingencies (Hickson, et al., 1971; Hinings et al., 1974), or the resource dependence model of organization-environment relations (Aldrich and Pfeffer, 1976) could prove useful here. In each of these, interest groups play an important role.

As Pennings and Goodman (1977) point out, knowledge of the composition of the dominant coalition is quite useful in predicting how organizations define success. In a related fashion, strategic contingencies theory approaches organizations as "decision-making systems interacting with their environments in conditions of uncertainty. Together with centrality of workflows and substitutability of activities, coping with uncertainty gives rise to dependencies of one subunit upon another, because the activities performed by one are contingencies for the activities of another" (Hinings et al., 1974: 22). In organizations composed of competing, yet cooperating, interest groups, centrality and uncertainty can be defined in terms of the ability to maximize benefits and minimize costs for other organizational interest groups. The determinants of power as outlined by strategic contingency theorists become important in the process through which official efficiency becomes operative efficiency. The concerns of the more central and more powerful subunits or interest groups

will be more reflected in operative efficiency than those of less powerful groups. For example, in the case of many social service organizations, we would expect clients to have little control over how operative efficiency was defined. Consequently, findings that organizational activities are not associated with efficiency or effectiveness from the client perspective are not particularly surprising.

Though internal politics certainly play an important role in the development of operative efficiency, organization-environment relations also are an important determinant of the definition of operative efficiency. The resource dependence or adaptive model points out that organizations are not able to internally generate either all the resources or functions required to maintain themselves; therefore, they must deal with the environment. However, the environment does not restrict an organization to one choice; rather, power struggles within the organization help determine which alternative of those available will be chosen. As an example of the impact of organization-environment relations on the implementation of a program (defining operative efficiency), we can look at the federal affirmative action program of 1972-1976 as outlined by Rosenbloom (1980). If we view the Civil Service Commission (CSC) as the focal organization, we can view civil rights groups as the input set, and the federal bureaucracy as the output set.

Prior to 1971, the CSC was considered to be <u>the</u> organization for implementing federal employment policy in the federal bureaucracy. The Equal Employment Opportunity Commission (EEOC) was responsible for monitoring employment policy in the private sector. However, during the late 1960's, civil rights organizations began to make stronger demands about transferring federal affirmative action efforts from the CSC to the EEOC. Given its dependence on the input set and the

availability of an alternative source of its functions, the CSC was forced to respond by instituting a federal affirmative action program. However, given the control of the CSC by those with a "merit" philosophy, the CSC responded in a way consistent with this philosophy, and inconsistent with the intent of Equal Employment Opportunity legislation. As Rosenbloom points out, affirmative action, as designed, was never implemented during the 1972-1976 period. A more complete analysis could be performed with the resource dependence model and strategic contigencies theory, or some other organizational theory or theories. However, this brief discussion illustrates the usefulness of organizational theory for process evaluations, and the importance of looking at interest groups.

Efficiency as a variable in organizational analysis

Often researchers are not interested in evaluating organizations, but are interested in using efficiency as a dependent, or, occasionally as an independent variable. For example, in urban Indian centers, we could examine the effect of the numbers of levels of authority on time from intake to referral (client-based efficiency). Or, we could examine the effect of the number of levels of authority on several measures of efficiency defined from the perspectives of all relevant organizational interest groups (operative efficiency). Though it is impossible to identify one measure of operative efficiency, it is possible to identify and measure costs and benefits that are important to various interest groups. Table 1 contains some suggested measures of efficiency applicable in many social service organizations. Some of these, such as administrative salaries and administrative work time, are more easily measured than others, such as the public benefit of services. Though vertical differentiation (number of levels of authority) would not be strongly related to all of these, we might, for example, find a stronger relationship between vertical differentiation and administrative salaries, than between vertical differentiation and client-based efficiency.

