12-1994

Assertive Communication: Its Effect on Conflict, Trust, Hostility, and Productivity in the Organization

Jacqueline J. Brayman
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations
Part of the Educational Leadership Commons

Recommended Citation
https://scholarworks.wmich.edu/dissertations/1809

This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact maira.bundza@wmich.edu.
ASSERTIVE COMMUNICATION: ITS EFFECT ON CONFLICT, TRUST, HOSTILITY, AND PRODUCTIVITY IN THE ORGANIZATION

by

Jacqueline J. Brayman

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the requirements for the
Degree of Doctor of Education
Department of Educational Leadership

Western Michigan University
Kalamazoo, Michigan
December 1994
The purpose of this study was to determine the relationship between assertive communication training and conflict over values, goals, and demands, as well as trust, hostility, and productivity in the organization. The investigation took place at a manufacturing firm in Grand Rapids, Michigan, which produces wood chair frames and components for distribution worldwide. The research involved both the day and night shift employees of four "work cells" or units, each numbering three to four workers. Two work cells were randomly assigned to be trained in assertive communication. The other two work cells, the comparison group, were trained in preventive maintenance. Both groups of employees were surveyed prior to implementation of an 8-week training period and then again 1 month following the conclusion of the training. The employees were also asked to respond to related questions on a journal. Additionally, their supervisors were interviewed 1 month after the training was completed.

The t test for independent means was used to compare the group scores of the assertive communication trained employees with the preventive maintenance trained employees 1 month after the training was completed. Since the two-tailed probabilities of all six null
hypotheses were greater than the alpha of .05, no conclusion could be drawn about the difference between the assertive communication trained group and the preventive maintenance trained group with respect to conflict over values, goals, and demands, as well as trust, hostility, and productivity.

The results of the journal substantiated the results of the t test that no differences were observed between the assertive communication trained and the preventive maintenance trained groups. The interviews with management suggested, too, that no firm conclusions could be drawn about the relationship between assertive communication training and conflict over values, goals, and demands, as well as trust, hostility, and productivity. However, management responses indicated a positive feeling tone for the assertive communication training and suggested that the training "sanctioned workers to open up" and share what they know. Accordingly, additional study is required to determine the relationship of assertive communication training to conflict over values, goals, and demands, as well as trust, hostility, and productivity.
INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI
University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Assertive communication: Its effect on conflict, trust, hostility, and productivity in the organization

Brayman, Jacqueline Joy, Ed.D.
Western Michigan University, 1994
DEDICATION

To the memory of my father, David D. Steere, who taught me that any goal is achievable with persistence and hard work.

To my husband, Todd, who made this goal a reality with his patience and support.

To my children, Matthew and Michael, who sacrificed family time while I learned. May they grow to know the love of learning as one of the greatest loves of all.

Jacqueline J. Brayman
That men will differ in the ways they think and act is accepted as both inevitable and desirable. Indeed, this is one hallmark of an open society. Differences are intrinsically valuable. They provide the rich possibility that alternatives and options will be discovered for better and poorer ways of responding to any particular situation. Preserving the privilege of having and expressing differences increases our chances of finding best solutions to the many dilemmas that arise in living. . . . Efforts to reconcile differences often only promote difficulties. As individuals we find this hard to do. As members of organized groups we appear to find this even more difficult. (Blake & Mouton, cited in Jandt, 1970, p. 88).
ACKNOWLEDGMENTS

I am indebted to several people who were instrumental in the completion of this doctoral degree. Like most projects, this dissertation is a compilation of the inspiration, work, and thinking of many. I am especially grateful to:

Dr. Uldis Smidchens, my advisor and committee chair extraordinaire, for his selfless and conscientious attentiveness to my needs as a student.

Dr. Charles Warfield, committee member and teacher, for enlightening me to the potential of conflict. This has positively impacted my life, both personally and professionally, forever.

Dr. Nick Timmer, committee member, for his confidence in my ability, his encouragement, and his friendship.

Special heroes in education and business who patiently listened to me think about conflict and let me practice assertive communication with them. They gave me open, honest feedback and shared their energy.

Jacqueline J. Brayman
Table of Contents--Continued

CHAPTER

<table>
<thead>
<tr>
<th>Design</th>
<th>35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td>35</td>
</tr>
<tr>
<td>Model</td>
<td>36</td>
</tr>
<tr>
<td>Procedures</td>
<td>37</td>
</tr>
<tr>
<td>Risk to Subjects</td>
<td>38</td>
</tr>
<tr>
<td>Informed Consent</td>
<td>39</td>
</tr>
<tr>
<td>Protection of Subjects</td>
<td>39</td>
</tr>
<tr>
<td>Data Collection Through Multiple Measures</td>
<td>40</td>
</tr>
<tr>
<td>Operational Definitions</td>
<td>41</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>43</td>
</tr>
</tbody>
</table>

IV. FINDINGS OF THE STUDY                       | 47 |

| Reliability of the Survey                      | 47 |
| Pretest for Internal Validity                  | 49 |
| Results of Hypotheses Testing                  | 50 |
| Hypotheses 1-5: Conflict Over Values, Goals, and Demands; Trust; and Hostility | 50 |
| Hypothesis 6: Productivity                     | 52 |
| Results of the Analysis of the Journal         | 53 |
| Hypothesis 7: Interaction With Supervisors     | 57 |
| Hypothesis 8: Interaction With Teammates      | 58 |
| Hypothesis 9: Positive Feelings About the Interactions | 59 |
| Hypothesis 10: Conflicts Resolved Satisfactorily | 59 |
| Comparison of Pretest and Posttest Scores on the Dependent Variables | 60 |
Table of Contents--Continued

CHAPTER

Results of Analysis of Participant Talk About Training .................................................. 62
Results of Interviews With Management ................................................................. 64
  Conflict Over Values ..................................................................................... 65
  Conflict Over Goals ..................................................................................... 65
  Conflict Over Demands .............................................................................. 65
  Trust .............................................................................................................. 66
  Hostility ......................................................................................................... 66
  Type of Training Beneficial to the Organization ............................................. 67
  Changes Noted in Employee Communication ................................................ 67
  Benefits of Assertive Communication Training ........................................... 67
  Drawbacks of Assertive Communication ....................................................... 68
  Recommendations for the Training .............................................................. 68
  Limitations of the Study ................................................................................ 68
  Threats to Internal Validity ............................................................................ 68
  Generalizability of the Study ....................................................................... 69

V. DISCUSSIONS, RECOMMENDATIONS, AND CONCLUSIONS .................................... 70
Discussion ........................................................................................................ 71
  Relationship Between Training and Dependent Variables ................................ 71
  Relationship Between Training and Frequency of Interaction ...................... 72
  Relationship Between Training and a Positive Feeling About the Interactions .... 73

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Table of Contents--Continued

Relationship Between Training and Resolution of Problems ........................................... 73
Recommendations ............................................................................................................. 74
Conclusions ...................................................................................................................... 75

APPENDICES .................................................................................................................... 78

A. Survey of Organizational Effectiveness ................................................................. 79
B. Journal on Organizational Effectiveness ............................................................... 85
C. Interview With Management ...................................................................................... 87
D. Coding Sheets ............................................................................................................. 90
E. Letter of Permission to Conduct Research ............................................................ 96
F. Approval Letter From Human Subjects Institutional Review Board ..................... 98
G. Glossary of Conceptual Definitions ......................................................................... 100

BIBLIOGRAPHY ............................................................................................................... 103
LIST OF TABLES

1. Correlation of Scores on Test and Retest Administration of Survey to Verify Reliability ........................................................ 48

2. Comparison of Means and Standard Deviations of Dependent Variables ................................................................. 50

3. Comparison of Means, Standard Deviations, and t-Test Results for the Dependent Variables and Type of Training ................................................................. 51

4. Production Rates .................................................................................. 52

5. Comparison of Means, Standard Deviations, and t-Test Results for Production Efficiency and Type of Training ........ 54

6. Comparison of Proportions of Participants Who Interacted With Their Supervisor According to Training Type ......... 57

7. Comparison of Proportions of Participants Who Interacted With Their Teammates According to Training Type .......... 58

8. Comparison of Proportions of Participants Who Indicated Satisfactory Problem Resolution According to Training Type ........................................................................ 59

9. Comparison of Assertive Communication Group’s Pretest and Posttest Scores ........................................................... 61

10. Comparison of Preventive Maintenance Group’s Pretest and Posttest Scores ................................................................. 61

11. Comparison of Means and t-Test Results for Intra-Group Discussion ................................................................. 63

12. Comparison of Means and t-Test Results for Inter-Group Discussion ................................................................. 63
LIST OF FIGURES

1. Randomized Control Group Pretest-Posttest Design ............. 36
CHAPTER I

DEVELOPMENT OF A THEORETICAL FRAMEWORK

Introduction

Successful leaders continually quest for skills and tools that will increase the effectiveness of their organizations. In this search a universal challenge to leaders is the mitigation of conflict. According to Burns (1978), conflict plays a primary role in the definition of leadership. Burns (1978) explained that leadership acts as an inciting and triggering force in the conversion of conflicting values, goals, and demands into organizationally desirable behavior:

Since leaders have an interest of their own, whether opportunistic or ideological or both, in expressing and exploiting followers' wants, needs, and aspirations, they act as catalytic agents in arousing followers' consciousness. They discern signs of dissatisfaction, deprivation, and strain; they take the initiative in making connections with their followers; they plumb the character and intensity of their potential for mobilization; they articulate grievances and wants; and they act for followers in their dealings with other clusters of followers. (p. 38)

This implies that conflicting values, conflicting goals, and conflicting demands all provide potential obstacles and opportunities for growth, change, and success. Therefore, conflict, in itself, is neither good nor bad. The impact of conflict on the performance capability of the organization "is largely dependent upon the way in which it is treated" (Thomas, cited in Owens, 1991, p. 246). Conflict, then, mandates the leader's intuitive recognition, comprehensive understanding, and
well-honed management skill.

One such management skill is that of assertive communication. According to Thomas (cited in Owens, 1991), assertiveness is "the extent to which one wishes to satisfy his own concerns" (p. 256). It is also the extent to which one is able to communicate from a standpoint of personal power.

The variable of assertive communication training as it relates to conflict over values, goals, and demands, as well as trust, hostility, and productivity, is the focus of this research. It is the premise of this study that members of the organization who are trained in assertive communication are encouraged to share information up and down the organizational ladder as well as horizontally. Trained in assertive communication, members are able to take up their roles more authoritatively. That is, they are able to share information about what they believe, want, need, and know, thereby impacting organizational values, goals, and demands. As members impact these organizational values, goals, and demands, they will reduce the level of conflict between themselves and the organization. This in turn should promote trust among organizational members since assertive communication also mandates forthrightness and predictability. Bennis and Nanus (1985) speculated that it is forthrightness and predictability that are the primary prerequisites for the development of trust. Additionally assertive communication should reduce the level of hostility in an organization since it sanctions members to openly express themselves. With members no longer stifling their views, confrontation becomes the order of the day. This allows conflictual issues to be addressed routinely, matter-of-factly on an intellectual level as opposed
to an affective level. Covey (1990) concluded that conflict, when con­tained at the intellectual level, engenders less hostility and can more easily be resolved.

Further, with reduced levels of conflict and hostility, and increased levels of trust in the organization, productivity of the organization may also be enhanced.

Format

The format for this research paper is atypical. Unlike most studies, the review of literature precedes the problem chapter to establish a theoretical framework for the research problem and hypotheses.

An Historical Perspective of Conflict

"Conflict is an all-pervasive element in our society and permeates all relationships of human kind" (Katz & Lawyer, 1992, p. 93). There is no social group that is conflict free. In the opinion of Katz and Lawyer (1992), conflict may end up in destruction or even death; antithetically, it has potential to increase effectiveness, enhance relationships, and further goal attainment. Conflict is a catalyst that stimulates us to learn, progress, and grow. Chirco (1987) suggested that "no one changes any of their beliefs or behaviors unless they are made uncomfortable [through conflict]." Since conflict is inevitable in human relationships and is the primary stimulant for growth and change, conflict is the essence of leadership. The leader is charged to incessantly mitigate destructive conflict while engendering and capitalizing upon constructive
conflict.

If, indeed, people seldom change and grow unless they experience some level of discomfort (conflict), then leadership becomes foremost an exercise of conflict management. Leadership as conflict management recognizes that conflict presents innumerable obstacles to, as well as multiple opportunities for success. Leadership as conflict management continually monitors the inertia (resting or moving) of human learning, growth, activity, and change. Indeed, leadership stimulates desirable human activity by successfully managing the inherent conflict of social interaction.

In recent history, conflict has been viewed as undesirable, as detrimental, as a liability. Burns (1978) believed that,

in this century . . . social science, at least in the West, became most entranced with doctrines of harmony, adjustment, and stability. . . . [This] "static bias" afflicted scholarly research with a tendency to look on conflict as an aberration, if not a perversion, of the agreeable and harmonious interactions that were seen as actually making up organized society. (p. 36)

Additionally, conflict was viewed negatively by centralized bureaucratic hierarchies which purported that leadership emanates from leaders and control is imposed from top to bottom. Taylor (1911) suggested that managers thought and workers worked; information was held by a few; that institutional relationships were based on obedience and contractual obligations. Bureaucratic institutions' effectiveness required tight control of organizational processes and individual practices. This control included rewarding constructive contributions in interpersonal behavior and extinguishing disruptive contributions. Jacobson (1972) wrote that the thinking involved is simple, logical, and deserves to work. However, it is
based on a false premise, because constructive and destructive contributions are situational, they are defined according to the context.

