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**EMPOWERING MIDDLE MANAGERS TO
BE TRANSFORMATIONAL LEADERS: A
FIELD STUDY**

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Abstract

The paper describes a field study of a large scale management development program for a Fortune 100 organization's population of middle managers designed to stimulate change. The development of a middle managerial change typology suggests that middle managers are capable of making both transformational and transactional change targeted at themselves, their workunit, and their organization. Individuals with high levels of self-esteem, job affect, and coworker and superior social support are found to be most likely to make effective transformational changes. The most surprising finding is that those middle managers who are plateaued are most likely to make the most radical changes -- transformational change targeted at the organization. These findings suggest that many companies are eliminating the very subset of middle managers who are most prepared to become transformational leaders.

**Empowering Middle Managers to be Transformational Leaders:
A Field Study**

Middle managers are fighting for their survival in contemporary organizations seeking lower costs, flexibility, and speed. While self-managing teams and other participatory management practices are making obsolete the traditional supervisory responsibilities of middle managers (Dumaine, 1993), information technology makes it easier for top management to monitor and control activities directly rather than relying on middle management (Dopson & Steward, 1990). People in the middle of the hierarchy are apt to slow things down, increasing the distance between the customer and the corporate response. To remain viable, the role of middle managers must change. In the words of Floyd and Wooldridge (1994: 48), "More like the Phoenix bird than the dinosaur, a new breed of middle managers -- whose roles are more strategic than operational -- should be rising from the ashes of the delayered corporation."

In their new role, middle managers would successfully generate and mobilize resources around new ideas (Burgelman, 1983; Fulop, 1991; Kanter, 1982), link activities and ideas between technical and institutional levels (Van Cauwenbergh & Cool, 1982), sell critical issues to top management (Dutton & Ashford, 1993), and play significant roles in strategy making (Guth & MacMillan, 1986; Nonaka, 1988; Westley, 1990). In simple terms, their role in contemporary organizations is shifting from transactional managers charged with maintaining the status quo to transformational leaders who stimulate change (Johnson & Frohman, 1989).

While most agree that middle managers must become more transformational, we have little understanding of the process through which middle managers can be transformed (Wooldridge & Floyd, 1990) or even the extent to which they can be transformed. These issues are explored in a field study of a large-scale management development program in a Fortune 100 company, the purpose of which was to stimulate transformational behaviors in its population of middle managers. First, the paper describes the educational process designed to stimulate transformational behaviors on the part of the middle managers. It then addresses three research questions relevant to the reorientation of middle managers: (a) What types of

change are middle managers capable of undertaking? (b) What individual and organizational characteristics facilitate or inhibit the different types of change identified in the typology? and (c) What are the consequences of the different types of change in the typology? Finally, implications of this work for theory and for contemporary organizations in reorienting their stratum of middle managers are discussed.

The Transformational Leadership Program

The Fortune 100 company we studied is a manufacturing corporation headquartered in the Midwestern United States but which has facilities located all over the world. Since the early 1980s, this organization has made significant investments in its human capital, contributing to a dramatic organizational turnaround in the 1980s. During this time, a successful effort was made to develop the transformational capacities of the top 2,000 executives in the company. But as global competition intensified, it recognized that transformational leadership at the top of the organization was not enough; similar behaviors were necessary at the lower levels of the organization, particularly in the middle of the organization. This recognition led to the design, development, and implementation of a transformational leadership program (termed LEAD) for all middle managers (Quinn, Sendelbach, & Spreitzer, 1991).

Program Design and Development

Where transactional managers exercise control to preserve the status quo or make incremental changes in the organization, transformational leaders seek deeper change -- quantum improvements in the structure and processes of the organization (Bass, 1985; Bennis & Nanus, 1985). In traditional organizations, middle managers are socialized to be largely transactional (Fulop, 1991; Kraut, Pedigo, McKenna, & Dunnette, 1989; Labich, 1989). The notion of transformational middle managers violates years of practice and challenges many powerful assumptions about the role of middle managers (Floyd & Wooldridge, 1994). With the charge of radically reorienting the role of middle managers at this company, a steering committee made up of executives from different operating units of the company, with input from focus groups made up of the targeted middle managers, established the basic criteria for the transformational leadership program: (a) it should provide integration with other company efforts, (b) it should reinforce the company's

mission and values, (c) it should be targeted for participation by all middle management, (d) it should be application-oriented, and (e) it should provide a cross-functional and international perspective.

A partnership was formed between the company and a prominent business school in the Midwest. One of the first conclusions of the joint design group was that traditional training assumptions would not be appropriate for the task of developing transformational leaders in the middle of the organization (Quinn, et al., 1991). Traditional training approaches are based on the philosophy of disseminating information from expert to novice. In this mode, training experts determine what skills are needed and then "teach" the relevant skills. Trainees are conditioned to be passive, compliant learners who become increasingly dependent on the trainer. Consequently, in a program designed according to traditional assumptions, the role of the middle manager as a conforming transactional manager would simply be reinforced (Quinn, et al., 1991).

In order to stimulate transformational behaviors in middle managers, it would be necessary to design a program that was based on more radical assumptions. In the design of LEAD, it was assumed that the middle managers were highly educated people with more skills than the traditional hierarchy allowed them to utilize. The objective of the program, therefore, was to transform, rather than inform, with the goal of helping middle managers alter existing assumptions and redefine their role in the organization. Middle managers were stimulated to envision new behaviors necessary for long-term organizational survival.

Over a four year period, all 3,000 middle managers in the company participated in LEAD in groups of approximately 50, representing all functions and divisions of the company. The program was divided into a one week core session followed six months later by a two-and-one-half day follow-up session. In the core week, participants engaged in frank assessments about the competitive environment, the company, and the role of middle managers. They were assigned to diverse learning groups where they had the opportunity to interact with managers from each of the different functions. Participants also had an opportunity to assess their own leadership behavior. At the end of the week, they were then invited to develop a specific change initiative for implementation upon return to their home unit. In developing their initiative, they were encouraged to ask themselves: "What unique contribution am I willing to undertake?" Before returning to

their home units, participants publicly committed to their change initiative in a video with the other members of their learning team. The team then maintained ownership and control of the video.

