2001

The effectiveness of experiential education in executive development

Marlene Handley Rodenbaugh

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The Effectiveness of Experiential Education in Executive Development

by

Marlene Handley Rodenbaugh

Adviser: Dr. Gary Gemmill

Dissertation Submitted in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Philosophy
Applied Management and Decision Science

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OF

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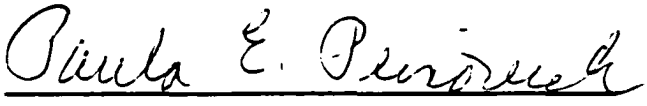

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Abstract

The Effectiveness of Experiential Education in Executive Development

by

Marlene Handley Rodenbaugh

MBA, Fairleigh Dickinson University, NJ, 1984

BS, Colby Sawyer College, NH, 1965

Dissertation Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

Applied Management and Decision Science

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February 2002

ABSTRACT

This study explored the effectiveness of the Tavistock model, an experiential learning approach, in mobilizing change in the perception of authority relations of business executives as they interacted in a group relations event. A secondary goal was to test perceptions about this model as an effective executive development program. Results of prior studies on experiential learning outcomes are inconsistent, and few demonstrate that results match learning goals. This exploratory study used both quantitative and qualitative methods. The results were triangulated in operationalizing the Kirkpatrick model, a widely accepted evaluation method for training and development programs in organizations.

Quantitatively, changes in perception of authority relations were measured using Q-methodology, an objective measurement of subjective responses. The Q-sort was conducted before and immediately after the Tavistock-style event, and again 6 weeks after the executives had returned to their work settings. Participants showed changes in mental models of authority immediately after the workshop, but only a few maintained the changes after 6 weeks. Qualitatively, the results of the Q-sorts were further explored with in-depth interviews regarding the participants' perceptions of (a) authority relations, (b) the experience of this nontraditional learning event, and (c) the utility of this model in

executive development. The participants also completed a self-report questionnaire that measured their level of satisfaction and learning. Integration of the quantitative and qualitative methods in the four levels of evaluation of the Kirkpatrick model showed that the participants were generally satisfied with the program, although the majority would not recommend this program indiscriminately for all managers. The attendees reported significant learning and behavioral changes during the interview process, although the Q-sorts indicated the changes were not maintained after 6 weeks. The impact on business results was limited, primarily because it is the most difficult Kirkpatrick level to evaluate and would have required a more sophisticated evaluation approach.

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DEDICATION

This dissertation is lovingly dedicated to my mother, Patricia Baxter, who had the courage to immigrate to the United States, teach herself to read and write a second language, and raise three responsible children, all on her own—and with so little formal education.

Thank you, Mother, you are one of the wisest women I know; you will always be with me.

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To Dr. Carole Eigen, a special friend, go untold thanks. She has been the inspiration for the research, the light in the fog, and the rudder when life got rough. She has taught me how to ride with the waves.

I would like to thank my two editors: Doug Deaville for his patience and ability to edit and understand the meaning of 65-word sentences and Dr. Elisabeth Johnson-Kallos for the final work. You truly saved my sanity in the final process.

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CHAPTER 1

INTRODUCTION OF THE STUDY

Purpose

> For the real question is whether the "brighter future" is really always so distant. What if, on the contrary, it has been here for a long time already, and only our own blindness and weakness has prevented us from seeing it around us and within us, and kept us from developing it? -Václav Havel

The most likely future organizational scenario is a steady increase in the intensity of change driven by the technical and universal dimensions of our global situation. Change is unsettling, altering consciousness and priorities and reducing the sense of dependability. When it dominates stability, individuals may react in predictable, self-defeating ways, such as tuning out, working harder and denying future promise, becoming overwhelmed and feeling victimized, or acting in a fantasy of understanding (Noer, 1997). Awareness and understanding of the process of change, one's resistance to it, defenses against anxiety associated with change, and personal predisposition for leading and following are critical to accomplishing organizational objectives and ultimately long-term survival. Concomitant with the requisite awareness is one's agility in transforming real-time learning and knowledge to work environments.

The primary purpose of this study was to explore the effectiveness of an experiential education approach in motivating change in the perceptions of authority relations of business executives

as they interact in a group-relations event. Effectiveness was investigated from the following three perspectives: (a) the Tavistock model, (b) the locus-of-control model, (c) and the Kirkpatrick model of evaluation.

Experiential Education from Three Perspectives

The Tavistock Model: Impetus for Transformation

The study explored the effects of an experiential education approach in the form of a modified Tavistock-style group-relations conference, positioned as Leadership Learning System that focused on opportunities to learn about transformation through small-group dynamics and intergroup relationships within the larger institution. The emphasis was on leadership, authority relations, unconscious processes, fantasies, and communications as they appear in a group (Gillette & McCollom 1995). As Argyris (1997) and Goleman (1998b) pointed out, transformation agility is an imperative in today's organizations, and the ability to balance emotions with rational processes is considered a predicator of new forms of leadership in networks, clusters, ad-hoc task forces, and self-managed and cross-functions organizational designs. Thus, it was expected that a conference modeled after Tavistock, with its focus on leadership, authority, and transformation, would have the potential to be an

effective method of mobilizing change as a component of executive development.

Although no attempt was made to prescribe one's learning from the Tavistock-style conference, emphasis was placed on authority relations, the dynamics between individuals and their perceptions of authority, whether formal or informal, and on the significance of development of effective working relationships in organizational life. This study explored changes in perceptions of authority relations relative to the dimensions of dependent, counterdependent, and interdependent internal mental models (Hirschhorn, 1990; Kahn & Kram, 1994; Kets de Vries & Miller, 1987; Senge, 1990) of business executives from organizations in the eastern part of the United States, using a Tavistock-style experiential education event. Q-methodology (Brown 1996; Smith, 2001; Stephenson, 1953), an objective measurement of subjective responses and an alternative to Pearson's product moment correlation, consistently maintains the subjectivity of subjects through a rigorous, objective method of operant subjectivity. It was used to identify mental models of authority preconference and any changes immediately postconference as well as 6 weeks postconference. Brown (1996) averred that the method is frequently used to investigate situations where the self is intimately involved, such as in public opinion, attitudes, groups, roles, and culture. The participants, according to some preference, judgment, or feeling about them, will sort Q-statements, examples of statements about authority,

and relatedness. The participants operated the Q-sort in a way that indicated their viewpoint, independently of any constructed effects, such as scales or ratings imposed by the researcher.

Locus of Control

The relationship between locus of control and perceptions of authority was explored. Because locus of control is an individual's generalized expectancy that his or her own actions (internality) or other forces (externality) control organizational outcomes as they relate to rewards and reinforcements (Rotter, 1966; Spector 1988), exploring this dimension sought to reveal predispositions likely to be influenced by an experiential learning approach.

The Kirkpatrick Model of Evaluation

The Kirkpatrick model (1998), an approach highly supported by major U.S. corporations (ASTD, 1997) to evaluate development programs, considers the following four levels of measurement: Level 1—the reaction of the participants, general satisfaction; Level 2—learning from the program; Level 3—behavioral changes perceived to be a result of participation; and Level 4—the business results as a consequence of the learning event. A self-report participant survey was conducted 6 weeks after attendance to determine perceived changes in attitude about leadership and authority, increased awareness of group dynamics, overall satisfaction with the program relative to

degree of learning and application on the job, degree of personal satisfaction, and level of advocacy for the Leadership Learning System. To explore participants' thoughts, opinions, and feelings, and enrich the work in individualistic terms, qualitative, topical, open-ended (Rubin & Rubin, 1995) interviews were conducted immediately after the conference. The objective was to investigate participants' feelings and opinions regarding their learning and the usefulness of the Leadership Learning System. This type of interviewing emphasizes the active participation of the interviewer and the importance of the interviewee as the interviewer guides the discussion around specific questions.

The objective of the research design was to fill in theoretical gaps in existing research and to ascertain the effectiveness of one form of experiential education as a method of leadership development. To accomplished these goals, theories from both quantitative and qualitative paradigms were used in a mixed-method approach (Creswell, 1994; Jick, 1979). Simultaneous triangulation permitted answering the qualitative and quantitative research questions at the same time; however, the results of each method may not necessarily relate to or confirm the results of the other methods. Qualitatively, the study addressed the question of effectiveness of a Tavistock-style conference from the viewpoint of the participants and evaluated it through a survey and interviews. Quantitatively, Q-methodology assessed whether change occurred in the members' perception of

authority relations during participation in this experiential education program, modeled in the Tavistock style, and whether the change continued 6 weeks postconference. The extent of the change, the nature of the change, and the identification of types of members who may or may not show shifts in authority perceptions also was explored. The survey, interviews, and Q-methodology were used within the Kirkpatrick model (1998) to fulfill the following three levels of evaluation of development: programs designed to consider the reaction, opinions, or feelings of the participants; principles and facts understood and absorbed by the participants; and on-the-job behavioral changes.

Background

Leadership Development Trends

The globalization of work, rapid technological advances, and the diverse demographics of the workforce have combined to create novel approaches to leadership, as witnessed in self-directed work teams, participative leadership, and other collaborative themes. Concomitant with these trends, human performance and organizational effectiveness strategies create a need to revisit the personal and contextual qualities related to effective group leadership and followership. A strong theme, and different from the past, is emerging from a random inspection of the academic and popular literature on

leadership and organizational behavior. Words and ideas such as passion, soul, self, authenticity, emotional intelligence, spirit, and heart are replacing older themes of hierarchy, power, strategy, and bureaucracy.

A little-known process by which the leader empowers the followers to do their work and followers take responsibility for their own intentions and actions is replacing command-and-control leadership models. This active, empowered, engaged, and intentional followership, led by leaders with heart, soul, and courage, creates management paradoxes, contradictions, and ambiguities. Followers want strong and soft leaders, but not too soft; organizational heroes are still touted, but not those who are inconsiderate of individual rights and responsibilities. Leaders must drive and obtain the strategic objectives, but with a concern for the well-being of followers (Greenleaf, 1996). Employees and managers with highly developed character, who are "masters in the paradoxical craft of integrating results and heart, and do it for the sake of their own souls, for personal fulfillment, not because the business threatens them if they fail" (Koestenbaum, 1991, p. 21), are hypothesized to be required for success in today's business environment.

The Need for Different Skills

The emerging pattern of effective managerial skills required to lead in this chaotic, turbulent, and ambiguous economic and social

environment is that of adaptive challenge—what Goleman (1998c) and Argyris (1997) defined as the ability for leaders and those who lead without authority to continually change, developing themselves and their organizations in the process of ongoing transformation and growth. The competencies underlying this changing leadership requirement have recently been variously defined as emotional intelligence; the procedural, interpersonal knowledge that allows one to recognize change; and the ability to put concepts into action and lead change (Goleman, 1998c; Salovey & Mayer, 1990). These personal capabilities are considered the drivers of outstanding organizational performance. Most recently, Huy (1999) argued that emotional intelligence in combination with emotional capability—the organization's ability to recognize and manage its members' emotions (Schein, 1992)—increases the likelihood for organizations to realize radical change.

When one considers the need to integrate emotions with rational thought and tries to understand the process of change in order to successfully lead and follow in the present and future work environment, important questions about leading and change arise. How does one learn to change? What are effective ways to experience this learning? And how do we work and change at the same time?

