A study examined organizational culture change to determine the effectiveness of a communication based intervention program to increase productivity and motivation. The cultural change was measured through a triangulation approach combining questionnaires, interview data and direct observation. Pre- and post-intervention data were obtained in the two-year study from 243 employees of a governmental organization in the Pacific Northwest. A representative sample was interviewed and subjects completed the Organizational Culture Scale, which provides quantitative data in teamwork/conflict, supervision, involvement, climate/morale, information flow, and meetings. Additionally, subjects were directly observed in the work context. Results revealed that the organization changed significantly with regard to information flow, involvement, climate/morale, and meetings. Findings suggest that the aspects of intervention which seem to have the greatest input on culture change are communication skills training for the entire organization, involvement in decision making, and establishment of task teams. (Four tables and two figures of data are included; 47 references and three appendixes containing the organizational culture scale, operational definitions and coding decision rules are attached.) (KEH)
Communication Intervention in an Organization: Measuring the Results through a Triangulation Approach

by

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ABSTRACT

TITLE: Communication Intervention in an Organization: Measuring the Results through a Triangulation Approach

The present paper describes a communication intervention program designed to change the culture of a governmental organization towards higher productivity and job satisfaction. This cultural change is then measured through a triangulation approach. Specifically, questionnaires, interview data, and direct observation were combined to study the areas of cultural change.

Subjects completed the Organizational Culture Scale (OCS) before the intervention and a representative sample was interviewed. Then, the entire organization participated in an organizational development program. Two years later, subjects again completed the Organizational Culture Scale and were interviewed. The post-intervention results were statistically analyzed and compared to the pre-intervention data. Finally, subjects were directly observed in the work context. These observations and the interview data placed in context the results of statistical analyses by specifying and clarifying perceptions of change.

The findings suggest that the organization changed significantly in the following dimensions: Information Flow, Involvement; Climate - Morale, and Meetings. Specific implications for cultural intervention in organizations are discussed.
This paper describes an intervention program designed to change the culture of an organization from hierarchical and authoritarian to participative and involved. This cultural change is then measured through a triangulation approach. Specifically, the Organizational Culture Scale (OCS) (Glaser, Zamanou, & Hacker, 1987) is combined with interviews and direct observation to assess areas of cultural change.

Even though many researchers have advocated culture change as an effective method to increase productivity and motivation (Marshall & McLean, 1985; Johnson, 1985; Tunstall, 1983; Gagliardi, 1986), literature in the area still remains more theoretical than operational. This study represents a first longitudinal, empirical attempt to assess cultural change in an ongoing organization. Employing a triangulation approach, a comparison is made between pre- and post-intervention data. Pre-intervention data were collected in January and February of 1986. Organizational members completed the Organizational Culture Scale (OCS), and a representative sample was interviewed. The OCS (Appendix A) provides quantitative data in six areas: 1. Teamwork & Conflict, 2. Supervision, 3. Involvement, 4. Climate & Morale, 5. Information Flow, and 6. Meetings (Glaser, Zamanou, & Hacker, 1987).

Then, the organization participated in an involved organizational development program. Two years later, post-intervention data were collected in order to evaluate cultural change. Organizational members completed the OCS, and all subjects, who had been interviewed prior to the intervention, were interviewed again. New subjects were also interviewed. The interviews provide a thematic analysis of organizational culture. This analysis compares pre-intervention cultural themes to post-intervention ones. Finally, ethnographic observations were conducted to aid in the interpretation of the OCS and interviews. Direct observations explain and illustrate the results of questionnaires and interviews.

Organizational culture is frequently described in terms of shared meaning - patterns of belief, symbols, rituals, and myths that evolve over time and function as the glue that holds the organization together (Baker, 1980; Siehl & Martin, 1982; Pettigrew, 1979, Smirichich, 1981; 1983). Others (Louis, 1980; Meyer, 1982) add that culture consists of shared values and beliefs that not only bind people together, but also explain their worlds. Kreps (1984) defines culture as the "collectively held underlying logics and legends about organizational life and the organization's identity." Others stress the organization's shared expectations for consensually approved behavior as the most important component of culture (Schwartz & Davis, 1981; Silverzweig & Allen, 1976; Spradley & McCurdy, 1972; Van Maanen & Barley, 1984). Finally, Schein (1984) provides the most comprehensive definition of culture as "the pattern of basic
assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid and thus to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 3).

Even though multiple definitions exist, most researchers agree on the importance of culture to the functioning of the organization. Specifically, culture plays an important role in the socialization of new members, in explaining the history of the organization, in prescribing the appropriate organizational behaviors, and in creating a collective vision of where the organization is heading. Consequently, if the goal is to change aspects of the organization in an effort to increase motivation, job satisfaction, and possibly productivity, the culture must be managed.

With all that has been written about organizational culture, relatively few have tried to operationalize and measure the concept. Much work on organizational culture has been conceptual and theoretical more than empirical in nature (Pacanowsky & O'Donnell-Trujillo, 1983; Gudykunst, Stewart, & Ting-Toomey, 1985). This is understandable given the methodological challenges of assessing culture in an organizational setting. If organizational cultures are created through symbol, ideology, belief, ritual, and myth, then describing and documenting a given culture is a complex methodological task. One of the first attempts was made by Glaser, Zamanou, and Hacker (1987), who measured organizational culture through a triangulation approach. Specifically, they employed reliably coded interviews to help interpret and place in context the results of statistical analyses. The subjects for this study were government employees representing every level and division in their department. All subjects completed the Organizational Culture Scale, and a representative sample participated in 45 minute critical incident interviews. From the analysis of these data emerges a description of the organization's culture, the validity of which is enhanced by the triangulation of coder interpretations with standardized questionnaire measures (Babbie, 1983). Specifically, six dimensions of culture were established in this study. These were: Climate & Morale, Involvement, Teamwork & Conflict, Information Flow, Supervision, and Meetings. The present study employs many of the same methods to measure culture change.

Many researchers have argued that a new paradigm for the study of culture is now emerging (Faules, 1988; Rodrick, 1988). This perspective recognizes that where we look from determines what it is that we will see. Furthermore, Rodrick (1988) suggests that no one vantage point provides a complete picture. An intriguing feature of the emergent paradigm is a focus on multimethods (Faules, 1982; Cheney, 1983; Glaser
et al., 1987). These researchers combine quantitative and qualitative methodologies. Glaser et al. (1987) assert that "triangulation is designed to maximize a single method's benefits while neutralizing its limitations". Neither Faules (1982) nor Cheney (1983) suggest that such triangulation results in convergence, a honing in on the "true" position of the phenomenon being investigated. Rodrick (1988) argues that within the emergent paradigm multimethods are perspectival: each method reveals a partial, situated truth. Whatever the reasons for using it, triangulation has been advocated as the best approach to organizational research.