Perhaps the most interesting use of efficiency would be as an endogenous variable in analyses of organizational change over time. Addressing this question is now possible due to recent developments in methodology and the theory of organizational structural change (Coleman, 1968; Freeman and Hannan, 1975; Hummon, Doreian and Teuter, 1975). Such research is likely to become more and more important. Daft and MacMillan (1977: 668) point out that "there is every likelihood that additional longitudinal studies of organizations will be undertaken in the future." I contend that such analyses can benefit from explicitly considering the underlying "logic of efficiency"--that is, operative efficiency--that motivates change in organizations.[6]

Daft and Becker (1980) examined the interrelationships of size, complexity, affluence, the number of administrators and three measures of the effectiveness of student services--teacher education, student/teacher ratio and the level of auxiliary services--in school districts. Though they are only tangentially interested in the interrelationships of efficiency and structure, their results are quite suggestive. For example, they find that the size of the administrative component of the school district in 1965 had a positive effect on revenues and the level of auxiliary services in 1970. Also, revenues in 1965 had a negative effect on the size of the administrative component in 1970. From this evidence, they conclude that increasing the size of the administrative component can improve the success of the organization; also, organizational success in securing funding can lead to decreases in the size of the administrative component since fewer administrators are needed to work in this area. In sum, their analysis illustrates the relationships between organizational structure, organizational environment relations, and aspects of the operative definition of efficiency. The additional step that is needed in such analyses is the inclusion of measures

of efficiency from other perspectives. These would include salaries, wages, workloads, and measures of student achievement.

Other research has examined the relationship between the organization of community services and the quality and efficiency of community services (see, for example, Christenson and Sachs, 1980; Fitch, 1975; Ostrom, 1976). Christenson and Sachs (1980) investigated the impact of governmental size and the size of the administrative component of government on the perceived quality of public services at the county level.[7] Their findings showed a positive effect of size (the number of public employees) on the perceived quality of public services, and a negative effect of the number of administrators per capita on the perceived quality of public services. Viewed in the context of an interest group approach to the study of organizational efficiency, their study amounts to the use of the perspective of the public-in-general to evaluate outputs. Within the interest group context, there are a number of ways in which such research could be extended. First, information could be collected on the public perception of taxes--the other side of efficiency from this perspective. Recent political events suggest that there would be a positive relationship between governmental and administrative size and the perceived costs in terms of taxes.

Second, information could be collected over time to allow investigation of the effect of perceived quality of services and taxes on governmental and administrative size. Again, recent political events suggest that there should be a negative relationship between the perceived level of taxes and the two measures of governmental size. As taxes increase, the public places more political pressure on elected officials to limit or cut the size of government, ceteris paribus. However, if the quality of services declines over time, the public-at-large may place more political pressure on elected officials to increase the size

of government. Thus, we would expect a negative relationship between perceived quality of services and governmental size over time.

Third, measures of costs and benefits from the other perspectives in Table 1 could be developed and included in an analysis of the relationship between governmental size and operative efficiency. Measures of official goals, such as the level of unemployment, use of the library, and use of other public facilities, along with measures of the official costs of county services, are fairly easily obtainable. Information is also available on salaries and wages of administrators and other governmental employees. Additional questionnaires would be required to elicit information on the work time of administrators and governmental employees, and on the views of clients concerning the benefits and costs of individual services. Though more costly than the usual data collection efforts in such research, this research has costs that are not prohibitive.

Given this third type of information, researchers could analyze the interrelationships of the organizational structure of governmental services, and costs and benefits relevant to the various organizational interest groups. Hypotheses can be developed based on organizational theory and research on community services. For example, organizational theory suggests a positive relationship between governmental size and the perceived work time of administrators. Also, perceptions of being overworked and overburdened by administrators could lead to demands for more administrators, suggesting a positive relationship between administrators' perceptions of personal time costs and the number of administrators over time. Whether this relationship is stronger or weaker than the relationship between public perceptions of cost and the size of the administrative component would be quite informative as to the underlying logic of efficiency operative in county and community governments. In sum, an interest group approach combined with dynamic analyses of organizational change

offers additional insights into the relationship between structure, environment, and efficiency at the organizational and community levels.

SUMMARY AND CONCLUSIONS

Table 2 contains a summary of the ways in which evaluation research and empirical studies of organizational structure and environment can overlap. I argue that a focus on organizational efficiency is a key to exploiting this potential overlap. As the first column shows, organizational theory can help us in cost-benefit or cost-effectiveness evaluation by providing a theoretical basis for selecting a perspective from which to define costs and benefits; organizational theory can be helpful in process evaluations by providing the conceptual tools necessary for understanding the mechanisms through which official goals and costs are transformed into operative goals and costs. The second column lists the ways in which efficiency can become a useful variable in analyses of organizational structure and organization-environment relationships. To reiterate, the most interesting, but also the most difficult use of efficiency is in the dynamic analysis of organizational change. Underlying this framework is a concern with organizational interest groups and how each perceives costs and benefits.