Current Western leadership still embraces and touts the virtues of unity, of harmony, of transcending differences. However, recent studies of leadership and social systems have discovered that energy is inherent in conflict to establish boundaries, channel hostilities, promote learning and innovation. According to Coser (cited in Miller & Simons, 1974),

Far from being only a negative factor which "tears apart," social conflict may fulfill a number of determinate functions in groups and other interpersonal relations. It may contribute to the maintenance of group boundaries and prevent withdrawal of members from a group. Commitment to the view that social conflict is necessarily destructive to the relationship within which it occurs, leads to highly deficient interpretations. (p. 21)

Argyris (cited in Miller & Simons, 1974) reported that "two clinical studies of U.S. government organizations have suggested that anti-conflict attitudes and behaviors have led to serious organizational dysfunctions" (p. 159). In the first study, the organizational norm was to withdraw from open discussion of interpersonal difficulties and conflict. This withdrawal included substantive issues that might, if discussed forthrightly, create conflict or interpersonal embarrassment. In the second study the organizational norm was to withdraw and to judge the individual negatively, but not tell him. Both of these norms proved to undermine organizational effectiveness.

Allen (1993) pointed to International Business Machines (IBM) as a prime example of the deleterious effect of standardizing interpersonal interactions and curtailing open, honest communication in an attempt to minimize conflict. IBM's in-house training encouraged a uniform way for
their managers to talk to one another. The company's management decided that it would be detrimental to have employees disagreeing or saying "no" to each other. As a result IBM instituted the expression "to non-concur" as in "I non-concur with your idea." Concurrently, when projects or plans were to be scrapped, IBM executives were trained to say "We are going to have to de-commit" (Allen, 1993, p. 6).

The result of these attempts to promote harmony within the organization resulted in a lack of exposure to ongoing, critical thinking and the company has suffered a major downturn in profitability in the last 2 years. This attribute of critical thinking, which is stimulated by and promotes conflict, is a key component of "exemplary followership" (Kelley, 1992, p. 160) which, according to Kelley, is the primary force of organizational productivity.

Bennis (1989) further suggested that two leadership actions that are crucial for survival in the 21st century are encouraging reflective back talk and encouraging dissent. It is mandatory to have someone, and preferable a cadre of "someones" who will "tell it like it is" about the organization. It is also imperative to be surrounded by devil's advocates who will verbalize the difference between what the leader expects and what could really happen. Bennis (1989) stated that too much accord is risky. He pointed to executives at Johnson and Johnson and Intel who insist on "creative confrontation" with their associates. They demand dissent and surround themselves with people wise enough to know and speak the truth, even though the truth is at odds with their own perceptions.

Zaleznik (1977) suggested that,
to confront is also to tolerate aggressive interchange and has the net effect of stripping away the veils of ambiguity and signaling so characteristic of managerial cultures, as well as encouraging the emotional relationships leaders need if they are to survive. (p. 23)

What comes as a surprise to many is that the absence of conflict is not an indicator of the strength of a relationship (Coser, cited in Miller & Simons, 1974). Coser stated that stable relationships may be characterized by conflicting behavior:

Closeness gives rise to frequent occasions for conflict, but if participants feel their relationships are tenuous, they will avoid conflict, fearing it might endanger the continuance of the relation. When close relations are characterized by frequent conflicts rather than by the accumulation of hostile and ambivalent feeling we may be justified given that such conflicts are not likely to concern basic consensus in taking these frequent conflicts as an index of the stability of these relationships. (p. 21)

Multiple experts have espoused the need for leadership to embrace conflict and value forthrightness. What is the membership’s view of this need? Bennis (1989) speculated that in most organizations members need to distort and suppress information, especially when communicating to higher level. They stifle the truth for fear of fantasized or real threats. However, although most do not feel free to express themselves, they highly value open communication.

Reported by Shellenberger (1993), the recent privately funded National Study of the Changing Workforce by the Families and Work Institute revealed that employees place high value on the quality of their work environment and that open communication ranks even higher than pay in choosing an employer.

Since both leadership and followership need and value open communication, what, then, are the primary sources of conflict that
leadership and followership share? When Burns (1978) suggested that leadership is the catalyst to convert conflicting values, goals and demands into organizationally desirable behavior, he pinpointed three primary facets of shared leadership-followership conflict: conflicting values, conflicting goals, and conflicting demands.

Conflict Defined as Values

The first arena of shared conflict is that of conflicting values. Hodgkinson (1991), indicated that "for any given state of affairs, the facts can never be in conflict while the values, assuming that there are more than one set, are always in conflict" (p. 89). This difference is fundamental, for the simple reason that everyone perceives the world from a different angle. Hodgkinson stated, "No one can occupy the same life space as another. The world comes up differently each time for each person. Therefore, in some very fundamental sense, values are always in conflict" (p. 90).

Because of the pervasive nature of values, Hodgkinson (1991) suggested that organizational values are primary in determining the culture of the organization. According to Owens (1991), the organization's culture is a shared set of beliefs that operate on an unconscious level to determine how the organization operates. Sergiovanni (1984) wrote that culture is built upon the values, beliefs, and cultural strands that give the organization its unique identity. It defines the way things are done "around here." As superordinate goals and the culture are defined and developed, the organization needs to consider individuals' values as a potentially powerful force since each individual's behavior is
essentially a demonstration of one's values. Hodgkinson (1991) elucidated, "Behaviors occur as observable facts connected by inference through chains of cause and effect to the psychological phenomena of attitudes, values orientation, values motives and self concepts" (p. 96). In order for individual values to be in sync with that of the organization, that is, for an individual to feel there is a good fit culturally as well as a match in role definition, individuals need to express their values and engage in the process of organizational culture development. This demands great energy and attention from the leadership (Rokeach, cited in Miller & Simons, 1974) because parties in a value conflict often move away from each other and move to associate with others of similar values. What the organization needs, instead, is for the members to move toward the organization's values. This requires that organizations strongly socialize new members (Tichy & Devanna, 1990), teaching them the prevailing values of the organization as well as allowing them to voice their own values.

Although the values of the individual may well be in conflict with the organization, the organization stands to be strengthened by the divergence of thinking and the questioning this value conflict calls into play. This, of course, requires that organizations encourage individuals to openly share their beliefs and values for the organization's consideration, if not assimilation. According to Tichy and Devanna (1990), "Ongoing cultures deal with cultural uncertainty (values) by saying that it is all right. They create cosmopolitan organizations that take pride in their diversity" (p. 226).
For the purposes of this research, conflict over values is defined as (a) holding beliefs about how things should be done in the organization that are different from the beliefs of the organization—feeling that one's own opinions, beliefs, and values are not valued by the organization; (b) having few opportunities to state what one knows, believes, wants, and needs; and (c) feeling that what one needs is seldom as important as what management needs.

Conflict Defined as Goals

Conflicting goals define the second arena of shared conflict between leaders and followers because today's institutions are challenged by one constant: change (Peters & Waterman, 1983). Senge (1990) suggested "the energy for change comes from the vision, from what one wants to create, juxtaposed with current reality" (p. 9). Typically individuals and their organizations resist change, desiring a state of homeostasis. It is almost an instinctual goal to maintain the status quo; however, the knowledge and technology explosion of the 1980s and 1990s have foisted change upon both the individual and the organization and requires that they develop the capacity to learn and adapt quickly and decisively. Peters (1993) recently admonished Steelcase, Incorporated, that were he to return for a visit in 3 years and recognize the company, Steelcase could expect to be out of business in 5 years. Consequently, individuals and organizations are continually caught between the conflicting goals of where they want to be (status quo) and where they need to be (vision).
Creative tension or conflict comes from seeing clearly where one needs to be, "our vision," and telling the truth about where one is, "our current reality" (Senge, 1990, p. 9). The difference between the two, reality and vision, creates a natural conflict or "creative tension." As Kissinger (cited in Peters & Waterman, 1983) stressed, "The task of the leader is to get his people from where they are to where they have not been" (p. 282). It is the energy of creative tension or conflict that facilitates growth. It stimulates the need for learning so that organizations can define their vision, and then develop goals mutually held by leaders and followers to achieve that vision. Senge (1990) purported that "new insights and initiatives often conflict with established mental models" (p. 15). Leadership is charged to manage this conflict by drawing from the expertise of the constituents to paint a collective, accurate picture of reality. Based on a thorough understanding of "what is" throughout the organization, leadership and followership need to create a vision of what they should do and from there develop collective goals to which both groups subscribe. According to Tichy and Devanna (1990), "the argument is that everyone must assume a leadership role in helping the organization meet its goals and it is exciting to see the energy that gets released when people are able to place their work in a larger context" (p. 57).

Transforming current reality into the vision mandates change. Tichy and Devanna (1990) purported that to create a felt need for change, effective leaders must develop mechanisms that provide dissonant information and surround decision makers with people who operate effectively in the role of devil's advocate.
Vaill (1989) suggested that the new circumstances of continual change thrust institutions into "permanent white water" (p. 2) wherein nothing can be taken for granted. This white water unleashes powerful conflicting forces in people and the individual psychodynamics of change must be understood and managed. No longer can a leader command and direct from a centralized location. He must deploy his power through his followers by building teams, forming alliances, and working through collaboration in order to establish any semblance of stability in a turbulent environment. Leaders who work with and through their people enhance their own effectiveness. They do so by entering into synergistic relationships with their followers and by creating highly interactive and problem-solving groups that are organized, not to do away with uncertainty, but to find adaptive ways of dealing with new problems and issues. This synergy can enhance the potential of conflict to dissipate hostilities and to promote learning which will narrow the gap between the current reality and the vision. This synergy can also promote the development of collective goals between leadership and followership. This in turn, Senge (1990) suggested, will reduce the natural conflict between current reality and the vision.

For the purposes of this research, conflict over goals is defined as wanting to have the organization stay as it is as opposed to pursuing its vision.

Conflict Defined as Organizational Demands

Conflicting demands is the third arena of shared conflict and can best be understood from a social systems perspective.
Defined from a social systems perspective, conflict is an intrapersonal or interpersonal struggle resulting from a perceived difference in needs or demands. Leadership, according to Getzels and Guba (cited in Warfield, 1992), is a series of superordinate/subordinate relationships within a social system. Their social systems model points to the decidedly conflictual nature of leadership which is charged to mitigate the differences in the relationships between institutional requirements and the idiosyncratic needs of individual participants so that the goals of the system can be achieved.

In the Getzels and Guba (cited in Warfield, 1992) social systems model, there are two primary sets of phenomena which are simultaneously independent and interactive. In the first set are institutions with specific roles and expectations (demands) that will fulfill the goals of the system. In the second set are the individuals with their idiosyncratic personalities and need-dispositions. The normative, or nomothetic dimension of the social system, is comprised of the institution, its defined roles, and their expectations (demands). The personal, or idiosyncratic dimension of the social system, is comprised of the individual, his personality, and needs-disposition.

All institutions have certain mandatory functions which become routinized or institutionalized to facilitate the perpetuation of the institution. Participants have routinized tasks and schedules to which they adhere in order to perpetuate their employment. This is a simple, yet powerful, conflict. The organization demands specific behaviors in order to maintain itself; the individual attempts to meet those organizational demands in order to meet his own personal demands both inside and
outside the organization.

According to Getzels and Guba (cited in Warfield, 1992), the most important subunit of the institution is the role, the structural elements which define the behavior of the participants. Roles are the positions, offices, or statutes of the institution and are defined through role expectations, that is, specific normative rights and duties. These rights and duties specify expected participant behavior. This role behavior is thought to extend along a continuum from "required" to "prohibited" (p. 210). Some behaviors are required of the participants, others prohibited, with a variety of allowable behaviors falling in between. However, no two individual participants will fulfill a role in the same way because of their human individuality. To the idiographic dimension of the social system, participants bring their unique personality and need-disposition. The unique predisposition of participants to act in certain ways creates conflict with the organization if these behavioral tendencies are out of sync with role expectations.

The challenge of leadership is to minimize the conflict between role expectation and the members' needs. Getzels and Guba (cited in Warfield, 1992) suggested that the "unique task of administration (leadership) . . . is just this: to integrate the demands of the institution and the demands of staff members in a way that is at once organizationally productive and individually fulfilling" (p. 213). They continued:

When an individual performs up to role expectations, we may say that he is adjusted to the role. Conversely, when an individual fulfills all his needs, we may speak of him as integrated. Ideally, the individual should be both adjusted and integrated, so that he may by one act fulfill both the nomothetic, or institutional, requirements and the idiographic, or personal, requirements. This would obviously be the
case if institutional expectations and personal needs were absolutely congruent, for the individual would always will what was mandatory, and both his adjustment and his integration would be maximized. But absolute congruence of (organizational) expectations and (individual) needs is seldom, if ever, found in practice, and as a consequence there is inevitably a greater or lesser amount of strain or conflict for the individual and the institution. (p. 214)

There are three primary sources of conflict to which leaders must direct their attention in this social systems model.

1. Role-personality conflict arises when the role expectations of the institution are at odds with the needs disposition of the participant. The leader must be aware of this naturally occurring interference and work to ameliorate the discrepancy.

2. Role conflicts exist when a role participant is expected to perform in a variety of situations that are contradictory. Leadership must assume responsibility for the clear definition of roles. These definitions are derived from institutional goals and are necessary to minimize potentially damaging conflict.