Organizational change has received considerable attention for the last several years. Many researchers (Lundberg, 1985; Siehl, 1985; Thackray, 1986) agree that organizational change implies cultural change, and that implementing it is a challenging process. Deal and Kennedy (1982) operationalize this cultural change as "... people telling different stories to each other to explain what is occurring around them, people spending their time differently on a day-to-day basis - calling on different accounts, asking different questions, carrying out different work rituals" (p. 158). Siehl (1985) suggests that "perhaps culture management is really this: Articulating a possible culture, coming to agree that it is desirable, and then attaining it through the sharing of desired values" (p.139). Many organizations (i.e. McDonalds, GE, Hewlett-Packard, AT&T) have consciously tried to change their cultures to achieve their goals of higher productivity and employee motivation (Cline, 1988; Tunstall, 1983).

Change appears in many different forms. Brager and Holloway (1978) define change as a modification of the actions and interactions of numbers of organizational participants, "resulting from alterations 1) in the people themselves, 2) in the organization's technology, or 3) in the organization's structure (p.18). Specifically, people focused change assumes in some measure that the participants perform unsatisfactorily as a direct result of their own insufficiencies (p. 18). Technological change refers to alterations in the agency's services --the procedures and activities which contribute to organizational output. The change may be directed to the type of service itself or the alterations within a particular modality (p. 19). Finally, structural change, refers to alterations in ways in which the members of the organization are arranged in relation to one another, the relationships that prescribe authority and responsibility (p. 20). Examples of structural change are shifts in patterns of communication, the creation of new roles or the redefinition of current roles and redistribution of rewards and responsibilities (p. 20).

Change in organizations is often resisted. Theorists have suggested different approaches to facilitating acceptance of change in an organization. Liepzig (1988)
suggests that one could change a corporate culture by changing communication policies. Specifically, he advocates a change in communication of core values and objectives and a built in reward system for adherence to them. Coch and French (1948) support that "it is possible for management to modify greatly or to remove completely group resistance to changes...This change can be accomplished by the use of group meetings in which management communicates the need for change and stimulates group participation in planning the changes" (p. 531). Participation in decision making is very important in dealing with the stress of the employees (French, Caplan, & Van Harrison, 1982, p. 113). Doyle (1979) proposes the use of neutral facilitators, so that in the meetings managers and workers can be equal in voicing their opinions. Kilmann and Mitroff (1979) view the use of outside consultants as the best method to implement change. They advocate that the use of consultants is essential because they can see, as outside observers, where the problem is and how to correct it. The role of the consultant in helping the organization to change is 1) to sense the problems that have been or could be created by the change, 2) define them, 3) derive solutions, 4) implement solutions, and 5) evaluate outcomes. The organizational development program employed in this study incorporated most of these findings.

Conducting ethnographic research is a challenging and time consuming endeavor. However, through direct observation and interviews one gains a perspective of how organizational members view their culture and how they behave within the organizational context. Therefore, this project combines ethnographic measures with quantitative methods to gain a multifaceted picture of organizational culture change.

**Intervention**

The intervention began in December, 1985 following an organization-wide needs assessment which included the administration of the Organization Culture Scale (OCS) as well as critical incident interviews with a representative cross section of organizational members. The intervention was designed to change the culture from authoritarian and hierarchical to involved and participative. To accomplish this objective, 6 areas were targeted in the needs assessment:

1. **Teamwork:** Breakdowns in teamwork were apparent between labor-management, union-non-union, office-field, across divisions and sections, and even among the executive management group.

2. **Information Flow:** Employees described the organization as "guarded" and "secretive." People lacked enough information to understand the "big picture" or even
to understand their own job tasks. They reported that when changes were made, they rarely knew why.

3. Involvement and participation: Employees reported that their ideas were not valued by management, that they had little say in decisions that affected their work, and that even though they had suggestions for improving work processes, their opinion was not needed.

4. Morale: Employees described morale as an "all time low." Repeatedly mentioned were lack of trust and respect for workers. Many reported that the organization treated people unfairly and inconsistently.

5. Meetings: Many employees complained of no opportunity to present ideas in meetings. In some instances the flow of information at meetings was always unidirectional—from supervisor to workers. Others reported that when discussion was allowed, few participated. Most agreed that decisions were rarely made and when they were made, seldom translated into action.

6. Supervision: Employers at all levels were dissatisfied with the quality of supervision they received. They reported that they rarely—if ever—got performance feedback, and that when they did it was highly critical. Employees at every level, from line workers to executive managers, reported seldom receiving praise for their contribution to the organization.

The intervention, which resulted from this assessment, had two main tracks: 1. teambuilding and 2. Training. These tracks are analyzed and exemplified in the remainder of this section:

1) TEAMBUILDING

Teambuilding had three main targets: a) the executive management team, b) five division management teams and c) a cross-functional, multi-level team mandated to make recommendations for improving teamwork across the organization.

a) Executive Management Team

To initiate the intervention, the Executive Management Team was taken on a 2-day facilitated retreat where the results of the OCS and critical incident interviews were first presented.

This retreat was the first such event for this group, and it was the first time the work "team" was used to describe their relationship. From the retreat onward they began to label themselves as the "Management Team." At the two-day retreat, the
managers achieved consensus on mission and values. They also agreed to: 1. generate ways to encourage employee input, 2. develop management skills for all supervisory staff, 3. improve meeting productivity, and 4. establish better communication and rapport with each other.

There was also a 5 hour training component in which they learned communication skills for coping with criticism and anger, raising delicate issues, and praise. They applied these "communication ground-rules" in a series of focused dyadic interactions with each other. In these 15 minute conversations, management team members had an opportunity to say what they wanted more of, less of, and continued from each other member.

b) Division Management Team

A similar model was then applied to each of the 5 division management teams. Prior to the intervention, most of the 5 division managers were unclear about which members of their staff were actually members of their management team. Most had managed their divisions as individuals, and had not used a management team approach. Once the management teams were identified, division specific needs assessment reports were presented to each division management team. From each of these meetings a divisional work plan was developed to address division-specific needs.

Then each division management team member was taught to facilitate a collaborative problem solving process. They identified a key problem in their division on which employee input would be valued. Then they appointed a team of employees, representing every level and function in their division, to meet collaboratively to examine the problem and make recommendations to the division management team. Following are examples of problems targeted:

1. What can we do to increase the efficiency, productivity, and quality of our service?
2. How can we improve communication flow between our division and the others?
3. How can our division establish a more orderly, timely flow of projects and reach our deadlines?
4. How can we increase efficiency and productivity while still maintaining a user-friendly orientation?

