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ORGANIZATIONAL LIFE CYCLES AND SHIFTING CRITERIA OF EFFECTIVENESS: SOME PRELIMINARY EVIDENCE*

ROBERT E. QUINN† AND KIM CAMERONI:

This paper discusses the relationships between stage of development in organizational life cycles and organizational effectiveness. We begin the paper by reviewing nine models of organizational life cycles that have been proposed in the literature. Each of these models identifies certain characteristics that typify organizations in different stages of development. A summary model of life cycle stages is derived that integrates each of these nine models.

Next, a framework of organizational effectiveness developed by Quinn and Rohrbaugh is introduced. This framework organizes criteria of effectiveness into four models—rational goal, open systems, human relations, and internal processes models. We hypothesize that certain of the models are important in evaluating the effectiveness of organizations in particular life cycle stages but not in others. The analysis of a state agency's development over five years provides some evidence to support these hypothesized relationships between life cycle stages and criteria of effectiveness.

We conclude that major criteria of effectiveness change in predictable ways as organizations develop through their life cycles. Some shifts in state of development are resisted by the organization much more than are others, and intervention into organizations may be needed to help make the transitions less painful and costly. We also discuss why the predictions of contingency theory often are not substantiated by research because the responses of organizations to the external environment vary in different life cycle stages.

(ORGANIZATIONAL EFFECTIVENESS; ORGANIZATIONAL LIFE CYCLES; ORGANIZATIONAL CHANGE)

1. Introduction

A historical bias in the literature on organizational analysis and design has been the tendency to generate studies which focus on mature rather than new organizations, and that are executed with a cross-sectional rather than a longitudinal perspective [18]. As a result, we have learned little about the design and the development of new organizations. Recently, however, a number of writers have suggested that the design, development and behavior of organizations can be predicted by means of organizational life cycle models [1], [10], [14], [16], [19], [22], [23], [27], [31], [39]. These authors suggest that changes that occur in organizations follow a predictable pattern that can be characterized by developmental stages. These stages are (1) sequential in nature, (2) occur as a hierarchical progression that is not easily reversed, and (3) involve a broad range of organizational activities and structures [19]. A variety of bases for describing the changing characteristics of organizations in different stages have been used by these writers. They range from the cognitive orientations of organization members to organizational structures and environmental relations. The consequence is that the different authors each have emphasized somewhat unique sets of organizational characteristics and life cycles models.

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Unfortunately, empirical research has not been forthcoming to validate these various models of life cycle development. Instead, writers who have considered organizational life cycles have focused on either identifying different types of existing organizations [11], [33], or on identifying static characteristics or organizations that exist in different stages [16], [31]. Stinchcombe [37], Kimberly [16], Van de Ven [40] and others argue that the early development of organizations has profound influence on what they subsequently become, yet little is known about characteristics of early developmental stages, or about the processes by which organizations progress from one stage to another. Given the fact that 54 percent of all businesses fail within one and one-half years, and that the median age of all firms is only seven years, it would seem that increased understanding of the design and development of new organizations might be significant for both theoretical and practical reasons [18].

Our purposes in this paper, therefore, are threefold. First, we review proposed life cycles models to determine if common stages of development can be identified among them. Second, we attempt to identify the major criteria of organizational effectiveness present in each of the stages of development. Because criteria of effectiveness change over time, different models of effectiveness (e.g., the goal model, the system resource model) have been found to be appropriate at certain times in organizations, but not at other times [4], [5]. It would appear to be important, therefore, to discover some predictable changes in criteria of organizational effectiveness, so that different models of effectiveness could be applied at predictable times in an organization's development.

The third purpose is to elaborate our integration of the literature by presenting a description of a developing organization in its early life cycle stages. We focus on early development of the organization because changes in life cycle stages seem to occur more rapidly in new organizations than in older, established organizations [16].

2. Models of Organizational Life Cycle Development

At least nine different models of organizational life cycles have been proposed, each of which emphasizes different factors to explain the changing characteristics of organizations over time. Because they have been reported in diverse literatures, a brief review and comparison of the models is presented here. This comparison forms the basis for a framework that integrates these nine perspectives. Table 1 summarizes the characteristics of each model as specified by its authors, and identifies the major factors upon which each model is based. Each of the nine models is organized in the table under a summary model consisting of four major stages.

Downs: Motivation for Growth

In one of the earliest models, Downs [10] focused on the life cycles of government bureaus. After describing four different ways in which bureaus are born, Downs suggests that three main stages of growth and development are experienced by these organizations. The first stage, struggle for autonomy, may occur before formal birth or just after. It is typified by attempts to obtain legitimacy and needed resources from the environment to achieve a "survival threshold." The second stage, rapid growth, includes rapid expansion and emphasis on innovation and creativity. The final stage, deceleration, is typified by an elaboration and formalization of rules and procedures and an emphasis on predictability and coordination. In brief, Downs' model views government organizations as moving from the establishing of legitimacy, to innovation and expansion, and then to formalization and control.

TABLE 1
An Integration of Nine Life Cycle Models

Entrepreneurial activities Little planning and	Collectivity Stage Informal communication and structure Sense of collectivity Long hours spent Sense of mission Innovation continues High commitment	3. Formalization and Control Stage	4. Elaboration of Structure Stage
owns: Motivation for Growth (1967)			
Struggle for Autonomy Stage • Legitimize the function to the external environment • Obtain autonomy from parent or competing bureaus • Stabilize resources • Achieve survival threshold	Rapid Growth Stages Innovators and climbers have control Emphasis on innovation and expansion Occurence of an "age lump" in membership	Deceleration Stage Increased size and complexity causes coordination problems Innovation is deemphasized Smoothness and predictability are emphasized "Conservers" have control Formalized and elaborate role systems Reduced flexibility	
ppitt & Schmidt: Critical Managerial Concerns	(1967)		
Birth One-man rule Short-range perspective Concerned with survival Confidence in personal abilities Personal control		Youth Emphasis on stability and service Team decision-making Efficiency emphasized Goal setting and planning occur Systematic control	Maturity • Emphasis on adaptability • Contribution to society is valued • Growth opportunities are sought
cott: Strategy and Structure (1971)			
Stage 1 One-man rule Paternalistic reward system Subjective evaluation criteria No formal structure		Stage 2 Functional specialization Institutionalized procedures Systematic reward system Impersonal evaluation Formalized structure	Diversified product markets Search for new products and growth opportunities Semi-autonomous divisionalized structure
einer: Problems Leading to Evolution and Rev	olution (1972)		
·	Creativity Stage • Emphasis on producing a product • Long hours or work with modest rewards • Informal communication and structure	Direction Stage Functional structure established Accounting system set up Specialization of tasks Formalized rules and policies	Delegation Stage Decentralization of structure Decision making pushed lower in the hierarchy Management by exception Coordination Stage New systems arise Product groups form Long term planning Profit sharing programs Collaboration Stage Team action Spontaneity in management Confrontation in interpersonal problems Self discipline Multi-purpose systems set up
	Marshalling of resources Lots of ideas Entrepreneurial activities Little planning and coordination Formation of a "niche" "Prime mover" has power Downs: Motivation for Growth (1967) Struggle for Autonomy Stage Legitimize the function to the external environment Obtain autonomy from parent or competing bureaus Stabilize resources Achieve survival threshold District Concerned with survival Concerned with survival Confidence in personal abilities Personal control Stage 1 One-man rule Paternalistic reward system Subjective evaluation criteria No formal structure	Marshalling of resources	• Marshalling of resources • Lots of ideas • Lots of ideas • Entrepreneurial activities • Engrhasis on ficiency and maintenance • Stable structure • Emphasis on efficiency and maintenance • Conservatism • Institutionalized procedures • Stable structure • Emphasis on efficiency and maintenance • Conservatism • Institutionalized procedures • Institutionalized procedu