Before returning for the follow-up session, the participants had approximately six months to implement their change initiative. In terms of changing traditional assumptions of middle managerial behavior, the six-month interim period of the design was crucial. It was during this period that participants were able to test the new mindsets developed in the core week, to challenge the system, and to attempt change. After the six-month period, the participants returned for the follow-up session where they shared their experiences to fellow participants. This included sharing personal learnings and coping strategies for making change in a system that often discourages change. In an effort to stimulate organizational learning and to further empower middle managers, participants met with a senior executive in a session devoted to sharing comments and concerns about the new role for middle managers in the company.

From the first session of the program, the results were dramatic (Quinn, et al., 1991). Senior executives immediately started to take note of the change efforts being undertaken by program participants. During a severe economic downturn when many training programs were eliminated, a number of senior executives argued that LEAD was a "best practice" with significant returns on investment. The program continued until the entire population of 3,000 managers finished the course in the Spring of 1993. The program now continues, in modified form, as a transition program for those newly promoted to the middle management level.

A Model of Middle Managerial Change

Because the LEAD Program focused considerable effort on stimulating middle managers to become more transformational agents of change, it provides a context for answering some of the key research questions pertaining to the process of middle managerial change. First, what types of change are middle managers capable of undertaking? That is, can we identify a typology of change initiatives? Second, what individual and organizational characteristics facilitate or inhibit middle managerial change? And third, what are the outcomes of the different types of changes initiated by the middle managers. The answers to these questions should provide some insights into the transformational capacities of middle managers.

The above three research questions are integrated into a general model of middle managerial change (see Figure 1). The model suggests that individual characteristics (such as self-esteem and affect about work) and organizational characteristics (such as barriers to change and social support) will influence the type of change initiative undertaken by a given middle manager. We expect that how individuals see themselves and their work environment will influence their propensity to undertake transformational change. Thus, the model assumes that both individual mindset and organizational context shape middle manager's propensity to make transformational change. In turn, the model suggests that different types of change will have differential impacts on outcomes such as managerial effectiveness and future promotions. Given the tremendous expenditures on the LEAD program and the changing norms for middle managerial behavior, we expect that transformational changes will be evaluated more positively than transactional changes.

 Figure 1 about here

Individual Characteristics

Not all middle managers will embrace a strategic role in the organization (Floyd & Wooldridge, 1994); individual mindset is likely to influence who will accept the charge to become transformational. We expect that individuals with high self-esteem will tend to initiate transformational change because they have more confidence in themselves and what they can accomplish. Individuals with high self-esteem expect success and as a result are more vigorous and assertive in their actions. In contrast, individuals low in self-esteem have little faith in their ability to succeed and tend to yield in the face of opposition (Michener, Delamater, & Schwartz, 1990).

We further expect that individuals who have positive affect about their job will be more likely to initiate transformational change because they like their work and believe in what they are doing. Prior research has shown that individuals with more positive affect about work take more risks and are more creative in their jobs (Staw & Barsade, 1993), both of which would increase propensity for deeper changes.

Finally, we expect that individuals who are the "high flyers," those who are been promoted quickly, to embrace the charge for change. These individuals are attuned to the changing organizational context and

will be anxious to respond to the strategic effort to reorient middle managers. Furthermore, the allure of the power inherent in transformational behavior is likely to be attractive to this group. We further expect that middle managers who are plateaued will be more likely to resist the reorientation in role. We expect that these individual characteristics will be more important than demographics in explaining the types of change undertaken by the middle managers.

Organizational Characteristics

As described in the model above, in addition to individual mindset, organizational context is also expected to influence middle managerial change. Lewin's (1951) force field analysis suggests that the status quo will be maintained when organizational forces restraining change overwhelm forces driving change. On one hand, system barriers prompt middle managers to conform to the status quo or make transactional change and avoid deeper, transformational change (Kanter, 1983). Middle managers are likely to justify their lack of initiative-taking by acknowledging system barriers to change; these barriers become rationalizations for not taking action (Kanter, 1982). We expect that those who perceive strong barriers to change in their workunit and organization will be less likely to undertake transformational change because they see their work environment as resistant to change and mired in the status quo.

On the other hand, we expect that those individuals who perceive strong social support from their coworkers and superior will be more likely to undertake transformational change. Social support acts as a buffer or cushion in stressful conditions, giving individuals strength to tackle difficult issues (Kanter, 1982). Three particularly important mechanisms for providing support include sharing information and resources and access to key sociopolitical networks (Kanter, 1983). The supportive of superiors is particularly important for enhancing the middle manager's motivation to take risks and make change (Dutton & Ashford, 1993; Floyd & Wooldridge, 1994).

Outcomes of Middle Managerial Change

In the LEAD program, middle managers are encouraged to redefine their role and initiate transformational change in their organization. It is expected that change initiatives would vary widely on the transformational / transactional dimension. Because of the evolution of the role of middle managers in this

organization, we expect that managers who undertake more quantum, or second order, change initiatives will be seen as more effective. In addition, because of the newly espoused role for middle managers in this organization, those who make more transformational change will be more likely to be promoted in the two years following the change effort.

Method

Sample

Data was collected from a random sample of 191 middle managers. Each middle manager was drawn from a separate workunit of the organization, and all functions and divisions of the organization were represented. The middle managers were approximately 93 percent male, over 85 percent white, and had a mean age of 45.9 years. Seventy percent of the middle managers had at least a college education with many having some graduate training. Their mean tenure in the company was between 11 and 14 years, and their mean position tenure was just over three years. Though the demographics indicate a fairly homogeneous sample, the managers in this sample are representative of the general population of middle managers (Johnson & Frohman, 1989). Because the data were collected in conjunction with the transformational leadership program, a 100% response rate was achieved, minimizing the potential for selection bias in the sample.