Individuals learn by thinking and acting, with the outcome of the action used to modify and change existing beliefs (Kolb, 1984). Recent neurological findings have shown that emotion and cognition

interrelate in the learning process, with emotions serving as the primary feedback mechanism to tell the individual what is happening and to trigger behavior (Damasio, 1994). The individual compares the new reality with prior expectations, and emotion drives the response with either dissatisfaction or acceptance of the reality. Learning, or change, is stimulated when a gap is created between the new reality and prior experience. It appears that emotional intelligence can be learned by changing emotional circuitry or old habits, rather than just adding new facts to the old knowledge (Goleman, 1998b). This process demands a profound change at the neurological level, whereby the existing habit is weakened and replaced with a better one. Research shows that this type of learning, learning to change, is associated with the learning of the limbic system and is best accomplished by motivation to participate, extended practice, and continual feedback (Goleman, 1998c; Salovey & Sluyter, 1997). This is a different learning process; it is governed by a different brain system than that associated with cognitive skills. The brain's limbic system, specifically the neurotransmitters (Damasio, 1994), rather than the neocortex, which controls concepts, logic, and analytical and technical skills, governs emotional competence.

Recognizing that emotional competencies are considered twice as important as cognitive skills and technical knowledge to an individual's success (Goleman, 1998a) and that change is at the core of this concept, these questions arise: What is the basis, from a learning-

theory perspective, of leadership development programs in today's corporations? Are programs available that target limbic-system learning? What is the nature of development programs that emphasize change processes?

The Nature of Leadership Development Programs

Leadership development has been based on competency models, emphasizing business knowledge; technical skills; and the cognitive abilities of information processing, analytical reasoning, and decision making. In evaluating leadership development programs in the United States relative to an adult-education approach and emotional competencies, the American Society for Training and Development (1998) reported that classroom-based, instructor-led programs using standard learning principles of engagement in cognitive tasks and a process with a neocortical involvement represented as much as 96% of all training in the United States. Experiential programs designed for personally responsible participants to cognitively, affectively, and behaviorally process knowledge, skills, and attitudes in an environment of high involvement—programs that are more conducive to stimulating the limbic system—have limited exposure in executive leadership programs. Although experience-based training methods are reported to be increasing in organizations and education (Henry, 1989), the majority of programs defined as *experiential* represent only 6% for senior-level and 15% for middle-level management and are

predominately based on the Outward-Bound model (ASTD, 1998). They are often referred to as adventure training or outdoor experiential learning (Wagner & Roland, 1991) and are designed to develop leadership and teamwork skills.

It would follow that, to enhance emotional competencies, specifically the exigent personal capabilities associated with the ability to change, experiential learning methods that integrate the cognitive, affective, and behavioral dimensions of learning into a whole process would be effective in evoking change processes as part of leadership development programs. These methods have been shown consistently to lead to long-term changes in behavior (Bandura, 1977). Experiential learning processes (other than outdoor learning programs) that have been used with success are human-relations training. Originating in the 1960s, they include (a) T-Groups (short for Training Groups), developed by the National Training Laboratories (NTL) and sometimes also called sensitivity training; (b) experiential group-relations conferences, modeled after those of the Tavistock Institute in the United Kingdom and run by Group-Relations, an American spin-off of Tavistock; (c) the dialogue process, based on the work of Bohm (1990) and Isaacs (1999), similar to T-groups and Tavistock, and focusing on collective learning abilities; and (d) modifications of these approaches used in university environments for teaching students in executive management programs.

Although these programs vary somewhat in their theories and application and fall under the general framework of group work (Gillette & McCollom, 1995), they all have one common objective identified throughout the literature, namely, that of stimulating change (Isaacs, 1999; Smith, 1980). T-groups focus on developing interpersonal skills and change processes and continue today with an emphasis on individual role taking in groups, awareness of perceptions of self and others, and communication capabilities. Their primary objectives are to provide a process for personal growth, interpersonal competence, and behavioral change (Gillette & McCollom, 1995). Tavistock-style conferences have a mission to advance the understanding of covert processes affecting leadership and authority in groups and organizations (A. K. Rice Brochure, 1999, p. 1). The objectives of a Tavistock conference focus on the development of "a deeper understanding of complex dynamics of institutional life, [an increased] ability to identify covert dynamics in groups, . . . [and learning] about the different roles an individual takes in the group" (A. K. Rice Institute, 2000, p. 2). Human-relations training programs modeled after Tavistock specifically address authority, leadership, and the perception of behavioral change potential; additionally, they are presented as an experiential model believed to facilitate adult learning (Kolb, 1984), thus providing learning opportunities to meet leadership requirements. One may, therefore, deduce that this format would be

perceived as an effective way to mobilize change and increase the participants' understanding of leadership in group life.

Reasons for a Limited Experiential Approach in Business

In this rapidly changing environment, flexibility and the ability to leverage previous knowledge into new ways of learning is imperative. Although experiential approaches, that is, learning by doing, appear to be more effective in developing skills that employers seek (e.g., interpersonal skills, communication skills, and the ability to work in teams), the learning goals have not been clearly articulated nor have learning outcomes been adequately assessed (Lewis & Williams, 1994). A review of the literature on experiential education produced over 6,000 studies over the past 20 years with the majority focusing on academic research of the process variables; studies relating to the outcome of this method of learning are limited to less than 30, with most of them conducted at the elementary-school level and a few with college students. More recently, the popular press has expressed the value of experiential learning in the form of outdoor experiential learning (OEL) for improving teamwork (Eisman, 1995), positive changes in attitudes toward cooperation, personal relationships, and group membership (Campbell, 1996), as well as for creativity (Muoio, 2000).

In reviewing the literature of experiential education from a training-in-human-relations frame of reference, it is apparent that

there is a need to repackage the product commensurate with the mechanics of adult education and the perceived needs of the consumer, as this form of learning has the potential to provide greater opportunity for sustained learning (Conger, 1992; Kolb, 1984; Vince, 1998).

Following is a discussion of issues and limitations of experiential education approaches, particularly as they relate to group-relations training, and the possible reasons for their limited use in today's organizations.

Product Shortcomings

Frugé and Bell (1997) recognized the difficulty they had in attracting other than mental health professionals to A. K. Rice conferences in the Texas region. They believed that several factors contributed to this issue, including (a) the language of the conference not being comprehensible to the business consumer; (b) a method that might not promote comprehension and application in inexperienced customers, even though the standard conference predictably elicits unconscious responses to authority, and (c) the style of the traditional consultant possibly making learning unnecessarily difficult. In their study, the researchers modified a Tavistock conference with the aim of attracting more business professionals. Critical changes included (a) language in the recruiting brochure more commensurate with company meanings; (b) traditional lectures on basic theory and

methods upon opening of the conference; (c) consultants determining what role would be most effective for them to play in the group (e.g., the role of fee-for-service consultant); (d) the use of staff with other than mental health experience; and (e) holding the conference in a hotel rather than on a college campus or an affiliated medical institution.

Although, rigorous research design was not used, the proportion of the 20 participants from business backgrounds was significantly higher than that of health professionals (30% and 15%, respectively) when compared with other conferences. The proportion of participants with no prior conference experience was also high (65%). The results suggested that the brochure may have been more appealing to the business community, attracting more participants from this target audience than previously experienced by this A. K. Rice center. The researchers were intrigued that less hostility was directed at the consultants by the change of role, suggesting that the traditional consultant role attracts so much attention to the person of the consultant, it possibly conflicts with the task of examining issues among group participants.

A customer evaluation survey, one of the few reported in the literature and vital to determining the effectiveness of a program from the standpoint of corporate training and development, used a 5-point Likert scale to evaluate the dimensions of degree of learning, overall satisfaction, and recommendation to peers. Results showed

participants perceived their overall learning to be high (89%); confidence in application of the learning to the workplace was high (79%); overall expectations of the program were met (74%); and a high percentage (79%) said they would attend again as well as recommend the program to peers. Although the sample was small, product modification more commensurate with the needs of the market appeared to improve recruitment from a broader base of participants and increase satisfaction of the program participants.

Psychoanalytic Foundations

Another possibility for the lack of penetration into corporate development programs may be that the work related to NTL and Tavistock comes from a psychoanalytic tradition and is often written and presented in a language meaningless to the business executive untrained in these concepts (Wells, 1995). Traditionally, psychological concepts were not appreciated by corporate executives, and even though the 1960s saw the emergence of encounter groups and sensitivity training, it was not until the 1970s and 80s that psychologists became a significant part of the human-resource team in corporations, providing assistance to employees with drug and alcohol problems. However, with the depth of change in traditional business models today, concepts from psychology are well-suited for supporting organizational change. Martin (1996) suggested that

> psychologists trained in group processes as well as individual analysis; sensitive to developmental milestones and transitions;

> [and] educated in the formation of beliefs, perceptions, and behavior patterns . . . are more able to see the relationship between history, people, and process. . . . Skilled in both direct and indirect strategic intervention . . . , [they] excel in bringing about change expertly and subtly. (p. 5)

As the demand for professional growth increases in corporate America with an even greater demand for comprehensive, strategic approaches to managing change, it holds that a new view and opportunity for applied psychology exists in corporations.

Need for Improved Application and Transfer of Training

Transfer of training is of growing concern, as the total training budget in corporations has risen from $45 billion in 1990 to $100 billion in 1996, and much of what is trained fails to be applied to the work setting (Broad & Newstrom, 1992). Broad and Newstrom reported that less than 30% of what is learned during training is transferred to the workplace, implying that 70% of this approximate $100 billion, or $70 billion, may not be applied to the work place or is consumed without accountability.

The lack of explicit attention to organizational application is likely a strong contributor to limiting the use of these programs (Thomas, 1995). Because there is greater transfer of learning if the design of the experience emphasizes applying training to work situations, and transfer of training is of paramount concern for training researchers and practitioners (Ford, Quinones, Sego, & Sorra, 1992), it is imperative that participants have significant opportunity to apply

their learning to work within organizational settings. Thomas (1995) gave several reasons for the limitations in applying experiential education approaches: instructors and consultants untrained in application to organizational settings, the complexity in moving from a here-and-now focus to the transfer to other settings, the lack of resemblance of this type of study group to other kinds of work groups, and the location of application work in the course design. The literature is inconsistent about the placement of application work: Should it be placed at the end of the program or integrated throughout the program (Bunker, Nochajski, Mcgillicuddy, & Bennett, 1987)? The literature promotes the view that increasing participants' ability to apply changes to formal organizational settings has the potential to improve the perceived effectiveness of the program and increase penetration into the business environment.

Evaluation of Outcomes

Measuring and evaluating training and development programs is of extreme importance in corporations; 90% of solicited organizations reported that they evaluate at least some of their programs (ASTD, 1997). The evaluations range from measurement of inputs, such as training expenditures per employee, total costs of facilities and training programs, and training expenditure as a percentage of sales, to quantitative measurement of outcomes. Of organizations that conduct training and development evaluations, 67% use the

Kirkpatrick model (ASTD, 1997) with its four levels of evaluation focusing on (a) the reactions, opinions, or feelings of the participants about the program; (b) principles and facts understood and absorbed by the participants; (c) on-the-job behavioral changes; and (d) results compared to expected results.