PRIDE: A Cross-functional, Multi-level, Organization-wide Team

Perhaps the most inspiring application of teambuilding was the PRIDE team (Participation and Recognition for Information exchange between the Department and its Employees). This team had representatives from all divisions and levels,
from union officers to executive management.

The Executive Manager sent letters to all employees describing the team and asked each person to recommend the one employee that would do the “best job of representing you.”

The PRIDE team was given a 4 part mission:

1. To improve information flow by indentifying what information was important to share with employees and then developing mechanisms for communicating this information.
2. To increase understanding among employees of each division’s function and mission.
3. To improve employee identification within the work units and the department.
4. To increase recognition of employees and department achievements throughout the department, organization, and community.

Considerable skepticism existed as to whether management would accept any of the PRIDE team’s proposals. In fact, most every recommendation was accepted and put into action. As a result of PRIDE team suggestions, the following changes were made:

1. Each supervisor was expected to hold a brief daily or weekly meeting designed to encourage a two-way exchange of information concerning approaches to work assignments. This was an opportunity for employees and supervisors to review and preview jobs. Supervisors were held responsible for getting information on the results of meetings to their managers.
2. A departmental newsletter was introduced. The editorial board was composed of employees from each division.
3. The department’s entire performance review system was modified.
4. Line employees were invited to attend management team meetings on a rotating basis.
5. A department handbook was developed, including a list of divisions, sections, and functions; key contact people; photos and job descriptions of each employee.
6. To insure more consistent involvement of employees in the review of specifications for the purchase of new equipment, each division established an equipment task team, including both operators and supervisors.
2) TRAINING

To transform an organization's culture from authoritarian and hierarchical to participative and involved necessarily requires more than the sorts of teambuilding efforts previously described. Managers, supervisors, and employees all needed to learn new communication skills and strategies. Participative leadership requires skills never acquired by most of the managers in this organization. Modules were developed in each of the following areas for every supervisor and manager in the organization:

1. Correcting Employee Performance
2. Responding to Criticism and Anger
3. The Power of Praise
4. Making Meetings Work
5. Collaborative Problem Solving

Employees also received training to help them to make the transition to a more involved culture. There was a 3 module program:

1. Raising Delicate Issues
2. Coping with Criticism and Anger
3. The Power of Praise

Finally, a Facilitator Training Program was designed to teach basic process consultation skills to selected organizational members, representing every level and division. The goal was to fade out consultant contact and replace it with in-house organizational facilitators. Modules in this program were:

1. Active Listening
2. Conflict Management
3. Brainstorming
4. Collaborative Problem Solving
5. Task/Maintenance Roles
6. Getting to Yes

These modules were taught through a four-step behavioral shaping process: Conceptual presentation, dramatization, written practice, and behavioral rehearsal. Each component of the learning model is described below.

1. **Conceptual Presentation**
   
The first phase in developing each skill involved a brief presentation of the concepts underlying that skill. This presentation explained the reasons for each action step within the skill, and clarified how the skill was used in different situations targeted in
the needs assessment. The purpose was to ensure that participants understood exactly how the skill worked and why it was effective.

2. **Dramatization**
   In the second phase, the instructors presented scenarios based on situations and experiences described in the needs assessment interviews. These dramatizations illustrated:
   - how communication could unintentionally break down when a particular skill set was absent.
   - how those same situations could evolve cooperatively and productively when a target skill was used.

   These dramatizations were based on a series of key step-by-step actions. The purpose was to clarify the actions making up each skill set being taught. Tailoring the dramatizations to situations encountered by organizational members ensured that the modeled actions were relevant to the participants' experience.

3. **Written Practice**
   The next phase, written practice, was a key step in assisting participants to comfortably perform target skills. Challenging situations, developed through the needs assessment interviews, were described in workbooks. Groups of participants worked together to analyze the situations and develop written responses using the target skill. Written practice allowed participants to become more comfortable with each skill before they practiced verbally. In this way, written practice prepared participants for a positive behavior rehearsal experience.

4. **Behavioral Rehearsal**
   Again drawing from the needs assessment interviews, the participants were presented with actual conflict situations experienced on the job. Individuals chose situations particularly relevant to them, and were given time to prepare and practice a productive response. Behavior rehearsal gave each participant an opportunity to verbally practice the target skill in a personally relevant situation.

   The twenty-one month long intervention program concluded in September, 1987. The OCS was readministered to the whole organization in January, 1988, to assess which aspects of the organization's culture had changed, and which areas needed further development. To interpret the questionnaire results, the administration of the scale was followed by interviews with key people from every level and division in the organization.
The following hypotheses were then tested in the present study:

H1: Ratings at Time 2 will be significantly higher than those at Time 1 for all work categories combined in all 6 subscales.

H2: Ratings of Members of Teams at Time 2 will have higher ratings than Non-Members of Teams.

H3: There will be a significant difference between work categories in the ratings of the 6 subscales at Time 1.

H4: There will not be a significant difference between work categories in the ratings of the 6 subscales at Time 2.
METHOD

Description of Subjects

The governmental organization under study is a six-division department in the Pacific Northwest, composed of 322 employees. The sample in this study consisted of subjects from every level and division in the organization (line workers, supervisors, clerical staff, professional-technical staff, and top management).

Subjects responded to the Organizational Culture Scale (OCS) and were interviewed twice within a two-year period. A total of 243 subjects responded to the OCS at Time 1 of data collection (January 1986). A total of 190 subjects responded to the OCS at Time 2 of data collection (January 1988). A representative sample of 76 employees participated in interviews at Time 1. This sample came from every level and division in the organization. Sections of the organization with larger numbers of employees were represented in the interviews with greater numbers of subjects. A representative sample of 94 employees from every level and division in the organization participated in interviews at Time 2 of the project. All subjects interviewed at Time 1 were again interviewed at Time 2.

Interviews took place in a private conference room in the organization. Employees were given time off work to participate in the interview. However, only the researcher kept a list of the names of the people interviewed. Finally, the researcher directly observed employees in each division in the actual work context.

Assessment

Organizational Culture Scale (OCS)

The Organizational Culture Scale (Appendix A) is a 5-point Lickert scale. It includes 31 items which belong to the following six subscales: teamwork and conflict, climate and morale, supervision, involvement, information flow, and meetings. Instructions on how to complete the scale, including an example, were given to each subject.

Interviews

At Time 1, 76 employees were interviewed. They represented every level and division in the organization. Interviews followed a critical incident format, beginning with a general question and following up with probes that asked for specific examples. Each interview lasted approximately 30 minutes. At Time 2, the researcher interviewed a sample of 94 organizational members, representing employees from every level and division within the organization. These interviews also lasted approximately 30 minutes.
At Time 2, two groups of subjects were interviewed: Those that had been interviewed at Time 1, and new subjects who had not been interviewed before. These interviews also followed a standardized, open-ended, critical incident format, beginning with a general question, and following up with probes that ask for specific examples, situations, and illustrations of a particular point.