Data Procedures and Measures

Quantitative and qualitative data on the middle managers and their change initiatives were gathered throughout the LEAD program. Different pieces of data were collected across three points in time: at the start of the core program (individual characteristics and social support), at the start of the follow-up program which occurred six months after the core program and after the middle managers had time to implement their change initiative (dimensions of the change initiative, barriers to change, effectiveness), and approximately two years after participation in the follow-up program (actual promotion). Because the individual characteristics and social support data were collected prior to the beginning of the LEAD program, they can be used to assess a some of the antecedent conditions of middle managerial change.

Individual Characteristics

Individual characteristic measures included age, gender, education, self-esteem, affect toward one's job, and prior promotions. Age, gender, and education were measured objectively by single item, categorical items. Self-esteem was assessed with 17 yes/no items created by Coopersmith (1967). After appropriate recoding, an index was formed by summing the true responses. It has a KR-20 reliability of .76 (a Cronbach alpha reliability is not appropriate because of the dichotomous nature of the individual items). Affect for one's job was measured with a clinical affect scale developed by the Institute for Social Research (Cobb, 1970). The affect scale has a satisfactory reliability of .75. Prior promotions was measured with a self-reported question asking their number of promotions in the last five years.

Organizational Characteristics

Social support from the middle manager's coworkers and immediate superior was measured with two social support scales developed by the Institute for Social Research (LaRocco, House, & French, 1980). The five-point Likert items were aggregated to create two scales, one for coworker support and one for superior support. Both achieved acceptable levels of reliability, .71 for coworker support and .72 for superior support.

Because no previously validated measures could be located in the literature to track the barriers to change experienced by middle managers making change, new items were developed. First, qualitative data from interviews and open ended surveys were gathered from approximately 100 LEAD participants. These qualitative data were content analyzed and used to identify 12 key barriers to change. Items were developed to assess each barrier and are provided in the Appendix. An exploratory factor analysis of these items was conducted with a varimax rotation and using the eigenvalue criterion to determine the appropriate number of factors (see Table 1). An oblique rotation produced an identical factor structure. A scale was created for each of the factors using the mean of the individual items. One factor (personal time constraints) did not achieve acceptable levels of reliability and is not retained in subsequent analyses (Nunnally, 1978). Each of the two remaining factors are described below.

Table 1 about here

Factor 1: Structural Constraints. The first factor describes the lack of strategic vision to guide change and the absence of a structure to support change. This factor reflects a top-down culture, short term thinking, a perceived lack of support from those above, a bureaucratic structure, limited rewards for change, a lack of vision for the future, and a tradition of nurturing the status quo. This factor suggests that the middle management role is embedded in a structure that generally discourages initiative taking on the part of middle managers. In examining the descriptive statistics, this factor was the second most commonly experienced set of barriers to change for the middle managers in the sample.

Factor 2: Embedded Conflict. The presence of embedded conflict factor reflects different types of conflict: across functions, across peers, and with subordinates. All three kinds of conflicts were identified as problematic. *Conflicts between functions* were particularly bothersome since they led to conflicting priorities, information hoarding, and intergroup competition. *Conflict among peers* was manifest in a lack of cooperation due to fear that someone else might take credit for their successes, place blame for failures, and compete in a system with limited opportunities for promotion. Finally *conflict among subordinates* reflected a resistance to teamwork because it may involve more work in the short run. Implicit within this factor is an inherent lack of trust in the system. From the descriptive statistics on the barriers, this factor was found to be the most commonly experienced set of barriers to initiative taking.

Change Outcomes

Immediately prior to the follow-up segment of the program (after the change initiative was implemented during the interim period of the program), an effectiveness measure was administered to a group of the participant's subordinates and his or her immediate superior. Given the diverse jobs represented across the sample of middle managers, no common objective measures of effectiveness were available. The five-point Likert perceived effectiveness measure described in Denison, Hooijberg, and Quinn (forthcoming) was adopted for this study. It includes multiple items that were aggregated to create an overall scale with a Cronbach alpha reliability of 0.77 for subordinate assessments and .70 for superior assessments. Individual subordinate responses were aggregated to the level of the middle manager following an F-test to check for

consistency in responses. The promotion variable was assigned a value of one if the manager was promoted within two years of their participation in LEAD, and zero if not promoted.

Dimensions of Change

At the follow-up session, specific questions about the actual change initiative undertaken by the middle manager were also asked and are described below. From the content analysis of the interview and open ended surveys describe above, two critical dimensions of middle managerial change were identified: the target of the change and the magnitude of the change. Items to measure both dimensions were developed and are included in the Appendix. Change *targets* include (a) the mindset and behaviors of the individual middle manager, (b) the unit in which the middle manager is a member, or (c) the larger organization. The *magnitude* of the change initiative may be expressed as transactional (i.e., first order) change or transformational (i.e., second order) change. A change was considered transformational or second order if the respondent strongly agreed with the following statements: the initiative was revolutionary, large in scope, multidimensional, and high in personal risk (the actual items are provided in the Appendix). In an exploratory factor analysis, these four items loaded onto a single factor with a Cronbach alpha reliability of .67 (see Table 2). A change magnitude scale was constructed using the means of the four items and is used in the analyses described below.