TABLE 1
An Integration of Nine Life Cycle Models

Torbert: Mentality of Members (1974)			
Fantasies Stage • Individual visions and fantasies • Free-floating conversation • Diffused perceptions by members	Investment Stage • High investment by individual • No clear leadership style • Validity and depth of commitment examined Determination Stage Group goals and structure set up • Group unity prevalent • Psychological contracts set up	Experiments Stage Plans, schedules, roles, and governance established Antional decision making Predefined Productivity Stage Focus on task performance as defined by others Fixed rules, structures and authority system	Openly Chosen Structure Stage • Collaboration among levels • Reflection about deeper issues • Creativity and innovative methods • Fexbillity in procedures Foundational Community Stage • Shared spiritual, behavioral, and theoretical qualities among members • Organization becomes a spiritual community
			Liberating Disciplines Stage • Individuals and the organization are engaged in self enewal • Individuals not the solution of the properties of the propert
Lyden: Functional Problems (1975)			
First Stage • Emphasis on adaptation to the external environment Second Stage • Emphasis on resources acquisition		Third Stage • Emphasis on goal attainment Fourth Stage • Emphasis on pattern maintenance and institutionalization	
E Katz and Kahn: Organizational Structure (1978)			
	Primitive System Stage • Cooperation endeavors based on common needs and expectations of members	Stable Organization Stage Coordination and formalization Authority systems arise Informal structure arises Welle enforcement Maintenance systems arise	Elaborative Supportive Structures Stage • Adaptation systems are formed, i.e., procurement systems, disposal systems, institutional relations systems

TABLE 1 An Integration of Nine Life Cycle Models

Adolescent Organization Stage - Emphasis on production - Time pressures kently left - No fractition - Few meetings - Little planning - Adolescent Organization Stage - Little planning - Adolescent Organization Stage - Responsized leadership - Some planning - Some planning - Fast, frequent, intuitive decision - Making - East, frequent, intuitive decision - Making - Makin	Maturity Stage Paramalistic, comfortable organizational climate Organizational climate Formalized relationships Little innovation Little innovation	Cond Stage Obtaining support for the external environment and environ
Courtship Stage • Founders are dreaming up "what product the product of the prod	Kimberly: Internal Social Control, Structure of Work and Environmental Relations (1979)	Second Stage • Marshalling of resources • Creation of an ideology • Creation of an ideology • Choice of a "prime rr • Staffing of the organ • Frequent, discrete de made Third Stage • Formation of identity • Sense of collectuity, • High member commit involvement in the organ • Progression of identity • Sense of collectuity, • High member commit in the organ • Progression of identity • Sense of collectuity, • High member commit in the organ • Progression of identity, • Progression of identity, • Sense of collectuity, • Progression of identity, • Progression of iden

Lippitt and Schmidt: Critical Managerial Concerns

Lippitt and Schmidt [21] developed one of the earliest models of life cycles in the private sector. They suggest that corporations progress through three stages of development: (1) birth—creating an operating system and learning to become viable; (2) youth—developing stability and reputation; and (3) maturity—achieving uniqueness and adaptability along with domain expansion. The model specifies six major managerial concerns which change as the organization progresses from stage to stage. At "birth," the critical concerns are creation of the system and achieving a survival threshold. In "youth," the main concerns are stability and earning a reputation. In maturity, achieving uniqueness and responding to diverse societal needs become major concerns.

Scott: Strategy and Structure

Scott [31] bases his model of corporate life cycle development on the work of Chandler [8]. The model identifies three distinct types of corporate forms that follow a historical sequence. Stage 1 organizations are characterized by little or no formal structure, a single product, and personal control and paternalistic rewards. Stage 2 organizations are characterized by functional specialization, institutionalized search, and impersonal reward systems. Stage 3 organizations have multiple product lines, diversified product markets, and orientations toward R and D, growth, and adaptation. In summary, Scott's model suggests that firms progress from informal "one-manshows," to formalized bureaucracies, and then to diversified conglomerates.

Greiner: Problems Leading to Evolution and Revolution

Another early private sector model of organizational development was proposed by Greiner [14]. His model suggests that organizations evolve through five sequential stages, each of which is followed by a "revolution" or a transitional phase arising from a major organizational problem. It is only by solving the problem inherent in each developmental stage that the organization successfully advances to a more mature stage.

Organizations advance out of the entrepreneurial and creativity stage (stage 1) by overcoming crisis of leadership arising from the need to rationalize organizational activities. Progression through stage 2—growth through direction or rationalized leadership—is motivated by overcoming a crisis of autonomy. This crisis arises from the need to decentralize decision making. Stage 3—growth through delegation—encounters a crisis of control when nonintegrated goals in autonomous subunits begin to emerge. The organization overcomes this crisis by advancing to stage 4—growth through coordination (e.g., restructuring, formal planning, project teams)—until another crisis, the crisis of red tape, induces the organization to move toward another stage—growth through collaboration. Collaboration in Greiner's model refers to matrix designs, spontaneity in management, and increasing organizational flexibility. The major crisis of the fifth stage is information overload and psychological saturation, but Greiner does not specify a resolution of that crisis in his model. In brief, Greiner's model moves from stages emphasizing creativity and entrepreneurship to formalization and then to adaptability and flexibility.