Observational Data

The researcher became a "known participant observer" in the organization. This form of participant observation, in which members of the culture know that they are being observed, is the strongest ethnographic research position (Germeroth, 1988). For an initial period of 2 months, a researcher was immersed in the organization so that her presence would not influence the behavior of organizational members during field observations. She was introduced to the whole organization through an article in the organizational newsletter. All employees receive a copy of the newsletter every month with their paycheck.

The researcher, first submerged herself in the organization and completed descriptive observation of organizational life. The purpose of this stage was to familiarize herself with the organization. She then initiated the focused observation stage. Spradley (1980, p. 77) suggests that ethnographers should choose certain cultural aspects on which to focus their observations. This choice should be based on the ethnographer's interests combined with comments by key organizational members or "consultants". A consultant is defined by Werner & Schoepfle (1987a) as a person with expert knowledge in the field, with whom ethnographers discuss their observations and ask for advice. For the present project, the Department Director's Administrative Assistant and the secretary of a key division manager served as consultants. They were both located in central parts of the organization, they were highly involved in organizational life, they had been holding positions in the organization for over five years, and they interacted with large numbers of employees daily. Finally, the focused observation stage led to selective observation (Spradley, 1980). Specifically, this stage included observations in the communication areas investigated by the OCS, namely Teamwork, Climate, Information flow, Supervision, Involvement, and Meetings. Specific communication episodes were recorded.

Finally, other types of hard data (i.e. comments, ratings, letters from the public), as well as other cultural artifacts (newsletters published by the organization, etc.) were analyzed to assess cultural change.
RESULTS

Statistical Analysis

Each major research question was examined in this phase of the project. The results of the analyses of the Organizational Culture Scale (OCS) are then summarized for each hypothesis:

H1: Ratings at Time 2 will be significantly higher than those at Time 1 for all work categories (i.e., the entire organization) in all 6 subscales.

The first hypothesis was partly confirmed. Ratings for the entire organization (all work categories combined) were significantly higher at Time 2 than those at Time 1 for the following subscales: Information Flow (t=2.64, p<.006), Involvement (t=2.04, p<.04), Meetings (t=3.56, p<.0004), Climate and Morale (t=10.19, p<.0001). Ratings at Time 2 were not significantly higher than those at Time 1 for the following subscales: Teamwork and Conflict (X1= 3.27, X2= 3.37), Supervision (X1= 3.14, X2= 3.19).

However, differences were in the hypothesized direction (higher means at Time 2 than at Time 1.) Table 1 presents the comparison of Time 1 and Time 2 Means and Standard Deviations for the entire organization. Figure 1 illustrates the comparison of Time 1 and Time 2 ratings by subscale.

<table>
<thead>
<tr>
<th>Subscales</th>
<th>IF</th>
<th>MTGS</th>
<th>INV</th>
<th>C&amp;M</th>
<th>T&amp;C</th>
<th>SUP</th>
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<tbody>
<tr>
<td><strong>Time 1</strong> Mean</td>
<td>2.58</td>
<td>2.69</td>
<td>2.75</td>
<td>2.10</td>
<td>3.25</td>
<td>3.14</td>
</tr>
<tr>
<td>SD</td>
<td>(1.06)</td>
<td>(.94)</td>
<td>(.99)</td>
<td>(.82)</td>
<td>(.78)</td>
<td>(.87)</td>
</tr>
<tr>
<td><strong>Time 2</strong> Mean</td>
<td>2.83</td>
<td>3.01</td>
<td>2.95</td>
<td>2.98</td>
<td>3.37</td>
<td>3.19</td>
</tr>
<tr>
<td>SD</td>
<td>(.85)</td>
<td>(.90)</td>
<td>(1.02)</td>
<td>(.98)</td>
<td>(.80)</td>
<td>(.96)</td>
</tr>
</tbody>
</table>

FIGURE 1. Comparison of Time 1 and Time 2 ratings for the entire organization by subscale.
H 2: Ratings of Members of Teams at Time 2 will be higher than those of Non-Members of Teams.

The second hypothesis was partly confirmed. Ratings of members of teams at Time 2 were significantly higher than ratings of non-members for the following subscales: Information Flow (t=3.65, p<.002), Supervision (t=3.24, p<.001), Meetings (t=2.15, p<.03), Involvement (t=3.04, p<.002), Climate and Morale (t=2.59, p<.01). Only for Teamwork and Conflict were the differences not significant, but in the hypothesized direction (X1=3.2, X2=3.4). Table 2 compares means and standard deviations of Members of Teams and Non-members of Teams by subscale. Figure 2 illustrates the comparison of Members of Teams ratings to Non-members of Teams in each subscale.

TABLE 2. Comparison of Members of Teams and Non-members of Teams Means and Standard Deviations by Subscale

<table>
<thead>
<tr>
<th>Subscales</th>
<th>IF</th>
<th>MTGS</th>
<th>INV</th>
<th>C&amp;M</th>
<th>T&amp;C</th>
<th>SUP</th>
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<tr>
<td>Non-Members Mean</td>
<td>2.74</td>
<td>2.95</td>
<td>2.85</td>
<td>2.90</td>
<td>3.36</td>
<td>3.08</td>
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<tr>
<td></td>
<td>SD</td>
<td>(.85)</td>
<td>(.87)</td>
<td>(.98)</td>
<td>(.94)</td>
<td>(.77)</td>
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<tr>
<td>Members</td>
<td>Mean</td>
<td>3.23</td>
<td>3.3</td>
<td>3.44</td>
<td>3.38</td>
<td>3.42</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>(.78)</td>
<td>(.99)</td>
<td>(1.09)</td>
<td>(1.09)</td>
<td>(.96)</td>
</tr>
</tbody>
</table>

FIGURE 2. Comparison of members of teams and non-members of teams ratings by subscale.
H 3: There will be a significant difference between work categories in the ratings of the 6 subscales at Time 1.

The third hypothesis was partly confirmed. One-way analysis of variance (ANOVA) for Time 1 data revealed that work categories were significantly different for several subscales. Specifically, Teamwork and Conflict (F (4, 233)=3.42, p<.009), Information Flow (F (4, 233)=3.12, p<.01), Supervision (F (4, 233)=5.32, p<.0004), Meetings (F (4, 226)=5.52, p<.0003), Involvement (F (4, 231)=12.12, p<.0001), Climate and Morale (F (4,233)=5.12, p<.0006). The Scheffe test indicated that there were significant differences between Line Workers and Supervisors on the following subscales: Teamwork and Conflict, Supervision, Meetings, Involvement, and Climate and Morale. There were also significant differences between Supervisors and Professional/Technical Staff on Information Flow, Supervision, and Involvement. Finally, there were significant differences between Supervisors and Clerical/Support Staff on Meetings. Table 3 presents these results for Time 1.