 Table 2 about here

Analyses

Our objective was to create a typology of middle managerial change initiatives and then relate the change types to individual and organizational characteristics and outcomes. We examined the initiatives undertaken by the LEAD participants in order to understand the kinds of change that, under conditions of high stimulation, can be expected from middle managers. Cluster analysis, using Ward's (1963) method, was employed to classify the 191 middle managerial change initiatives. Clustering is a process which allows cases (in this paper, change initiatives) to be arranged into similar groupings or types. Cases were clustered

according to the two dimensions of middle managerial change described above -- target (three potential targets) and magnitude of change (transformational versus transactional change). The potential for six, theoretically meaningful clusters existed based on the two dimensions: two levels of change magnitude by three potential change targets. While there is no objective method for determining the optimal number of clusters for any data set (Hambrick, 1984), a cluster solution should optimally provide highly distinct meaningful clusters which have a moderate number of cases in each cluster (i.e., no clusters with a very small percentage of total cases). Ward's procedure provides an index of the "cost" of further reducing the number of clusters in terms of the increases in the pooled within-group sum of squares. "When further clustering produces a discontinuity in the plot of the sum of squares versus the number of patterns, dissimilar groups are being combined and hierarchical clustering is terminated" (Joyce & Slocum, 1984: 728).

In order to more clearly describe and differentiate the five change clusters with respect to the two dimensions, one-way analyses of variance (ANOVAs) were conducted on each of the change dimensions (target and magnitude of the change). The significant differences in means across the clusters were used to distinguish the clusters from one another. In addition, we also conducted one-way ANOVAs for each of the individual and organizational characteristics and outcomes of the change initiative.

Results

A Typology of Change Initiatives

From an analysis of the various cluster solutions, the agglomeration schedule suggests that the five cluster solution was optimal. The five cluster solution provided a distinct set of clusters with no clusters having less than 12% of the cases. The five cluster solution is also meaningful theoretically; it includes first and second order work unit change types, first and second order organizational change types, and one individual change type that was neither clearly first order nor second order.

To describe the five change clusters, the results of the ANOVAs are examined (see Table 3). The results suggest that each cluster represents a distinct type of change initiative; there are significant differences between means on each change dimension across the five clusters. To further facilitate the

description of the clusters, information on the content of the cases making up each cluster (from written descriptions by the middle managers) is included in the descriptions below. An example of an actual change initiative as written by a LEAD participant is provided before the description of the cluster.

 Table 3 about here

Type 1: Management Style Change

Example: My initiative involved making major improvements to my personal leadership style. First, I worked to be more open and respectful of employee feedback and ideas. Second, I tried keep a better balance between coaching and criticism. Third, I attempted to push more responsibility downward by allowing my analysts to be the experts and defer to them.

The changes in this category tend to be alterations in personal management style (i.e., they are individual rather than unit or organizational changes). Type 1 is the only group to score above two on the individual target variable. The majority of the cases in the cluster, like the above example, describe efforts to change from a management style of direction and monitoring to a style of openness, trust, participation, and support. The new middle managerial mindset in this cluster tends to be manifested in behaviors such as listening, coaching, and delegating. Some of the initiatives suggest increased sensitivity on the part of the manager to issues such as customer focus, time management, quality, productivity, and safety. Unlike the remaining four clusters, this cluster is ambiguous in terms of change magnitude (i.e., first order /second order); this cluster has a low to middle score on the change magnitude variables, leaning toward transactional change. Changes initiatives of this type represented 17% of the sample.

Type 2: Transactional Within Unit Change

Example: We needed to improve productivity and efficiency in our department. Previous attempts to introduce measurement systems had been resisted. Because of the varied and non-standard nature of our workload, it was argued that measurement was not practical. I came up with a new method that measured total department test data rather than total

man hours. I was able to get a trial implementation going. I presented the method and the trial results to executive engineers and received enthusiastic approval.

Instead of management style changes such as the type described above, the target of these initiatives tended to be the work group or department in which the middle manager was a member (this cluster has the second highest mean on work unit target). The majority of the cases involved well reasoned attempts to improve things such as cooperation, information sharing, planning, monitoring progress, productivity savings, safety, quality, or customer satisfaction. Methods tended to include instituting new meetings, reorganizing, changing a set of procedures, instituting new measures, or setting new priorities. These changes tended to more first order, or transactional, in nature, involving a concrete, well understood problem, with few dimensions being changed (this cluster has the second lowest score on change magnitude). Changes of this type tended to be more incremental improvements to the status quo rather than radical change which challenged basic assumptions. In short, Type 2 changes were targeted at the workgroup or unit level and tended to be more incremental, first order changes. Changes of this type represented 21% of the cases.

Type 3: Transactional Organization Change

Example: The job of the Data Base Administrator (DBA) is to protect the data base from errors caused by hardware or software failure and to insure efficient access to the data. DBAs provide service to the data processing organization which consists of application programmers. The initiative was intended to get them to be more customer oriented. We undertook an initiative to increase responsiveness but the early results were negative. We kept at it and did a re-alignment between the DBAs and each of the three application groups in the data processing organization. This greatly increased the customer focus and improved the working relationships.

As the above example indicates, these changes are similar to the changes in Type 2 because they are also attempts to resolve clearly defined problems, or first order changes (this cluster has the very lowest score on second order change magnitude). In fact, as evidenced in this person's use of the pronoun "we", this individual appears to align his initiative with an effort already underway to refocus DBAs. Type 3

initiatives used methods similar to those employed in Type 2 initiatives, such as instituting meetings, reorganizing, changing a set of procedures, instituting new measures, or setting new priorities. The primary difference is that Type 3 initiatives tend to be aimed at the organization level rather than the level of the work unit (this cluster has the second highest mean on the organization target variable). These initiatives tend to cut across the boundaries of the manager's group or unit. As a result, their initiatives tend to be broader than Type 2 initiatives. In short, Type 3 initiatives tend to be concrete management improvements of a more incremental or first order nature and tend to be focused at organization level problem solving. Changes of this type represented 16% of the cases.

Type 4: Transformational Work Unit Change

Example: We are responsible for three different computer systems that provide divisional information. My department consisted of three stand alone sections. I reorganized it into five "natural work groups." The five natural work groups were set up around a customer focus. Instead of being responsible for a specific computer system, as in the past, the natural work group concept required all team members to be concerned with common data, by vehicle, and to provide a check and balance on data across systems. The result has been more consistent and higher quality data.