3. Personality conflicts result from the opposing needs and dispositions within the personality of the participant incumbent; that is, the participant is in conflict with the institution because he cannot maintain a stable relation with a given role or he regularly misinterprets role expectation. Left unmanaged these three sources of conflict have great potential for undermining individual and institutional productivity.

The pervasiveness of the natural conflict throughout the social systems model suggest that leadership must be a property of the overall system and according to Krantz (1990), stem from the ongoing process of interaction among important elements of the system. Accordingly,
leaders and followers are charged to co-produce an overall system leadership. This suggests that workers at all levels are expected to take up their roles more authoritatively. According to MacKinnon (cited in Tichy & Devanna, 1990), "They [we] need to have the whole . . . committee sitting in front of [us]. They give us what they think needs to be done, open discussions go back and forth and they discuss points they want" (p. 255).

By asking members at all levels to participate collaboratively demands a renegotiation of authority relations and a recognition of the fundamental interdependence between leaders and followers to create effective enterprise leadership.

Licensed to express his position, the member takes an active role, or a more authoritative role, in his organization. He feels free to reveal himself by his words and actions and is not afraid to say, "This is what I believe, think, and feel." He is thus capable of voicing his opinion about the symbols, culture, and vision of the organization. According to Lawler (cited in Tichy & Devanna, 1990), he is also not afraid to say "You are wrong!" (p. 258). His evaluation of organizational processes is valued. This includes evaluating his own role expectations. Encouraged to communicate, the member is empowered to impact those role expectations and can, therefore, have more ownership in it. Once that sense of ownership in the role expectations has been established, a sense of oneness with the organization is fostered and the distance between idiographic and nomothetic dimensions is greatly narrowed. The potentially deleterious conflict attendant with conflicting demands is concomitantly reduced.
The authoritative member also expresses his own thinking which, of course, at some point in time will digress from those of his peers or leaders, creating conflict. Thomas (cited in Owens, 1991) purported,

The confrontation of divergent views often produces ideas of superior quality. Divergent views are apt to be based upon different evidence, different considerations, different insights, different frames of reference. Disagreements may thus confront an individual with factors which he had previously ignored, and help him to arrive at a more comprehensive view which synthesizes elements of his own and other's position. (pp. 247-248)

It would seem that enlisting and giving everyone the responsibility for openly expressing themselves promotes conflict; however, in so doing it can improve organizational effectiveness. Owens (1991) suggested there is growing reason to believe that conflict causes people to seek effective ways of dealing with it, resulting in improved organizational functioning, for example, shared values, cohesiveness, and clarified roles and relationships.

For the purposes of this research, conflict over demands is defined as when the organization's expectations for behavior are different from the needs and behavioral tendencies of the individual.

The Need for Trust

When people recognize that conflict and open communication are potential catalysts for organizational improvement, they simultaneously begin to promote a culture of trust. Bennis and Nanus (1985) stated, "Trust is the emotional glue that binds followers and leaders together. The accumulation of trust is a measure of the legitimacy of leadership" (p. 153). The values of forthrightness and honesty are the foundation
for trust since for trust to be generated, there must be predictability, the capacity to predict another's behavior (Bennis & Nanus, 1985). Predictability is generated when leaders' and followers' positions are made clear. Bennis (1990) purported that leaders engender trust of subordinates by fostering congruity, reliability, and integrity. As he defined them, the essence of these three concepts is predictability. People tend to trust one another when they know where they stand in relation to one another and to the organization. People also tend to trust one another when they simply ask for and pledge their trust (Deutsch, 1973). In order for members to make their positions clear and to comfortably express their trust, they must be sanctioned and trained to do so.

According to J. R. Brayman (cited in J. J. Brayman, 1992), "Feedback is imperative to trust. We must come to venerate feedback in the organization so that we have the information that we need. We have to understand that feedback is a gift" (section 2, p. 1). Feedback refers to knowing the results of one's own or others' performance on a given task. It is a process that usually requires a support system, trusted individuals with whom one can "float trial balloons and who will play devil's advocate as the leader works through the task" (Tichy & Devanna, 1990, p. 178). One must get a perspective from being able to confront reality even if it is painful. This includes seeking both the "good news" and the "bad news." Peck (1981) supported this notion, We are daily bombarded with new information as to the nature of reality. If we are to incorporate this information, we must continually revise our maps, and sometimes when enough new information has accumulated, we must make major revisions. The process of making revisions, particularly major revisions, is painful, sometimes excruciatingly painful. (pp. 45-46)
Emotionally one must be able to reveal the truth to others who may not want to hear it (Tichy & Devanna, 1990). Leadership must have the courage to ask for the truth, see the truth, and tell the truth. It is unconscious assumptions and unquestioned beliefs that are frequently a barrier to real progress.

The organization, then, is charged to empower members to give feedback, that is, to share what they know, whether positive or negative, providing the organization with a wealth of information on which to develop its "maps," that is, its values, goals, and demands.

Traditionally, organizations have aggressively solicited feedback from their external customers and have ignored that tremendous information source, their own members who are often best equipped to deliver the bad news. The bad news feedback is latent with conflict, but is "constructive" conflict in that it pinpoints problems, which, once identified, can be resolved. Deutsch (1973) found that forced communication, a condition in which subjects were compelled to talk to each other, produced greater payoffs in accomplishing goals than other forms of communication.

Tichy and Devanna (1990) suggested that all organizations profit from open debate on important issues. It is healthy predictable disagreement and feedback that provide the foundation for trust in the organization.

Errors are embraced. People admit mistakes, examine the causes and learn from them . . . responsibility is realistically accepted and shared. . . . People perceive power as a non-zero sum game, there is expansion in sharing. Uncertainty is confronted, not denied. Interpersonal relationships are open and there are high levels of trust. (p. 267)
Accordingly, for the purposes of this study, trust is defined as (a) using honest, communication about how operations of the organization are going; (b) using honest communication about how one's performance affects others and the operations of the organization; (c) supporting others in "moments that matter," both challenging and celebratory; and (d) demonstrating integrity by consistently honoring commitments and promises (Bennis, 1990).

The Threat of Hostility

"A conflict exists whenever incompatible activities occur" (Deutsch, cited in Owens, 1991, p. 244). This incompatibility is further defined as "the pursuit of incompatible, or at least seemingly incompatible, goals, such that gains to one side come out at the expense of the other" (p. 244). Owens (1991) explained further that "we are confronted with the classic, zero sum, win-lose situation that is potentially so dysfunctional to organizational life, everyone strives to avoid losing and losers seek to become winners" (p. 244). Though conflict can originate as substantive, it can readily become affective. According to Likert and Likert (cited in Owens, 1991), it is the affective involvement that is central to organizational conflict, which they defined as "the active striving for one's own preferred outcome which, if attained, precludes the attainment by others of their own preferred outcome, thereby producing hostility" (p. 244).

Leadership as conflict management seeks ways to reduce hostility and frame conflict as a basis for more effective behavior. Contingency approaches to management require assessment of the situation as...
prerequisite to action. The contingency view is that there is no one preferred way to manage conflict under all situations but there are optimal ways of managing conflict under certain conditions (Owens, 1991) that will keep hostility in check.

Covey (1990) disagreed with contingency theory. He suggested that hostility and its destructive potential can be eliminated through a win/win mentality. Win/win mentality is a recognition of the dignity, demands, goals, and values of all parties. Using a win/win problem-solving style results in lowering the level of emotional energy (hostility) in the conflict. The result is that future conflicts are much less likely to occur and are much less likely to be intense (Katz & Lawyer, 1992).

Miller and Steinaft (cited in Miller & Simons, 1974) suggested that hostility can also be reduced through the use of effective communication.

The fewer the restrictions and the more open the communication allowed, the greater the probability of de-escalation of a conflict. The addition of a channel which provides knowledge of others actual behaviors is quite important in producing even greater de-escalation and an increased probability for cooperation. (p. 69)

Tichy and Devanna (1990) stated that organizations are able to reduce hostility through processes that encourage contention and foster consensus. They suggested that organizations "institutionalize a contention system" (p. 268) to reduce hostility and maximize the potential of conflict.

For the purposes of this research, hostility is defined as (a) feeling like an enemy in one’s own organization, (b) feeling thwarted in attempts to pursue one’s own goals, (c) feeling overpowered by others in the
organization, and (d) often endangered by interactions with others in the organization.

Assertive Communication Defined

It is the premise of this research that assertive communication can be one such "institutionalized contention system" (Tichy & Devanna, 1990, p. 268). Assertive communication recognizes that the principal ingredient of communication from high power figures is information and opinions (Jacobson, 1972). Assertive communication is the sharing of information and opinions from a standpoint of personal power. Therefore, assertive communication has the potential of rendering all members of the organization as high power, regardless of the status of their role. Assertive communication, then, equips members with the skill to take up their roles more authoritatively (Bennis, 1989) and to become leaders.

Thomas (cited in Owens, 1991) purported that it is common in a conflict situation to emphasize the extent to which a party is willing to cooperate with another party but to overlook a second critical factor: the party's desire to satisfy his or her own concerns. According to Thomas, there are two behavioral issues that shape the way one conceptualizes contention or conflict: (1) "cooperativeness, the extent to which one wishes to satisfy the concerns of the other; and (2) assertiveness, the extent to which one wishes to satisfy his or her own concerns" (p. 256). It is also the extent to which one is able to communicate openly and honestly from a standpoint of personal power.

Owens (1991) asserted that leadership connotes interactive patterns of interpersonal behavior that help a group to achieve its needs.
Assertive communication is one such desirable interpersonal behavior. For students of contingency theories of leadership, assertive communication enhances the favorableness of most leadership situations for when members are equipped with this skill, they are able to communicate openly and honestly from a standpoint of personal power. Concomitantly, the entire group is strengthened and is capable of interacting more effectively in the achievement of specific group goals.

In the opinion of Yukl (1989), resolution of conflicts involves both external and internal relations. It involves the specific behaviors of sharing information, ideas, and feelings; exploring common interests; facilitating integrative problem solving that satisfies everyone's needs; and holding team building sessions. All of these behaviors require members to operate from a philosophy of assertiveness. Assertive philosophy embodies a win/win orientation and constantly seeks mutual benefit in all human interaction. Covey (1990) defined the win/win frame of mind as:

agreements or solutions that are mutually beneficial, mutually satisfying. With a win/win solution all parties feel good about the decision and feel committed to the action plan. Win/win sees life as a cooperative, not a competitive arena. Win/win is based on the paradigm that there is plenty for everybody, that one person's success is not achieved at the expense or exclusion of the success of others. Win/win is a belief in... It's not your way or my way, it's a better way, a higher way. (p. 207)

The basic tenets of assertive philosophy as espoused by Jakubowski-Spector (cited in Rawlings & Carter, 1977) are as follows:

1. By standing up for our rights we show we respect ourselves and achieve respect from other people.

2. By trying to govern our lives so as to never hurt anyone, we end up hurting ourselves and other people.
3. Sacrificing our rights usually results in destroying relationships or preventing ones from forming.

4. Not letting others know how we feel and what we think is a form of selfishness.

5. Sacrificing our rights usually results in training other people to mistreat us.

6. If we don’t tell other people how their behavior negatively effects us, we are denying them an opportunity to change their behavior.

7. We can decide what’s important to us; we do not have to suffer from the tyranny of the should and should not.

8. When we do what we think is right for us, we feel better about ourselves and have more authentic and satisfying relationships with others.

9. We all have a natural right to courtesy and respect.

10. We all have a right to express ourselves as long as we don’t violate the rights of others.

11. There is more to be gained from life by being free and able to stand up for ourselves and from honoring the same rights of other people.

12. When we are assertive everyone involved usually benefits. (p. 176)

Specifically assertive communication is defined as recognizing and expressing information, feelings, beliefs, wishes, attitudes, or rights in a direct, firm, honest, and appropriate manner while still respecting the feelings, beliefs, and rights of others. It recognizes and respects the individual boundaries and rights of self and others. Assertion is built on the foundation of respect and dignity of all individuals. It is a demonstration of self-awareness and self-esteem.
Assertive Communication: Promoter of Productivity

The act of being assertive requires one to communicate openly, honestly, and directly. It recognizes that individual importance and individual values do not have to be compromised; it allows one to agree to disagree and to meet the needs of external forces while remaining true to self. Assertive communication requires that thoughts and emotions are expressed, whether positive or negative, without experiencing undue anxiety and without violating the dignity of others in the process. As such assertive communication allows members of an organization to initiate and develop relationships with all people regardless of their education, or position of power. This has potential for increasing organizational effectiveness and productivity. Hoffman, Harburg, and Maier (cited in Jacobson, 1972) suggested "if low status members are encouraged to oppose high power group members, they do so; and the resulting conflict produces more creative solutions than in groups where high status members met no resistance to their suggestions" (p. 6). Berkowitz and Daniels (cited in Jacobson, 1972) speculated, too, that the amount of speaking that is allowed or encouraged in an organization is highly related to successful power attempts. The more each member is allowed to express himself, the more power he will be able to accrue and use. Therefore, the more he will be able to accomplish.