Although experiential models represent a small percentage of executive development programs in corporations today, their integration into training has significantly increased because there is some recognition that this approach fosters self- knowledge and encourages continuous learning—processes that enhance change (Lewis & Williams, 1994). This trend, along with substantial investments dedicated to developing managers, will continue to fuel the increasing demands for accountability of training programs. Although there is a body of work that reports measurement of outcomes as a result of T-group training—such as changes in perception of self and others (Blumberg & Golembiewski, 1976), changes in interpersonal behavior (Argyris, 1965), attitude changes (Argyris, 1965; Blumberg & Golembiewski, 1976), and limited reports of measurement of Tavistock conference outcomes—many of the studies are inconclusive and often report conflicting findings (Smith, 1980).

Summary of the Background

Some researchers have suggested that there is now enough significant data showing positive results in personal growth and improved interpersonal and intraorganizational behaviors for scholars to endorse experiential learning in the form of human-relations training as a means of inducing desired organizational changes (Rugel & Mayer, 1984; Shoemaker, 1987). Given this endorsement, the expressed need for emotional skills, or the so-called soft skills, in executive development programs; a corporate environment becoming more receptive to psychological or behavioral programs; and a business environment experiencing accelerating and turbulent change, the need for just-in-time learning seemed acute. Thus, it seemed only logical that modifying a Tavistock human-relations conference and addressing some of the limiting issues it had experienced before might increase its potential effectiveness and marketability to business executives.

Problem Statement

The literature search made apparent a need for more research on the outcomes of experiential learning programs: Few articles provided consistent evidence that results matched the learning goals. As companies feel more pressure to meet the competitive demands not only for products and services but also for superior leadership, training and development programs able to achieve outcomes

commensurate with business objectives will be required (Lewis & Williams, 1994). This study was designed to explore and evaluate the effectiveness of an experiential learning approach in providing an executive development program and to determine the outcome from the perspective of the attendees' perceptions of the experience.

Research Questions

This study explored an experiential education approach, namely, a group-relations conference conducted to evoke change in business executives. Data were collected during this group-relations program planned in the Tavistock style. Tavistock is based on several models and different approaches to sociopsychological, sociotechnical, and socioecological work; it incorporates elements of systems theory and generally focuses on leadership and authority relations associated with transformation. This study sought to answer the following research questions:

1. Do changes in perception of members' authority relations occur during an experiential education program? Perceptions of authority relations have been selected as a measurement of change because individual authority perceptions are not only central to group formation, but also responsible for shaping individual experience and actions in societal systems (Argyris & Schon, 1978), and the concept of authority and leadership underlie the work of a Tavistock conference.

2. What is the relationship between any change in perception and the individual's locus of control? The implication of the traditional concept of authority is that people create or enact authority relationships largely on the basis of a compelling, deep-seated personality perception, of which they may not be aware (McClelland, 1985). Recent studies suggest a connection between individual differences and constructed relationships (Kahn & Kram, 1994), showing how various self-concepts shape organization members' ability to perform effectively. Concepts in this regard include the perception of locus of control (Rotter, 1966), self-efficacy (Bandura, 1982), self-confidence (Mowday, 1978), self-understanding (McCall, Lombardo, & Morrison, 1988), and self-actualization (Burns, 1978). Thus, locus of control was considered in this study.

3. Are any changes that occur transferred to the workplace? Cognitive transfer theory (Royer, 1969) suggests that the probability of transfer of learning depends on the likelihood of encountering a relevant bit of information or skill during the memory search process. Since the probability of retrieval is directly related to the number of interconnections between the learned skill and the remainder of the word-knowledge structure, it follows that an educational procedure that increases the richness of the interconnecting network will also increase the likelihood of transfer. One way to increase richness of the experience is through use of members' description of application to a work situation. It would then follow that a process in which new

knowledge is applied to a real work situation would increase the transfer of learning (Frugé & Bell, 1997).

4. What is the overall satisfaction level of the participants with this type of experiential education program?

Philosophical Assumptions

The rationale for the mixed methodology in the research design was based on seeking convergence with the triangulation and on expanding the understanding of experiential learning. The quantitative Q-methodology is a process of discovery rather than theory deduction and hypothesis testing and is tied to the implicit postulates of Stevenson (1967), further described by Smith (2001). These assumptions include general guiding propostulates about science, such that science is concerned solely with concrete events in which each event is specific and unique. Metapostulates or supportive assumptions for a particular science are described as the need to manifest in some reliable operation whatever is not subject to observation, analyses tailored to the experimental situation, operants and not constructs as the beginning of the investigation with subjectivity or meaning arising from persons and not groups. Postulates that are subject matter assumptions center on the idea that psychological events are subjective from an individual's point of view and objective from others' reference.

The qualitative inquiry in this work focuses on the socially constructed nature of reality, the intimate relationship between researcher and the situational constraints that shape the inquiry (Lincoln & Guba, 1985). This approach emphasizes the value-laden nature of inquiry and seeks to answer questions about the creation of social experience, the given meaning, and the perception of the meaning.

Multiple qualitative approaches exist, shaped by the researcher, the research purpose, and the nature of the situation to be examined (Lincoln, 1989). Because this researcher in the role of gatherer and interpreter of information believes that knowledge is constructed and not discovered and that reality is constructed from the lived experience of those who live it, a constructivist paradigm underpins reality. In this framework, the researcher maintains a constructivist philosophy whereby the aim of research is not to discover external reality but to construct clearer interpretations of simple stimulations. This is accomplished by fusing historical, cultural, experiential, and personal frameworks, which results in evolving, sophisticated experiences (Guba & Lincoln, 1989) and buttresses the view that knowledge or experience has contextual meaning. These experiences serve to guide the improvement of practice in the particular case setting.

Limitations

Although Q-methodology is a quantitative process, there is no a priori meaning (McKeown & Thomas, 1988) associated with the research questions. Limitations in this study may evolve as the inquiry process evolves. General strengths and limitations of the methodology are included in chapter 3. The degree of difficulty in recruiting business executives into this type of experiential learning (Frugé & Bell, 1997) may impact the number of samples. Although Q-methodology has meaning in single sample studies (McKeown & Thomas, 1988), a sample smaller than defined by the directors of the Tavistock workshop could impact the value of the qualitative interviews and evaluation questionnaire.

Terms and Definitions

Some terms and definitions are used in a unique way in this study; the following operational definitions are provided to make clear their meaning for the advancement of this research.

Authority relations: The dynamics between individuals and their perceptions of authority, whether formal or informal

Counterdependent model of authority: A suggested internal model of authority where individuals split role from personal dimension in the authority relationship and resist the rules and roles of formal authority at the expense of the organization's systems that support the tasks (Kahn & Kram, 1994).

Dependent model of authority: A suggested internal model of authority where individuals split role from the personal self in the authority relationship and depend on the rules and roles of formal hierarchy at the expense of values, beliefs, and behaviors (Kahn & Kram, 1994).

Emotional intelligence: "The subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189).

Emotional capability: "An organization's ability to acknowledge, recognize, monitor, discriminate, and attend to its members' emotions" (Huy, 1999, p. 325). Schein (1992) suggested that these capabilities can be seen in the organization's norms and routines related to feelings.

Interdependent model of authority: A suggested internal model of authority where individuals in authority relationships integrate both the personal and role dimensions, exercising dependence and independence on hierarchical authority (Kahn & Kram, 1994).

Locus of control: A generalized expectancy that an individual's own actions (internality) or other forces (externality) control organizational outcomes as they relate to rewards and reinforcements in life (Rotter, 1966).

Organizational authority: The given right to perform roles; these rights being legitimated by consensual decisions codified in

constitutions, contracts, charters, rulings, and other accepted institutional sanctions (Katz & Kahn, 1987).

Personal authority: The counterpart of organizational authority, central to one's sense of self, irrespective of the occupied role; the right to exist and to be oneself in the role (Hirschhorn, 1993).

Training: Instructional events designed to increase knowledge, improve skills, change attitudes, and/or change behavior (Kirkpatrick, 1998).

Transfer of training: "The extent to which the learning of an instructional event contributes to or detracts from subsequent problem solving or the learning of subsequent instructional events" (Royer, 1979, p. 53).

Significance of the Study

This study was undertaken with the hope of contributing to increased understanding of effective executive development, particularly in self-awareness of authority relations. It may assist executives in overcoming ineffective interpersonal behaviors in authority relationships that block their leadership ability; it may foster changes in their worldview, build self-confidence, and in turn cause them to take initiatives in leadership and self-management (Conger, 1992). Because little is known about the process of authority (Heifetz, 1994), how authorizing and deauthorizing processes work in organizations (Katz & Kahn, 1994), and what changes in

understanding of authority relations are experienced by the participants in a Tavistock learning event, this study sought to provide a basis for better understanding of change in authority relations in work arrangements.

Evaluating the effectiveness of the program in an organizational training context, that is, with the use of the Kirkpatrick model (1967, 1998) and from a customer satisfaction standpoint, will lend some resolution to the criticism that human-relations training does not have obvious application to real work. Because the Kirkpatrick model is widely used by the business community, evaluation of a training program using this model is more likely to be accepted by corporations as validation for the program. The qualitative approach enriches the research and permits interpretation for better understanding by the business practitioner.

Implications for Social Change

This study explored the psychological roots of leadership, the crucial dynamic of authority relationships, and the possibility of changing mental models of authority relationships with an experiential model of learning. Although experiential learning has significant support in the field of education and the Tavistock model is employed throughout the world in business, academia, and psychology, limited research exists on the outcomes of this approach to learning, particularly in the business environment. A review of the literature on

experiential education produced more than 6,000 studies over the past 20 years, with fewer than 30 focused on the outcome of this type of learning event. This study sought to add to the body of knowledge about experiential learning by contributing to the understanding of any changes (e.g., learning) that may result after participation in an experiential workshop.

If change were perceived by the participants in the workshop and demonstrated through triangulation of methods to measure the learning outcomes in mental models of authority relationships, further commercialization of the workshop into the business community could be realized. A more concerted commercialization of this approach to learning would give companies the opportunity to provide their employees with training commensurate with adult learning theory. Experiential learning in the Tavistock style fulfills most of the characteristics of adult learning theory; it provides a holding environment in which safely to explore the unconscious, the source of creativity and effective leadership (Koestenbaum, 1991). Participants would be able to work in real time, as the dynamics of group processes are happening, and practice reflection where past events are brought to a conscious level and used for future thinking, feeling, and behaving.

It is important to mention that experiential learning methods, which integrate the cognitive, affective, and behavioral dimensions of learning into a whole process, have been shown consistently to lead to long-term changes in behavior (Bandura, 1977). Therefore, the results

of this study have the potential to support the workshop as an effective approach to evoke change processes as part of leadership development programs, particularly as they relate to the enhancement of emotional competencies—those exigent personal capabilities associated with the ability to change.

Formal assessment models for experiential education are under broad attack because traditional assessment procedures that rely on indirect measures of learning may be misleading indices of occupation or task readiness (Jackson & MacIsaac, 1994). Traditional approaches to outcome measurement reveal what the learner knows; however, they fail to reveal if and how the learning is being used.

By contrast, his study incorporated an applied learning phase where participants in the workshop addressed an important work issue relative to any changes they perceived after the workshop, and they continued to apply the learning over a period of 6 weeks. At the end of this period, a formal assessment in the form of a survey was used to measure the transfer of learning to real work situations. Results of the survey, designed to evaluate outcomes, provided not only an answer to how the learning was being used but also the supporting documentation needed by organizations better to substantiate their extensive expenditures for training.