Like Type 2 initiatives, these changes tend to be targeted within a middle manager's unit or department (this cluster has the highest score on the work unit target variable). But unlike Type 2 initiatives, they tend to be more second order changes (this cluster has the second highest score on the change magnitude variable). These changes may involve a reorganization, a new strategy, technology, or practice, but they are much broader in scope and involve a reframing or reconceptualization of the status quo. In Type 4 changes, the problem tends not to be well-defined, but ambiguous. Consequently basic assumptions are questioned about the ways that things are currently done.

By way of illustrating the differences between first and second order changes, consider the differences in the two computer-related examples given for Types 3 and 4. In the Type 4 example, the more second order change, the change initiative is more complex; instead of simply reorganizing into different groups around the customer (as was the case with the Type 3 example), the nature of the task was also altered.

The structure, relationships, and information were restructured to align groups according to the vehicle product they served. More so than the first order changes (Types 2 and 3), descriptions of Type 4 initiatives tended to include claims of high impact on the system and on the bottom line. In short, Type 4 changes reflect second order, within unit level initiatives. Changes of this type represented 12% of the sample.

Type 5: Transformational Organization Change

Example: At the end of the LEAD core session, I made a commitment to substantially reduce product complexity on my [product lines]. This would be accomplished by deleting low take rate options, standardizing high take rate options, and logically grouping other related options. Initially I encountered considerable resistance. Then I got lucky in that there were some directives from the top to go in this direction. Now we have buy-in at all levels and across all functional areas. In fact, I am now under pressure to speed up the process.

Like the Type 4 initiatives, this type of change is of significant magnitude, reflecting the reframing of normal operating assumptions (this cluster has the highest score on the second order change variable). These initiatives involve a problem that is not clearly defined or ambiguous. Yet these initiatives tend to be targeted at a higher level of analysis than Type 4 initiatives. Like Type 3 initiatives, Type 5 initiatives tend to cross units or functions and sometimes the entire company (this cluster has the highest score on the organization target variable). These initiatives also tend to involve many people in the process of change. Other examples include eliminating an entire process at a plant, a reduction in workforce while increasing customer focus, involving suppliers in internal cross functional teams, a competitive bench marking study that allowed suppliers to critique company processes, a major reduction in conflict across two functions, and development of a new bid strategy that allowed the company to reenter a lost market. Clearly these are second order, system level changes. Changes of this type represented 34% of the sample, the largest proportion of change initiatives.

Given the barriers to change on the part of middle managers described in the previous section, the typology of middle managerial change initiatives is striking. Here 12% of the participants were willing to

engage in second order change efforts at the unit level and 34% at the organization level. Taken together, 46% of the sample of the middle managers, when stimulated, experimented with more transformational behaviors. First order changes at the organization (16%) or unit level (21%), were reported by 37% of the participants and the remaining 17% reported changes in management style. These data are encouraging in that they suggest that it is possible to stimulate large proportions of middle managers to experiment with new patterns of behavior -- transformational leadership behaviors. It is particularly impressive, given the previously described barriers to change, that so many middle managers were willing to experiment with transformational behaviors. In the next section of the paper, we examine the characteristics which distinguish those middle managers who embraced transformational change from those who initiated more moderate change initiatives.

What Differentiates the Change Types?

Descriptive statistics and correlations for all of the variables in the model are provided in Table 4. The results of the ANOVAs linking individual and organizational characteristics and outcomes to the change typology are provided in Table 5. In analyzing across the five types of change, each of the characteristics shows statistically significant differences with the exception of the barriers to change, managerial demographics, and effectiveness assessed by one's superior. Most of the data on individual and organizational characteristics were collected prior to participation in LEAD and thus can be examined longitudinally; however, the change barriers and effectiveness measures were collected at the same point in time the change initiatives were being implemented and consequently we are limited to discussing associations rather than cause and effect relationships. The promotion information was collected approximately two years after the change data were collected and can thus be used to assess one outcome of the change initiative longitudinally. The most interesting findings, relating to barriers to change, first and second order change, and the change types 1, 4, and 5 are described in detail below.

Tables 4 and 5 about here

Barriers to Change. We expected that middle managers who perceived many barriers to change would make a personal management style change while those who perceived few barriers to change would make deeper, more transformational changes. Contrary to expectations, a middle manager's perceptions of the barriers to change in their work environment were **not** found to distinguish the type of initiative undertaken. While all of the managers perceived significant barriers to change in their work environment (i.e., there were no significant differences in perceptions of the barriers across the five change types), almost half of the managers initiated deep, second order changes. These results suggest that middle managers, regardless of perceived barriers, can make substantial change in the organization. This finding suggests that it is not solely the context of the situation which determines what type of change a middle manager is willing to undertake. This leads us to inquire about the characteristics that do differentiate the types of change middle managers chose to engage.

Transactional and Transformational Change. Some interesting differences emerged between the those who undertook first order changes and those who undertook second order change initiatives. As expected, middle managers who reported higher levels of job affect and those with more supportive relationships from others prior to attending LEAD were likely to make Type 4 and 5 changes -- the transformational changes. In other words, individuals who had the most positive feelings about their job and relationships at work before attending LEAD were the ones most likely to be impacted by the program to make transformational changes. The individuals also were seen as more effective by their subordinates at the time of the follow-up. Thus, these results suggest that, in comparison to those making first order changes or personal changes, middle managers making second order changes felt better about themselves prior to the program and as a result were more likely to make deep change and ultimately be seen as effective by those who work for them. In addition to these differences between transformational and transactional change initiatives, findings regarding Types 1, 4, and 5 are particularly striking and are briefly described.

Individuals Who Made Type 1 Changes. Individuals who tended to report alterations in personal management styles had the lowest scores on self-esteem, job affect, and social support from coworkers and

superiors. They also had the history of fewest promotions in the past five years. At the time of the follow-up, subordinate scores on the effectiveness of those middle managers making Type 1 changes were the lowest of any change types. Those experiencing the most difficulties at the psychological and social levels prior to participating in the LEAD program were eventually seen as the least effective following their change initiative.

