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Published in *Group & Organization Studies*, vol. 12, no. 3, pp. 274-286, September 1987

ARTICLES

Meaning Making and Management Action

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This research suggests that management styles are shaped by developmental stage, that is, by the way the individual makes meaning of his or her world. Subjects were 49 MBA alumni and students, all of whom held full-time positions in a variety of organizations. Managers at later developmental stages, measured by Loevinger's Sentence Completion Test, were more likely to redefine problems on an in-basket exercise than to accept them as presented. The data also indicated, though less clearly, that later-stage managers were more likely to act collaboratively. Implications are offered for leadership theory and management development.

Research suggests that effective managers tend to exhibit certain patterns of decision making and leadership. For example, effective managers have been characterized as using logical-incremental and dialectical approaches in making decisions (Mason & Mitroff, 1981; Quinn, 1980), as able to balance concerns for task with concerns for people (Blake & Mouton, 1964), as able to vary their behavior to adapt to a wide variety of situations (Hersey & Blanchard, 1982; House, 1971; Moment & Fisher, 1975; Vroom &

We wish to thank the Boston College MBA alumni and graduate students who generously participated in the research. We also gratefully acknowledge the suggestions and assistance of Jean Bartunek, Lee Bolman, James L. Bowditch, Thomas W. Dunn, Greg Jackson, Delia Johnson, and John W. Lewis, III.

Group & Organization Studies Vol. 12 No. 3, September 1987 274-286

Yetton, 1973), and as creating conditions under which subordinates can grow and develop Argyris, 1962, 1964; Bradford & Cohen, 1984; McGregor, 1960) and under which leaders as well as followers are transformed to higher levels of motivation and maturity (Bennis & Nanus, 1985; Burns, 1978).

Although many theories distinguish between different management styles, few offer explanations. Why does one manager use one style more than another? How easy is it to learn a new style? Why is it that discrete new managerial skills frequently do not "graft" well despite well-focused training designs and opportunities for practice and feedback?

We argue that how managers act can be explained to a large extent by how they "make meaning" of their managerial world. We begin by describing how developmental theory orders people's different ways of making meaning along a development continuum. Then we explore how managers' developmental position predicts their responses to a management situation.

A DEVELOPMENTAL THEORY OF MANAGEMENT ACTION

Developmental theory holds that individuals can evolve through a sequence of meaning-making systems or "stages" (Kohlberg, 1969, 1976; Loevinger, 1976; Piaget, 1948, 1954, 1969). Development is viewed as a process of transformation based on shifts of perspective. A significant body of research based on developmental theory shows empirically that individuals at earlier stages are cognitively more simple and concrete (Harvey, Hunt, & Schroeder, 1961; Loevinger, 1976). Their view of the world is more stereotypical and dogmatic (McCrae & Costa, 1980). As individuals move to later stages, their thinking becomes more complex and abstract, but also more precise and specific. Further, they become more able to empathize with others who hold conflicting views, to understand interpersonal relationships, to act on perceptions of mutual interdependence, and to tolerate higher levels of stress and ambiguity (Bartunek, Gordon, & Weathersby, 1983). Other elements that change with development include the character and quality of ethical judgment, capacity for self-awareness, and one's view of society and social issues. In each successive stage the individual builds on earlier capacities, but transforms them into a reordered

worldview that includes an increased capacity for understanding and action (Kegan, 1982; Perry, 1981). The sequence of stages at which adults are found can be very briefly described as follows:

(1) *Opportunistic*: Self, others, and events are treated as external things to be manipulated according to one's own desires.
(2) *Social*: Self, others, and events are treated as patterns of behavior to be influenced by molding one's behavior to induce positive responses.
(3) *Analytic*: People and events are treated as technical systems to be influenced by finding the right "key" to their inner workings.
(4) *Goal-oriented*: Self, others, and events are treated as rational systems that can be influenced by substantive argument and calculated action.
(5) *Relativistic*: Self, others, and events are treated as an interaction of irreconcilable perspectives, none objectively right, to be influenced by tolerance and discussion.
(6) *Self-defining*: Self, others, and events are treated as developing systems, to be influenced by creating mutually determined frameworks that permit freedom to hold different values and provide for mediation of value conflicts.

These stages correspond, respectively, to Loevinger's opportunistic, conformist, conformist/conscientious, conscientious, conscientious/autonomous, and autonomous stages. Names of some of the stages have been changed to reduce evaluative connotations and increase clarity. Recent studies indicate that most managers (80% or more) are to be found at the analytic and goal-oriented stages. Fewer than 15% inhabit the later positions, the relativistic and the self-defining (Gratch, 1985; Smith, 1980; Tobert, 1983).