Assertive communication, therefore, promotes productivity in that it expects that each person will be sanctioned to express his needs, feelings, and information, thus maintaining his self-respect and sharing information the organization needs for effective operation. Assertive
communication allows all members to be in the center of the communication network. Berkowitz (cited in Jacobson, 1972) found that "if a person is told he is the leader—whether or not he has any real power—he will participate more actively and direct and organize group efforts more than other members" (p. 25). The opportunity to be more effective, that is, productive, increases.
CHAPTER II

PURPOSE OF THE STUDY

Statement of the Problem

Volumes about developing collaborative, participative organizations, and about sharing information from the top down have been written by authors such as Bennis and Nanus (1985), Burns (1978), and Sergiovanni (1984). Currently concepts of quality circles, empowerment, participatory management, and cross-functional teamwork enjoy wide popularity as vehicles to increase organizational efficiency and effectiveness. Inferred in these writings and concepts is the expectation that followers respond as leaders, that is, that they communicate important information about the values, goals, and roles of the organization. However, this charge for "shared leadership" throughout the organization may be more rhetorical than pragmatic. What has been regularly overlooked is how to effectively elicit information from the bottom rung of the organization up; in essence, how to help workers take up their roles more authoritatively by openly communicating about the values, goals, and demands of the organization.

Bennis (1989), in his condensation of the history of the American worker, stated the following:

American business has traditionally seen its workers in an adversarial light, as mere cogs in the corporate machine: necessary, perhaps, but anonymous, replaceable, and greedy. In the first decades of the Industrial Revolution, workers were treated as indentured servants. Finally, of
course, the workers rebelled, and by the middle of this century, a kind of uneasy peace was established, with unions and businesses in approximate if rancorous balance. But today, there is far more rancor than balance.

Successful new companies are run not like feudal estates, in which workers are expected to be seen and never heard, but like round tables, in which workers not only are expected to speak up but are assured of a receptive audience. In this way, all the talents of the workers are tapped and used to the benefit of everyone, including company customers. What's more, these businesses . . . understand that healthy, spirited people are the primary source of economic growth. (pp. 86-87)

A broad recent survey of American workers depicts a work force that thirsts to share what they know. The privately funded National Study of the Changing Workforce by the Families and Work Institute (Shellenberger, 1993) suggested that workers view open communication as the highest priority in deciding to take their current job. The survey suggested, too, that workers rated the workplace characteristic of open communication even higher than pay in choosing an employer.

Conflicting values, goals, and demands are all sources for schisms between workers and bosses. As the leader contemplates conflicting values, he recognizes that individuals need to express their own values (Burns, 1978) and become stakeholders in the development of organizational culture (Vaill, 1989). Yet how does the leader evoke value laden responses from his workers?

As the leader reflects upon conflicting goals, he realizes that his people must be able to define their own goals (Hodgkinson, 1991) and link them to the vision (Senge, 1990) of the organization. Further, they must express their concern and frustration attendant with change so they can develop a sense of control over it. Yet how does the leader
solicit goal ideation from workers and massage individual goals into the broad vision of the organization?

And as the leader contemplates conflicting demands, he understands that ideally in a social system people are able to articulate their needs and have vocal input into the operation of the organization so that they link organizational purposes and missions with their own. This linkage can narrow the distance and minimize the potentially destructive conflict between the nomothetic and idiographic dimensions of the organization (Getzels & Guba, cited in Warfield, 1992). Yet how does the leader discover the knowledge and needs of the workers as it relates to his role?

Vesting workers with the real freedom and power to impart information and influence decisions is easily stated, but statements and intentions do not necessarily translate into reality. According to Bennis (1989),

Everyone can become a leader but not everyone will. Why? Because too many people are prisoners of their own inertia. They lack the will to change and to develop their potential. People who are willing to overcome change and to develop their potential, people who are willing to overcome inertia can transform themselves if they want to badly enough. Becoming a true leader is an act of free will and if you have that will, you will find your way! (p. 2)

This researcher suggests that more than leadership being a matter of inertia, choice, or free will, it is determined by self-perception and training. Most people do not see themselves as leaders. People may feel confident in their judgment and capabilities and may presume to have better ideas than their bosses do. Still they have difficulty assuming the power and sense of ownership that leadership demands. If,
indeed, free self-expression is the essence of leadership as Bennis (1989) suggested and self-perception of leadership capability is prerequisite to an authoritative mode of functioning, then institutions are charged to teach their members how to lead and how to communicate assertively. All members of the organization should be able to consolidate or challenge prevailing values, to share what they want, what they need, and what they know in a way that engenders cooperation and support.

Bennis (1989) recognized that "the leader cannot know everything and his subordinates have the information and competences that he needs" (p. 120). He suggested that leaders are mandated to communicate with his subordinates no matter how different their views may be. Thomas (cited in Owens, 1991) stated:

Confrontation of divergent views often produces ideas of superior quality. Divergent views are apt to be based on different evidence, different considerations, different insights, different frames of reference. Disagreements may thus confront an individual with factors which he had previously ignored and help him to arrive at a more comprehensive view which synthesizes elements of his own and other's positions. (pp. 247-248)

It is the premise of this study that training workers to communicate assertively reduces the levels of conflict in an organization, promotes trust and productivity, and reduces hostility. Empowered to communicate assertively, subordinates can state their beliefs, make requests so that individual wants and needs may be realized, share information they have that the organization needs, and give feedback to members throughout the organization. Equipped with assertive communication skill, subordinates will be able to ameliorate their own conflict,
engender trust, and dissipate hostility throughout the organization. Accordingly, their productivity will increase.

Importance of the Study

The variable of assertive communication training as it relates to organizational conflict over values, goals, and demands; trust; hostility; and productivity is the focus of this research. By studying the relationship between assertive communication training and conflict, leaders may be better equipped to manage conflict in their organization. They may have a skill that they can impart to subordinates that will empower them to take up their roles more authoritatively and in so doing ameliorate the conflict that subordinates perceive as existing between themselves and the organization.

By studying the relationship between assertive communication and trust, leaders may be able to increase trust levels in the organization.

By studying the relationship between assertive communication and hostility, leaders may be able to decrease levels of hostility in the organization.

With increased control over conflict, trust, and hostility, the leader may then be able to positively impact organizational productivity. It is the premise of most students of human resource development that any training efforts are pointless unless they impact organizational effectiveness. By comparing the productivity rates before and after the assertive communication training, the findings of this research will determine whether the training is a worthwhile investment of time and money.
Questions to Be Answered

Based on the previous reasoning, answers to the following questions were sought in this study:

1. Is there a relationship between assertive communication training and the worker's perception of conflict over values between himself and the organization?

2. Is there a relationship between assertive communication training and the worker's perception of conflict over goals between himself and the organization?

3. Is there a relationship between assertive communication training and the worker's perception of conflict over demands between himself and the organization?

4. Is there a relationship between assertive communication training and levels of trust between the workers?

5. Is there a relationship between assertive communication training and levels of hostility between the workers?

6. Is there a relationship between assertive communication and rate of the organization's production efficiency?

Concomitantly, the conceptual hypothesis for this study is that trained in assertive communication, workers' perceived level of conflict over values, goals, demands, and of hostility will decrease and workers' perceived level of trust as well as their productivity will increase.
CHAPTER III

METHODS AND PROCEDURES

Introduction

The purpose of this study was to investigate the relationship between assertive communication training and the variables of conflict over values, goals, and demands, as well as trust, hostility, and productivity.

In the preceding chapter literature was reviewed which suggested a potentially beneficial relationship between assertive communication training and the dependent variables. In this chapter a complete description of the study and methods used to test the hypotheses are discussed. The purpose of this chapter is to discuss the (a) operational hypotheses, (b) design of the study, (c) the instrumentation and data collection, and (d) data analysis.

The research project took place at a manufacturing firm in Grand Rapids, Michigan. This company manufactures wood chair frames and components for 85 customers worldwide. The firm employs 130 hourly personnel. The firm has just recently employed a human resource development coordinator who is actively engaged in assessing the needs of the employees to promote their professional growth. Heretofore, no comprehensive formal training program had been instituted. However, the president of the firm had mandated assertive communication training for all of the management personnel during 1992. Hourly workers and
their spouses had been invited to take the class on a voluntary basis.

The president of the firm states that the human resource department's formal needs assessment may not target assertive communication as the cornerstone of the company’s training efforts; however, he intends to continue to offer the training to all of his employees on at least a voluntary basis. He states that he is uncertain how assertive communication relates to productivity, but to him the effect of the training on productivity are secondary to the qualitative impact it has on interpersonal interaction. In an attempt to begin to determine to what extent assertive communication impacts the organization, the president designated two work groups to receive assertive communication training as a part of their assigned duties.

Operational Hypotheses

The researcher believed that training workers in assertive communication would impact positively conflict over values, goals, and demands, as well as trust, hostility, and productivity. The following operational hypotheses were developed to determine if a relationship exists between assertive communication and these concepts:

1. When using the survey (Appendix A) on conflict over values as a basis of comparison, the mean conflict between values score of an assertive communication trained group will be lower than the mean conflict between values score of a comparison group.

2. When using the survey (Appendix A) on conflict over goals as a basis of comparison, the mean conflict between goals score of an assertive communication trained group will be lower than the mean
conflict between goals score of a comparison group.

3. When using the survey (Appendix A) on conflict over demands as a basis of comparison, the mean conflict over demands score of an assertive trained group will be lower than the mean conflict over demands score of a comparison group.

4. When using the survey (Appendix A) on hostility as a basis of comparison, the mean hostility score of an assertive communication trained group will be lower than the mean hostility score of a comparison group.

5. When using the trust survey (Appendix A) as a basis of comparison, the mean trust score of an assertive communication trained group will be higher than the mean trust score of a comparison group.

6. When using the research site's statistical analysis procedures for measuring rate of production, the mean rate of production of an assertive communication trained group will be higher than the mean rate of production of a comparison group.

Design

Subjects

When approached to use his firm as an experimental site, the president agreed to allow the researcher to study two designated work groups. Each of the two work groups consisted of two work cells; each cell operated during both first and second shifts. Each work cell was comprised of three to four members per shift. The total possible population for the experiment numbered approximately 23 to 32. The
experimental group was comprised of two work cells which were randomly selected by the flip of a coin, one from Work Group 1; one from Work Group 2. A comparison group was established from the remaining two work cells.

The entire population of subjects has tenure with the research site. The president suggested that having these experienced employees as subjects would help control the internal validity threat of mortality.

Model

A randomized control group pretest-posttest design (see Figure 1) was employed (Isaac & Michael, 1984).

Random selection of groups

| Experimental group | T₁ | Assertive communication training | T₂ |
| Comparison group   | T₁ | Preventive maintenance training  | T₂ |

Figure 1. Randomized Control Group Pretest-Posttest Design.

Since it was not possible to assign the subjects to groups at random, this precluded the control and manipulation of all relevant variables. However, preassembled groups that are as similar as availability permitted were randomly selected and assigned to the experimental and comparison groups. Both groups were then given pretests. Pretest means and standard deviations were then compared for similarity. According to Isaac and Michael (1984), the internal validity with this design is fairly satisfactory if groups have similar means and standard deviations on the pretest. Although the comparison group does help
minimize mistaking the effects of history, pretesting, maturation, and instrumentation for the main effects of assertive communication training, concerns for internal validity still exist since the individual subjects were not randomly selected.

**Procedures**

Assertive communication training was administered to the group selected by the first coin toss. This group is hereafter referred to as the assertive communication group. The assertive communication curriculum had been developed and was delivered by Chuck Fridsma of Pine Rest Christian Hospital. Management staff of the research site met with Fridsma and the researcher to insure that the curriculum included components of how to generalize the training to daily work activities. Training consisted of 8 hours total of on-site instruction over four sessions. Training began on January 25, 1994, and ran for 4 consecutive weeks, concluding on February 15, 1994.

To minimize the possibility of competition developing between groups over the status of the training, the totally unrelated training of preventive maintenance was administered to the two cells which comprised the comparison group, hereafter called the preventive maintenance group. This training took place during the same timeframe as the assertive communication training.

The training took place during the course of the work day so that it would not impinge upon employees' personal time. The training occurred at a time of day wherein employees were reasonably fresh and possibly better able to profit from instruction.
Subjects were not informed of specific anticipated outcomes of the experiment; instead, they were primarily informed of the general nature of the training, of its relationship to organizational effectiveness, and of the logistics of their respective training. This was to minimize the threat of demand characteristics as discussed by Tuckman (1978), that is, self-imposed demands for performance by subjects who have a high regard for science. Tuckman (1978) suggested that subjects may attempt to comply with their own expectations of how the experiment should come out. To help camouflage the scientific nature of this activity, the trainer and cell supervisors were involved in the administration of the survey and journals so they would appear to be an inherent part of the training.

A posttest survey was administered on March 11, 1994, approximately 1 month after the completion of the training. This time period was selected to minimize the possibility of subjects dropping out of the study. The manufacturing industry in West Michigan is currently experiencing considerable turnover in their hourly wage work force. Traditionally, December and the first 3 months of the year incur the lowest rate of employee turnover.

Risk to Subjects

Because subjects were trained to communicate in a way that may have been foreign to them, the new method may have created some psychological discomfort for the subjects. Otherwise, there were no apparent physical, psychological, or social risks to the subjects. The treatment was a class that is offered to the general public through the
Life Enrichment Center of Pine Rest Christian Hospital. The curriculum and trainer have been used extensively by the research site as well as other organizations in the Grand Rapids area as a part of their human resource development programs. The research site assumed responsibility for all risks to the subjects as a result of this project.

Informed Consent

Following company policy, the president notified all subjects on January 4 of the training through two memos, one to the assertive communication group, the other to the preventive maintenance group. These memos described in general terms the training each group was to receive, and the logistics of the training, that is, dates, hours, and impact on the regular work schedule. Because this training was required of subjects as a part of their employment at the research site, the company assumed full responsibility for the risks, appropriate emergency measures, compensation, and treatment available to the subjects. Accordingly, no consent forms were issued.