Torbert: Mentality of Members

Torbert [39] proposed a model of development based on the individual "mentalities" of organizational members. Organizations progress through stages as organizational members become more experientially aware of the causal factors and dynamics operating in the organization, and as they develop greater capacities for personal and

interpersonal effectiveness. Torbert does not specify the process by which organizations progress from one stage to another; rather, he specifies successively higher levels of organizational functioning that organizations may attain. The model moves from an early stage of individuality, informality, and diffusion to group unity and a sense of collectivity. Thereafter, fixed rules and structure predominate until renewal and adaptability occur.

Lyden: Functional Problems

Lyden [22], basing his model on Parsons' [28] functional problems of organizations (i.e., the AGIL model), suggests that organizations put primary emphasis on different functional problems at different stages in their development—environmental adaptation, resource acquisition, goal attainment, and pattern maintenance. The first major focus of new organizations, according to Lyden, is adapting to and generating a niche in the external environment. This generally occurs through innovation. (In highly routine and stable external environments, Lyden suggests that goal attainment may come first, but that is rare.) Second, the organization emphasizes resource acquisition and the development of workflow procedures. Third, the emphasis switches to goal attainment and the efficient production of output. Finally, stage 4 organizations emphasize pattern maintenance and the institutionalization of structure. In general, the pattern of development moves from emphasis on innovation and "niche generation" to stability and institutionalization.

Katz and Kahn: Organizational Structure

Katz and Kahn [15] base their model on the elaboration of organizational structures that develop over time, and they suggest that three main stages occur in organizational life cycles. The first stage is called a *primitive system stage* where the rudiments of a production system are based on the cooperative endeavors of organizational members. The second stage, the *stable organization stage*, focuses on coordination and control behavior. An authority system and a maintenance system occur in order to regulate organizational activities. An informal structure also arises during this stage. The third and final stage mentioned by Katz and Kahn is the *elaboration of structure* wherein adaptive mechanisms are established for dealing with the external environment.

Adizes: Major Organizational Activities

Adizes' [1] model of organizational development suggests that organizations develop through stages because of changes in emphases on four activities—producing results (P), acting entrepreneurially (E), administering formal rules and procedures (A), and integrating individuals into the organization (I). This model of organizational life cycles is the only one that accounts for both maturing stages and declining stages. Simply put, the model suggests that organizations develop through distinctive stages—from infancy to maturity—and that they decline in distinctive stages—from maturity to death—depending on the emphasis placed on the four different activities. Progression from one stage to the next occurs primarily by overcoming the major problems of successive stages. Organizations, according to this model, begin with an emphasis on entrepreneurial activity (E) that later becomes coupled with an emphases on producing results (P). Formalization, administrative activities, and integration emphases take precedence as maturity is approached. Organizational decline occurs primarily because of an over-emphasis on stability, administration, and rules and procedures.

Kimberly: Internal Social Control, Structure of Work, and Environmental Relations

Kimberly's [16] study of the creation and development of a medical school provides still another model of organizational development. Kimberly suggests that the first identifiable stage in organizational development occurs before the organization is actually formed. It involves the marshalling of resources and the formation of an ideology. This leads to a second stage which includes selection of a "prime mover", hiring a staff, and establishing support from strategic constituencies. The third stage involves the formation of an organizational identity, high emotional and physical investment by organizational members, and a sense of high member commitment and cohesiveness as the primary mission or ideology of the organization is pursued. The fourth stage, referred to as institutionalization, occurs when policies and rules become more rigid, structure becomes formalized, and the organization becomes more conservative and predictable as it responds to external environmental pressures.

Integration of the Models

Although these nine models are based on different organizational phenomena (e.g., structure, individual mentalities, functional problems), it is noteworthy that all nine suggest progress through similar life cycle stages. Each model contains an entrepreneurial stage (early innovation, niche formation, creativity), a collectivity stage (high cohesion, commitment), a formalization and control stage (stability and institutionalization), and a structure elaboration and adaptation stage (domain expansion and decentralization). The summary model in Table 1 enumerates the common organizational characteristics typical of each of these stages. Some of the authors divide these four major stages into multiple sub-stages (e.g., Adizes' adolescent, prime, and mature organizational stages are all in the formalization and control stage); some authors ignore either the first or the last stage (e.g., Katz and Kahn do not include the entrepreneurial stage in their model); and Downs, Lyden, Adizes, and Kimberly do not include the fourth stage (elaboration of structure) in their models. But as a group, there seems to be some consensus in the models about the characteristics of certain developmental stages as organizations progress through their life cycles. This consensus is reflected in the summary model in Table 1.

With the exception of Adizes [1], none of the models is concerned with organizational decline and death, so the life cycle is not complete. This may be because in mature organizations (after the elaboration of structure stage) life cycle models break down, and change occurs metamorphically and unpredictably [17]. The stages from birth to maturity may be the only predictable ones. In the small group literature, however, it has been found that groups frequently revert to earlier stages of development as environmental turbulence is encountered, as turnover in membership occurs, as the primary task changes, or as the leadership style is altered. This also may be the case with the development of organizations in their life cycles.

In addition, the length of time that organizations remain in particular stages of development is not specified by the authors. However, research by Kimberly [16], Cameron and Whetten [5], Miles and Randolph [25], and Neal [27] suggest that the stages can occur in rapid sequence (i.e., maturity can be reached quickly) or they can be very slow in developing [10]. Lippitt and Schmidt [21] even hold that organizational age and stage of development are poorly correlated. We will not speculate here on the variations in this temporal dimension.

What is important to point out, however, is that a consistent pattern of development seems to occur in organizations over time, and organizational activities and structures in one stage are not the same as the activities and structures present in another stage. This implies that the criteria used to evaluate an organization's success in one stage of development also may be different from criteria used to evaluate success in another stage of development. That is, given different emphases and different organizational characteristics, the bases for evaluating organizational success are likely to be different as well. Whereas most writers have admitted that appropriate criteria of effectiveness

change over time, few have investigated how the criteria change or if there are predictable patterns of such change. The fact that this is an important area of investigation in organizations is pointed out by several of the writers on life cycles (eg., [1], [14], [19], [21]). They argue that organizations are prone to pursue strategies that proved effective in the past [9]. But when new stages of development occur, past strategies and behaviors become inappropriate and ineffective, and possibly even fatal [14]. Therefore, new indicators of effectiveness must emerge. To assess effectiveness using out-dated or inappropriate criteria (i.e., criteria that do not match the stage of the organization's development) produces inaccurate information about the true level of organizational effectiveness and the major criteria guiding organizational action.