People who were experiencing the most difficulty prior to the program were the ones who tended to limit their initiative to personal or management style changes. Their own management style may have been the one component of their work environment over which they felt any personal control. However, it is not at all clear that their management style changes were successfully implemented. Given the limited social support from significant others prior to participation in LEAD, it appears that taking initiative further clarified the lack of support from those above them in terms of their assessments of effectiveness. It is not clear whether the LEAD program was able to effectively reach these people.

Individuals Who Made Type 4 Changes. Individuals who made second order changes at the group or work unit level had significantly higher scores than individuals making first order or management style changes on job affect, social support from coworkers and superiors prior to their participation in the program. They were also most likely to have been promoted frequently in the past five years. At the time of follow-up, these people were seen as very effective by their subordinates. The traditional role of middle managers has been to manage within the boundaries of his or her work unit. The managers who made Type 4 changes were impacted by the LEAD program to make second order change but within their traditional domain of control, their work unit. It is those managers who did not overstep the bounds of their traditional authority, who limited their change to their work unit, and who reported the strongest social support from their superiors that made transformational changes to their work unit. Their superiors were not likely to be threatened by these transformational changes because they were limited to the middle manager's own work unit.

Individuals Who Made Type 5 Changes. Like Type 4 managers, individuals who made second order changes at the organizational level had high scores on job affect and social support from coworkers

and superiors. At the time of the follow-up, these people received high scores from subordinates on managerial effectiveness (like Type 4 managers). In contrast to Type 4 managers, Type 5 managers had received fewer promotions prior to their participation in LEAD and fewer promotions after LEAD (only six percent of those managers were promoted compared to an average promotion rate of 13%). Though the age variable did not achieve significance, the trend suggests that middle managers making Type 5 change were also the oldest group.

The findings prior and current promotions suggests that this group may consist of those middle managers who have plateaued. Contrary to popular conceptions of plateaued middle managers as "dead wood" in the organization, these middle managers seem to be more characteristic of what Ettington (1992) has identified as successfully plateaued managers. She defines a successfully plateaued manager as one who, despite being plateaued, is still characterized by effective job performance and high job satisfaction. In a study of middle managers from the same population, she found these people to be very committed to the organization, in spite of the fact that they felt they had little chance to advance in the organization. Interestingly, it is this group of people who seem most ready to accept the challenges provided by the LEAD program and most ready to assume the risks manifest in transformational initiatives at the organizational level. They are also the most likely, at the conclusion of the program, to receive the highest scores from subordinates on perceptions of effectiveness.

The fact that managers who made Type 4 changes received more promotions following participation in LEAD than those who made Type 5 changes suggest that superiors find those making Type 5 change to be threatening because they make transformational change outside of their traditional domain of control, the work unit. These findings suggest that senior executives may be more comfortable with transformational middle managers who target their changes within the boundaries of their work unit than middle managers who target their changes more broadly in the organization.

Theoretical Implications

The above findings suggest that a variety of individual characteristics distinguish the types of change engaged by middle managers. While the findings regarding Type 1-4 changes are logical and expected, the

most provocative findings involve Type 5 change. The results suggest that the "successfully" plateaued middle managers, those who maintain a positive work and life orientation while plateaued, are the most likely to engage in transformational initiatives. Several possible explanations for this unexpected finding are offered below.

The first possible explanation has to do with a redefinition of the risk-reward ratio. It is not uncommon for a plateaued manager, no longer constrained by the political and ubiquitous race for promotion, to suddenly assume a new perspective regarding his or her role in the organization. With lessened pressure for political conformity, the person feels able to listen to his or her inner voice regarding the appropriate path for change. Freed from the worry of stepping on other people's toes, the person is able to challenge well-entrenched but outmoded assumptions and practices in the organization. They may become an ethical advocate for the common good by asking the questions that others are afraid to ask. The result is an individual who is willing to engage deep, transformational change which challenges the status quo. This rebirth may, but not necessarily will, lead to a reevaluation of the plateaued person by powerful others in the organization and a return to the promotion track. Basically this person becomes powerful when he or she gives up trying to be powerful.

The second possible explanation involves personal challenge. Ettington's (1992) findings suggest that "successfully" plateaued managers feel highly committed to the organization. She found strong evidence for the importance of providing these people with work they find challenging. Challenge was found to be more important than other kinds of rewards such as job rotation or lateral moves. Providing this type of personal challenge was precisely the mission of the LEAD Program. The middle managers were *challenged* to rethink their role in the organization. They were *challenged* to reform their work within their own domain of influence. They were *challenged* to pursue self-developed initiatives which they believed to be important to the organization. They were *challenged* to risk the status quo assumptions and practices in making change. Clearly, the "successfully" plateaued middle managers were most responsive to the challenge of the LEAD program. The importance of personal challenge in the workplace will continue to grow given today's employees higher expectations for challenging and meaningful work (Dumaine, 1993).

The third possible explanation has to do with notion of positive affect. People, particularly managers because their work tends to be relatively unstructured (Izraeli, 1975), with positive emotions, moods, and dispositions are found to be better performers (Staw, Bell, and Clausen, 1986). Managers with more positive affect tend to have higher scores on helping behavior, risk taking, negotiation skills, creativity, susceptibility to influence, interpersonal relations, and managerial performance than managers with negative affect (Staw and Barsade, 1993). The findings of this research support the predictive power of positive affect. The "successfully" plateaued managers came to the LEAD program with the strongest indicators of positive affect: job affect, self-esteem, and social support from coworkers and superior. They engaged the most transformational change and were perceived as the most effective by their subordinates following the change. In contrast, individuals who made the Type 1 changes came to the LEAD program with the least positive affect: low job affect, little social support, and weak self-esteem. They attempted a management style change, the least transformational with respect to the organization and viewed as the least effective by their subordinates following the change. Thus, positive affect prior to participation in the LEAD program was a powerful indicator of who was ultimately impacted by the program to make transformational change.