Lastly, this study incorporated what Gardner (1993) offered as two important assessment strategies for learning or product assessment. First, the Q-methodology provided a formal assessment,

"an objective, decontextualized form of assessment, which can be adopted widely with some assurance that similar results will be obtained" (p. 162). Second, incorporating personal interviews and a survey modeled after the Kirkpatrick (1967, 1998) approach to training evaluation was related to Gardner's (1993) apprenticement assessment. The latter includes subjective standards and expectations, "which [are] implemented . . . within a naturally occurring context and in which the particulars of a craft are embedded" (p. 162). This more flexible, contextually situated, and individualized form of assessment (i.e., the personal interviews and the Kirkpatrick-type survey) is especially appropriate for experiential learning (Lewis & Williams, 1994). The triangulation of methods in this study added to the body of knowledge about change by evaluating outcome measures.

In addition to the significance of the study as outlined above, implications for social change include the following: (a) the potential for an improved, more effective experiential training program for business executives, (b) a better understanding of the outcomes of experiential education, and (c) a method for evaluating the outcome of experiential education as it relates to changes in mental models of authority relationships.

Organization of the Study

Chapter 1 presented an introduction to the study and provided the rationale for attempting to find a more effective approach to

leadership development in business organizations. Chapter 2 will present a review of pertinent literature and identify the theoretical framework for the study. Chapter 3 will describe the research methods used and explain Q-methodology as part of data collection. Chapter 4 will present the results of both quantitative and qualitative analysis in triangulation with the Kirkpatrick model of evaluation of executive development. Chapter 5 will summarize major findings, draw conclusions based on the results, discuss implications for the future, and offer recommendations for additional research.

CHAPTER 2

LITERATURE REVIEW

Introduction

A review of the literature, contributing to an understanding of the effectiveness of experiential education in the business environment, provided the conceptual framework for this study. It includes studies of executive development programs used in today's corporations, relative to perceived needs for leadership and the ability to change in the current marketplace. Also reviewed were theories and topologies of authority relationships, including the role of locus of control in the workplace; the theoretical framework underpinning group dynamics, particularly experiential learning from a Tavistock perspective; and a review of evaluation processes for executive development programs used in corporations.

Executive Development and Change

Revolutionary periods follow periods of calm, or evolution, and in reality bring about real progress, thus discrediting the idea that change is a linear progression toward truth (Kuhn, 1970). Whether revolutionary or evolutionary in nature, it is apparent that the chaos of the new economy with its powerful paradoxes of better quality and lower prices, individuality and collectivity, strength and vulnerability, autocracy and participation, rationality and intuition, and technology

and human development, all while preserving human values is putting unprecedented demands on management as the brutal reality of business today (Koestenbaum, 1991).

At the heart of the struggle with managing these polarities are leaders who were groomed to be larger-than-life heroes, "charismatic creators of new products, building businesses, and accumulators of massive wealth" (Zaleznik, 1993, p. 182). Many of them lead in bureaucracies where the hierarchy of authority fosters impersonal relationships and protects the followers from anxiety evoked by the uncertainties and paradoxes of work life. The accelerating changes in the business environment, the assimilation of a diversity of cultures in a global economy, shifts in balance of power as a result of universal availability of information, and the flattening of organizational hierarchies are changing the dependency on bureaucracy for order and security. The result is a need for leaders who can tolerate the separation from mythology (Zaleznik, 1993) and followers who, recognizing their changing roles, exercise authority in new, objective ways, both redefining the existing business environment and changing their views to a new way of working. It is all about change and transformation.

The management literature contains a plethora of issues with which individuals and organizations must struggle in order to develop and maintain high performance leadership in view of the changing work configuration. Attributes of vision, integrity, trust,

communication, and strategic planning skills permeate the popular press and academic journals and provide the topics for a $100 billion organizational training industry as well (Broad, 1997). Review of research conducted by the American Society for Training and Development (ASTD, 1998) provides insight into the nature of leadership development programs in the United States and their relationship to the requirements to lead, given the accelerating changes in the business environment. Approximately 50 companies, representing a median of 3,850 employees and sales of $250 million to over $1 billion each, indicated that leadership development is of high priority for the management staff in organizations. These companies claim a need for leaders and employees who can stand up to the challenges encountered in decentralized business units, real-time transactions, virtual offices, and exacting customer service, yet these same companies give leadership development for nonmanagement employees a low priority. This has contributed to inadequate succession planning, identified as the most serious problem facing the organization, followed by leadership training as the second greatest concern. Of 2,000 executives represented, 55% reported that their organizations spent only 5% of their total training and development budget on leadership training and development, with 24% spending between 10% and 25% on the topic.

At the top of the list of topics provided most frequently in leadership training is change management (74%), followed by

leadership styles (73%) and performance management (65%). The primary method of delivery is the traditional instructor-led classroom course, with 61% of executives, 78% of senior management, and 96% of middle management attempting to learn by this method. Mentoring represents 5% to 23% of the delivery method for various executive levels. The experiential method based on the adult learning theories of Bandura, Dewey, Kolb, and Rogers represents 9% of executive leadership training, 18% of senior management training, and 15% of middle management training, with the category defined as adventure/ experiential delivery. The failure to encourage corporations and leadership development providers to consider adult learning variables in their program design, as suggested by these theorists, highlights a weakness in the literature. These grounding theories could provide the foundation for training and development designs with the potential of sustaining transfer of knowledge in the workplace.

Often, during periods of revolution, valid and valuable concepts and theories are revived and reapplied in creative ways to realize new insights. This literature review will examine the Tavistock experiential model, a technology that has the potential of exposing and challenging deep-rooted assumptions and, thereby, mobilizing change in core beliefs and values, an imperative for leadership in today's posttechnical world. The literature was used deductively to advance the development for the quantitative Q-methodology and inductively to frame the research problem as appropriate for the qualitative

approach (Creswell, 1994). The literature review had three key objectives: (a) to demonstrate an understanding of the field of executive training and the application of experiential learning to leadership development and change processes, (b) to connect the specifics of the study with the bigger picture of the discipline, and (c) to provide support for original work (Fink, 1998). It was also used to compare and contrast the findings of this study and to generate a theory from the results.

Leadership, Emotional Intelligence, and Change

"Change—true, lasting, deep-seated change—is the business world's biggest and most persistent challenge," suggested Peter Koestenbaum, philosopher; author of many books linked to education, psychology, and philosophy; and consultant to leaders of such corporations as Citibank, Ford, and EDS (cited by Labarre, 2000, p. 224). He posited that the business community "has no tolerance for the character-building conversations that pave the way for meaningful change" (p. 224), with most people in organizations riveted to numerical objectives. Although the technical approach may result in creativity and innovation, both necessary for effective problem solving, particularly when individuals or organizations are stuck, it is not these rational competencies that separate out the high performers. Koestenbaum (according to Labarre, 2000), like Goleman (1998c) and Argyris (1997), believed that corporate growth is predicated on

individuals with a better understanding of self, "in the philosophical sense of understanding what it means to be a human being in the world" (Labarre, 2000, p. 226), who have the ability to change old habits, thinking, values, and ways of connecting to others.

Goleman (1998a) has popularized the importance of understanding the human side of management with the concept of *emotional intelligence*, modifying Salovey and Mayer's (1990) work, who defined the idea as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). Goleman (1998b) analyzed the competency models from 188 companies, including Lucent Technologies, British Airways, and Credit Suisse, with the objective of determining which personal capabilities were driving outstanding performance. Although cognitive skills and long-term vision were particularly important, emotional intelligence was considered twice as important for jobs at all levels. Emotional intelligence played an increasingly important role at the highest levels of the organization when average performers were compared with stars, showing that nearly 90% of their differences were related to emotional intelligence. The popular press and academic journals (Goleman, 1998a, 1998b; Huy, 1999; Salovey & Sluyter, 1997) defined the concept of emotional intelligence as possessing a self-awareness that increases an individual's social knowledge and empathy and the ability to put

oneself in the shoes of others and understand their world views. This developed sense of empathy and the ability and courage to read social reality with accuracy is the foundation of emotional intelligence.

Goleman (1998c) and Koestenbaum (1991) both take their lead from the philosophy of Kierkegaard to extend the concept that anxiety due to uncertainty of the future is pure energy. In these chaotic, ambiguous times, when the natural response is to build defenses against anxiety, it is precisely holding within and managing the polarities, the conflicting feelings, and contradictory ideas of today's business climate that makes the authentic, effective leader. To Goleman (1998c) and Koestenbaum (1991), anxiety is the experience of growth. "Anxiety that is fully confronted and fully lived converts itself into joy, security, strength, centeredness, and character. . . . The practical formula is go where the pain is" (Koestenbaum, 1991, p. 228).

Drucker (1954) recognized the need for emotional intelligence in business almost 50 years ago, positing that management development is personal development where effective change requires transformation of personality, values, beliefs, and aspirations. He suggested that this kind of transformation required an emotional shock to the belief system of a magnitude that the rational system alone is incapable of delivering. This deep, emotional change "is the rare, existential event, and one against which the basic psychological forces of every human being are strongly organized" (Drucker, 1954, p.

487). The challenge today is the creation of leadership development programs that mobilize change processes in personality, beliefs, and values, to which basic human psychology is strongly opposed.

Leadership and Authority

Leadership has a long history and a multitude of definitions, with theories developed on the basis of individual traits, the nature of the situational involvement (Hersey & Blanchard, 1982), contingency theories (Fiedler, 1970), transformational leadership (Burns, 1978), and authority relationships, providing the dynamic contributions and perspectives for understanding the complexity of this central construct of organizational behavior. Gemmill (1986) even suggested that groups, in order to deny the anxieties of interpersonal power caused by routine work, unconsciously invent the leader role. Although these theories were successful in the conventional organization, they do not address the leadership dynamics of today, where both the external environment and the group within are requiring frequent shifts in leadership behavior, the ability to recognize change, and the agility to transform.

As group work becomes the organizational design of choice in corporations of the 21st century, it is necessary to rethink the role of leadership and authority. Senge (1990) suggested that the days when a single individual was the brilliant visionary and hero of the organization are gone.

> In an increasingly dynamic, interdependent and unpredictable world, it is simply no longer possible for anyone to "figure it all out at the top." The old model, "the top thinks and the locals act," must now give way to integrated thinking and acting at all levels. (Senge, 1990, p. 358)

This new paradigm creates a paradox with traditional theories and research of leadership and authority, where authority—the legitimating of power within an organization—is basic to hierarchical control and is the expected pattern of power relationships (Pfeffer, 1981). Understanding of authority relationships in organizations is evolving with technology and newer organizational forms of work, challenging traditional views. The following section traces the concept of authority evolving as a method of social control in organizations to the uncertain paradigm shift required for the empowered, self-managed teams, cohorts, and networks of today.

Power and Authority

Although often used interchangeably, the concepts of power and authority will be distinguished for this study. Power is, simplistically, the ability to get what one wants, to produce an effect (McMahon, 1994). Specifically, an individual has power to the extent that actions are available to accomplish his or her wishes. Vivelo (1998, p. 9) averred that "real power" is established by acquiring control of vital commodities, such as resources of energy, goods, and services and the technology and labor required for converting resources to life requisites. He maintained that the extent of power is dependent on

the degree of control the individual has over resources and the perceived dependence of those over whom it is exercised: It does not require consent. Concurrent with the concept of power directing the action of others is the right to do so. This is authority, the legitimizing of power, or the right to direct the action of others (McMahon, 1994). Talcott Parsons believed that authority is the only kind of power, because it is vested in formal leadership positions for decision making to further collective goals (Cassell, 1993). Managers use this authority in exercising their formal role; it then becomes the institutionalized legitimization underlying power.