Our review of the life cycles models provides some hints regarding the dominant criteria of effectiveness that are likely to be present in each of the early life cycle stages. In order to put them in context, a discussion of the major models of organizational effectiveness is necessary before they can be presented.

3. Criteria of Organizational Effectiveness

Despite the centrality of the concept of effectiveness in organization theory, it has not been well developed or defined, and there has been little agreement as to the criteria that serve to define organizational effectiveness [3], [12], [36]. A variety of models and approaches have been used, and the indicators of effectiveness employed by researchers are numerous [6]. Debates about the superiority of one model of effectiveness over others continue to be found in the literature [26], [29], [35]. Goal model advocates, for example, claim that effectiveness must be measured by goal accomplishment, while advocates of the systems resource model claim that the ability to acquire resources is the appropriate criterion of success. Unfortunately, almost all of the effectiveness research has been limited to the assessment of static criteria in mature organizations [2], [23], and the appropriateness of different criteria at different times in the organizational life cycle has seldom been considered. The result is that organizational effectiveness research has continued to be criticized as non-integrated and diverse because of the multiple, and sometimes contradictory criteria that are used.

Models of Organizational Effectiveness

In an attempt to bring some order to the diverse array of effectiveness criteria used in empirical research, Campbell and his associates [7] surveyed the literature on organizational effectiveness and compiled what they termed a comprehensive list of all variables that have been proposed as indices of organizational effectivenss. Using this comprehensive list, Quinn and Rohrbaugh [30] asked a panel of experts in organizational effectiveness to reduce and organize the criteria, so that they were all on the same level of analysis, non-overlapping, and specifically related to organizational performance. The resulting list of criteria was submitted to a multidimensional scaling technique to try to identify underlying cognitive dimensions upon which the criteria were based. Quinn and Rohrbaugh discovered that individuals make evaluations about the effectiveness of organizations based on three underlying dimensions—(1) an internal focus versus an external focus (e.g., individual satisfaction versus organizational goal accomplishment); (2) a concern for flexibility versus a concern for control (e.g., innovation and adaptation versus predictability and stability); and (3) a concern for ends versus a concern for means (e.g., efficient production of outputs versus planning and goal setting). Campbell's criteria arrayed themselves in such a way that all eight combinations of these three dimensions are represented. That is, the criteria clustered together so that each combination of dimensions typifies some of the criteria. Figure 1 illustrates this model.

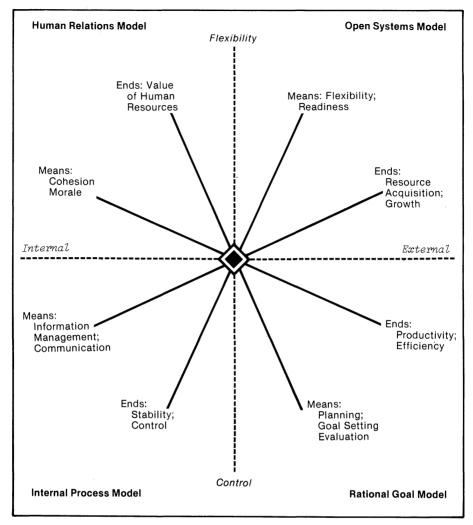


FIGURE 1. Four Models of Effectiveness Values.

Quinn and Rohrbaugh also discovered that these clusters of effectiveness criteria and the underlying dimensions that represent them are consistent with four major models of organizational effectiveness that have been used in the past (see Figure 1). The reason we use the Quinn and Rohrbaugh model here, in fact, is that it provides a good summary of the major models of effectiveness, and it illustrates well how the appropriateness of the various models of effectiveness changes in different life cycle stages. Based on the characteristics of the four summary life cycles stages, these four models of organizational effectiveness are hypothesized to receive different degrees of emphasis in each of the different stages. As organizations progress through their life cycles, the different criteria of effectiveness emphasized by these models should parallel the changing activities and characteristics of organizations over time. Figure 2 shows the hypothesized patterns of effectiveness during the four life cycles stages. I

¹Tichy [38] has simultaneously and independently developed a similar framework. It is based on the solution of three organizational problems that closely parallel three of the four quadrants in Figure 2. The present framework has some advantages over the Tichy scheme, however. It is somewhat more parsimonious while at the same time more comprehensive; it is empirically derived; and it is grounded in general theories of organization (i.e., [13], [28], [32]).

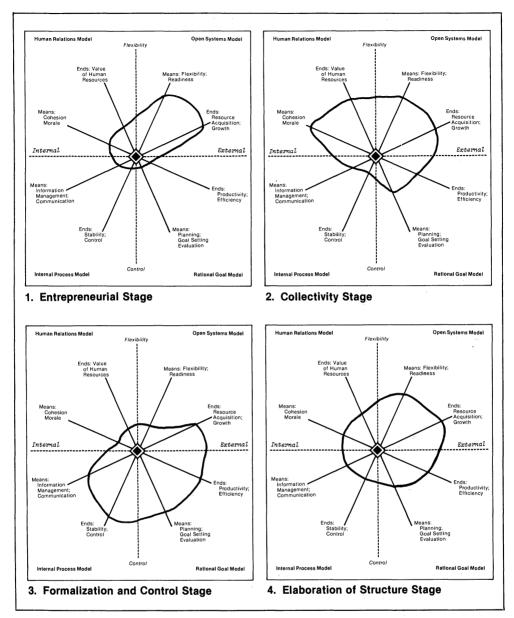


FIGURE 2. Effectiveness Values During the Early Stages of Development

In the entrepreneurial stage—typified by innovation, creativity, and the marshalling of resources—the strongest emphasis appears to be on open systems criteria of effectiveness. That is, the success of an organization will tend to be associated with its flexibility, growth, resource acquisition, and the development of external support. Downs [10], for example, discusses the achievement of a "survival threshold" and the stabilization of resources as prerequisites for organizational success. Adizes [1] specified "dreaming" and entrepreneurship as activities necessary to get the organization off the ground during the first developmental stage.