Practical Implications

These results confirm that in large organizations, even the most progressive ones, there are considerable barriers to initiative taking. These barriers are significant and are unlikely to ever go away in large hierarchically organized firms. The potent nature of the barriers accounts for the fact that, under normal conditions, middle managers lean toward transactional actions. It is possible however to stimulate middle managers to redefine their roles and experiment with new behaviors. The outcomes of the LEAD program suggest that middle managers can, in the face of considerable barriers, alter their behaviors to become transformational. They can take impressive initiatives that benefit both the company and themselves. Yet the redefinition of one's role is not stimulated by a well written memo from a senior manager. Real change requires real investment. The LEAD program represents a creative design, long term commitment, and heavy expenditure. The payoffs would not have transpired with a significant investment. Several implications for transformational middle management are described below.

First, senior management must be increasingly sensitive to attitude and morale issues given the findings regarding positive affect and transformational change. Individuals with the most positive feelings about themselves and their work, job, and relationships were found to have made the most transformational changes. Yet, bitterness among middle managers is at an all time high as their ranks are being decimated by the corporate trend to downsize. "The cynicism out there is frightening. Middle managers have become insecure, and they feel unbelievably hurt. They feel like slaves on the auction block" (Drucker, 1988 as quoted in "Caught": 80). If senior management is serious about unleashing the transformational energy of the "frozen middle," they must pay attention to the attitudes and feelings of their middle managers. As these results show, when stimulated to make change, middle managers with poor personal affect tend to be unsuccessful in their efforts.

Second, developing transformational middle managers may require much more than most senior executives want to consider expending. There is a strong desire to believe that change can be accomplished by the writing of a memo announcing that people need to behave differently. This proclamation may then be immortalized on a plastic card that people can carry with them wherever they go. Real change requires real investment. The LEAD program represents creative design, long term commitment, and heavy expenditure. But the long term pay-offs can be enormous. The value of the improvements resulting from the change initiatives have been impressive. Perhaps the most telling sign of all, in the midst of financial crisis, when almost all training and development funding was being reduced in the company, the company we studied preserved funding for the LEAD program because they believed the return on investment so high.

The findings in this paper also suggest that an important resource in many organizations may be unintentionally wasted or consciously destroyed. It is interesting that while many organizations seek to empower people and encourage greater leadership from middle managers, their downsizing efforts are targeted at exactly the people who might have the greatest impact -- plateaued middle managers. We find that it is the plateaued managers who are most likely to take the greatest risks on behalf of the company. The assumption that plateaued managers should be the initial targets of downsizing efforts through such

things as early retirement buyouts may be terribly destructive to organizational responsiveness. The organization may be losing precisely the people who can enhance the organization's responsiveness through transformational change. While it is true that many managers may be plateaued and less likely to respond to stimulation, it is likely that every large organization has a small army of plateaued managers waiting to receive a thoughtful, honest and concerted call to arms.

Limitations and Directions for Future Research

Though this paper provides an important first step in understanding the transformational capacities of middle managers in large organizations, it has several limitations. First, the study is primarily exploratory in nature. Only a skeletal theory has been developed on the change process of middle managers. Future research should draw on these exploratory research findings to develop a rich theoretical framework which can then be empirically validated with new data. Second, because of the cross-sectional nature of the change barrier and outcome data regarding the change initiatives, we are able to speak only of associations between variables rather than causation. Future research must create longitudinal designs to more appropriately understand the cause-and-effect relationships of the framework.

Third, the generalizability of the findings is limited. In spite of the richness of the data analyzed in this study, the research was nevertheless conducted in a single organization. Because this organization was primarily manufacturing in orientation, generalizability is unknown for more service-oriented companies, not-for-profit companies, or governmental bodies. Generalizability is also limited given the homogeneity of the sample. Though the sample is fairly representative of the general population of middle managers, women and minorities are generally underrepresented in the sample. The transformational capacities of these groups may be quite different than the sample examined here. Thus, future research should examine the transformational capacities of middle managers using more heterogeneous samples and across a larger number of firms.

A final limitation of the study may be that the managers may not be truthfully reporting information on their change initiative. In spite of the fact that the managers were assured that their individual data would be kept in confidence from the organization, it is possible that individuals had a bias toward reporting more

transformational change initiatives. However, given the assurances of confidentiality and the fact that an empirical measure of social desirability was not found to be significantly related to any of the change initiative variables, we do not believe that managers exaggerated their self-reported change initiatives to appear more transformational. Nevertheless, future research should tap multiple assessments of middle managerial change initiatives to completely discount the possibility of response bias.

In spite of these limitations, this paper does make several contributions to the literature. It offers some initial theoretical notions about the process by which middle managers can become transformational change agents. The study indicates that both individual characteristics and the organizational context influence the propensity of middle managers to embrace transformational change. In this way, the study is a first step in developing a nomological network of middle managerial change in contemporary organizations. The study also offers some insights in the process by which the role of middle managers can be transformed and insights on the extent to which middle manager can be empowered to be effective change masters in contemporary organizations. A particular strength of the study is the richness of the data which includes individual characteristics collected prior to the LEAD program, specific information about the change initiative collected at the follow-up segment of the program, and promotion data collected approximately two years following the program. The findings suggest that older managers who have successfully confronted the crisis of plateauing created the most transformational change when stimulated by the LEAD program. Their transformational approach to change may be the result of a redefined risk-reward ratio of the plateaued middle manager, the plateaued middle managers' appetite for new challenges, or their tenacious positive affect. Whatever the reason, these "successfully" plateaued middle managers made a difference in the organization to which they were so highly committed. These findings provide fertile ground for future research on middle managerial change and send warning signals to organizations who have written off plateaued middle managers as "dead wood."