Protection of Subjects

All subjects were expected to attend the training as part of their work day; however, none were required to give public responses or participate in role playing. Subjects were instructed to say "pass" if they did not wish to share information or actively participate.
Data Collection Through Multiple Measures

There are serious risks in making recommendations based on a single criterion which fails to consider the whole outcome of an educational process (Isaac & Michael, 1984). Therefore, four criteria, trust, hostility, conflict, and production, are all being used to determine the effectiveness of assertive communication training.

Since multiple measurements provide more powerful evidence supporting a proposition than any single measurement approach (Isaac & Michael, 1984), four methods of data collection were used:

1. Surveys were used for both the pretest and posttest (Appendix A): A survey to measure trust, hostility, and conflict over values, goals, and demands was developed by the researcher. Content validity was checked by a group of 15 graduate students as well as a small group of two school administrators. Reliability was assessed using the test-retest reliability method as described by Tuckman (1978). A group of first line supervisors of the firm who were not involved in either of the training groups were administered the survey on more than one occasion. The score obtained by each person on the first administration of the test was related to his score on the second administration to provide a reliability coefficient.

The homogeneity of variance of the assertive communication and preventive maintenance groups was determined by comparing the means scores and standard deviations on the pretest.

2. Journaling (Appendix B): During the third and fourth training sessions members of both the assertive communication and preventive
maintenance groups were asked to comment in a journal about their response to a conflictual situation encountered on the job site. They were asked to write a description of the situation and respond to the questions, "What happened?" and "What did you say?" and "How did you feel?" Future goals relating to the situation were also requested. Participants were asked to write in their journals at the end of the third and fourth training session. Responses were to be coded and quantified to substantiate or refute the operational hypotheses.

3. Interviews (Appendix D): One month after the training was completed, the researcher conducted a structured interview with the supervisors of the subjects. Questions on the interview followed the concepts of the research questions, that is, levels of conflict, trust, and hostility. Responses were coded and summarized and compared to survey results to substantiate or refute the operational hypothesis.

4. The research site's statistical analysis procedures for measuring production efficiency were used to determine if there was, indeed, a difference in productivity levels. These are recorded daily and average percentages of efficiency are computed monthly for each work cell through a standardized process.

Operational Definitions

The above instruments were developed and used to assess the hypotheses according to the following operational definitions:

The variable of conflict over values can be defined by attitudes toward beliefs of the organization, feelings of value and need in the organization, and opportunities to state beliefs as measured on a survey...
(Appendix A) by eight questions (Numbers 1, 5, 9, 13, 17, 21, 25, and 29) on a 5-point Likert-type scale. It was also to be operationalized through the coding of responses to questions about conflict over values on a journal (Appendix B) and an interview (Appendix C, Questions 10 and 12), which were then intended to be quantified through frequency counts, means, and percentages.

The variable of conflict over goals can be defined as attitudes toward pursuing the vision of the organization as measured on a survey (Appendix A) by eight questions (Numbers 2, 6, 10, 14, 18, 22, 26, and 30) on a 5-point Likert-type scale. It was also to be operationalized through the coding of responses to questions about conflict over goals on a journal (Appendix B) and an interview (Appendix C, Questions 9 and 13), which were then to be quantified through frequency counts, means, and percentages.

The variable of conflict over demands can be defined by attitudes toward the difference between organizational expectations and individual needs as measured on a survey (Appendix A) by eight questions (Numbers 3, 7, 11, 15, 19, 23, 27, and 31) on a 5-point Likert-type scale. It was also to be operationalized through the coding of responses to questions about conflict over demands on a journal (Appendix B) and an interview (Appendix C, Question 14), which were then intended to be quantified through frequency counts, means, and percentages.

The variable of trust can be defined by attitudes toward open communication as measured by 20 questions (Numbers 1-20, page 3) on a survey (Appendix A) on a 5-point Likert-type scale. It was also to be operationalized through the coding of responses to questions about trust
on a journal (Appendix B) and an interview (Appendix C, Questions 5 and 6), which were then to be quantified through frequency counts, means, and percentages.

The variable of hostility can be defined by attitudes toward the organization, toward pursuing one's own goals, and toward interactions with others as measured on a survey (Appendix A) by 10 questions (Numbers 4, 8, 12, 16, 20, 24, 28, 32, 33, and 34) on a 5-point Likert-type scale. It was also to be operationalized through the coding of responses to questions about hostility on a journal (Appendix B) and an interview (Appendix C, Question 8), which were then intended to be quantified through frequency counts, means, and percentages.

The variable of productivity can be defined as the percentage of efficiency in production as measured against standard rates per job. Rates were produced by the assertive communication group and the preventive maintenance group on their assigned jobs on monthly measures from January through March.

Data Analysis

On both the pretest and posttest, a t test for differences between group means with independent samples was used to determine if there is a relationship between assertive communication training and levels of conflict over values, goals, and demands, as well as trust, hostility, and production.

The alpha level of .05 was used to determine the rejection or non-rejection of the following null hypotheses:
1. When using the conflict-over-values survey as a basis of comparison, the mean conflict-over-values score of the assertive communication group will be the same as the mean conflict-over-values score of the preventive maintenance group.

2. When using the conflict-over-goals survey as a basis of comparison, the mean conflict-over-goals score of the assertive communication group will be the same as the mean conflict-over-goals score of the preventive maintenance group.

3. When using the conflict-over-demands survey as a basis of comparison, the mean conflict-over-demands score of the assertive communication group will be the same as the mean conflict-over-demands score of the preventive maintenance group.

4. When using the hostility survey as a basis of comparison, the mean hostility score of the assertive communication group will be the same as the mean hostility score of the preventive maintenance group.

5. When using the trust survey as a basis of comparison, the mean trust score of the assertive communication group will be the same as the mean trust score of the preventive maintenance group.

6. When using the research site's statistical analysis procedures for measuring rate of productivity, the mean rate of production efficiency of the assertive communication group will be the same as the mean rate of production efficiency of the preventive maintenance group.

Computer analysis was accomplished through the Software Package for Social Sciences (SPSS) computer software program (Norusis, 1990) available through Western Michigan University.
Content analysis is the method of analysis that was to be used to quantify data contained in the journal and the interview. Budd, Thorp, and Donohew (1967) described the following six stages of content analysis: formulating the research question, theory, and hypothesis; selecting a sample and defining categories; coding the content according to objective rules; scaling the items or in some other way arriving at scores; comparing these scores with other variables included in the study; and interpreting the findings according to appropriate concepts or theories.

These six steps were to be followed to analyze the content of the journal and interview. The first two steps, formulating theory and hypothesis, and selecting a sample have been discussed previously. The third step, coding was satisfied by the construction of code sheets for both the journal and interview (Appendix D).

Relevant responses on both the journal and typed copies of the interview were to be designated with a serial number and the code, followed by a feeling-tone symbol. This information was then to be transferred to appropriate cells in the code sheet.

Scoring was to be done by computing frequency counts of responses in the main categories of trust; hostility; and conflict over values, goals, and demands. Means were to be identified for the subcategories and percentages computed for the feeling tones within each category. The resultant scores were to be compared to scores obtained on the t test of independent samples and interpreted. This was to satisfy the fifth and sixth stages of content analysis as specified by Budd et al. (1967).
Although content analysis was thoroughly planned for, the nature of the results of the journal and the small number of interviewees precluded the use of this methodology. Other procedures were used to analyze data and are explained in Chapter IV.
CHAPTER IV

FINDINGS OF THE STUDY

The purpose of this study was to determine if a relationship exists between assertive communication training and levels of conflict over values, goals, and demands, as well as levels of hostility, trust, and productivity in the organization.

Chapter III described methods and procedures used to test the six hypotheses. The research questions were developed from a review of the literature that suggested the value of assertive communication to the organization. Measurements were done with the use of a researcher-made survey, a journal, an interview, and production results.

The design of the study involved the participation of two work groups comprised of four work cells in a Grand Rapids manufacturing firm. Two of the four work cells were randomly chosen by the toss of a coin to receive assertive communication training. The other two work cells received the unrelated training of preventive maintenance. The membership of the work cells had been established prior to the study.

In this study, the independent variable was assertive communication training. The dependent variables were conflict over values, goals, and demands; trust; and hostility, as well as productivity.

Reliability of the Survey

A test-retest analysis was run on the survey to determine the reliability of the survey. The survey was originally administered to the
first line management group which numbered seven (n = 7). The survey was then readministered to the same population one week later. A Pearson product-moment correlation was computed for each of the hypotheses addressed on the survey: conflict over goals, conflict over values, and conflict over demands, as well as hostility and trust. The small number of participants in this assessment precludes drawing firm conclusions about the reliability of the instrument. However, for each of the concepts, except conflict over demands, a Pearson product-moment correlation calculation produced a positive linear relationship as shown in Table 1.

Table 1
Correlation of Scores on Test and Retest Administration of Survey to Verify Reliability

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Pearson product-moment correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict over values</td>
<td>.6741</td>
</tr>
<tr>
<td>Conflict over goals</td>
<td>.9479</td>
</tr>
<tr>
<td>Conflict over demands</td>
<td>-.2305</td>
</tr>
<tr>
<td>Hostility</td>
<td>.6033</td>
</tr>
<tr>
<td>Trust</td>
<td>.7173</td>
</tr>
</tbody>
</table>

No explanation is known for the negative linear relationship obtained for the conflict-over-demands concept.

Because the group to which the survey was administered was so small, no firm conclusion can be drawn about the survey's reliability.
Pretest for Internal Validity

A pretest survey was administered to the experimental and comparison groups at the outset of the study to determine similarity of the groups. According to Isaac and Michael (1984), the internal validity of the design of this research is fairly satisfactory if groups have similar means and standard deviations.

Using the survey as a basis of comparison, the researcher anticipated an analysis of variance to demonstrate similar means and standard deviations on each of the dependent variables: conflict over values, conflict over goals, conflict over demands, hostility, and trust.

A comparison of the assertive communication group and the preventive maintenance group relative to the dependent variables is found in Table 2.

A summary of the comparisons of the two groups in terms of variance indicates that they are, indeed, similar for all variables. The .05 alpha level is exceeded by the probability scores of all of the variables. Therefore, one can conclude that the experimental and comparison groups are from the same population relative to each of the variables.

The data analysis of the research used the t test for independent samples. The t test is a robust statistical test as suggested by Popham and Sirotnik (1992). That is to say, a t value that can be correctly interpreted will be obtained even when the assumption of equal variances is violated.
Table 2
Comparison of Means and Standard Deviations of Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Assertive communication (n = 13)</th>
<th>Preventive maintenance (n = 13)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Conflict over values</td>
<td>2.22</td>
<td>.58</td>
<td>2.62</td>
</tr>
<tr>
<td>Conflict over goals</td>
<td>2.01</td>
<td>.45</td>
<td>2.44</td>
</tr>
<tr>
<td>Conflict over demands</td>
<td>2.16</td>
<td>.68</td>
<td>2.65</td>
</tr>
<tr>
<td>Hostility</td>
<td>2.02</td>
<td>.63</td>
<td>2.34</td>
</tr>
<tr>
<td>Trust</td>
<td>3.14</td>
<td>.71</td>
<td>3.33</td>
</tr>
</tbody>
</table>

*p < .05.

Results of Hypotheses Testing

**Hypotheses 1-5: Conflict Over Values, Goals, and Demands; Trust; and Hostility**

When using the survey as a basis of comparison, the investigator expected a difference in the mean scores of each of the dependent variables for the assertive communication group and the preventive maintenance group. In order to test these hypotheses, the research sample, comprised of the two work groups, totaling 23 employees, was surveyed using the researcher-developed instrument. The findings of the t test for independent means are found in Table 3. In this table the means, standard deviations, and the t-test findings for the dependent
Table 3
Comparison of Means, Standard Deviations, and t-Test Results for the Dependent Variables and Type of Training

<table>
<thead>
<tr>
<th>Variable</th>
<th>Assertive communication (n = 11)</th>
<th>Preventive maintenance (n = 12)</th>
<th>df</th>
<th>t</th>
<th>Two-tailed p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict over values</td>
<td>2.46 (SD = 0.75)</td>
<td>1.99 (SD = 0.80)</td>
<td>21.00</td>
<td>1.43</td>
<td>.168</td>
</tr>
<tr>
<td>Conflict over goals</td>
<td>2.30 (SD = 0.59)</td>
<td>2.14 (SD = 0.88)</td>
<td>19.37</td>
<td>0.64</td>
<td>.530</td>
</tr>
<tr>
<td>Conflict over demands</td>
<td>2.43 (SD = 0.65)</td>
<td>2.43 (SD = 0.98)</td>
<td>19.20</td>
<td>0.01</td>
<td>.992</td>
</tr>
<tr>
<td>Hostility</td>
<td>2.27 (SD = 0.72)</td>
<td>2.10 (SD = 0.90)</td>
<td>20.66</td>
<td>0.51</td>
<td>.616</td>
</tr>
<tr>
<td>Trust</td>
<td>3.10 (SD = 0.79)</td>
<td>3.38 (SD = 0.57)</td>
<td>18.07</td>
<td>-0.98</td>
<td>.338</td>
</tr>
</tbody>
</table>

*p < .05.
variables are described in terms of both assertive communication training and preventive maintenance training.