As shown in Figure 2, open systems criteria are also hypothesized to be important in other life cycle stages (less so in the formalization stage), but in stage 1 they appear to be particularly important. Organizational success tends to be defined in the entrepre-

neurial stage primarily by how well the organization meets criteria of growth, resource acquisition, external support, and readiness.

Organizations in the collectivity stage appear to be characterized by the criteria associated with the human relations model. Life cycle theorists describe this stage as typified by informal communication and structure, a sense of family and cooperativeness among members, high member commitment, and personalized leadership. Emphasis on criteria such as human resource development, morale, cohesion, and human need satisfaction (human relations criteria) are highest in this stage. For example, Katz and Kahn [15] describe effective organizational activities in this stage as resulting from "the cooperative response of people based on their common needs and expectations" (p. 71). Torbert [39] suggests that group unity and psychological contracts are typical of effective organizations in this stage.

Again, we are not suggesting that human relations criteria are the only relevant criteria during the collectivity stage of development, nor that human relations criteria are not important in other developmental stages as well. Rather, we are pointing out that human relations criteria appear to dominate in defining organizational effectiveness in this stage, and that they are more important in the collectivity stage than in any other stage.

In the formalization stage, organizational stability, efficiency of production, rules and procedures, and conservative trends typify organizations. Effectiveness appears to be defined primarily on the basis of criteria in the internal process and rational goal models; that is, by goal setting and goal attainment, productivity, efficiency information management-communication, and stability-control. For example, Lyden [22] recommends evaluating effectiveness quantitatively in this stage using productivity measures and efficiency ratios; and Adizes [1] lists achieving efficiency, being results oriented, and having established plans and procedures for getting things done (goals) as major indicators of effectiveness. While goal accomplishment, productivity, and efficiency are clearly important through most of the life cycle of an organization, it is in the formalization stage that these rational model criteria are most emphasized by life cycle theorists.

The fourth stage, elaboration of structure, appears to be one in which the organization monitors the external environment in order to renew itself or expand its domain, or both. Decentralization of structure occurs and a balance between differentiation and integration is necessary [20] at this stage. While there appears to be at least moderate emphasis on internal process criteria, human relations criteria, and rational goal model criteria, the open systems model, which emphasizes flexibility, resource acquisition, and growth, seems to receive the most emphasis in this stage. Open systems criteria are suggested in Katz and Kahn's [15] description of effective organizations in this stage as those that "develop at the boundaries" of the organization in monitoring and controlling environmental relationships.

In order to explore further these hypothesized relationships between the stages of life cycle development and changes in emphasis given to criteria of organizational effectiveness, we decided to track an organization over time and to observe changes in its stages of development. Because the processes by which development occurs are also important, simply comparing different organizations in different stages of development is not appropriate. An organization had to be found in which observable changes in stage development occurred, and from which evidence for a change in the emphasis on effectiveness criteria could be produced.

4. A Chronicle of Life Cycle Change

The organization selected was a developmental center in the former New York State Department of Mental Hygiene. The events described here are from observations made over a three year period, 1974–1976. These observations are part of a "process research approach" [16] in which interviews, observations, and archival techniques were employed. The focal organization served children with developmental disorders and the retarded of all ages in a six county area. It included the developmental center and seven "teams", or subsystems, which operated in the six counties. A staff of over 800 and an operating budget of over \$9,000,000 were present during the observation years.

The center was directed from its establishment in 1969 by a psychiatrist who was nationally known for his writings and for his work in the area of community mental health. He was a charismatic leader who tended to generate either extreme loyalty or opposition. While few of his associates felt indifferent towards him, both supporters and critics were in agreement that he was a "near genius" in conceptualizing innovative solutions to the problems of service delivery.

Early Stages of Development

The director's past work and writings in community mental health had generated a series of prescriptions for the treatment of the mentally disabled. These prescriptions became the organizational ideology. Collectively, they were called the developmental treatment model. This model emphasized the broad participation of parents, consumers, and the community, as well as focusing on the development of independence and self-reliance by clients. This developmental ideology was on the cutting edge of the "deinstitutionalization" movement that was then sweeping the mental health profession.

The center was composed of seven teams and a support group. Although the teams were relatively autonomous, they followed a common set of guidelines. The teams were characterized by numerous disciplines (social work, child psychiatry, special education, pediatrics, psychology, rehabilitation counseling, etc.), and were staffed to maintain a balance among at least four areas: social-recreational, psychological, educational-vocational, and health care. For every professional hired, at least one person from the community (with a bachelor's degree or less) also had to be hired. After the first wave of interviews in 1975, the following description was entered in the first field report:

The team is a fluid, nonbureaucratic system with the capacity to immediately assign and reassign staff in response to changing organizational needs. Even the use of the administrators is characterized by flexibility since they often have more than one organizational role. The organization appears to have been very successful in identifying needs and reorganizing staff and other resources to meet these needs. The organization has been well matched to the characteristics of the environment and the nature of the task. In general, the staff expressed satisfaction with the fluid, and informal nature of the organization and the subsequent freedom, responsibility, and room for creativity which this type of organization facilitates. This is reflected in the fact that they habitually spend long hours at work, work weekends, carry out multiple organizational roles, and expand or stretch their talents and influences almost beyond a point of reason. This almost missionary dedication and zeal is infectious and is a valuable tactical tool in their dealings with the community.

In short, the organizational structure was a reflection of the philosophy of its director. For example, the director had no office, but went where believed he was needed, establishing a temporary base of operations. Strong emphasis was placed on openness, cooperation, creativity, and innovation. While the director reserved a veto power over group decisions, he seldom used it and most major decisions were arrived at through participative decision-making techniques. The physical plants of some teams were intentionally too small, because it was believed that overcrowding would encourage members to be in the community rather than in their offices. Dress standards and strict attention to seniority were not in operation. The chain of

command was not easily identifiable, and there was a heavy emphasis on face-to-face communication rather than on formal written documents. The organic or ambiguous nature of the structure was reflected by the fact that, despite attempts to do so, no one had been able to draw an organizational chart that satisfactorily reflected the functioning of the organization.

Performance and Resource Acquisition

Within the organization, there was a high concern for the accomplishment of purposes as set forth in the developmental model. This required an emphasis on the establishment of interorganizational relationships and the capturing of external support. Here, again, an excerpt from the initial field report provides a description of conditions in early 1975:

The team has been very successful in marshalling the energies of its own workers and those of the community to develop and provide an array of services to the retarded not available heretofore. Both the staff and the community workers exhibited a high degree of cohesion and an intense dedication to the "Cause." It was our observation that a good deal of the community's interest was a result of the zeal of the staff of the team. The team has been very successful in identifying and obtaining monies from various sources, including appropriations from the Department of Mental Hygiene, the Legislature, grant monies from the Federal Government, as well as convincing community agencies to redeploy some of their monies to service for the retarded.