There are two additional issues that must be faced in applying this approach; I have ignored them for the moment. First, careful attention must be given to selecting appropriate structural and environmental variables for use in analyses of efficiency. Future studies should carefully consider what variables are likely to be associated with the costs and benefits as defined by particular interest groups. Thus, we may discover that certain structural or environmental attributes that are important determinants of one kind of efficiency may be irrelevant to other kinds of efficiency. Second, I have

ignored the nitty-gritty measurement issues. Analyses using the model developed here must also devote considerable attention to selecting appropriate measures of costs, benefits, structural and environmental variables.

In sum, I hope to have demonstrated that the conceptualization of organizations as arenas in which groups attempt to maximize benefits relative to costs is helpful in studying organizational efficiency. In fact, directly addressing the issues of conflicting interests and operative goals enables us both to evaluate organizations and to study organizational change.

Table 1: Measures of operative efficiency in a social service organization

Interest Group	Measures of Efficiency	
	Outputs	Costs
Input Set		
Funding Sources	official goals	money provided
Suppliers	income	value of supplies
Board of Directors	official goals	official costs
Managers or Administrators	salaries	time
Rank-and-file	salaries; wages	time
Clients	services	time; money spent
Public-at-Large	public benefit of services	taxes

Table 2: Uses of efficiency in organizational research

Concept of Efficiency	Type of Research: Evaluative	Type of Research: Nonevaluative
Single Perspective	Cost-benefit; Cost-effectiveness	Effect of structure, environment on perspective-based efficiency
Operative Efficiency	Process Evaluations	Interrelationships of efficiency, structure and environment

Footnotes

[1]Use of this definition of efficiency is based on the concerns of past students of efficiency. First, organizational theorists and evaluation researchers have carefully made a distinction between efficiency and effectiveness. For my purposes, I assume that effectiveness refers to the benefits of organizational outcomes. Thus, costs are not considered in conceptualizing and measuring effectiveness. Though this paper emphasizes efficiency, some of the issues raised are also relevant to the study of effectiveness, and the literature on effectiveness is certainly relevant to the study of efficiency. Second, measuring efficiency requires discounting the value of outcomes and costs because of the long time perspective involved in evaluating a program. I assume this is possible, and address most of my attention to developing an approach to studying efficiency that is appropriate for social service organizations.

[2]By public and private social service organizations, I mean any organization which has as its official purpose the delivery of social and human services to clients. This includes county welfare departments, hospitals, schools, urban Indian centers and numerous other organizations whose major beneficiary is the clientele. Though this paper focuses on this type of organization, some of the issues are relevant to the study of efficiency in other types of organizations.

[3]The terms prescribed, official, and operative come from previous discussions of goals in the organizational literature (Perrow, 1961). Prescribed efficiency refers to costs and benefits specified by the researcher. Official efficiency refers to costs and benefits specified by the board of directors or owners. Operative efficiency refers to the costs and benefits that are taken into consideration in organizational decision-making.

[4]In an analysis of actual centers, one might want to further subdivide the input set. However, this could prove dangerous. It is possible to divide groups almost indefinitely since there are always divergent interests within any group.

[5]In evaluation research, these perspectives are referred to as accounting perspectives. Most analyses of accounting perspectives discuss client, government and taxpayer orientations (Rossi et al., 1979). Explicit consideration of interest groups allows expansion of the number of accounting perspectives which can be utilized.

[6]Recently, a somewhat different orientation towards studying the "logic of efficiency" and structural change has been developed. Ranson, Hinings and Greenwood (1980: 1) examine structural change as "the outcome of a complex interaction of interpersonal cognitive processes, power dependencies, and contextual constraints." Their method is also longitudinal; but the major emphasis is on how decisions are made, rather than on the consequences of these decisions as reflected in organizational structure. An examination of the interpersonal dynamics of organizational change should be viewed as complementary to studies of actual change in organizational structure.

[7]Governmental size was measured as the number of public employees and the number of public employees per capita. The size of the administrative component was measured as the number of administrative units and the number of administrative units per capita. The quality of public services was measured through a subjective evaluation of county services by county residents.

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