Through the use of the $t$ test, two-tailed probabilities were calculated which are all greater than the alpha level of .05; therefore, the null hypotheses relative to these variables cannot be rejected. No conclusion may be drawn about the difference between the group that was trained in assertive communication and the group that was trained in preventive maintenance relative to the variables of conflict over values, goals, and demands; trust; and hostility.

Hypothesis 6: Productivity

When using the research site's measures of production efficiency, the groups posted the productivity as depicted in Table 4.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Production Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January</td>
</tr>
<tr>
<td>Assertive communication Cell 1</td>
<td>99.26%</td>
</tr>
<tr>
<td>Assertive communication Cell 3</td>
<td>87.01%</td>
</tr>
<tr>
<td>Preventive maintenance Cell 2</td>
<td>99.60%</td>
</tr>
<tr>
<td>Preventive maintenance Cell 4</td>
<td>85.94%</td>
</tr>
</tbody>
</table>

Using these rates as a basis of comparison, the researcher expected a difference in the mean score of production efficiency between the assertive communication and preventive maintenance trained groups.
In order to test this hypothesis, these production rates were compared in a $t$ test for independent means. The findings for these independent means are found in Table 5.

In Table 5 the means, standard deviations, and $t$-test findings for the variable of production efficiency are described in terms of both assertive communication training and preventive maintenance training.

The $t$ test computed a two-tailed probability of .466 which is greater than the alpha level of .05; therefore, no conclusion may be drawn about the difference between the assertive communication trained group and the preventive maintenance trained group relative to production efficiency.

Results of the Analysis of the Journal

The intent of the journal was to gather data through a different method that would substantiate or refute the operational hypotheses regarding conflict over values, conflict over goals, conflict over demands, trust, and hostility. Content analysis as defined by Budd et al., (1967) was selected as the method by which the data contained in the journal would be analyzed. Questions for the journal were developed to elicit responses that could render information about each of the dependent variables. Coding sheets and scales were developed by which responses could be quantified.

The researcher assumed that the research participants would be explicit in responding to the questions. What the researcher failed to take into account was that the journal asked people employed to work with their hands to be astute and verbose in their written expression.
Table 5
Comparison of Means, Standard Deviations, and t-Test Results for Production Efficiency and Type of Training

<table>
<thead>
<tr>
<th>Type of training</th>
<th>Assertive communication (n = 11)</th>
<th>Preventive maintenance (n = 12)</th>
<th>df</th>
<th>t</th>
<th>Two-tailed p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>df</td>
</tr>
<tr>
<td>Production efficiency</td>
<td>92.89</td>
<td>7.29</td>
<td>89.21</td>
<td>9.31</td>
<td>9.46</td>
</tr>
</tbody>
</table>

*p < .05.
Responses to questions on the journals were very brief, most often "yes" or "no," even when longer answers were solicited. The responses were so terse that no coding could be done according to the concepts of the six hypotheses; therefore, the original journal coding sheets (Appendix D) were useless. Still the researcher speculated that the answers might show a pattern that would be of interest to the study. Accordingly, the researcher analyzed the yes and no answers to the following journal questions that are most directly aligned with the original research hypotheses:

1. Did you interact with your supervisor to resolve the problem?
2. Did you interact with your teammates to resolve the problem?
3. How do you feel about any of the interactions?
4. Was the problem resolved satisfactorily?

These questions relate closely to the original hypotheses by indicating if participants of either group communicate more with supervisors or fellow employees, thereby increasing opportunity to address conflict, feel positively about their interactions in the organization (increasing trust), and solve problems (reducing hostility). Accordingly, the following additional operational hypotheses were developed.

1. The proportion of assertive communication trained employees who interact with their supervisor is higher than the proportion of preventive maintenance trained employees.
2. The proportion of assertive communication trained employees who interact with their teammates is higher than the proportion of preventive maintenance trained employees.
3. The proportion of assertive communication trained employees who feel positively about their interactions is higher than the proportion of preventive maintenance trained employees.

4. The proportion of problems resolved satisfactorily is higher with the assertive communication trained employees than with the preventive maintenance trained employees.

Accordingly, null hypotheses are as follows:

1. The proportion of assertive communication trained employees who interact with their supervisor is the same as the proportion of preventive maintenance trained employees.

2. The proportion of assertive communication trained employees who interact with their teammates is the same as the proportion of preventive maintenance trained employees.

3. The proportion of assertive communication trained employees who feel positively about their interactions is the same as the proportion of preventive maintenance trained employees.

4. The proportion of conflict resolved satisfactorily by the assertive communication trained employees is the same as the preventive maintenance trained employees.

The journal produced nominal data which was coded and analyzed. A chi-square analysis was run on the data for each of the research hypotheses through the Statistical Package for Social Sciences (SPSS) computer software program (Norusis, 1990) available through Western Michigan University. Alpha level was set at .10.
Hypothesis 7: Interaction With Supervisors

Using the responses to the journal as a basis of comparison, the investigator expected a difference between the proportion of assertive communication trained and preventive maintenance trained employees who interacted with their supervisors. The findings of the chi-square analysis are presented in Table 6.

Table 6
Comparison of Proportions of Participants Who Interacted With Their Supervisor According to Training Type

<table>
<thead>
<tr>
<th>Type of training</th>
<th>Assertive communication training (n = 15)</th>
<th>Preventive maintenance training (n = 9)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60%</td>
<td>50%</td>
<td>.51</td>
</tr>
</tbody>
</table>

*<p < .10.

Given a p value of .51, which is far greater than the alpha level of .10, one can draw no conclusions about the difference between the proportion of assertive communication trained and the proportion of preventive maintenance trained participants who interacted with their supervisor.
Hypothesis 8: Interaction With Teammates

Using the responses to the journal as a basis of comparison, the investigator expected a difference between the proportion of assertive communication trained and preventive maintenance trained employees who interacted with their teammates. The findings of the chi-square analysis are presented in Table 7.

Table 7
Comparison of Proportions of Participants Who Interacted With Their Teammates According to Training Type

<table>
<thead>
<tr>
<th>Type of training</th>
<th></th>
<th></th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertive communication training (n = 18)</td>
<td>72%</td>
<td></td>
<td>.14</td>
</tr>
<tr>
<td>Preventive maintenance training (n = 9)</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .10.

The p value of .14 is larger than the alpha level of .10. Therefore, one can draw no firm conclusions about the difference between the proportion of communication trained and preventive maintenance trained participants who interacted with their teammates. However, the .14 level is very close to the predetermined alpha level of .10 and may indicate the advisability of further inquiry.
Hypothesis 9: Positive Feelings About the Interactions

The investigator anticipated a difference in the journal response between the proportion of assertive communication trained and preventive maintenance trained employees who feel positively about their interactions. However, 100% of the participants who responded in both groups indicated positive feelings about the interaction.

Hypothesis 10: Conflicts Resolved Satisfactorily

Using the journal as the basis of comparison, the investigator expected a difference between the proportion of conflicts resolved satisfactorily by the assertive communication trained employees and the proportion of conflicts resolved satisfactorily by the preventive maintenance trained employees. The findings of the chi-square analysis are presented in Table 8.

<table>
<thead>
<tr>
<th>Type of training</th>
<th>Assertive communication training (n = 15)</th>
<th>Preventive maintenance training (n = 9)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>65%</td>
<td>88%</td>
<td>.09</td>
</tr>
</tbody>
</table>

*p < .10.
The $p$ value of .09 is less than the alpha level of .10. Therefore, one can reject the null hypothesis that there is no difference between the proportion of assertive communication trained and preventive maintenance trained participants who resolved problems satisfactorily. However, the larger proportion was realized by the preventive maintenance group. This is in opposition to the investigator's predictions. It appears that those who are preventive maintenance trained evaluate satisfactory problem resolution more frequently than those who are assertive communication trained. These findings may suggest that assertive communication does not, of itself, foster problem resolution. Conversely, preventive maintenance training targets exactly that, preventing and solving problems. Further research seems to be indicated.

Comparison of Pretest and Posttest Scores on the Dependent Variables

A post hoc comparison of scores of the research groups on the pretest and posttest revealed an unexpected pattern. The researcher had predicted that for the assertive communication group all of the conflict related scores (i.e., scores regarding values, goals, demands, and hostility) would go down. Simultaneously, the investigator anticipated the trust score would go up as the group was trained. Instead, just the opposite occurred. In Table 9 the assertive communication group's scores of the pretest and posttest are compared.

Similarly the researcher anticipated no change in the scores of the preventive maintenance group. However, preventive maintenance group's scores did change in exactly the direction the researcher had
Table 9
Comparison of Assertive Communication Group's Pretest and Posttest Scores

<table>
<thead>
<tr>
<th>Concept</th>
<th>Pretest score</th>
<th>Posttest score</th>
<th>Direction of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict over values</td>
<td>2.22</td>
<td>2.45</td>
<td>+</td>
</tr>
<tr>
<td>Conflict over goals</td>
<td>2.01</td>
<td>2.33</td>
<td>+</td>
</tr>
<tr>
<td>Conflict over demands</td>
<td>2.16</td>
<td>2.43</td>
<td>+</td>
</tr>
<tr>
<td>Hostility</td>
<td>2.02</td>
<td>2.27</td>
<td>+</td>
</tr>
<tr>
<td>Trust</td>
<td>3.14</td>
<td>3.10</td>
<td>-</td>
</tr>
</tbody>
</table>

predicted for the assertive communication group. That is, conflict related scores went down and the trust score rose as indicated in Table 10.

Table 10
Comparison of Preventive Maintenance Group's Pretest and Posttest Scores

<table>
<thead>
<tr>
<th>Concept</th>
<th>Pretest score</th>
<th>Posttest score</th>
<th>Direction of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict over values</td>
<td>2.62</td>
<td>1.99</td>
<td>-</td>
</tr>
<tr>
<td>Conflict over goals</td>
<td>2.44</td>
<td>2.14</td>
<td>-</td>
</tr>
<tr>
<td>Conflict over demands</td>
<td>2.66</td>
<td>2.43</td>
<td>-</td>
</tr>
<tr>
<td>Hostility</td>
<td>2.34</td>
<td>2.10</td>
<td>-</td>
</tr>
<tr>
<td>Trust</td>
<td>3.33</td>
<td>3.38</td>
<td>+</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
In every case for both the assertive communication and preventive maintenance trained groups, there was a change in a direction that was totally unexpected. The existence and direction of the changes is so consistent that the change cannot be attributed to chance. Conjecture for the cause and direction of the change will be discussed in Chapter V.

Results of Analysis of Participant Talk About Training

Two questions on the survey inquired as to what extent the subjects have talked with one another about the training. One question asked the extent to which participants discussed the training with fellow participants in the same training group. The other question asked the extent to which subjects talked with participants in the other training group about the training.

The difference between the two groups in intra-group discussion and inter-group discussion is important in determining if contamination of results has occurred. To test for differences, a t test of independent samples was run. The findings of the t test for independent means are found in Tables 11 and 12.

The t-test analysis produced probability scores of .806 and .684 for intra-group and inter-group discussion, respectively. Both are higher than the .05 alpha level; consequently, there is little concern that differences in the amount of discussion about the training would contaminate the results of the research.
### Table 11
Comparison of Means and t-Test Results for Intra-Group Discussion

<table>
<thead>
<tr>
<th>Type of training</th>
<th>Assertive communication (n = 9)</th>
<th>Preventive maintenance (n = 12)</th>
<th>Two-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>df</td>
<td>t</td>
</tr>
<tr>
<td>Assertive communication</td>
<td>2.78</td>
<td>2.67</td>
<td>2.67</td>
</tr>
<tr>
<td>Preventive maintenance</td>
<td>2.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

### Table 12
Comparison of Means and t-Test Results for Inter-Group Discussion

<table>
<thead>
<tr>
<th>Type of training</th>
<th>Assertive communication (n = 9)</th>
<th>Preventive maintenance (n = 12)</th>
<th>Two-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>df</td>
<td>t</td>
</tr>
<tr>
<td>Assertive communication</td>
<td>2.44</td>
<td>2.25</td>
<td>2.25</td>
</tr>
<tr>
<td>Preventive maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Results of Interviews With Management

Originally the researcher expected to interview at least five administrators of the firm. However, two of the targeted five were not involved with the research subjects at the time of the interview. Of the three administrators left, one was the vice president of the firm. He reported that he was unable to answer most of the interview questions because he does not interact regularly enough with the research subjects to assess their communication. The responses of the interviewees were coded with the coding sheets (Appendix E). The results are reported in categories that correspond to the dependent variables.

Five additional questions were also asked that elicited interviewee opinions about the general effects of the assertive communication training. The vice president was able to respond to these more general questions. His answers are included in the summaries.

1. What are some types of training that you think are beneficial to the operations of your organization?

2. Have you noticed any changes in the employee's communication with one another (since the training)? If so, what kind?

3. Have you noticed any changes in how employees are communicating with management? What kind of changes?

4. What are the benefits of assertive communication training as you see them?

5. What are the drawbacks of assertive communication training from your standpoint?

Responses to these questions were summarized and reported.
Conflict Over Values

1. Cell supervisor: Newer employees to the organization feel as important as others in the organization. Very few express that they are not listened to. "Wants and needs are met here—employees get what they want. Everyone wants the firm to be successful."

2. Plant manager: All employees are treated equally and do not feel less important than others.

Conflict Over Goals

1. Cell supervisor: "If you make goals with them, you will not hear anything negative. Goals are now very reachable. If people feel goals are reachable and have input in developing them, the response will be positive. The key is involvement."