In early 1975, after slightly more than five years of existence, the focal organization had developed in ways very similar to those predicted in the first two stages of our model. Table 2 summarizes these characteristics. Early emphasis on innovation and creativity and the powerful presence of a prime mover (entrepreneurial stage) led to high levels of cohesion among workers, a dedication to the organization's ideology, and a sense of unity among the employees (collectivity stage). From the point of view

TABLE 2
Characteristics of Early Stages of Development in the Department of Mental Hygiene

Characteristic		Stage			
	1	2	3	4	
Innovative treatment model emphasizing "deinstitutionalization"	X				
Fluid and nonbureaucratic methods of task assignment					
Director had strong personal power	x				
Director had no permanent office	x				
Strong emphasis on creativity	x				
No organizational chart could be drawn	X				
Work teams formed		x			
Worked long hours and weekends		x			
Missionary zeal and dedication to the "cause"		х			
Staff encouraged to get out into the community, not in offices		x			
Staff and community workers had high cohesion		X			

of the Quinn-Rohrbaugh effectiveness model, the organization was doing extremely well on the criteria in the open systems, and human relations quadrants. That is, there was continued acquisition of political and financial support and cohesiveness and morale were extremely high.

Events Leading to Later Stages of Development

In the spring of 1975, one of the two major newspapers serving the area began to run an extensive expose of the entire Department of Mental Hygiene. Entitled "Wasted Dollars/Wasted Lives," the series included numerous devastating reports about bureaucratic inefficiency at the central office of the DMH and numerous descriptions about the bleakest aspects of life in institutions. Initially, the focal organization was mentioned only in summary statements. But beginning on May 9, 1975, the program became on the primary points of focus in the series.

- May 9: The paper ran a front-page article revealing that more than \$6,000 in drugs and supplies were purchased directly from local retail pharmacies instead of using the less expensive State contract procedure. The article indicated that the State Department of Audit and Control was not aware of the practice. The story received coverage for several days and included a response from the director, who argued that he wanted clients to have the developmental experience of buying their own drugs, and that the practice was cheaper than if the organization ran its own pharmacy.
- May 25: Six articles about the program appeared in the newspaper raising a number of issues about administrative practices. One article included a picture of the commissioner-designate of the Department of Mental Hygiene and quoted him as saying: "I believe that [the focal organization] is one of the most innovative and encouraging developmental center operations in the state, as a matter of fact, in the country." He went on to say that he hoped the program might be a model for the whole DMH system.

On the same page appeared another article describing the findings of a State Department of Health report on the developmental center. In regard to Federal regulations governing the payment of Medicaid and Medicare monies, the article cited numerous findings of "deficiencies in the area of administration, treatment program, medical care, food services, record-keeping, pharmaceutical and dental operations, and environmental conditions." Findings particularly focused on inadequacies with control mechanisms such as organization charts, job descriptions, master plans, policy manuals, and documentation practices.

- May 29: Three more articles appeared, the most potent arguing that the parents of many profoundly retarded children were unable to admit their children to the practically empty center. Two local assemblymen were quoted as saying that they had been unable to obtain admission for patients. The refusal to admit the profoundly retarded was an issue that was to continue throughout the summer.
- June 1: Five articles appeared, the strongest arguing that there was poor accountability and control at the Center, and that "some key doctors" were either ineffective or unavailable because they had "second jobs or other outside interests." The issue of second salaries was also to become a major theme in the weeks that followed.
- June 8: An article appeared quoting parts of a state Department of Audit and Control report which indicated that record-keeping procedures in the area of payroll and personnel were extremely weak. The report recommended,
 - "...a variety of changes, including verification of appointments and terminations by the business office; good record-keeping and follow-up by the personnel office; distribution of checks by a 'responsible employee' of the business office 'who is independent of payroll preparation;' close monitoring of employees by their supervisors so that attendance and leave records are kept 'properly,' and physical separation of the personnel and payroll offices."

July 19: The intense pressure on the program continued, and it was reported that the director was asked by the Commissioner to take a six-week leave of absence in the midst of the DMH probe. The DMH investigations centered on administrative and personnel practices at the Center.

September 7: The results of the probe were made public. Findings criticized the director for failing to provide direction, a traditional organization structure, and other necessary controls. It also recommended the top-level administrative staff be relieved of their present duties.

September 10: The report was met with outrage by supporters of the director. They accused the DMH of carrying out a vendetta. A newspaper article reported that the Governor, Lieutenant Governor, and several State legislators had expressed concern to the Commissioner that the director get a fair shake.

Development of the Formalization and Control Stage

When the probe was completed, the director was reinstated and given one year to address a list of problems. Most had to do with establishing clear lines of authority, clearly identifiable roles, following rules and regulations, and establishing mechanisms of accountability and control.

Shortly, after the year was over, the director left the state and he was replaced with a "more administratively minded" director. Thereafter many staff members left. By the end of the next year, there were few people working in jobs for which they were overqualified, the missionary zeal disappeared, and the Center began to function in a more controlled manner.

At the close of the study, the organization was firmly established in the formalization stage. While there was a high emphasis on control, there was a considerable fall off in staff commitment, productivity, and flexibility.

Of course, this single case study does not provide conclusive evidence that our model of organizational life cycles and effectiveness is precisely as we hypothesize in all new organizations. The case does provide, however, an *example* of the potential utility of this model for diagnosing and predicting organizational phenomena.

It seems clear from this case that the focal organization moved from the entrepreneurial and collectivity stages to the formalization and control stage. Furthermore, the criteria by which the organization was judged to be effective changed over time. In the years prior to the newspaper exposé, open systems criteria and human relations criteria were highly valued. However, emergence of a new and powerful strategic constituency (i.e., the newspaper) resulted in change in emphasis towards rational goal criteria (e.g., efficiency) and a subsequent change in the characteristics of the organization as well. When the relative power among strategic constituencies changed, the criteria of effectiveness changed as a result, and pressure mounted for the organization to make similar changes in its organizational form and behavior.