<table>
<thead>
<tr>
<th>Subscales</th>
<th>IF</th>
<th>MTGS</th>
<th>INV</th>
<th>C &amp; M</th>
<th>T &amp; C</th>
<th>SUP</th>
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</thead>
<tbody>
<tr>
<td>Work Categories</td>
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</tr>
<tr>
<td>Line Workers</td>
<td>2.53</td>
<td>2.48f</td>
<td>2.42c</td>
<td>1.90j</td>
<td>3.09a</td>
<td>2.99c</td>
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<tr>
<td>Supervisors</td>
<td>3.13b</td>
<td>3.27ef</td>
<td>3.55gh</td>
<td>2.50j</td>
<td>3.60a</td>
<td>3.58cd</td>
</tr>
<tr>
<td>Prof./Tech. Staff</td>
<td>2.35b</td>
<td>2.81</td>
<td>2.62h</td>
<td>2.02</td>
<td>3.20</td>
<td>2.94d</td>
</tr>
<tr>
<td>Cler./Supp. Staff</td>
<td>2.50</td>
<td>2.56e</td>
<td>2.91</td>
<td>2.35</td>
<td>3.41</td>
<td>3.30</td>
</tr>
<tr>
<td>Management</td>
<td>2.70</td>
<td>3.16</td>
<td>3.64</td>
<td>2.30</td>
<td>3.20</td>
<td>3.80</td>
</tr>
</tbody>
</table>

NOTE: Means with common subscripts are significantly different at the p<.05 level.

H 4: There will not be a significant difference between work categories in the ratings of the 6 subscales at Time 2.

The fourth hypothesis was confirmed. One-way analysis of variance (ANOVA) for Time 2 data revealed that work categories did not significantly differ in any of the subscales. As expected, the Scheffe test did not indicate any significant differences between any work categories. Table 4 presents these results for Time 2.
TABLE 4. Results of OCS for Time 2 Data by Work Category and by Subscale

<table>
<thead>
<tr>
<th>Subscales</th>
<th>IF</th>
<th>MTGS</th>
<th>INV</th>
<th>C &amp; M</th>
<th>T &amp; C</th>
<th>SUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Workers</td>
<td>2.77</td>
<td>3.03</td>
<td>2.86</td>
<td>2.96</td>
<td>3.36</td>
<td>3.16</td>
</tr>
<tr>
<td>Supervisors</td>
<td>3.13</td>
<td>3.09</td>
<td>3.30</td>
<td>3.20</td>
<td>3.59</td>
<td>3.26</td>
</tr>
<tr>
<td>Prof./Tech. Staff</td>
<td>3.62</td>
<td>2.81</td>
<td>2.72</td>
<td>2.75</td>
<td>3.27</td>
<td>3.03</td>
</tr>
<tr>
<td>Cler./Supp. Staff</td>
<td>2.85</td>
<td>3.16</td>
<td>3.01</td>
<td>3.11</td>
<td>3.15</td>
<td>3.46</td>
</tr>
<tr>
<td>Management</td>
<td>3.22</td>
<td>3.10</td>
<td>3.40</td>
<td>3.25</td>
<td>3.80</td>
<td>3.26</td>
</tr>
</tbody>
</table>

**Interpretive Analysis**

The meanings and patterns of the results of the quantitative analyses are more completely understood through an examination of themes that emerged in the interviews. Verbatim comments were coded in six categories corresponding to the subscales of the Organizational Culture Scale. Each category was operationally defined, and decision rules were made explicit (See Appendices D and E). After the initial coding of verbatim comments, assertions that appeared frequently in each division of the organization were treated as themes. Two sets of themes are presented and compared in this section: 1. themes which emerged from the pre-intervention (Time 1) interviews. 2. themes which emerged from the post-intervention (Time 2) interviews. These two sets of themes are compared to identify areas of change as well as areas which the organization still needs to improve.

**Organizational Themes**

An examination of interview data before and after the intervention reveals several themes. Before the intervention, the culture in this organization seemed to be characterized by the following three themes:

1. Employees felt that management did not value their hard work and was not interested in them as individuals.
   
   This theme was expressed in a variety of ways. Employees thought that management considered them "expendable" and treated them as "second class citizens." They also thought that how much they cost was more of a concern than how well they performed the task. Many employees expressed bitterness over the hiring and promotion procedure. They thought that management had placed unrealistic
stipulations on job descriptions which excluded hiring from within the organization. Many employees indicated that they wanted to receive a different expression of appreciation than money.

2. Employees thought that their supervisors were not interested in their opinions and that they were rarely given praise for work well done.

This theme was expressed in almost every division and seemed to be the one which caused most concern among the employees. They felt that they knew how to do their job better than anyone else and they thought that they should be consulted on important decisions concerning their work. In addition, lack of scheduled meetings became a related concern. Employees felt that without meetings they did not have a place to bring up and discuss their concerns and to contribute to decisions about their organizational lives. Employees in most divisions agreed that the few meetings they had were too long, unorganized and with no follow up action taken.

Employees were generally dissatisfied with their supervisors who were variously described as indecisive, stubborn, unable to give praise for work well done, unable to accept that they made mistakes, secretive, closed with important information, inconsistent, always ready to criticize employees in public, and unwilling to delegate authority.

3. Employees felt that they did not receive enough information to do their job well.

Some employees gave examples about their inability to perform adequately because of insufficient information. Several instances were reported where the public had been misinformed because the employees did not have the necessary information. Others felt that they were not a part of the organization since they were not trusted with important news. Finally, many employees saw the unwillingness to share information as an attempt by those in power to maintain their control in the organization.

After the intervention, the culture in this organization seemed to be characterized by very different themes:

1. Employees felt that management appreciated their contributions and cared about them as individuals. Employees felt that management expressed their gratitude for the employees contributions in many different ways. Many employees mentioned the social functions sponsored by the organization, i.e. the "Recognition Dinner" and the "Road-e-o" as a generous expression of management's appreciation. They generally appreciated the opportunity to get together with other employees outside of work, and they reported a
feeling of "belonging to this organization" as a result of these functions. Other employees gave examples, such as the purchase of new chairs, which indicated that the organization cared about them as individuals.

2. Employees felt that most of their supervisors were interested in their opinion, and praised them for work well done.

Employees generally felt that their knowledge on work-related matters was appreciated and valued by the organization. They agreed that they were much more involved in decision making. They also felt that they were given more authority and responsibility. A great deal of this involvement occurred in effective meetings. However, this was not true for every section. Some sections reported infrequent and less effective meetings.