The universal authority relationship of a traditional, hierarchical organization is control by management and the expected compliance with authority by workers. Literature on organizational authority supports the idea that power and authority are established by hierarchical structures, policy, procedures, and managerial roles (Pfeffer, 1981). These sources of power and authority are changing with the change in management's role as organizations evolve with the technological and economic changes of the organizational society.

Authority Relationships as Social Control

Weber's classical model of bureaucratic organizations coupled with Taylor's scientific management approach provided the basis for the concept of legitimate authority in corporations in the 20th century. Strategies of scientific management also included giving

professional managers authority because of their intrinsic leadership charisma and character traits learned through education. Authority relationships were exercised, technological advances were imposed to increase production, and workers accepted the increased demands resulting in benefit to all organizational members.

Robertson (1999), reviewing the historical context of authority, averred that the effectiveness and efficiency of authority relationships within and between organizations have changed with the distribution of power and the technologies implemented. He posited that the early development of factories served as a way for capitalists to exploit workers and maintain control and was not necessarily the outcome of changing technology. Subsequent technological changes, more dependent on the factory-based organizational design developed during the Industrial Revolution, were also not necessary, because greater economic justice without significant sacrifice in efficiency could have been realized with smaller production units and different authority patterns. This theory parallels that of the classical and neoclassical economists, in which the capitalistic exercise of authority requires exploiting labor to the fullest extent to maximize profit (Robertson, 1999). From a different viewpoint, Langlois (1999) suggested that improved efficiency was an objective and a result of the factory system fueled by market growth and the demand for manufactured goods. The authority relationship of exploitation was being fostered by workers' desire for the higher factory wages. Their

inability to work to the system's requirement created a dependency on the employer for the discipline they would not impose on themselves.

Rather than view authority relationships from the viewpoint of the actors or their environment or both, Giddens (1986), in his theory of structuration, explored the authority relationship between individuals and the larger social system, focusing on social practice—routine recursive activities of individuals across time—that draws on structure. He held that in this social practice schema, knowledgeable individual actors both shape and are shaped by the organizational culture in a structure that enables them to act according to the rules and resources implemented in the action, which also delimits the course of action. These power and authority relationships associated with structuration theory and exercised in routine life or social practice are reviewed from three viewpoints by Cassell (1993, p. 102): (a) a simple series of interactions between morality and power; (b) interactions of meaningful communication; and (c) structures relating to collectivism, the community of societies.

Looking at the moral order of interaction in meaningful communication, individuals exercise authority, choosing to meet obligations resulting from social practice, possibly negotiating compromise if in disagreement, or disregarding the rules or policy. Giddens (1986) called this capability *agency*, by which people mobilize power in terms of resources and transform an event to alter its course and meaning. He suggested that authority, or authorization, is the

resource or ability that "generates command over persons" (p. 100). The interaction of intended or unintended consequences structures new action with the inherent possibility of change in all circumstances of social reproduction. Giddens furthered his argument with the proposition that recursive social practices, institutionalized in roles and structured by rules, may delimit the success of the interaction because of the power relations.

Autonomous Groups

At the opposite end of the hierarchical spectrum is the organizational design of the autonomous group, where formal authority is downplayed and theory to guide group processes or team efforts is limited. The role of authority and control within self-directed and networked groups varies depending on the relationship to the hierarchy in the organization; in most cases it operates as a bossless organization. This means that there are no individuals with authority to hire and fire and direct the work of others; power and authority is held and exerted collectively (Robertson, 1999). Research on these work groups is limited because of their short history or the proprietary with which organizations hold their work activities (Manz & Sims, 1987). The literature on authority in these novel approaches to work design focuses on developmental stages and their authority relationships (Hackman, 1986), members' readiness to assume

autonomous management (Walton, 1980), and communication patterns (Carletta, Garrod, & Fraser-Krauss, 1998; Dabbs & Ruback, 1987).

The model of self-managed work teams originated with the Tavistock Institute for Human Relations, its effectiveness empirically confirmed relative to improved levels of productivity and member satisfaction (Cummings, 1978; Rice, 1958). In a review of 11 studies, Pierce and Ravlin (1987) synthesized the effectiveness of autonomous work groups into a series of propositions around design, evaluation, and performance effectiveness; further research was suggested in the area of understanding authority relationships and improving external management tactics that have the potential to improve participation, cohesiveness, and other team member responses.

The literature suggests that work groups develop over time, with each team moving along its own continuum (Hackman, 1986), decreasing its need for external managerial authority. In this type of unit, the group is responsible for managing the task and the performance of the group; it has authority to structure the process, make operational decisions, and define its future. In a survey conducted with 120 leaders of organizations that used autonomous work teams from 6 months to 3 years, Wellins, Byham, and Wilson (1991) supported the four stages of team development commonly known as forming, storming, norming, and performing. Tuckman and Jensen (1977) identified the phases as getting started, going in circles, getting on course, and full speed ahead. In the getting-started

stage, the understanding and exercise of authority is ambiguous and confusing because the members have moved from being followers to an unknown process of leadership. Coordination issues arise as technological change, accompanied by radical changes in knowledge, strains the system. Particularly in this phase, members learn new tasks, work in new and different roles, and adjust to new or nonexistent work rules. In the second stage, storming or going in circles, team members realize that the task may be more difficult than imagined. They often become testy and blameful, relying solely on their personal and professional experience. Pressure to function as a highly cohesive unit mounts, and members' inability to provide social and emotional support creates arguments, defensiveness, competition, and questions about the value of the project and those who designed the team. Little energy may be exerted on the task, but authority relationships are beginning to be understood. In the norming, getting-on-course-and-performing, and full-speed-ahead stages, the team attempts to achieve harmony with a focus on continuous improvement. Internal systems for decision making have been developed. Acceptance of membership in the team is realized without the sacrifice of personal identity, and members exercise their authority in productive, interdependent ways.

In a comparison of autonomous work groups with traditional leader-led groups to determine the consequences for innovation as a result of placement of authority and communication patterns, Carletta,

Garrod, and Fraser-Krauss (1998) found that groups with joint authority make better and more innovative decisions than do those with one authoritative individual. Based on research that suggests innovation means having ideas about change and getting them accepted by the group, Carletta et al. analyzed the content of group discussions in a corpus of workplace meetings and proposed the theory of output/input coordination as a mechanism for how the observed patterns in small autonomous groups can result in better innovation. They also provided practical implications for implementing innovative work groups. The principle of output/input coordination predicts that the placement of authority in groups has no impact on the simplicity of communication, when considering the frequency of adjacent contributions made by pairs of participants, the relationship between discussion size, and the proportion of new contexts.

Types of Authority

Authority can be categorized into two types: (a) organizational authority, sometimes called legitimate or formal authority, with delegated roles, giving the role occupant the "right-to-work" within the boundaries of the role (Gould, 1993, p. 51); and (b) personal authority, the counterpart to organizational authority. Gould (1993) defined personal authority as the core of one's sense of self, regardless of the role occupied, the "right-to-be" (p. 51) and to exist fully as oneself. He refined the definition of personal authority as

> experienced when individuals feel entitled to express their interests and passions, when they feel that their vitality and creativity belong in the world, and when they readily accept the power and vitality of others as contributions to their own experience. They give themselves and others permission to be vital, or in a word, authentic-in-role. (Gould, 1993, p. 51)

Organizational authority has it origins in Weber's topology of traditional rational-legal authority, the only kind of authority where organizational members realize a value consensus of legitimacy (Katz & Kahn, 1978). This approach of rational-legal authority is a major source of influence in management, as witnessed by the hierarchy of leadership roles and governed by command-and-control policies. Schlesinger and Klein (1987), elaborating on early work, extended five bases of social power held by individuals: legitimate power—the right to assign and direct work activities; reward power—the right to distribute compensation; coercive power—the right to discipline or punish; referent power—which refers to influence based on the identification with another person; and expert power—which is the result of one's superior knowledge or experience. All of these classifications of authority are played out in organizational management.

The authority relationship associated with organizational authority involves a kind of influence that can be exercised only from a normative arrangement accepted by both the leader and the follower. In the traditional organizational design, the authority relationship stresses the idea that private judgement is surrendered. Raz (1990) suggested that this relationship where subjects refrain from

demanding satisfactory justification of the precept may exist because the possibility of exercising their own authority is inconceivable to them. It is not that they have suppressed judgment, blindly obeying, but that the environment for recognizing alternatives to the established practices has not been experienced. The hold of the established authority structure on individuals in organizations might be so strong that it is difficult for employees to envision a work form that can be judged by external standards, such as natural rights (Raz, 1990).

It is this authority based on one's sense of self, regardless of the role of the occupant, that Gould (1993) saw as a critical determinant of effective self-management. He averred that managerial authority based on hierarchy is no longer adequate to guide human behavior in organizations that depend on teams of individuals. In these new work forms, managers must find and exercise their personal authority. An organizational environment with information available to all and managed by work groups of various types in a flatter organization creates pressure on members to transcend their positions or traditional roles and negotiate authority relations. This new authority relationship includes both positional and personal authority, requiring leadership that has an understanding of its own role and authority and how to exercise them in constructive ways within the system.

Mental Models of Authority

An individual's understanding of role has its roots in authority, and the ability to exercise this understanding impacts how the individual works, learns, and adapts. This ability requires an acute knowledge of one's self and the multiple identities and roles one takes. Authorizing oneself is an inherently relational activity, highly dependent on personal history, mentors, and one's individual efforts. Group dynamics theorists Gillette and McCollom (as cited in Kahn & Kram, 1994) and organizational psychologists Argyris and Schon, Hirschhorn, and Kets de Vries and Miller (as cited in Kahn & Kram, 1994) suggested that individuals have internal models of authority, influenced by childhood experience, that shape authority relations in organizational arrangements. Although typically unaware of their internal working models (Bowlby, 1980), individuals can change them in the context of meaningful relationships, thus limiting their influence on behavior. Gillette and McCollom (1995) described this process of change as three stages of unfreezing the individual's self-view (Lewin, 1951, pp. 228-229): identification with external authorities, differentiating from these authorities, and acting independently and interdependently. The researchers suggested that this change process is one of evolution from dependence through counterdependence to interdependence, a process similar to the learning stages experienced by group members, as well as by children growing to adulthood.

Kahn and Kram (1994) defined three stances individuals take toward the nature of authority regardless of who occupies authorized roles. The framework for the three positions—dependent, counterdependent, and interdependent—comes from interpersonal (Hirschhorn, Kets de Vries & Miller, as cited in Kahn & Kram, 1994), group (Schein, as cited in Kahn & Kram, 1994), and institutional dynamics (Miller & Gwynne, as cited in Kahn & Kram, 1994). Each stance is characterized by a set of assumptions based on individuals' beliefs about how their selves are affected by relations to authority in hierarchical systems. When these basic assumptions are combined with internal models, associated with attachment theory between infants and caregivers, they provide an understanding of the ways adults enact their internal models in relations involving authority.