Research has begun to suggest that stage of development affects a manager's style of managing and effectiveness (Smith, 1980; Vaillant, 1977). Smith found that managers scored at the social stage were more likely to exercise power coercively, whereas managers at the goal-oriented stage tended to build power through consultation. Vaillant's longitudinal study of the adaptation of Harvard graduates to life and career events strongly indicated the importance of personal development as a basis for effectiveness within an organization. Merron and Torbert (1984) found managers at later stages of development were more likely than those at earlier stages to request feedback about their performance and to explore in discussions what behavioral changes could increase their effectiveness.

The present research relates development directly to managerial action effectiveness as measured by responses to an in-basket test. The concept of effectiveness is based on the work of Argyris and Schon (1974, 1978) and Schon (1983), wherein practitioners are defined as more effective if they can redefine problems, as well as accept problems as presented, and if they can create an atmosphere of collaborative commitment with others, as well as delegating or acting unilaterally. We theorize that managers at the later developmental positions will more likely recognize the possibility of alternative definitions for problems and appreciate the value of collaboration with colleagues who might bring a fundamentally different approach to a problem. Thus these later-stage managers should have more options and be more effective, as Argyris and Schon define *effectiveness*.

METHOD

The 49 subjects were 21 MBA alumni, 23 part-time MBA students, and 5 part-time students in other graduate programs. All held full-time managerial and staff jobs in business, government, and educational institutions. The average age was 31, with 10 over age 35 and 6 under 26. The 29 men and 20 women averaged 7 years of full-time work experience. The MBA alumni did not differ significantly from the others in age or experience. The sample was uniformly white except for 2 persons.

The measure used to identify developmental stage was the same as in the studies of managers mentioned earlier, Loevinger's Sentence Completion Test (SCT), the most comprehensively reliability-tested and validated developmental measure (Hauser, 1976; Loevinger, 1979; Loevinger & Wessler, 1970; Redmore, 1976). Table 1 shows the demographic characteristics of the subjects by developmental position. In general, there were no significant relationships between developmental position and any of the demographic measures, although women were more likely to be measured at the goal-oriented stage and less likely at the self-defining stage ($\chi^2 = 12.4$, $p = .01$). We cannot generalize from so small a sample, but it may be that women MBAs feel more than men a need to prove themselves equal to Goal-oriented values. Our data hint this may accelerate their development to the goal-oriented stage, but limit their development beyond it.

TABLE 1
Demographic Characteristics of Subjects by Developmental Position

Developmental Positions	Sex		Education		Mean Age	Mean Full-Time Work Experience	Percentage at Each Position
	M	F	MBA Alum	Student			
Analytic	9	4	5	8	32.0	7.2	26
Goal-oriented	8	11	9	10	30.9	7.4	40
Relativistic	6	5	4	7	31.1	7.6	20
Self-defining	6	0	4	2	31.2	6.8	14
Total Sample	29	20	22	27	31.4	7.3	100
	$\chi^2 = 7.07$ $p < .07$		$\chi^2 = 4.70$ $p < .32$		$F = 0.31$ $p < .82$	$F = 0.05$ $p < .99$	

The sample was skewed toward the later developmental positions in comparison with the three studies of managers mentioned earlier, perhaps because persons at later stages are theoretically more initiating and less threatened by feedback. Participation in this study required an input of time and effort in exchange for feedback.

Managerial style was measured through use of the Consolidated Fund In-Basket Test, an exercise developed by Educational Testing Services, which positions the subject as director of a community fund, newly appointed in midcampaign, who must deal with staff members, a board of directors composed of leading citizens, and a large volunteer organization. For 3 hours the subject writes memos or letters in response to 34 in-basket items, and then completes a reasons-for-action form describing what action was taken on each item, and why. The exercise simulates reality, yet has the advantage over field observation that all subjects are responding to the same set of circumstances. The effects of structure and circumstances on behavior were thus controlled, so that differences relating to developmental stages could be examined.

We explored two questions. First, can differences in the ways managers solve problems be explained by differences in developmental position? Second, can differences in managers' leadership styles be predicted by differences in developmental position?