5. Discussion

As seen in Figure 2, in the entrepreneurial and collectivity stages, we hypothesized that the most important criteria of effectiveness for an organization would be those of the open systems model (flexibility and resource acquisition) and of the human relations model (cohesiveness-morale, development of human resources). During these stages there should be less emphasis on rational goal criteria (planning—goal setting, efficiency, and productivity) and on internal process criteria (information management, communications, stability, control). With the onset of the formalization stage, however, there should be a dramatic shift in criteria. Information management, communication, stability, control, productivity, efficiency and goal setting should

become increasingly important. This, in turn, should be accompanied by a dramatic decline in the emphasis on open systems and human relations criteria.

In the organizational history just provided, there is evidence to suggest that the changes in the dominant criteria of organizational effectiveness followed the predicted pattern. The focal organization started out in the entrepreneurial stage and continued in the collectivity stage with an internal strategic constituency being the most powerful (i.e., led by the director). The criteria of success that were most valued by this group were consistent with the implementation of an innovative treatment model. As such, formalization, control, and efficiency were not only unimportant criteria, they were contradictory to the organization's accepted values. The major criteria of effectiveness (e.g., creativity, informality, morale), for this strategic constituency, therefore, became accepted as part of the organization's self definition because they were perpetuated by the constituency in power. These criteria reflected the self interests and values of that group.

For a time, this internal strategic constituency was successful in warding off controls and power plays of internal and other external constituencies. However, the attack from the newspaper allowed many of the external constituencies to coalesce and to become dominant. That is, a new constituency acquired more power relative to the focal organization than did the previously dominant internal strategic constituency. This created an overwhelming pressure towards formalization in the organization because the criteria of effectiveness valued by the new constituency included efficiency, control, planning, etc. (criteria consistent with the formalization stage). The organization found it necessary to adopt these new criteria of success in order to survive, and this in turn necessitated a change in structure and activities.

What this suggests is that the organization must adopt the primary criteria of effectiveness espoused by the dominant constituency in order to survive. And changes in the dominance of various constituencies over different life cycle stages necessitate changes in form and function.

Our example illustrates how a change in life cycle stages occurred because of external pressures. With the change came a new set of effectiveness criteria and a new dominant coalition. The model suggests that the period between stage 2 and stage 3 is the time when this change is most likely to happen. In reviewing four similar case studies, Miles [23] describes some very similar dynamics. One value of the life cycles–effectiveness model developed in this paper is that it predicts what criteria of success are likely to take precedence in what sequence, and it allows managers to anticipate the necessary changes.

One weakness of this model as a predictive theory of organizational life cycle development, of course, is that it is based on the integration of existing theories of life cycles. However, some evidence exists in other empirical studies suggesting that the model may be predictive. For example, Strasser and Deniston's [35] study of a mental health facility found that effectiveness as measured by the open systems model is a prerequisite to effectiveness as measured by goal accomplishment and productivity (the rational model). The model outlined in Figure 2 suggests a similar conclusion inasmuch as open systems criteria are emphasized in the entrepreneurial stage, and the rational goal model and internal process model criteria are more typical of the later formalization stage.

Cameron and Whetten [5] found that significant changes occurred in the importance of criteria of effectiveness to organizational members as eighteen simulated organizations progressed through life cycles. Evaluations of the importance of effectiveness criteria were made at several points during the life cycles. Open systems model criteria were found to be important in early stages but then decreased. Rational goal model and internal process model criteria increased in importance over time and were the

most important criteria in later stages of development. Again, the model in Figure 2 makes a similar prediction.

Besides being predictive of changes in criteria of effectiveness and organizational life cycle stages, the model in Figure 2 also produces an interesting contrast to contingency theories of organizational adaptation. In general, the contingency literature suggests that effective organizations should become organically structured and adaptable when faced with a complex or turbulent environment. On the other hand, a placid or stable environment should be matched with mechanistic or formalized structures. However, our model predicts that the reaction of an organization to external environmental turbulence will partly depend on its stage of development. In an organization operating in the collectivity stage, turbulence would result in a tightening up of controls and a tendency toward a mechanistic structure (progressing to stage 3). If the organization was already in the formalization and control stage, the tendency would be toward a flexibility and elaboration of structure (progressing to stage 4).

This prediction receives some support from a study by Bourgeois, McAllister, and Mitchel [2] who found that managers reacted to turbulence and uncertainty in the environment by shifting to mechanistic rather than organic structures. What is most important (and it is ignored by the authors of the study) is that the units were all *newly created*, autonomous product divisions in a large firm. That is, they were likely to have been in early stages of development in the life cycle, and, according to the model, should have progressed toward the formalization and control (mechanistic) stage.

Taken together, the events in this case and the life cycle model not only provide evidence for predictability but also raise the possibility that the propositions of contingency theory may not hold for new and developing organizations. It may be that organizations must go through the first three stages in the developmental model before many of our conventional theories are appropriate. This would seem to be a particularly reasonable observation when we recognize that most research has focused on mature organizations and most research has been cross-sectional in design.

References

- 1. Addizes, I., "Organizational Passages: Diagnosing and Treating Life Cycle Problems in Organizations," *Organizational Dynamics*, (Summer 1979), pp. 3–24.
- 2. BOURGEOIS, L. J., MCALLISTE^{*}, DANIEL W., AND MITCHELL, TERENCE R., "The Effects of Different Organizational Environments Upon Decisions About Organizational Structure," *Acad. Management J.*, Vol. 21, No. 3 (1978), pp. 508-514.
- 3. CAMERON, K. S., "Measuring Organization Effectiveness in Institutions of Higher Education," *Admin. Sci. Quart.*, Vol. 23 (1978), pp. 604-632.
- 4. ——, "The Enigma of Organizational Effectiveness," In Dan Baugher (Ed.), New Directions in Program Evaluation: Measuring Effectiveness, Jossey-Bass, San Francisco, Calif., 1981.
- AND WHETTEN, D. A., "Perceptions of Organization Effectiveness Across Organizational Life Cycles," Admin. Sci. Quart., Vol. 26 (1981), pp. 525-544.
- CAMPBELL, J. P., "On the Nature of Organizational Effectiveness," In P. S. Goodman and J. M. Pennings, (Eds.), New Perspectives on Organizational Effectiveness, Jossey-Bass, San Francisco, Calif., (1977), pp. 13-55.
- 7. CAMPBELL, J. P. ET AL., "The Measurement of Organizational Effectiveness: A Review of Relevant Research and Opinion," Final Report, Navy Personnel Research and Development Center, Minneapolis: Personnel Decisions, 1974.
- 8. CHANDLER, A. D., Strategy and Structure, M.I.T. Press, Cambridge, Mass., 1962.
- 9. CYERT, R. M. AND MARCH, J. G., A Behavioral Theory of the Firm, Prentice-Hall, Englewood Cliffs, N.J., 1963.
- 10. Downs, A., "The Life Cycle of Bureaus," In Downs, Anthony, *Inside Bureaucracy*, Little, Brown and Company and Rand Corporation, San Francisco, Calif., 1967, pp. 296–309.
- 11. FILLEY, A. AND ALDAG, R., "Organizational Growth and Types: Lessons From Small Institutions," In B. Staw and L. L. Cummings (Eds.), *Research in Organizational Behavior*, Vol. 3, JAI Press, Greenwich, Conn., 1980.