This paradigm of internal authority models involves the degree to which individuals expose and extend relevant dimensions of their selves into the performance of the task (Gould, 1993; Hirschhorn, 1985; Kahn, 1990; Katz & Kahn, 1994). They may resolve the conflict in authorizing themselves and others to work by suppressing the self, suppressing the hierarchical role, or suppressing neither. Kahn and Kram (1994, p. 26) described the three internal models as follows:

The dependent model describes individuals with internal models of authority that value and seek out relationships with formal authority, identifying with established patterns of thought and behavior and deauthorizing any responsibility for their own management. In

management or supervisory roles, they seek dependent followers, deauthorizing them to manage themselves. The attraction in the relationship is the role the individuals occupy and not the personal relationship, thus suppressing their personal selves. The notion is that personal relationships undermine the authority relationship upon which they depend; thus, they split the role dimensions from the role performance.

In this concept, personal identities are thought to be associated with hierarchical roles. The individuals' operating strategies are externally determined, with defined rules and roles guiding their beliefs and actions in their relationships. Dependent internal models can be associated with the resistant pattern of attachment (Ainsworth, 1973; Bowlby, 1980), in which individuals continue to need the connection to their primary caregiver to reduce the anxiety of their world.

The operating strategy is one that permits continuation of the dependency. Unless changed, the pattern continues, suppressing any internal guides of feelings, beliefs, or ideas that could mobilize creativity and innovation. Leaders' actions will aim to maintain the followers' need for them, idolizing the authority relationship at the expense of those who might contribute feelings, beliefs, and spontaneously generated ideas.

The counterdependent model is the antithesis of the dependent model. Here, individuals look for relationships where there is limited

authority, possibly where it might even be undermined, or where they can create deviant acts. As followers, they will undermine hierarchical roles, and as leaders, they will ignore the role-determined boundaries, maintaining relationships that inhibit individuals from completing tasks in the context of hierarchical relationship. The deauthorization process might be the blatant refusal to cooperate with authority, or the more subtle substitution of personal connections for role-related interaction with others (Hirschhorn, 1985, 1990).

Counterdependents believe personal identity will be destroyed if the individual fuses with his or her role; therefore, people resist external demands and substitute their own boundaries, behaviors, and beliefs. This is the pattern of avoidance of attachment (Ainsworth, 1973; Bowlby, 1980), where the individual as a child distrusted the caregivers and became emotionally self-sufficient, suppressing the notion that authority can be helpful. The operational strategy is to maintain the deauthorization of themselves and others either through direct confrontation or passive withdrawal from relationships of authority. These individuals might try to overthrow the group's or organization's authority structure, or deny its existence by explicitly or implicitly disparaging the boundaries of the relationship. This is done at the expense of the organization's systems of communication, accountability, responsibility, and coordination that support the task.

The interdependent model describes individuals with a stance of both dependence on and independence from hierarchical authority.

They respect the role and the contributions of the hierarchy from the context of their own role, assuming that people neither subsume nor are subsumed by the occupied role (Kahn, 1990). Individuals with internal interdependency models seek to collaborate with others to incorporate diverse perspectives into the task, trusting in their own roles as leaders or followers, and believing in both authority and self-expression.

Identity is defined in connection with and resistance to established role systems, boundaries, and authority. This is the model of the secure pattern of attachment (Ainsworth, 1973; Bowlby, 1980), where individuals feel both self-sufficient and trusting of the caregiver, maintaining the ability to simultaneously separate themselves and remaining connected to authority figures and the concept of authority itself. The operating strategy of such individuals is to use their own thoughts, feelings, and beliefs to guide the task performance, while considering their roles and those connected to the hierarchy (Kahn, 1990). They recognize status differences without losing the personal dimension of self and others; as leaders or followers they respect the system without letting it dictate their relationships. Kahn and Kram (1994) made a very clear normative statement regarding this stance on authority:

> People with interdependent models of authority are better able to authorize relevant personal dimensions of themselves and others to work in roles of superior and subordinate than people with either of the two other internal models of authority . . . [and they] are better suited to the demands of the high involvement (Lawler, 1988) and the postindustrial organizations (Hirschhorn,

> 1985, 1990), which depend on the joint negotiation of duty and authority and the collaborations that ensue. (p. 26)

Although attachment theorists and organizational psychologists had maintained that these internal models of authority are difficult to change, Kahn and Kram (1994) argued that individuals can change models in a two-part process of, first, becoming aware of their patterns of thought and behavior and the extent of their psychological defenses to maintain them and then developing new ways of relating to others. The awareness may be developed in relationships where they receive feedback about the ways they frame authority. They can change their internal models with self-awareness and through understanding their experience in authority relations. Kram (1988) suggested that this kind of transformation happens with mentoring relationships where, over time, a counterdependent or dependent stance can evolve into interdependence.

Gould (1993) argued that a strong sense of interdependent authority relationships is needed, as the trend to self-management in organizations replaces the old command-and-control, standardized routines of organizations. Effective management of one's work is no longer directed by the supervisor or manager but results from proactive actions and the management of one's anxiety over having taken responsibility and initiated action. Confronting anxieties and conflicts that bewilder in the exercise of authority involves a radical reframing of how one takes up one's role. Gould (1993) suggested the need to create a "culture of authorization" (p. 60), which would include

(a) taking behavioral responsibility, which involves looking at one's own behavior first, modifying that behavior, and suspending projections of difficulties onto others; (b) taking emotional responsibility and developing the capacity to tolerate and manage (not deny) anxiety, ambiguity, and complexity, which requires acceptance of these feelings in oneself and recognition of their role or authority in the projections of others; (c) taking ethical and moral responsibility, including accepting delegation and negotiation when necessary; and (d) fully recognizing interdependence by depending on peers and subordinates for insight, wisdom, and perspective (p. 61).

Locus of Control

It is important to understand what types of variables influence the "personal gyroscopes" (Gould, 1993, p. 51) that drive enactment of authority relations. The literature focuses on theories of self-concept (Bandura, 1982; Burns, 1978; McCall, Lombardo, & Morrison, 1988), whereby it is suggested that high self-concept results in greater leadership characteristics (Bennis & Nanus, 1985; Goleman, 1998b), personal achievement needs (Kaplan, 1991), defensive postures (Argyris, 1997), and neurotic behaviors (Kets de Vries & Miller, 1987), suggesting that any of these dimensions may play a role in creating authority relations.

At the core of self-concept are individuals' beliefs about the controllability of what happens to them (Goleman, 1998b), a construct

that is derived from early social learning theory (Rotter, 1966). In early exploration of these beliefs, clinical psychology researchers proposed, as a result of their observations, that some clients changed their behavior more than others as a result of new experiences. Rotter, Seeman, and Liverant (1962) suggested that the variable that contributed most to this difference was locus of control. They posited that individuals with an internal locus of control believe that outcomes in their lives are dependent on internal causal forces, and the learning process is based on the principle of instrumental conditioning (Carver, 1997). A belief that outcomes are the result of causal forces outside the individual's control, or in an external locus of control, results in an inability to learn from reinforcements and a perception of outcomes as the result of fate, chance, or powerful others.

Because of the significance of locus of control in determining behavior, research has been quite extensive (Lefcourt, 1976; Strickland, 1989) and generally supporting theoretical beliefs that individuals with an internal locus of control work more adaptively than people with an external locus of control (Baites & Baltes, 1986; Carver, 1997; Thompson & Spacapan, as cited by Carver, 1997), changing their behavior following a positive or negative reinforcement. High internality has been associated with high need achievement, greater job performance, greater educational success, more expression of satisfaction with life and career, greater social-action involvement, and more willingness to accept responsibility for

individual actions (Lefcourt; Rotter, as cited in Carver, 1997). It is an important variable in explaining human behavior in organizations. More specifically, it is suggested that locus of control is related to motivation, effort, performance, satisfaction, compliance with authority, and supervisory style (Spector, 1982).

Spector's (1982) hypothesis that internals perceive that they have a large measure of personal control and seek out situations where this control is possible is supported by the work of Kabanoff and O'Brian (1980), who described leisure time activities along five dimensions of skill utilization and influence. They found a small, but statistically significant tendency for internals to spend time on leisure skills that permitted personal control.

More recently, Spector (1982, 1988) developed a Work Locus of Control Scale (WLCS), considering dimensions such as leadership, job satisfaction, role stress, organizational commitment, and managing the relationship with one's superiors. With this domain specific scale, an individual's generalized control belief in organizational settings was measured and found to have greater correlation than the more general control measures of Rotter (1966). Subjects for the research were six different samples of business administration and industrial psychology students, department store sales and support employees, mental health agency employees, convenience store clerks and managers, and Florida municipal managers. Instruments were specific for the variables evaluated. For example, the subscales of Consideration and

Initiating Structure of the Leadership Behavior Description Questionnaire (Stogdill, 1963) measured levels of initiating structure. The locus of control was measured with a 16-item summated WLCS derived from an initial pool of 49 items constructed from a conceptual analysis of locus of control and its relationship to work behavior (Spector, 1982). Validation evidence of the relationship between locus of control and organizational variables was consistent across most samples with significant correlation of all variables except tenure. For example, the correlation of job satisfaction, commitment, and role stress with the WLCS ranged from 0.20 to 0.68; tenure correlation was 0.05 to 0.10. The specific WLCS correlated with the general locus of control (Rotter, 1966) with a correlation range of 0.49 to 0.57. These results suggest that the WLCS is a viable scale, requiring further parallel work with the Rotter E-I (external-internal) scale and testing of other hypotheses in work settings.

Blau (1993), in a study testing the value of locus of control to explain initiative and performing beyond basic job requirements versus compliant performance prescribed by job requirements, showed that the Spector (1988) scale has a stronger fit to work-related outcomes when compared with the Rotter (1966) scale. A survey completed by 146 bank tellers in a major northeastern city measured the relationship between the two locus of control measures to different performance dimensions, such as nonperceptual situations, perceptually- based situations, individual variables of ability, and teller

performance. Specific measurements within these variables were defined to explain initiative versus compliant performance. The magnitude of correlation between the Spector and the Rotter measures (r = 0.50) is consistent with Spector's finding (1988). Based on Spector's (1982) conceptual work, where he supported his hypotheses with applied studies that locus of control is related to organizational variables, Blau (1993) showed (a) Spector's (1988) locus of control has a stronger relationship to initiative and compliant performance than the Rotter measure (1966), where dimension of productivity (compliant-based), dollar shortage (compliant-based), and self-development (initiative-based) resulted in correlations of 0.15, -0.06, and -0.08, respectively, with Rotter, and 0.27, 0.5 and -0.30, respectively, with the Spector scale; (b) locus of control has a negative relationship to initiative performance (r = -0.30) and a positive relationship to compliant performance (r = 0.27) with Spector's scale (1988), and no significant results with the Rotter (1966) measure. A negative correlation between productivity and self-development (r = -0.22) and dollar shortages and self-development (r = -0.17), combined with a weak positive correlation (r = 0.12) between productivity and dollar shortage supported the idea that dollar shortages (compliant-based) are opposite from self-development (initiative-based).