2. Plant manager: No conflict is expressed over attempts to pursue goals. However, employees express fear about change. "People who are educated challenge the system."

Conflict Over Demands

1. Cell supervisor: Employees do not express that how they do their job is different from the way the organization expects it done. Instead, they might talk about how they have a better idea. Recently the subjects are talking more freely. Currently when asked a question, subjects will reply openly. This was not necessarily true prior to the training. "Perhaps the training gave employees the sanctioning to open up."
2. Plant manager: No response.

3. Vice president: Currently employees are engaged in doing a time study and have responded by being honest and open with their supervisors. Management did not anticipate this.

Trust

1. Cell supervisor: Members of the assertive communication group are more frequently heard supporting one another in challenging situations. Employees use honest communication with one another. Much is based on whether they are doing a good job. There is not much difference between cells.

2. Plant manager: It is not possible to compare the difference between the assertive communication group and preventive maintenance group. However, two participants of the experimental group are described as demonstrating frequent overt support for their peers. To quote the manager, "Two men who were trained are the shining stars. They are really demonstrating this. I have heard more praise out of them recently than I have in a long time."

Hostility

1. Cell supervisor: In the assertive communication group there is a small amount of hostility expressed regarding change. In the preventive maintenance group, there seems to be no hostility communicated; however, in one cell of the preventive maintenance group there is no communication at all.
2. Plant manager: Very little hostility is expressed. There is a
language barrier in one of the preventive maintenance cells which pre­
cludes communication.

Type of Training Beneficial to the Organization

The managers feel that a variety of training is desirable and should
include orientation to the organization, machine training, preventive
maintenance, print reading, shop math, problem solving, team building,
and interpersonal communications. Managers suggested that the
training of the research project will become increasingly beneficial as
employees are encouraged to use their new skills.

Changes Noted in Employee Communication

Some change has been noted. Some of the key phrases of the
training are noticeably being used. Improvement in eye contact and
body language has been observed. One of the managers made repeated
comments about increasingly realizing the need for quality communica­
tion skills, using both quality expressive and listening skills.

Benefits of Assertive Communication Training

Assertive communication training sets the expectation for em­
ployee involvement. People will let you know if they have a problem, or
an idea to improve. Assertive communication enables people to partici­
pate in the change process and communicate with team members. It
elicits respect for diverse opinions. It promotes clarity of understanding,
"You never leave a meeting not knowing what is wanted. From the 'big
guy' down." Learning how to better communicate will only help collaboration. It is critical to be able to understand each other.

Drawbacks of Assertive Communication

There are no negatives as long as the approach maintains others' self-respect. "Through assertive communication, what you hear may not make you happy, but if you can understand it, you can live with it."

Recommendations for the Training

Administer the training in shorter bits over a longer period of time in order to capitalize on the potential of follow-up and to remind employees to use their skills.

Limitations of the Study

Threats to Internal Validity

Several factors may influence the internal validity of this study:

1. Differential selection: Preexisting groups were used precluding random assignment of individuals to the sample population. However, the work cells were randomly assigned to the experimental and comparison groups by a flip of a coin.

2. Maturation: Since the experiment took place over a time span of 4 weeks, some uncontrolled processes within the subjects may have occurred simultaneously. The use of a comparison group composed of comparable persons with similar experiences should have helped minimize this factor.
3. Contemporary history: Since the experiment took place over a 4-week period, there may be external historical events in the environment that may impact measured outcomes; for example, unusually high number of orders to produce in a given time necessitating long hours, or increased work days per week. Use of a comparison group with similar experiences should have minimized this factor also.

4. Pretesting procedures: Exposure to the pretest may effect the performance of some of the participants on the posttest (Ary, Jacobs, & Razavieh, 1990).

**Generalizability of the Study**

There are two primary limitations of the generalizability of this study to other populations:

1. Generalizability of results and selection of environment: Because the research site's president is convinced of the value of assertive communication training for his staff, one would suspect that the president values open communication and that it is already a part of the culture and "the way things are done around the firm" (Sergiovanni, 1984). His staff's receptivity to the training and willingness to utilize its principles may not be representative of other manufacturing firms.

2. Generalizability of results and selection of subjects: Subjects for this experiment have considerable tenure with the company. This may impact the extent to which they have been acculturated into the organization. Their receptivity and responsiveness to the training may be unique to their longevity with the company, rendering the generalizability to other employees inside and outside the firm suspect.
CHAPTER V

DISCUSSIONS, RECOMMENDATIONS, AND CONCLUSIONS

Tichy and Devanna (1990) concluded that organizations that "institutionalize a contention system" maximize the potential of conflict (p. 268). The fewer the restrictions and the more open the communication allowed, the greater the probability of de-escalation of conflict. Miller and Simons (1974) found that sanctioning members to give one another feedback about behavior increases the probability for cooperation.

Assertive communication is one such contention system. Assertive communication is predicated on open communication. It mandates feedback and recognizes conflict as necessary. It focuses on recognizing goals and information in a direct, honest manner while maintaining respect for others (Jakubowski-Spector, cited in Rawlings & Carter, 1977).

This study investigated the relationship between assertive communication training and conflict over values, goals, and demands, as well as trust, hostility, and productivity in the organization.

A discussion on the conclusions of the study is framed according to the research questions addressed. Recommendations and conclusions follow.
Discussion

Relationship Between Training and Dependent Variables

The data analysis in Chapter IV does not suggest a relationship between assertive communication training and conflict over values, goals, and demands; hostility; trust; and productivity. The research did not reinforce the idea that if encouraged to communicate, the workers will be more empowered and have more ownership in the organization (Lawlor, cited in Tichy & Devanna, 1990). The increased sense of ownership or oneness with the organization developed through open communication was thought to diminish perceptions of conflict over values (Burns, 1978), goals (Senge, 1990), and demands (Getzels & Guba, cited in Warfield, 1992); hostility (Miller & Simons, 1974); and increase trust (Bennis & Nanus, 1985) between the individual and the organization, resulting in increased productivity. These concepts could not be supported by this research study.

Instead, the results of the research were in the opposite direction of that anticipated. For the assertive communication trained group, the conflict over values, goals, and demands and hostility scores went up instead of down. Additionally, the trust score, predicted to go up, went down. Conversely, for the preventive maintenance group, the conflict over values, goals, and demands and hostility scores went down and the trust score went up. Although it is purely conjecture, the researcher suggests that the perceived level of conflict increased because the employees were trained to communicate openly and regularly. More frequent communication leads to additional opportunities for conflict.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
(Thomas, cited in Owens, 1991), thereby increasing the perceived level of conflict. This logic is reinforced by the idea that specific problem-solving skills were not taught as a part of the assertive communication training. Participants were trained to identify and inform others of problems but not to solve them. This could have heightened awareness of conflict without providing the means to resolve it. Conversely, the focus of the preventive maintenance group was to solve mechanical problems. Perhaps the focus of this training on problem resolution impacted the comparison group's perception of conflict, hostility, and trust.

The researcher's conjectures are reinforced by comments from the management's interviews about the assertive communication group.

The assertive communication group is good at communicating. I hear them giving one another feedback such as "You are being passive aggressive on this issue!" The assertive communication trained workers are talking more freely and will reply to questions openly. Perhaps the training gave employees the sanctioning to open up.

Relationship Between Training and Frequency of Interaction

The results of the data analysis in Chapter IV does not support a significant relationship between assertive communication and frequency of interaction between employees and their supervisors or teammates. Although the difference in the proportion of workers who interacted with their supervisors and teammates was not statistically significant between the assertive communication group and the preventive maintenance group, it is interesting to note that the proportion of the assertive communication group who interacted with both supervisors and teammates was higher. Although the higher proportions may be due to
chance, this may lend further credence to the researcher's previous conjecture that the assertive communication training encouraged participants to communicate, thereby possibly impacting the frequency of interaction.

Relationship Between Training and a Positive Feeling About the Interactions

Data analysis indicated that virtually no difference existed between the assertive communication and preventive maintenance groups relative to their feelings about their interactions with supervisors and management. One hundred percent of those responding from both groups indicated positive feelings about the interactions. This may suggest that employees' communication attempts are reinforced positively in some way by the organization. It may also suggest that employees may feel intrinsically rewarded when they respect themselves by speaking what is on their minds (Jakubowski-Spector, cited in Rawlings & Carter, 1977).

Relationship Between Training and Resolution of Problems

The data analysis in Chapter IV does not support a relationship between assertive communication and satisfactory problem resolution. Instead, from the data one can conclude that the group trained in preventive maintenance more frequently viewed problems satisfactorily resolved than did the assertive communication trained group. The result of this testing is also in sync with the researcher's speculations that this may reflect the absence of problem-solving skill development in the
assertive communication training and the focus on problem solving in preventive maintenance training. It is logical that trained to solve specific mechanical problems, the comparison group would express more frequent problem resolution that the experimental group that was trained to share information and pinpoint problems, not resolve them.

Recommendations

As a result of the data analysis, this researcher suggests several recommendations. Recommendations include extension of the time-frame for the study, change of the assertive communication curriculum, and additional data collection methods.

First, the study could be extended over the course of a year so that the experimental group has time to practice their assertive communication skills. Problem resolution skills are not explicitly taught through assertive communication training. However, problem resolution skills mandate exchange of information which is an implicit part of assertive communication training. Given practice at exchanging information and openly communicating with one another over time, participants may develop specific problem resolution skills that will impact their perceptions of levels of conflict.

The monthly production efficiency scores were compiled over only a 3-month period. Although the t test indicated no significant difference between the two groups, both cells of the assertive communication group posted higher rates after the conclusion of the training in March as compared to January rates. Conversely, both cells of the preventive maintenance group posted lower rates in March than at the outset of the
study. A study extended over a longer time period could indicate a pattern.

The second recommendation is that the assertive communication curriculum be extended to include specific problem resolution strategies. This may impact participants' perceptions of conflict, hostility, and trust since they would then be trained not only to raise issues, but also to address them. Further research is desirable to determine the impact of the modified curriculum.

Finally, additional data collection methods such as case studies of the interactions of individual cells and their individual members may shed light on the types and frequency of interactions that result in decreased levels of perceived conflict, hostility, and increased levels of trust and productivity. Interviews of those participants recently observed and reported by management to be more open and more supportive of their peers may illuminate what prompted the increase in this organizationally desirable behavior.

Conclusions

Although this research study did not generate support for a relationship between assertive communication training and conflict over values, goals, demands; hostility; trust; and productivity, it did suggest that all participants perceive interactions with supervisors and teammates as positive. Possibly the process of training employees does sanction them to "open up" as suggested by management and sharing what they know is gratifying to employees.
By encouraging open communication, one is encouraging participation which should increase the information available to the organization. According to Wheatley (1992), the way one develops the information needed to do business is through participation.

We need a broad distribution of information, viewpoints, and interpretations if we are to make sense of this world. . . . A few people, charged with interpreting the data, are, in fact observing only very few of the potentialities contained within that data. Consider how different it is . . . when the wave of information spreads out broadly everywhere in the organization.

It would seem that the more participants we engage in this participative universe, the more we can access its potentials and the wiser we become. To banish the ghosts in this ghostly universe, we need a different pattern—one in which more and more of us engage freely, evoking multiple meanings through our powers of observation. (pp. 64-65)

According to the management of the research site, assertive communication sets the expectation for employee involvement and enables participation in the change process. It elicits respect for diverse opinions and promotes clarity of understanding.

Wheatley (1992) continued:

We also create order when we invite conflicts and contradictions to rise to the surface, when we search them out, highlight them, even allowing them to grow large and worrisome. We need to support people in the hunt for unsettling or disconfirming information, and provide them with the resources of time, colleagues, and opportunities for processing the information. . . . Through constant exchanges, new information is spawned and the organization grows in its effectiveness. (p. 116)

This researcher concludes that it is in the best interest of the research site to combine assertive communication training, problem-solving training, and specific production-skill training to encourage employees to share information, and deal with the resultant issues.
Further research is in order to determine the relationship between this combination of training and perceived levels of conflict over values, goals, and demands; hostility; trust; and productivity.

If such a relationship can be demonstrated, organizations will be well served to train their employees accordingly.
Appendix A

Survey of Organizational Effectiveness
SURVEY OF ORGANIZATIONAL EFFECTIVENESS

The purpose of this questionnaire is to exchange information. It's an attempt to find out how well we are working together at Davidson Plyforms, Inc. When we know what is working well and what is not we can better plan for the success of our employees and the organization. You can help us get the information that we need to improve by completing this questionnaire. There are no right or wrong answers. Just your thoughts and feelings.

Please fill in or circle the information below to assist in interpreting your responses. Your responses will be strictly confidential; no one in the organization will know how you answer the questions. Thank you in advance for your help.

1. I am a member of:  
   a. Work Group #1  
   b. Work Group #2

2. I am a member of:  
   a. Cell 1  
   b. Cell 2  
   c. Cell 3  
   d. Cell 4

3. I work:  
   a. day shift  
   b. night shift

4. How many years have you worked at Davidson Plyforms, Inc.  
   a. two years or less  
   b. three to five years  
   c. five to ten years  
   d. more than ten years

5. Please indicate your age:  
   a. 18-20  
   b. 20-24  
   c. 25-29  
   d. 30-39  
   e. 40-50, or more

6. Please indicate your gender:  
   a. female  
   b. male
Please answer the following statements by circling the number you feel best fits the extent each statement is true given your experience on your job.