- 12. GOODMAN, P. S. AND PENNINGS, J. M., "Critical Issues in Assessing Organizational Effectiveness," In Edward E. Lawler, David A. Nadler, and Cortlandt Cammann (Eds.), Organizational Assessment: Perspectives on the Measurement of Organizational Behavior and the Quality of Work Life, Wiley, New York, 1980, pp. 185–215.
- 13. GOULDNER, A. W., "Organizational Analysis," In Robert K. Merton, Leonard Broom, and Leonard S. Cottrell, Jr., (Eds.), *Sociology Today*, Basic Books, New York, 1959, pp. 400–428.
- 14. Greiner, L., Evolution and Revolution as Organizations Grow, *Harvard Business Rev.* (July-August, 1972), pp. 37-46.
- 15. KATZ, D. AND KAHN, R. L., The Social Psychology of Organizations, Wiley, New York, 1978.
- KIMBERLY, J. R., "Issues in the Creation of Organizations: Initiation, Innovation, and Institutionalization," Acad. Management J., Vol. 22 (1979), pp. 437-457.
- 17. ——, "The Organizational Life Cycle: Constructive Concept or Misguided Metaphor?" In J. R. Kimberly and Miles, R. H., The Organizational Life Cycle: New Perspectives for Organizational Theory and Research, Jossey-Bass, San Francisco, Calif., 1980.
- 18. —— AND MILES, R. H., The Organizational Life Cycle, Jossey-Bass, San Francisco, Calif., 1980.
- 19. LAVOIE, D. AND CULBERT, S. A., "Stages in Organization and Development," *Human Relations*, Vol. 31 (1978), pp. 417–438.
- 20. LAWRENCE, P. R. AND LORSCH, J. W., Organization and Environment, Irwin, Homewood, Ill., 1969.
- 21. LIPPITT, G. L. AND SCHMIDT, W. H., "Crises in a Developing Organization," *Harvard Business Rev.*, Vol. 45 (1967), pp. 102-112.
- LYDEN, F. J., "Using Parsons' Functional Analysis in the Study of Public Organizations," Admin. Sci. Quart., Vol. 20 (1975), pp. 59-70.
- 23. MILES, R. H., "The Role of Organizational Learning in the Early Creation and Development of Organizations," In J. R. Kimberly and R. H. Miles, *The Organizational Life Cycle*, Jossey-Bass, San Francisco, Calif., 1980.
- "Findings and Implications of Organizational Life Cycles Research: A Commencement," In J. R. Kimberly and R. H. Miles, *The Organizational Life Cycle*, Jossey-Bass, San Francisco, Calif., 1980.
- AND RANDOLPH, W. A., "Influence of Organizational Learning Styles on Early Development,"
 In J. R. Kimberly and R. H. Miles, The Organizational Life Cycle, Jossey-Bass, San Francisco, Calif., 1980
- 26. Molnar, J. J. and Rogers, D. C., "Organizational Effectiveness: An Empirical Comparison of the Goal and System Resource Approaches," Sociological Quart., Vol. 17 (1976), pp. 401-413.
- Neal, J. A., The Life Cycles of an Alternative Organizations, Intercollegiate Case Clearinghouse, Boston, Mass., 1978.
- 28. PARSONS, T., Structure and Process in Modern Society, Free Press, Glencoe, Ill., 1960.
- 29. PRICE, J., "The Study of Organizational Effectiveness," Sociological Quart., Vol. 13 (1972), pp. 3-15.
- 30. Quinn, R. E. and Rohrbaugh, J., "A Spatial Model of Effectiveness Criteria: Towards a Competing Values Approach to Organizational Analysis," *Management Sci.* (to appear).
- 31. Scott, B. R., Stages of Corporate Development—Part 1, Case No. 9-371-294, Intercollegiate Case Clearing House, Boston, Mass., 1971.
- "Effectiveness of Organizational Effectiveness Studies," In Paul S. Goodman and Johannes M. Pennings (Eds.), New Perspectives on Organizational Effectiveness, Jossey-Bass, San Francisco, Calif., 1977, pp. 63–95.
- 33. STARBUCK, W., "Organizational Metamorphosis," In Millman, R. W. and Hottenstein, M. P., *Promising Research Directions*, Academy of Management, 1968.
- 34. ——, "Organizations and Their Environments," In Dunnette, M. D., Handbook of Industrial and Organizational Psychology, Rand McNally, Chicago, Ill., 1976.
- 35. STRASSER, S. AND DENISTON, O. L., "A Comparative Analysis of Goal and System Models Assigned to Evaluate Health Organizational Effectiveness," *Acad. Management Proc.*, 1979, pp. 342–346.
- Steers, R. M., "Problems in the Measurement of Organizational Effectiveness," Admin. Sci. Quart., Vol. 20 (1975), pp. 546-558.
- 37. STINCHCOMBE, A. L., "Social Structure and Organizations," In James G. March (Ed.), *Handbook of Organizations*, Rand McNally, Chicago, Ill., 1965.
- 38. TICHY, N. M., "Problem Cycles in Organizations and the Management of Change," In J. R. Kimberly and R. H. Miles, *The Organization Life Cycle: New Perspectives for Organizational Theory and Research*, Jossey-Bass, San Francisco, Calif., 1980.
- TORBERT, W. R., "Pre-Bureaucratic and Post-Bureaucratic Stages of Organization Development," *Interpersonal Development*, Vol. 5 (1974), pp. 1–25.
- 40. Van De Ven, A. H., "Early Planning, Implementation, and Performance of New Organizations," In John R. Kimberly and Robert H. Miles (Eds.), *The Organizational Life Cycle*, Jossey-Bass, San Francisco, Calif., 1980, pp. 83–133.