To approach the first question, we distinguished between two types of problem solving, *first order* and *second order*. A first-order

response was any attempt to treat a problem as an isolated event, to accept the given definition of the problem, or to neglect the underlying causes of the problem (i.e., to treat the symptom rather than try to find the disease). A second-order response was any attempt to redefine the problem, to question the underlying assumption, goals, or values represented in the definition of or proposed solution to the problem, or to treat the problem as a symptom of a deeper underlying problem. Virtually every response to each in-basket item was scored as falling within one of these two categories, with interrater agreement of 92%. Cases of disagreement were discussed by the raters until consensus was reached. Because people at the later stages of development are more likely to be capable of questioning or redefining the norms and values of their social world, we *hypothesized that managers measured at later developmental positions would be more likely to respond to in-basket items in a second-order manner than those at earlier stages.*

For the second question, we defined two leadership styles, *unilateral* and *collaborative*. Unilateral was any attempt to take direct action alone or to delegate complete or partial responsibility to another person without seeking his or her input about the problem or about the appropriateness of the act of delegation. Collaborative action was any attempt to inquire into the opinions or concerns of another in the decision-making or implementing process. Interrater agreement was 85% in scoring actions as unilateral or collaborative. Based on the theory that persons at later stages tend to enmesh their concerns with the concerns of others, *we hypothesized that managers measured at later developmental positions would be more likely to act collaboratively than those measured at prior positions.*

RESULTS

The mean percentages and standard deviations on the measures of managerial style are shown in Table 2. Second-order responses were found to be associated with age, $r = .37$, $p < .005$, and with education level, $F(3, 47) = 5.14$, $p < .03$. Collaborative action was not significantly associated with any of the demographic measures.

Analysis of covariance using second-order response percentage as dependent variable and developmental position as independent variable with age and education as covariates showed $F(3, 43) = 5.07$, $p < .005$. The relationship between developmental position and

TABLE 2
Mean Scores and Standard Deviations on Mangerial Measures

Developmental Positions	Percentage of Second Order Responses		Percentage of Collaborative Actions		
	Mean	SD	Mean	SD	N
Analytic	13.8	12.6	21.7	9.5	13
Goal-oriented	16.3	7.7	20.5	10.5	19
Relativistic	26.3	17.5	24.0	14.8	11
Self-defining	31.7	16.1	35.5	18.4	6

collaborative action percentage was also in the predicted direction and was marginally significant, $F(3, 45) = 2.33, p < .09$.

A further feature of the data supports the developmental interpretation offered here. Table 2 shows that the largest increase in percentage of second-order responses occurs between the goal-oriented and relativistic positions, whereas the largest increase in percentage of collaborative actions occurs between the relativistic and self-defining positions. The first finding corresponds to the theoretical expectation that in moving beyond the goal-oriented stage people go beyond the simple pursuit of initial goals to an appreciation of the significance of second-order feedback that tests the validity of the initial goals and initial framing of the problem. The second finding suggests collaborative skill develops still later in the developmental sequence, corresponding with the view by persons at the self-defining stage that reality is mutually determined. Though the sample size is small, these indications bear watching in subsequent research.

Finally, it should be noted that even those at the self-defining stage made second-order and collaborative responses just 31.5% and 35.5% of the time, respectively. Managers at later developmental positions by no means give up making first-order and unilateral responses, but do appear much freer to choose alternative responses.

FURTHER OBSERVATIONS AND EXAMPLES

Given sufficient data, it should be possible to distinguish distinct styles of management for each developmental position. The current

data, augmented by interviews with the subjects, display clearly distinct styles of handling the in-baskets only at the extreme developmental positions (analytic and self-defining). These two styles are termed the *fire-fighting* approach, characteristic of the analytic stage of development, and the *systemic management* approach, characteristic of the self-defining stage. Each approach related to the findings described above.

FIRE FIGHTING

Those using the fire-fighting approach treated the in-basket items as given and fixed, separate from one another, and requiring quick action. Consequently, they displayed a high percentage of first-order responses. Their actions typically involved either correcting the problem or delegating it to someone else to correct. In other words, they tended to act unilaterally. Seldom did they schedule meetings for collaborative decision making.

An example was Joel, who was measured at the analytic stage. When faced with things he saw as problems, Joel changed them. He responded to a memo from the fund's public relations director (Ed Finch) complaining about a person with the fund (Mrs. Courtney) who had publicly criticized small contributions to the fund by directing that Finch draft a public reprimand for his approval. According to Joel, his response was to "fix the fund's image." In another case, when overzealous volunteers had damaged a hotel meeting room, Joel wrote a memo saying such things should not happen and the volunteers were personally responsible for the cost. In a third case, when interviewed about how he handled staffing problems in the in-basket exercise, Joel said, "I saw immediate need to get secretarial help because two people said it was needed. I didn't sit down and analyze why. I wanted to get the organization up and running. Later I could sit back and fine-tune it." Such instances of immediate, unilateral action, based on private judgments about problems as presented by others, characterized the fire-fighting approach. If something could not be done now, it was usually not seen as important. Fire-fighters rarely raised second-order questions about the values, goals, and assumptions of the person presenting the problem, because this would require that action be deferred.