Supervisors, who were rated the highest by employees, shared the following characteristics: They were consistent, fair, good listeners, open, able to give praise for work well done, able to give reprimands in an effective manner, able to acknowledge their mistakes, able to delegate authority, and finally, competent in technical areas.

3. Employees felt that they received much more information about the specific goals and objectives of the organization. Several employees reported that they knew where the organization was heading and that they had "the whole picture." Most of the employees thought that they received enough information to do their job well. However, some sections felt they still needed more information on work-related issues in order to do their jobs better. Supervisors attributed this lack of information not to lack of commitment but to lack of time due to a heavy work load.

Cultural Change Artifacts

Schein (1985) suggests that the communication artifacts and rituals (i.e. newsletters, social functions, memos, etc.) of an organization often serve as a reflection of the deeper levels of culture - the values and underlying assumptions which guide the behaviors of organizational members. Following a model proposed by Miller et al. (1987), this section examines organizational newsletters to evaluate how the cultural change is reflected in them. Analysis of these newsletters is conducted according to "who" articles were about, "what" articles were about, and the predominant time orientation ("when") of the article (Miller et al., 1987). Newsletters examined were published from September 24, 1987 to July 1, 1988. This period includes 11 issues.

Examination of organizational newsletters was only possible after the intervention since newsletters were created as a direct result of the new effort to increase
communication in the organization. These newsletters provided further confirmation of the previously described cultural changes. First, regarding "who" the stories were about, most of the articles concentrated on individual employees and their accomplishments. In each newsletter there were one to two pages devoted to people who retired. These articles included a detailed description of the employee's contribution to the organization as well as the employee's future plans. There was a personal tone underlying these articles as evidenced by descriptions of families and hobbies. Also, a different column informed everyone about the news of people who had retired in the past. It described their current interests and lifestyles. In addition, each newsletter included a column named: "New Faces, New Places" which welcomed all the new employees and introduced them to the rest of the organization. In addition, the newsletters included several articles discussing projects that employees were working on and their accomplishments. These articles served the dual function of informing employees about what other people in different sections were doing and of providing recognition of individuals for their hard work. Finally, several articles provided information of interest to employees, i.e. hunting news, environmental concerns, information on upcoming functions and community events.

Newsletters also included several structures asking for employee input. First, one of the first newsletters outlined the goals that the Newsletter Committee had for the newsletter and asked employees for input on additional goals and directives. In addition, columns like: "Ask the Director" invited employee involvement. Through this column the organization indicated that it was open and that all employees could ask the director about any questions or concerns they might have.

Finally, about half of the articles in the newsletter contained important information concerning the organization. Those articles discussed the following topics: Goals and directives of each division, response from the public, new plans to improve the function of different sections, safety news, new technology news (i.e. the new computer system), information on seminars and classes sponsored by the organization for the employees.

The predominant time orientation of the newsletters is concerned, it was, as expected, in the present and future. Very few articles discussed the past and those that did provided some historical information necessary to understand a current event.

In addition to the newsletters there are rituals which deserve special attention because their function is to demonstrate to the employees that the organization cares about them as individuals and appreciates their contributions. First, the "First Annual Employee Recognition Dinner" was held "to honor all employees; to thank you for your
dedication to your jobs and specifically our past year retirees and recipients of
departmental safety and other awards“ (Newsletter, Dec. 31, 1987, 1(6)).

Another social function, which further proved to employees that this organization
values their contribution, is the "Annual Equipment Road-e-o". During this function
employees had the chance to demonstrate their skill in running their equipment and
everyone had the opportunity to socialize at the work place.

Organizational communication artifacts and rituals do appear to provide a reflection
of the organization's culture. This culture has become one characterized by employee
involvement, attention to the needs of the individual and commitment to sending
information concerning the organization to all levels.

Perceptions of Change from Public Officials and the Public

Goldhaber (1986) argues that in order to evaluate cultural change in an
organization, one needs to interview the public which the organization serves, as well
as other agents who come in direct contact with the organization. This task was
especially challenging in this organization because it has a variety of diverse
functions. Letters recently received by the organization were examined. Comparison
to pre-intervention letters was impossible since the organization did not keep easily
accessible records. Public officials were also interviewed to assess their perceptions
of current changes in the organization. These data sources reveal additional evidence
that this organization's culture has changed.

The following comments were made by the public: in 62 customer comment cards
reviewed there were 53 positive comments and 9 negative ones. Some of those
positive comments included the following: "Best visit I have ever made to the
organization", "what a breath of fresh air compared to years past", "lot better than
before", "your new processing system is very efficient and pleasant. Everyone is very
helpful and a pleasure to work with", "everyone was very helpful and responsive to the
needs of myself and my clients", "I have never had better support", "the information and
cooperation were much appreciated," "Excellent", "a marvelous improvement over a
year ago", "this was real different from my previous visits", "Hooray for the changes!
Super!", and "a great improvement from past years".

Negative comments included the following: "too many delays", "permits are too
expensive", "make cashier location easier to find with a sign", "I found the smoke in the
building very uncomfortable".
Public officials interviewed agreed that there had been significant changes in the organization since before the intervention. They agreed that at first there was a reluctance on the part of employees because they expected immediate results. Changes did not happen over night. Public officials agreed that employee behavior had changed significantly but employee awareness of that change may not have occurred. Changes happened over a long time and were gradual. Because of this, employees may not have been consciously aware of them. One public official gave an example: "When I talked to [_______] who has been with this organization for 20 years, he said: 'I don't believe in any of this stuff. I am a dinosaur. This stuff will never work.' But when I saw him working with his people he was honest, straightforward, consistent. There have been changes, but it's hard for some people to admit them."

Public officials felt that someone needed to keep the organization on track, "to make sure that the system is passed on. To pass on the principles of communication and flexibility." Other changes noticed by public officials were the fact that road crews are now allowed to come into the central building - which is something they were not allowed to do before. Also, women started getting hired in the regular crews. This demonstrates a much more open-minded policy. Finally, they believed that future programs should concentrate on the supervisory level which is most threatened by this change. They felt that new people hired or promoted to the supervisory level need to have "people skills" not only seniority or technical knowledge. They felt that just the fact that employees could accept this new hiring practice is a sign that things have significantly improved.

Direct Observations

This section concentrates on observable changes which took place in the organization as a result of the intervention. These observations were made in the central building of the organization. What follows are some observable manifestations of how the culture changed towards more involvement, attention to employee needs and increased information flow to all levels in the organization.