<table>
<thead>
<tr>
<th>Statement True:</th>
<th>Extent True</th>
</tr>
</thead>
<tbody>
<tr>
<td>To What Extent Is</td>
<td>little</td>
</tr>
<tr>
<td>1. I feel that my opinions and beliefs are not valued by the organization.</td>
<td>1</td>
</tr>
<tr>
<td>2. I feel that the old ways of doing things are better than the new.</td>
<td>1</td>
</tr>
<tr>
<td>3. I feel that I know how to do my job better than the organization.</td>
<td>1</td>
</tr>
<tr>
<td>knows how it needs to be done</td>
<td></td>
</tr>
<tr>
<td>4. I feel that when decisions are made, I usually disagree</td>
<td>1</td>
</tr>
<tr>
<td>with what has been decided upon.</td>
<td></td>
</tr>
<tr>
<td>5. I have few opportunities to state what I believe.</td>
<td>1</td>
</tr>
<tr>
<td>6. I feel that the changes we are going through are not worth all of the effort.</td>
<td>1</td>
</tr>
<tr>
<td>7. I feel that I know how to improve my job but do not get a chance</td>
<td>1</td>
</tr>
<tr>
<td>to share the information with management.</td>
<td></td>
</tr>
<tr>
<td>8. I feel frustrated in my attempts to state my own side of a situation.</td>
<td>1</td>
</tr>
<tr>
<td>9. I feel that what I believe is seldom as important as what</td>
<td>1</td>
</tr>
<tr>
<td>management believes.</td>
<td></td>
</tr>
<tr>
<td>10. I feel that we need to spend more time dealing with the reality of</td>
<td>1</td>
</tr>
<tr>
<td>our situation instead of dealing with &quot;how things could be.&quot;</td>
<td></td>
</tr>
<tr>
<td>11. I feel that Davidson does not care that I know how my job</td>
<td>1</td>
</tr>
<tr>
<td>can best be done.</td>
<td></td>
</tr>
<tr>
<td>12. I feel that what I think is not as important as what management thinks.</td>
<td>1</td>
</tr>
<tr>
<td>13. I have few opportunities to suggest how we might do things</td>
<td>1</td>
</tr>
<tr>
<td>better around here.</td>
<td></td>
</tr>
<tr>
<td>14. I feel that it is not very important to understand the vision of</td>
<td>1</td>
</tr>
<tr>
<td>Davidson Plyforms, Inc.</td>
<td></td>
</tr>
<tr>
<td>15. I feel that Davidson and I do not agree on how my job can</td>
<td>1</td>
</tr>
<tr>
<td>be done most efficiently.</td>
<td></td>
</tr>
<tr>
<td>16. I feel resentment over decisions that are made here at work.</td>
<td>1</td>
</tr>
</tbody>
</table>
17. I do not agree with management about how Davidson Plyforms, Inc. should operate. 1 2 3 4 5
18. I feel that it is more important to talk about today's activities that the future of the organization. 1 2 3 4 5
19. I feel that some of the things I am required to do at my job do not make much sense. 1 2 3 4 5
20. I feel angry about my interactions with management. 1 2 3 4 5
21. If I were in charge, I would change how we do things here. 1 2 3 4 5
22. I feel that I do not want the same things out of my job that Davidson expects from my job. 1 2 3 4 5
23. I feel that I would really like to have more say in how my job should be carried out. 1 2 3 4 5
24. I feel that what I think does not count as much as what some of my co-workers think. 1 2 3 4 5
25. I feel that what I think, believe, and feel is not important to my employer. 1 2 3 4 5
26. I feel that what I want to do at Davidson Plyforms, Inc. is different from what my employer wants. 1 2 3 4 5
27. I feel that management does not listen to my suggestions for improving the efficiency of my job. 1 2 3 4 5
28. I feel that there is a power struggle between myself and management. 1 2 3 4 5
29. I feel that my supervisors and I do not agree on how my work should be done. 1 2 3 4 5
30. I feel that we can continue to be competitive if we keep things the way they are 1 2 3 4 5
31. I feel that I should have more say in the way my job is supposed to be done. 1 2 3 4 5
32. I feel angry about my interactions with some of my co-workers. 1 2 3 4 5
33. I would like to tell management "a thing or two." 1 2 3 4 5
34. I would like to tell some of my co-workers "thing or two." 1 2 3 4 5
In this section of the questionnaire please circle the number you feel best fits the extent each statement is true of your work team using the same rating scale:

<table>
<thead>
<tr>
<th>To What Extent Is Statement True</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. show an interest in suggestions from other members of the work group</td>
<td>little</td>
<td>mod.</td>
<td>great</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. let people know where they stand and how they are doing their jobs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. are dependable in doing their assigned work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. compliment individuals who contribute to the group's effort</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. are easy to approach and communicate with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. welcome ideas from other group members even if they differ</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. show appreciation when group members solve a tough problem at work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. can be believed when they tell you something</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. sincerely want individuals to feel free to say what they think</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. encourage people to participate in decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. can be depended upon to do what they say will be done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. give individuals frequent feedback about their work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. encourage people to speak up if they think they have a good idea</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. are open and above board in dealing with each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. assume group members will take care of their assigned responsibilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. ask others for recommendations on matters that affect their work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. are easy to talk to about work problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. say what they think about the group's performance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. make it easy for people to say what is on their minds</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. give individuals frank comments about the way they do their jobs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
The next brief section deals with employees' discussion of this training.

21. I have talked with my co-workers in this training group about our training.  

<table>
<thead>
<tr>
<th>none</th>
<th>some</th>
<th>lots</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

22. I have talked with my co-workers in other training sessions.  

<table>
<thead>
<tr>
<th>none</th>
<th>some</th>
<th>lots</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

Journal on Organizational Effectiveness
Journal on Organizational Effectiveness

1. Describe a situation you were in this week in which there was a production problem.

2. Did you interact with your supervisor to resolve the problem? What did you do and/or say?

3. Did you interact with your teammate/s to resolve the problem? What did you do and/or say?

4. How much time approximately did it take to resolve the problem?

5. How many parts needed to be scrapped?

6. If this happened again, what would you do/say differently?

7. How do you feel about any of the interactions?

8. Was the problem resolved satisfactorily? Yes or No (circle one)
   Why or why not?
Appendix C

Interview With Management
Interview with Management

1. What are some types of training that you think are beneficial to the operations of your organization?

2. You are aware that we have recently trained work groups one and two in assertive communication skills. Have noticed any changes in the employees' communication with one another? If so, what kind of changes?

3. Have you noticed any changes in how employees are communicating with management? What kind of changes?

4. How often have you seen these changes? In whom have you seen them? In what setting?

5. Do you hear employees using honest communication about how the processes of the organization are going? Can you tell me some specific examples?

6. Do you hear employees using honest communication with one another about how their performances are affecting others and the operations of the organization? If so, describe.

7. Do you hear employees supporting each other in challenging situations? If so, describe.

8. Is there evidence of hostility between co-workers and between co-workers and management? Please describe?

9. Do you hear frustration over attempts to pursue goals? Please describe.

10. Do you hear employees suggest they feel less important than others in the organization? Please elaborate.

11. Do you hear employees express what they believe or value? What do they say?

12. Do you hear that employees feel their needs are less important than management needs? What do they say?

13. Do you hear employees expressing desire to have the organization stay as it is as opposed to pursuing its vision? What do they say?
14. Do you hear employees express that how they do their job is different from the way the organization expects it done?

15. What are the benefits of assertive communication training as you see them?

16. What are the drawbacks of assertive communication training from your standpoint?
Appendix D
Coding Sheets
<table>
<thead>
<tr>
<th>Code</th>
<th>Subcategory</th>
<th>Feeling tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-1</td>
<td>Opinion/beliefs: not valued</td>
<td></td>
</tr>
<tr>
<td>a-2</td>
<td>Has no opportunities to share beliefs</td>
<td></td>
</tr>
<tr>
<td>a-3</td>
<td>Feels own beliefs are not important</td>
<td></td>
</tr>
<tr>
<td>a-4</td>
<td>Has no opportunities to share knowledge</td>
<td></td>
</tr>
<tr>
<td>a-5</td>
<td>Disagrees with management re: operation of firm</td>
<td></td>
</tr>
<tr>
<td>a-6</td>
<td>Disagrees with management re: how own job should be done</td>
<td></td>
</tr>
</tbody>
</table>
## Category: Conflict Over Goals

<table>
<thead>
<tr>
<th>Code</th>
<th>Subcategory</th>
<th>Feeling tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>b-1</td>
<td>Likes old ways better</td>
<td></td>
</tr>
<tr>
<td>b-2</td>
<td>Changes are ineffective</td>
<td></td>
</tr>
<tr>
<td>b-3</td>
<td>Needs to deal with the here and now</td>
<td></td>
</tr>
<tr>
<td>b-4</td>
<td>Wants different things from job than firm wants</td>
<td></td>
</tr>
</tbody>
</table>
### Category: Conflict Over Demands

<table>
<thead>
<tr>
<th>Code</th>
<th>Subcategory</th>
<th>Feeling tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>c-1</td>
<td>Knows job better than organization</td>
<td></td>
</tr>
<tr>
<td>c-2</td>
<td>Does not get to talk about improving job to management</td>
<td></td>
</tr>
<tr>
<td>c-3</td>
<td>Feels firm does not care about employee’s knowledge of job</td>
<td></td>
</tr>
<tr>
<td>c-4</td>
<td>Does not agree with firm about efficiency of the job</td>
<td></td>
</tr>
<tr>
<td>c-5</td>
<td>Does not understand why job needs to be done as defined by firm</td>
<td></td>
</tr>
<tr>
<td>c-6</td>
<td>Wants more say in job</td>
<td></td>
</tr>
</tbody>
</table>
Category: Trust

<table>
<thead>
<tr>
<th>Code</th>
<th>Subcategory</th>
<th>Feeling tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-1</td>
<td>Teammates use open communication about operation of firm</td>
<td></td>
</tr>
<tr>
<td>d-2</td>
<td>Teammates use open communication about performance of others</td>
<td></td>
</tr>
<tr>
<td>d-3</td>
<td>Teammates support one another</td>
<td></td>
</tr>
<tr>
<td>d-4</td>
<td>Teammates honor commitments and promises</td>
<td></td>
</tr>
<tr>
<td>d-5</td>
<td>Teammates are easy to talk to</td>
<td></td>
</tr>
<tr>
<td>d-6</td>
<td>Teammates ask for recommendations</td>
<td></td>
</tr>
</tbody>
</table>
Category: Hostility

<table>
<thead>
<tr>
<th>Code</th>
<th>Subcategory</th>
<th>Feeling tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-1</td>
<td>Disagrees with decisions</td>
<td></td>
</tr>
<tr>
<td>e-2</td>
<td>Frustrated in wanting to share information</td>
<td></td>
</tr>
<tr>
<td>e-3</td>
<td>Has different priorities than management</td>
<td></td>
</tr>
<tr>
<td>e-4</td>
<td>Feels resentful over decisions</td>
<td></td>
</tr>
<tr>
<td>e-5</td>
<td>Angry with management</td>
<td></td>
</tr>
<tr>
<td>e-6</td>
<td>Feels less important than co-workers</td>
<td></td>
</tr>
<tr>
<td>e-7</td>
<td>Angry with co-workers</td>
<td></td>
</tr>
<tr>
<td>e-8</td>
<td>Feels a power struggle between self and management</td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

Letter of Permission to Conduct Research
Dear Ms. Burnette:

This is to inform you that Jacqueline Brayman and Uldis Smidchens, Ph.D. have permission to conduct a research project on assertive communication on site at Davidson Plyforms, Inc. I have met with Ms. Brayman on a number of occasions and have been involved in the development of the research design. I am knowledgeable of the purpose of this research and the methodology that will be employed.

Sincerely,

John Walton, President
Appendix F

Approval Letter From Human Subjects
Institutional Review Board
Date: January 26, 1994

To: Jacqueline Brayman

From: M. Michele Burnette, Chair

Re: HSIRB Project Number 94-01-05

This letter will serve as confirmation that your research project entitled "Assertive communication training: Its relationship to trust, hostility, conflict and productivity" has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: January 26, 1995

xc: Smidcens Ed. Leadership
Appendix G

Glossary of Conceptual Definitions
GLOSSARY OF CONCEPTUAL DEFINITIONS

conflict over values:
-holds beliefs about how things should be done in the organization that are different from the beliefs of the organization
-feels that one's own opinions, beliefs and values are not valued by the organization
-has few opportunities to state what one knows, believes, wants and needs
-feels that what one needs is seldom as important as what management needs

conflict over goals:
-wants to have the organization stay as it is as opposed to pursuing its vision

conflict over demands:
-the organization's expectations for behavior are different from the needs and behavioral tendencies of the individual

trust:
-using honest, communication about how operations of the organization are going
-using honest communication about how one's performance affects others and the operations of the organization
-supporting others in "moments that matter", both challenging and celebratory
-demonstrating integrity by consistently honoring commitments and promises (Bennis, 1990)

hostility:
-feels like an enemy in one's own organization
-feels thwarted in attempts to pursue one's own goals
-feels overpowered by others in the organization
-is often enangered by interactions with others in the organization


Bennis, W. (undated). New patterns of leadership for adaptive organizations. [In-class handout.] Western Michigan University, Kalamazoo.


Peters, T. (1993, October). [The need to continually assess environmental factors and work hurriedly at instituting the organization's vision in order to maintain viability.] In-service meeting on Organizational Viability conducted at Steelcase, Inc., Grand Rapids, MI.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