Finding that internals show higher initiative performance, with externals having higher compliant performance, supports the predictions of Spector (1988). Although the mechanisms to explain

these different relationships are still unknown (Blau, 1993), implications are that externals make more compliant followers or subordinates than do internals. Externals' focus is on productivity; internals are likely to resist control by others. Externals with their greater compliance, at ease with following directions, could experience conflict when social demands of coworkers are not commensurate with management direction. When and how they execute personal authority for interdependent performance is not understood. Internal or external locus of control may also determine the best fit for a specific job, depending on its organizational factors and demands. When complex information processing and learning are required, as in research or technical systems, and often associated with initiative and independence of action, the internal may be more suitable. Although many relationships have been established between locus of control and work dimensions (Spector, 1982), several researchers (Blau, 1993; Carver 1997; Spector, 1982) still believe that more complex studies contributing to a more thorough understanding are needed.

Summary of the Literature on Leadership and Authority

Many studies of leadership equate the process with the uses of authority to accomplish adaptive change, but little is known about the process of authority relations per se (Heifetz, 1994). Because these relationships are extremely productive and provide a foundation for

adaptability and creativity in problem solving, it is imperative to understand their role in the changing leadership processes. New work configurations, flatter organizations, self-led work teams, and virtual work spaces intend greater freedom in roles, but if management is to be effective, confrontating the anxieties and conflicts of exercising authority in the new system is necessary. Gould (1993, p. 60) suggested that individuals may lack flexibility and vitality and behave in repetitive, constricted, and often self-defeating ways because of the fear and uncertainty of exercising their authority in unfamiliar ways under these new configurations.

With the challenges of change or adaptive problems, "authority must look beyond authoritative solutions . . . [and] usefully provoke debate, rethinking, and other processes of social learning" (Heifetz, 1994, p. 71). It is therefore incumbent on those responsible for leadership development to understand the difference between technical and adaptive changes and provide learning environments where not only learning of new skills occurs, but where new ways of learning permeate educational programs.

The Theoretical Framework

The concept of change within organizations has been shaped by several schools of thought including scientific management, human relations, and contingency theory. Since the 1960s, a plethora of approaches have been overlapped in an attempt to understand this

elusive concept. The literature informs many frameworks, some with clear theoretical foundations and others shaped for the practical approach. Some of these approaches include business process change (Kaplan & Murdock, 1991), culture and corporate identity (Schein, 1983), quality approaches (Deming, 1982), information technology approaches (Scarbrough & Corbett, 1992), the learning organizational approach (Argyris & Schon, 1978; Senge 1990), and the general systems approaches of Lewin (1951) and Nadler (1988). Smith and Gemmill (1991) looked at change from a chaos and complexity frame of reference. Elaborating on Lewin's position of phases of change, they suggested that group changes result when turbulence and chaotic conditions occur, giving rise to dissipative self-organization. Burns (1992) summarized organizational change theory from three perspectives: the whole organization, the dynamics of groups or teams, and centrality on individual behavior. Although there are numerous categories of organizational change and many influential social forces, the commonality is the underlying assumption that an organization and the individuals that form it can be changed in a direction that improves overall performance.

This study is rooted in the model of Lewin (1947) and in concepts at the core of a classical theory of organizational development that integrates transformative education (Boyd & Meyers, 1988) and recognizes that the struggle involved in working through ambiguities and paradoxes is the source of personal growth and an

integrative personality. Specifically, theories from group dynamics and experiential education supported this study.

Group Dynamics

"Group dynamics are distinct processes that interact with individual members' emotions and personalities, with the dynamics of the larger systems in which the group is embedded, and also with the specific task of the group" (Gillette & McCollom, 1995, p. 7). Highlighting the research of group dynamics is the complexity, authority, and change in experiential groups, particularly when these processes center on the individual and group process. Psychodynamic theory (Bion, 1961; Gillette & McCollom, 1995; Rioch, 1970) and open-systems theory (Katz & Kahn, 1978) provide the underpinnings for this study.

Systems Theory

A systems theory perspective is provided by the application of an open system to the social structure of the group. Like other open systems, the subunits of the human system form interdependent relationships with one another (Alderfer, 1976). These small subunits of human systems are embedded in numerous larger ones with overlapping hierarchies. These larger systems, which comprise the smaller subunits, form the organization; hence, the importance of

understanding the dynamics of group processes and authority relationships in particular.

Boundaries separate the group from the external environment and serve a regulation function. Within these boundaries are boundaries of the individuals and the subgroups that make up the larger groups. Overlapping all of these boundaries are those of the organization. The boundaries serve to filter the effects of society in terms of values, norms, roles, and other social characteristics (Miller & Rice, 1967). Boundaries are semipermeable, depending on the need for interaction. In groups, boundaries are abstract, referring to the observable and subjective measures individuals use to distinguish group members from outsiders. Time is also a group boundary, such as the temporal limit for each study experience, a characteristic of Tavistock group studies. Psychological boundaries are subjective boundaries within a group; they can be defined as the "basis of group structure" (Gibbard, Hartman, & Mann, 1974, p. 155). Bringing individual experiences from family life and life in general, the individual, the group, or both attempt to manage psychological boundaries covertly or overtly, in an understanding of the transactional and contextual functioning in and of the group. The stability and growth of groups depends on the relationships among these bounded subunits of the system and the system's relationship to its external environment (Alderfer, 1976). Thus, a group can be explained from open-systems theory, the process of group dynamics, the structural

relationships among group members, the development of the group, and the environmental influences acting upon the group.

Psychodynamic Theory

This approach recognizes the significance of inherent contradictions and confusion created by the conscious and unconscious processes driving many aspects of human behavior in group dynamics. It provides an important basis for exploring the role of such processes in the behavioral dynamics of leadership, authority, and change. Although Freud, Jung, and others discussed unconscious processes in larger collectives (Gillette & McCollom, 1995), psychodynamic theory brings a deeper appreciation of basic psychological assumptions through an understanding of rationalization, fantasy, transference, projection, and scapegoating as common, unconscious defense routines against anxieties that surface in group settings. Such assumptions are central to the individual and group levels of experiential groups; the challenge is to acknowledge them and work within the complex dynamics of the system, while keeping sight of the goals.

The literature and research on group dynamics may be divided into three segments that are associated with the psychodynamic elements of the group. They center on leadership and authority, group development associated with the sequence of stages of group formation, and interpersonal processes related to effective intergroup

dynamics as experienced in the work of the Tavistock Institute and the T-groups associated with the National Training Laboratories. This study focused on the unconscious elements of the group and their impact on the interpersonal process associated with leadership, authority, and intergroup dynamics; it used the experiential learning approach of the Tavistock tradition.

Experiential Education

The origins of experiential learning lie in the humanistic school, exemplified by Maslow (1943) and Rogers (1961), wherein they portray the purpose of human existence as a continual, lifelong learning process. Piaget (1951), in his work about the education of children, also contributed to this concept by extolling the value of learning from experience and self-directed study. The role of the so-called knowledgeable other, of discovery, and experiential learning were discussed in terms of child and adult development by Vygotsky (Cole, John-Steiner, Scribner, & Souberman, 1978). Lewin (1951) also was among the pioneers of this concept, but it was John Dewey who had the greatest influence with this approach (Kolb, 1984; Lewis & Williams, 1994). His experiential learning model strengthened the relationship among education, work, and personal development. Dewey's learning cycle consisted of a cycle of *trying and undergoing*, first through awareness of the problem, followed by the creation of an idea, trying the idea, experiencing the consequence, and finally

confirming or modifying the concept and repeating the cycle (Lewis & Williams, 1994). Archaubault (1974) explained that in this process, past experiences create knowledge from which participants in an educational process can communicate thoughts, ideas, and concepts to form a collective set of learning. The participants influence the learning process in the communication of their ideas, feelings, and observations about behavior from the experiential activity.

Kolb (1984) furthered Dewey's thinking by linking experiential learning theory to practical applications. In this model, "learning is the process whereby knowledge is created through transformation of experience" (p. 26). Six propositions provide the theoretical basis of the cycle composed of concrete experience, observations and reflections, abstracting concepts, and testing of the concepts. Learning (a) is the formation and reformation of ideas from experiences; (b) is facilitated by an education process that brings out the learner's beliefs and theories, tests them, and integrates the new concepts into the belief system; (c) requires the resolution of conflicts; (d) is a holistic process that integrates thinking, feeling, perceiving, and behaving; (e) involves a transaction between the participants' internal experience and their environment; and (f) creates knowledge (Vince, 1998). This process fosters learning in different capacities: affective, perceptual, symbolic, and behavioral (Kolb, 1984).

Kolb's (1984) learning cycle has been one of the key theoretical models in management education and development over the past 20 years (Cunningham, 1994; Gill & Johnson, 1991), linking theory to actual practice. Managers explored learning from either an individual's rational or emotional reality, whereby a direct experience of feelings or thoughts or both is generated; the experience is reflected upon; and the managers then draw rational conclusions or emotional insights and initiate action from the experience. Development is realized through the gain of knowledge at experiential and intellectual levels and its transformation into practice. Through this process, learning increases in complexity.

Vince (1998) suggested that there are limitations to Kolb's model and focused on several areas of improvement in experiential education, particularly as it relates to management education. Citing the works of Elliot Jacques, Hirschhorn, Kets de Vries, and Miller and Rice, Vince (1998) suggested that unconscious as well as conscious processes be considered as key factors in an organization's ability to manage learning and change. Often, learning in management education mirrors the way the organization defends against certain emotions. The challenge in management education is to work with the fears and anxieties that accompany the beginning of many learning processes and to restrain uncertainty and feelings of incompetence while entertaining a new feeling or concept. Through the rejection of

defenses against the turbulent, unknown business environment, effective experiential learning can be realized.

To work with these unconscious processes, Vince (1998) suggested the use of methods from the general field of group relations, management, and organizations (Coleman & Geller; Gillette & McCollom; Hirschhorn, as cited in as cited in Vince, 1998). He further suggested that management trainers find ways of working with the inseparability of the individual and the organization, creating a learning environment where managers can practice different ways of behaving and engaging.

The Association for Experiential Education (1994) provides the following description of experiential education in an early brochure:

> Experiential education is a holistic philosophy, where carefully chosen experiences supported by reflection, critical analysis, and synthesis, are structured to require the learner to take initiative, make decisions, and be accountable for the results, through actively posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, constructing meaning, and integrating previously developed knowledge. Learners are engaged intellectually, emotionally, socially, politically, spiritually, and psychically in an uncertain environment where the learner may experience success, failure, adventure, and risk taking. The learning usually involves interaction between learners, learner and educator, and learner and environment. It challenges the learner to explore issues of values, relationship, diversity, inclusion, and community. The educator's primary roles include selecting suitable experiences, posing problems, setting boundaries, supporting learners, insuring physical and emotional safety, facilitating the learning process, guiding reflection and providing the necessary information. The results of the learning form the basis of future experience and learning. (p. 1) ..

The literature reinforces this definition focusing on three primary characteristics of adult experiential learning: the diversity of

ways in which adults learn (Hiemstra & Sisco, 1990), such as learning through listening and reflecting, visually perceiving, or direct interaction; the need for acknowledgement and use of their experiences and prior knowledge; and a desire to be actively involved in the learning process rather than passive recipients (Merriam & Caffarella, 1991). Underpinning the application of this experiential model, or any training program, is the need for consistency between theory and practice when designing experiential learning opportunities (Jackson & MacIsaac, 1994). The Tavistock style of experiential learning takes into account most of the characteristics pointed out by the adult learning theory, providing a holding environment to safely explore the unconscious, the source of creativity and effective leadership (Koestenbaum, 1991); work in real time as the dynamics of group processes are happening; and practice reflection, where past events are brought to a conscious level and used for future thinking, feeling, and behaving.