First, several changes were made to elicit input into decision making from all levels and divisions in the organization. Two organization-wide task teams were created by management. Their purpose was to allow representatives from all levels to make recommendations about serious matters that affected organizational life. Both teams were composed of representatives from all levels and divisions in the organization. The authors observed their meetings. Everyone in the meeting was treated equally. The meeting usually took place around a rectangular table. At each end of the table normally sat one of the trained facilitators. These facilitators were as likely to interrupt...
a manager as they were a line worker in order to bring the discussion on target. As a matter of fact, in the beginning, when one author was not very familiar with the environment and the organizational members, she could not detect any difference in status among the participants. This provides further evidence that everyone's viewpoint had equal weight in these meetings.

Another observation, which supports this increased effort to involve employees in decision making and to listen to their input, is the "open door policy." Every manager and supervisor in the organization kept their door open throughout the day. The only time that their doors closed were during private conferences with employees or other supervisors. In addition, many walls in supervisors offices were substituted with glass windows, so that they could be seen by the employees at all times.

The largest changes would be classified under management's concern for employees' needs and welfare. These changes came as a result of task team recommendations. First, the organization installed first aid kits in all work areas and in all the vehicles. In addition, it established an exercise facility with modern equipment for the use of all employees. The organization also sponsored the "Recognition Dinner" and the "Equipment Road-e-o" for all employees. Employees' ticket at the "Recognition Dinner" were paid for by the organization. During that time, awards were presented for safety and good performance and retirees were recognized. These functions succeeded in creating "a family atmosphere" as reported by many employees. The organization also sponsored "Drug and Alcohol Awareness Programs" for all field workers and their supervisors, "First Aid and CPR Training" for all employees, and it proposed a "no smoking policy", which hasn't been implemented yet. Finally, the organization instituted regular fire drills, back injury inspections, and defensive driving workshops.

In addition, this organization made a sincere effort to increase information flow at all levels and divisions. First, the VAX system was established. Every remote zone became connected to the rest of the organization through electronic mail. Everyone received training on how to use the system and terminals were sent to all work areas. The organization also organized a Handbook Committee to create a detailed manual for new employee orientation. The "minutes" from managers' meetings were posted for everyone to see. Finally, newsletters, which were discussed in detail in the previous section, provided employees with all the latest information concerning the organization.
Pre and Post-Intervention Statistics

Goldhaber (1986) suggests that in order to evaluate change in culture of an organization, one needs to compare, in addition to people's perceptions, statistics on letters and calls of complaint or commendation. This type of information was only available in one division, which is the one that has most direct contact with the public. During their "Customer Service Action Plan", conducted in January, February and March of 1988, they asked for anonymous comments from all their customers. Out of 188 cards returned, 176 (93%) were marked as "excellent" or "very good." Ten (5%) were marked as average or below, and 2 (1%) were undeterminable. (For specific examples of comments from the public see the previous section entitled "Perceptions of Change from Public Officials and the Public.")

Bennis (1969) contends that most researchers who attempt to evaluate change concentrate almost exclusively on attitudinal and subjective factors. "Hard" behavioral variables (i.e. absentee rates, sickness and accident rates, productivity and cost reduction) need to be investigated. For the purpose of assessing change in this organization, two factors were compared: sick leave and total cost of sick leave for the organization. Two different years were chosen for comparison: 1985 (the year before the intervention started), and 1987 (which is the second year of the intervention.)

During the period of 1/01/85 - 12/31/85 this organization employed 311 people. These employees took 35,209.6 hours of sick leave, which cost the organization $349,965.70. During 1/01/87 - 12/31/87 the 322 employees in the organization took 23930.1 hours of sick leave, which cost the organization $254,101.21. From 1985 to 1987 one can observe a decrease in sick leave by 11,279.5 hours and a decrease in cost by $95,864.49. One explanation is that the new culture of involvement creates an environment which decreases absenteeism.
DISCUSSION

The findings of the present study suggest that organizational cultures can be managed, and that this change may have a positive impact on employee morale and the quality of service provided to customers. The culture in the organization examined in this project changed from a hierarchical one, in which its members felt isolated and ignored, to an involved culture, in which the members felt that their ideas and suggestions were valued.

As discussed in the first chapter, Brager and Holloway (1978) define change as a modification of the actions and interactions of numbers of organizational participants, resulting from alterations 1) in the people themselves, 2) in the organization's technology, or 3) in the organization's structure (p. 18). The intervention program designed for this organization targeted the organization's structure. Structural change is the most desirable and lasting type of change because it involves alterations in the system. This change can be maintained irrespectively of individual employees since it can be transferred to new employees through the socialization process.

Structural change in this organization occurred in several areas. Specifically, the ways in which members of the organization are arranged in relation to one another changed. Authority and responsibility for decision making shifted from the few managers at the top of the organization to all employees. Every level in the organization was asked for input in decisions which affected their jobs. Communication between all work levels improved dramatically. Information flow increased to employees at every level and function. As a result, organizational members felt more involved in the organization, and OCS findings indicate that employee job satisfaction increased.

In addition to structural change, important alterations were observed in the people as well as the organization's technology. Alterations in the people included the new communication skills that employees learned and practiced in their everyday lives in the organization. Organizational members of all levels and divisions learned skills in active listening, giving and receiving praise and criticism, raising difficult issues and clarifying misunderstandings. This increase in communication among the different levels allowed the organization to function more effectively and acquire a congruent vision. Alterations in the technology of the organization included the DEC system which connected all units and increased information flow. Employees felt a part of the
organization since they received much more information about decisions made and other events which might affect their organizational lives.

Argyris and Schon (1978) suggest that the only type of organizational change that is lasting is "second order change." This involves a change in the basic assumptions of the organization. Specifically, change in behavior is accompanied by a different attitude. Interviews and direct observation indicated a difference in behaviors of many employees. This difference in behaviors was accompanied by a difference in attitudes as expressed in the questionnaires. One may wonder if the change observed is going to last after the intervention is completed and the organization resumes its normal pattern of functioning. Post-intervention results were collected 6 months to a year, depending on the division, after the intervention had ended. This minimized the possibility of operation of the Hawthorne effect. This effect suggests that employees in an organization may change their behavior in expected ways as long as they are under observation. The interval between the end of the intervention and the post-intervention data collection phase suggests that change in this organization is being maintained.

The statistical analyses for all work categories combined suggests that the entire organization improved significantly in the following categories: Information Flow, Involvement, Meetings, and Climate-Morale. The dimension which showed the most improvement is Climate-Morale. Items included in this dimension referred to the organization as a whole. It appears that even though employees may have had problems and gripes with their specific supervisor or the people they worked with, they felt that this organization was committed to providing a positive working environment. Based on specific subscale items, employees felt that they had an effective and productive working relationship with management, were motivated to put out their best efforts, were respected by their organization, were treated in a fair and consistent manner, there was an atmosphere of trust in their organization, and finally they felt motivated to be productive (Items 6-11, Appendix A). These results are further confirmed by the divisional themes. Organizational members agreed that management showed concern for them as individuals, valued their hard work and invited their input in decision making. Employees of all divisions agreed that this organization, especially after the changes that took place as a result of the intervention, was a great place to work.