SYSTEMIC MANAGEMENT

The systemic management approach involved taking a broader view of the organization and its problems. Second-order inquiry was undertaken. Underlying assumptions and goals behind a stated problem were often questioned, and, at times, whole new lines of inquiry were begun. Management attention was aimed not only at presented problems but at the context from which they arose. In-basket items were seen to be related in ways that recognized their underlying, second-order causes. For example, one interviewee formed from many bits of evidence the sense that the staff did not work well together: "They did not plan together, have regular updates, or coordinate their efforts."

Ben, scored at the self-defining stage, exemplified this approach. Instead of simply treating each problem as it occurred, Ben prioritized the items. He also related a number of seemingly discrete items. In response to a newspaper's request for information on the fund for a feature article, Ben wrote Finch, "Ed, will this opportunity also help offset the Courtney problem? Let's discuss on Wednesday, 8 A.M." He connected another set of diverse items, seeing them as related policy issues that needed to be discussed at a trustees' meeting. Such efforts to connect items, with recognition of underlying second-order issues, were much rarer in the fire-fighters' responses. As a result, systemic managers made fewer decisions. Ben held eight items for discussion at a staff meeting, and seven other items pending discussion with individuals or further investigation of the problem.

In contrast to the fire-fighter's use of unilateral leadership, Ben more often led bilaterally or collaborated with others in making decisions. Rather than telling Finch how to handle the Courtney problem, or delegating it completely to Finch, Ben gave Finch some direction while simultaneously asking for his alternatives, inviting his judgment, and proposing they discuss the matter. When interviewed, Ben explained that he asked Finch and others for their suggestions in several cases "to see what they would do." To Ben, problems were not just problems to be handled, they were also opportunities to observe how others manage and to coach them. Like others at the self-defining developmental stage, Ben frequently reframed problems from closed-ended, first-order issues to which answers can be deduced to open-ended, second-order issues that invite active, collaborative inquiry.

IMPLICATIONS

According to developmental theory, it is not surprising that managers at different stages responded differently to the in-basket items. Given the same set of stimuli, persons at different developmental positions will likely interpret the stimuli differently and, hence, react differently. The data reported in this study lend a measure of support to this expectation and suggest answers to the three questions raised at the outset.

The first question was why does a manager use one style more often than another? The data suggest one answer is that managers' styles are determined partly by their stage of development—by the way they make meaning of their surroundings.

The second question was how easy is it to learn a new management style? The theory and data presented here suggest it is very difficult, because to do so requires a change in fundamental worldview or stage of development. This means genuine, permanent learning, involving not just new ways of acting, but new ways of thinking.

The third question was why new management skills often do not "graft" well despite carefully designed training. New skills will not "graft" well when they represent a different stage of development from that of the person being trained. Understanding the developmental perspective may help explain the perennial tendency toward management fads that rarely take root or significantly improve effectiveness. To be effective, training would need to reach deeper than behavioral skills to influence the individual's developmental position. Thus these findings hold implications for leadership theory and for management education and development.

For leadership theory, the findings argue the importance of meaning making in the process by which a manager responds to a problem. Research based on contingency theories has shown that no one style of management is uniformly effective; effectiveness results from a match between a particular response and the circumstances in which it is used (Hersey & Blanchard, 1982). But even managers who are aware of the proper "match-up" may bring about mismatches by misperceiving or misinterpreting their surroundings. Our data suggest the value of further research into the different ways that managers make meaning of their surroundings. We suspect many managers who are aware of the need to adapt

action to surroundings are not as aware that there are multiple ways of viewing and interpreting those surroundings. Joel saw one remedy for the Courtney problem and told Finch to implement it. Ben, by contrast, saw the possibility of alternative solutions, the possible value of collaboration with Finch, as well as the opportunity to evaluate and develop Finch. Enriched understanding of differences in how managers make meaning could be gained through field observation and interviewing of managers who are at different developmental stages and who are in different types of organizations (organic versus mechanistic, for example). A primary question for further research is how a manager at a given developmental stage can work effectively with people who make meaning differently.

A second area of implications concerns management education and development. It appears that in order to develop, managers need to be helped to see not just new ways of acting, but new ways of inquiring, perceiving, and characterizing their surroundings. Such training efforts have been few, and the results only suggestive (Bartunek, Gordon, & Weathersby, 1982; Torbert, 1981, 1983). We know that change can occur in adults' developmental positions, but more research is needed to reveal the processes involved and to discover effective ways for stimulating this growth.

Our findings suggest a new aim for management education and development: the cultivation not just of new knowledge and skills but also of development—an increased capacity for learning new knowledge and skills. How to create such learning environments in schools of management and in the training programs and daily work of corporations and other institutions is still largely a mystery (see Torbert, 1981, 1983, for one ongoing effort) and is an important question this research suggests.

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