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Appendix Measures

Target of the Change Initiative (7 point Likert scale)

The focus of my change initiative was on:

1. Personal change
2. Group or unit change
3. Organization change

Magnitude of the Change Initiative (5 point Likert scale)

My change initiative could be described as:

1. High in personal risk
2. Major in scope
3. Revolutionary
4. A change in many dimensions of the current system

Barriers to Change (5 point Likert scale)

The following were barriers or constraints to my initiative:

1. **Bureaucratic Structure:** "There are too many levels to get approval for something new." "There is too much paperwork and red tape."
2. **Time limitations:** "I have no time to think about making changes in the system." "I am too busy fighting fires to be future looking."
3. **Short-term Thinking:** "There is too much of a short term focus in the organization -- the perspective is too narrow." "The results of the initiative would take too long in coming."
4. **Limited Rewards for Change:** "There are few rewards for making change." "There is no incentive for taking risks."
5. **Tradition for Status Quo:** "There is no precedence for change initiatives, and there is skepticism that change can occur." "It is too hard to break established habits ingrained in the status quo."
6. **Top Down Organizational Culture:** "The culture is too top down oriented and we have little freedom to initiate changes." "The culture discourages change."
7. **Lack of Vision:** "There is a lack of common vision of what the future should look like." "There are competing visions of the future."
8. **Lack of Top Management Support:** "There is a lack of top management support." "The top management is indecisive -- what do they really want?"
9. **Functional Conflict:** "The functional areas have goal conflicts and different priorities." "There is an unwillingness to share information across functions for fear of losing control." "Functions are too competitive."
10. **Conflict with Subordinates:** "There is a lack of interest and commitment in teamwork." "There is a negative attitude among group members because the initiative requires more work in the short run."
11. **Conflict Across Peers:** "There is a lot of finger pointing to avoid blame." "There is suspicion that some group members may try to steal the show."
12. **Non-work Commitments:** "The project will overlap with personal and family responsibilities." "I am working too many hours already and can't take on more responsibilities."

Table 1**Factor Analysis of the Barrier to Change Items**

Item	F1	F2	F3
Structural Constraints			
Top Down Organizational Culture	.64	.23	.04
Short-Term Thinking	.62	.04	.25
Lack of Top Management Support	.52	.22	-.03
Bureaucratic Structure	.52	.04	.11
Limited Rewards for Change	.51	.09	.22
Lack of Vision	.50	.28	-.04
Tradition for Status Quo	.48	.25	.16
Embedded Conflict			
Conflict with Peers	.17	.61	.18
Conflict with Subordinates	.18	.57	.28
Functional Conflict	.33	.46	.05
Personal Time Constraints			
Non-Work Commitments	.08	.06	.50
Time Limitations	.29	-.06	.45
Eigenvalue	3.84	1.48	1.25
% Variance Explained	27.4	10.6	8.9
Cronbach alpha reliability	.77	.66	.52

Table 2

Factor Analysis of the Magnitude of Change Items

Item	F1
Revolutionary Change	.66
Change is large in scope	.64
Change is multidimensional	.52
Change is high in personal risk	.52
Cronbach alpha reliability	.67

Table 3**Summary of Cluster Analysis Results: Cluster means, and ANOVA F-statistics**

	Cluster 1 (n=32)	Cluster 2 (n=42)	Cluster 3 (n=31)	Cluster 4 (n=21)	Cluster 5 (n=65)	F- Value (P=prob. level)
<u>Change Magnitude</u>						
2nd vs 1st Order Change (Hi = 2nd Order Change) (rank)	3.46 (3)	3.26 (4)	2.97 (5)	3.84 (2)	4.03 (1)	17.75 p=0.000
<u>Change Target</u>						
Individual Target (rank)	4.28 (1)	1.57 (2)	1.13 (4)	1.43 (3)	1.12 (5)	183.18 p=0.000
Work Unit Target (rank)	2.44 (3)	4.00 (2)	1.90 (4)	4.29 (1)	1.74 (5)	94.20 p=0.000
Organization Target (rank)	1.69 (5)	2.05 (4)	3.64 (2)	3.22 (3)	3.84 (1)	78.68 p=0.000

Cluster 1 = Managerial style change initiative

Cluster 2 = Transactional within unit change initiative

Cluster 3 = Transactional organization change initiative

Cluster 4 = Transformational within unit change initiative

Cluster 5 = Transformational organizational change initiative

Table 5

Summary of ANOVA Results across the Five Clusters: Predictors, Descriptors, and Outcomes

	Cluster 1 (n=32)	Cluster 2 (n=42)	Cluster 3 (n=31)	Cluster 4 (n=21)	Cluster 5 (n=65)	F- Value (P=prob. level)
<i>Individual Characteristics</i>						
Gender	1.91	1.95	1.94	2.00	1.95	.74
Age	4.59	4.33	4.52	4.48	4.99	1.87
Education	5.75	5.88	6.06	5.86	5.89	.16
Self-esteem	29.6	31.6	31.4	31.5	31.7	3.26**
<i>Organization Characteristics</i>						
Structural Barrier	3.28	3.03	3.07	3.14	3.15	.60
Embedded Conflict Barrier	3.04	3.07	3.25	3.25	3.21	.47
Job Affect	3.67	3.72	3.75	3.95	3.94	3.20**
Social Support Coworkers	2.95	3.06	3.11	3.26	3.36	3.02**
Social Support Supervisor	2.77	2.86	3.01	3.33	3.20	2.44*
Prior Promotions	2.03	2.33	2.26	2.43	1.92	1.97+
<i>Change Outcomes</i>						
Effectiveness (Subordinates)	3.61	3.84	3.86	4.03	4.00	2.85*
Effectiveness (Superior)	3.84	3.96	3.84	4.08	3.85	.49
Promotion (percentage)	.15	.15	.21	.17	.06	1.18