The two categories which did not show significant differences from Time 1 to Time 2 are Teamwork-Conflict and Supervision. In both cases the post-intervention scores were slightly higher than the pre-intervention scores in the hypothesized direction.
These findings are not surprising. Interviews indicated that some divisions worked as a team and were very satisfied with their supervision, while members of other divisions were competing with each other and were unhappy with their supervision. Many supervisors asked for their employees' input, and praised them for work well done. Other supervisors were secretive, punishing, inconsistent, and authoritarian. Supervision seemed to be the one dimension which correlated highly with every other dimension. Interviews indicated that when employees were satisfied with their supervisor, they were also satisfied with the other dimensions. If we then accept that supervision has a significant effect on the other dimensions, it seems that a subsequent intervention should concentrate on eliciting greater supervisor support for the involvement program.

Glaser and Glaser (1987) suggest that a major reason why involvement programs fail is that mid-level managers feel left out and alienated by the process. They are the ones that lose power as they are asked to give up their main function in the organization - making decisions. Glaser and Glaser (1987) suggest that in order for an employee involvement program to be successful, involving middle managers in the initial phases of the program as well as training them in responding nondefensively are essential.

Finally, Members of Lams showed a much higher improvement than the rest of the organization. They showed a significant improvement in every dimension except Teamwork - Conflict. One would expect this since their standards, from belonging to an effective team, had become very high. One might expect them to be dissatisfied with teamwork in their own work units. This finding has important implications for organizations. It may be that acceptance of change is facilitated if organizations manage to involve all of their employees in the new system. Team membership gives organizational members a sense of involvement in organizational life which may have a direct effect on their level of commitment. Thus, employee participation in organizational task teams may facilitate cultural change.

Analysis of Time 1 data indicated that there was a significant difference between the way different work categories viewed several of the dimensions. For example, Line Workers perceived Meetings, Involvement, Climate - Morale, Teamwork - Conflict, and Supervision significantly differently than Supervisors. This is consistent with other findings (Glaser, 1983), which indicate that management views many cultural dimensions in the organization much more positively than Line Workers. One explanation is that the more involved employees feel in decisions which affect their organizational lives, the more positive their perceptions of the organization. Under the
old, authoritarian system, supervisors were much more involved than line workers. This helps to explain their more positive ratings.

Analysis of Time 2 data did not show a significant difference between any work categories. One explanation is that after the intervention all work levels had a congruent view of the organization, and the discrepancy in the degree of involvement was not as vast. This is consistent with Siehl's (1985) assertion that after cultural change in the organization there should exist commonality of values. Findings after the intervention suggest that there were no significant differences between the way management and employees at different levels viewed the organization's culture.

This study was the first empirical project to measure organizational culture change as a result of a communication based intervention. It employed a triangulation approach by combining questionnaires, interviews, and direct observation. The aspects of the intervention which seemed to have the greatest impact on the culture were communication skills training for the entire organization, involvement in decision making, and the establishment of task teams. Findings suggest that organizational cultures can be managed. These findings have great implications for organizations. It seems that if an organization can involve its employees, with special emphasis on mid-level supervisors, by possibly including them in task teams or asking for their input in meetings, it can change from an authoritarian culture to an involved and possibly more productive one.

Future research should concentrate on what aspects of the intervention program were most helpful. In order to investigate which aspect of the intervention had the most effect on culture change, a control group has to be used. Unfortunately, this is very difficult in organizational research due to the constraints placed upon the researcher by the organization. However, examining groups under different conditions would allow researchers to draw some conclusions about where they should concentrate their efforts.
APPENDIX A

Organizational Culture Scale

1. People I work with are direct and honest with each other.
2. People I work with accept criticism without becoming defensive.
3. People I work with function as a team.
4. People I work with constructively confront problems.
5. People I work with are good listeners.
6. Labor and management have a productive working relationship.
7. This organization motivates me to put out my best efforts.
8. This organization respects its workers.
9. This organization treats people in a consistent and fair manner.
10. There is an atmosphere of trust in this organization.
11. This organization motivates people to be efficient and productive.
12. I get enough information to understand the big picture here.
13. When changes are made the reasons why are made clear.
15. I get the information I need to do my job well.
16. I have a say in decisions that affect my work.
17. I am asked to make suggestions about how to do my job better.
18. This organization values the ideas of workers at every level.
19. My opinions count in this organization.
20. Job requirements are made clear by my supervisor.
21. When I do a good job my supervisor tells me.
22. My supervisor takes criticism well.
23. My supervisor delegates responsibility.
24. My supervisor gives me criticism in a positive manner.
25. My supervisor is a good listener.
26. My supervisor tells me how I am doing.
27. Decisions made at meetings get put into action.
28. Everyone takes part in discussions at meetings.
29. Our discussions in meetings stay on track.
30. Time in meetings is time well spent.
31. Meetings tap the creative potential of the people present.
APPENDIX B

Operational Definitions of Categories

**Involvement**: reported input and participation in decision making; respondents feel that their thoughts and ideas count and are encouraged by top management to offer opinions and suggestions.

**Teamwork and Conflict**: reported coordination of effort, interpersonal cooperation, rapport, antagonism, resentment, jealousy, mistrust, power struggle within sections or divisions; people talk directly and candidly about problems they have with each other.

**Information Flow**: links, channels, contact, flow of communication to pertinent people or groups in the organization; reported feelings of isolation or being out of touch.

**Climate and Morale**: reported feelings about work conditions, motivation, general atmosphere, organizational character.

**Supervision**: reported information by the employees on their immediate supervisor; the extent to which they are given positive and negative feedback on work performance; the extent to which job expectations are clear.

**Meetings**: reported information on whether meetings occur and how productive they are.
APPENDIX C

Organizational Culture Coding Decision Rules

1. Only valued statements will be coded. Specifically statements indicating satisfaction or dissatisfaction.

2. If two or more statements are part of, or help to support the same assertion, they will be coded as one verbatim comment.

3. If two or more statements are separate, distinct assertions, they will each be coded as one verbatim comment.

4. If respondents are talking about an ideal or preferred state that the organization has not yet achieved, the statement will be coded in the negative direction.

5. When operational definitions of categories are mentioned, the statement is coded in that category.

6. When the issue of input into decision making is raised, the statement is always coded as "involvement." If an employee makes a statement, directly attributing this degree of input to the immediate supervisor, the statement is also coded "supervision".

7. When the issue of input into decision making is raised in a meeting context, the statement is coded as "involvement."

8. When in doubt (if not clearly in a category), don't code.
BIBLIOGRAPHY