The Tavistock Approach to Authority Relations

Group dynamics in the Tavistock tradition originate from Freudian concepts that were theoretically systemized by Bion (1961), a British psychoanalyst. Bion's formulation about group behavior resulted from his efforts to treat individuals who were psychological casualties of fighting in World War II. His theories became the basis for Tavistock group studies and conference design. He purported that the

reality of group experience encompasses all of Freud's concepts of dependency flight, counterdependency fight, pairing, and the preoedipal mother in the group-as-a-whole, all coexisting within group dynamics. He categorized the variables as basic assumption groups of dependency, fight/flight, pairing, and oneness assumptions (Bion, 1961). Although work groups experienced in organizational life may not always resemble the basic assumption group, it is the task organization that keeps the group from regressing to these positions (Alford, 1989). In individuals and bureaucracies, inhibition of emotional growth and learning results from excessive denial of these psychological defenses. According to Jacques (1959), the nature of a group is determined by rational, conscious functions, or the task of the group, and by unconscious functions operating at the level of unconscious fantasy.

A Tavistock human-relations conference aims to provide an open institution for studying the working problems of a society in microcosm. Although the free and unstructured communication heightens emotional conflict, repressed emotions will eventually be released. Once made public, members can integrate these emotions into the task in a way that improves the overall performance. In bureaucratic organizations, restrictions on the direction of communication, the heroic role played by many leaders, communication fragmentation as a result of the division of labor, and norms that encourage repression of emotion in the name of

professionalism assure that emotion does not lead to emotional learning (Alford, 1989, p. 69).

With the unfolding of the Tavistock conference, a temporary learning organization results that provides opportunities for members to experience and study the unconscious and conscious defenses that affect systems with a focus on leadership, authority, tasks, roles, and boundaries. This temporary organization, structured into small groups, larger groups, and intergroup events over the scheduled days mirrors work life, allowing engagement, reflection, and learning on transactional, psychological, political, and spiritual levels.

The process uses a group-as-a-whole perspective, where the group exists both more and less than the sum of its members and their intrapsychic dynamics (Gillette & McCollom, 1995). The group behaves with a life of its own, separate from and related to the dynamic of the coactors, in what Bion (1961) called the group's mentality. Gibbard (1974) described it as a process of unconscious collusion, and Miller (1998) suggested that it is "an instinctive propensity of individuals to be mobilized even when dispersed" (p. 1507). In this approach, participants study aspects of the system as they occur in the here-and-now, that which is occurring in the present and is being generated by the interactions of the group. A group consultant sharpens the here-and-now by aiding the group in the study of their own dynamics. The application component of the

conference takes the individual to the back-home setting, to which the learning can be transferred.

Rice (1965) recognized that conference members needed some relief, some security from interpersonal, intrapersonal, and group-as-a whole dynamics of the events in order to recognize anxieties, ambiguities, paradoxes, implicit assumptions, leadership behaviors, and other patterns of human interaction. He saw this security coming from the concept of the conference as a holding space, or holding environment, originating from psychoanalytical theory and used to describe the relationship between the therapist and the client. The therapist, like the parents, provides the containing vessel for the individual to safely learn and develop. Heifetz (1994) expanded the definition of a holding environment beyond the therapeutic relationship to any relationship where there is a developmental task to be accomplished, such as that of politicians and their policies, coaches and teams, and managers and subordinates. He described the holding environment as "any relationship in which one party has the power to hold the attention of another party and facilitate adaptive work" (p. 105). This concept of a holding environment provides potent ways to transform stresses into adaptive change. If the behaviors for effective group dynamics are in fact similar to the descriptions of behavior traditionally associated with a holding environment, then individual and organizational change will be facilitated by the psychological safety discovered in such a context. The security in the Tavistock approach

also comes from the boundaries kept by staff in their own devotion to the task, time limits, and continuous monitoring of fantasy and reality through interpretation.

As assumptions of individual values and lifestyle, emanating from social experience and rooted in birthright identities, surface in group relations training, the individuals become acutely aware of the prehistory of their beliefs. Explicating these beliefs and values in this process can challenge core identity. Self-awareness is heightened because the environment has made it psychoemotionally safe. Getting to this point of psychoemotional safety in a group where exposure of intimate beliefs and emotions is not the norm requires an appreciation of how and why the experience can be uncomfortable.

In the Tavistock study group the consultants extend group-centered comments, focusing member responses on leadership and allowing for elaboration of fantasies about authority. Members may participate to their desired level in the process, exploring shared responses to leadership and their own responses to authority. An objective of this process is to deny implicit assumptions and motivate participants' self-defensive routines in order to unfreeze the powerful force that may be locking group members into unproductive behaviors. The consultants' mission is to model personal vulnerability and publicly acknowledge the struggle with these defensive behaviors, thus rejecting many of Bion's (1961) attributions of authority and invincibility, normally associated with the traditional process of

leadership. This antithesis of authoritarian leadership attribution can be a source of surprise, discomfort, or even rage for some members in the group.

Rather than formal role authority based on the consultants' position power, human relations training relies on informal authority, achieved by the group's recognition of the referent power of the consultants (Rioch, 1970). In order to stay in role, consultants must have the paradoxical ability to deny the natural group perceptions of formal leadership and authority and take facilitator roles, while accepting initial leadership in the endeavor. They must manage any group-held fantasies about being saved by the facilitator as mother, father, or boss, as well as any efforts to destroy the consultants, once the traditional role and expectations of leadership are betrayed (Bion, 1961; Klein, 1960). Unlike the traditional position of leadership with the right of executive action (Tourquet, 1985), consultants within the study groups must focus on modeling a variety of behaviors that maximize individual and group learning, not on maintaining their executive privilege. These behaviors may be split into functional behaviors, or role requirements for managing the group experience, and behaviors that refer directly to the personal qualities or attributes of the consultant. Because group relations training is concerned primarily with group learning, consultants should have little interest in power dynamics. They must use their referent authority to bring the entire group to focus upon implicate structures of meaning, with no

conscious or unconscious intention to parlay this authority into personal power or influence over the group for other purposes.

Anxiety and fear are natural to any new experience. The Tavistock model, where a group task is virtually indistinguishable from its process, is no exception. Overcoming and effectively managing these fears and anxieties through the process is at once an interpersonal as well as organizational requisite for functional change. The successful identification and management of these anxieties by the broadest number of members disables the natural inclination toward defending against these anxieties and fears. It provides a sense of hope and relief, generating disposition of goodwill in the group-as-a-whole (Kets de Vries & Miller, 1987).

Tavistock group relations training offers a qualitatively different experience of theory and praxis concerning effective group dynamics. By consciously denying the traditional leadership and facilitation concepts, group relations training has the potential for a collective intelligence that supersedes lectures in group problem solving. The format of inquiry into basic assumptions and implicit dynamics in groups of different sizes and in events with different tasks elevates the degree of difficulty in the process and results in group ethos of deeper meaning (Frankel, 1959). The process is a multifaceted approach to organizational life, incorporating characteristics of adult learning and providing opportunities to learn about the overt and covert processes that influence authority relationships and leadership.

Evaluation of Executive Development Programs

Introduction

Companies, as well as schools, governmental agencies, and other organizations have become increasingly interested in the evaluation of transfer of knowledge from training and development programs. Business competition is moving from building the proverbial better mouse trap to viewing their employees as competitive advantage, as the trend for continuous learning permeates management philosophy. Coupled with this growing recognition of the need for lifelong development and the fueling of tremendous expenditures in training budgets is the concern that most of the changes resulting from training programs are not transferred (Royer, 1969). Baldwin and Ford (1988) concluded, based on studies by Georgenson (1982), "While American industries annually spend up to $100 billion on training and development, not more than 10% of these expenditures actually result in transfer to the job" (p. 64).

The Kirkpatrick Model

Evaluating development programs in companies serves several purposes, including providing feedback to program planners, managers, and participants relative to the content of the program and its continuation; assessing the employees' skills level; and providing

support for budgetary considerations. Kirkpatrick (1967) developed a four-level model in 1959 for evaluating training in order to clarify the elusive perceptions of the concept of measuring results of educational events; this model is used in many organizations today. Because evaluation may have different meanings (e.g., measurable changes in behavior or business results; learning measured as increased knowledge, improved skills, or changed attitudes; and comments by participants), Kirkpatrick (1967) integrated these concepts into a model with four levels of measurement: reaction, learning, behavioral change, and business results as a consequence of the learning event. He suggested that if the program objectives were simply to increase knowledge, improve skills, and change attitudes, all four levels may not be required. However, if the purpose of the training were to change behavior, all levels should be used, because they function as a system in evaluating the learning, the transfer of the learning to business results, and the customers' satisfaction with the program.

The American Society for Training and Development Measurement and Evaluation Program (1997) found that 90% of the 300 organizations surveyed said they evaluated at least some part of their training. Of these, 67% used the Kirkpatrick model, with larger organizations more likely to use it than smaller ones. Training inputs were more widely collected in the form of total expenditures and number of employees, number of courses offered, total training expenses, and training expenses as a percentage of payroll in large

corporations. Level 1 of the Kirkpatrick model, customer satisfaction, was the single most frequently measured outcome in development programs, with 94% of the responders using this form of evaluation. Of the companies surveyed, 53% measured Level 2, learning; 32% measured Level 3, behavior or transfer of training; and 20% attempted to measure Level 4, return on investment or financial performance, but admitted that this was a most difficult issue in training evaluation.

The four levels are a sequential way of evaluating training and development programs, with each level affecting the next one. Moving up the levels, especially measuring the process of transfer of learning and return on investment, becomes more complex and time-consuming, which explains why companies focus most of their attention on Levels 1 and 2 (ASTD, 1997).

Descriptions of Evaluation Levels

Level 1: Reaction

This level measures customer satisfaction or the extent to which the participant finds the program positive. Among other characteristics, effective training and development programs are dependent on the participants' reactions, since a favorable reaction impacts learning as well as decisions on the disposition of future programs. Many training programs with empirical evidence of

accomplishing the predesigned objectives have been discontinued because of unfavorable participant comments.

Reaction measurement may provide information to the participants themselves on ways to improve their performance, and it lets them know that the organization is interested in meeting their needs. It serves as a feedback mechanism for managers about the effectiveness of the program by identifying areas that were most effective and those that were problematic. It may also establish standards of performance for future programs. The reaction measurement is typically taken in the form of a questionnaire, administered at the end of the development program. Kirkpatrick (1998, p. 26) suggested using the following guidelines in developing the questionnaire in order to get maximum benefit from the reaction sheets: (a) determine what information is wanted relative to the content of the program and the leader(ship) of the program; the nature, amount, and usefulness of handout material; the facilities in terms of comfort, convenience, breaks, meals, etc.; and audiovisual aids; (b) design a form that is quantifiable and provides the maximum amount of information in the minimum amount of time; (c) get 100% immediate response at the end of the program prior to return to the home environment (with the potential for a follow-up reaction sheet at some later time) in order to minimize the "happiness" effect, which may occur at the conclusion; (d) get honest responses by evaluating the role of a signature on the questionnaire; (e) consider developing

acceptable standards and evaluating the reaction against the standards; and (f) communicate the reactions as appropriate.

Robinson and Robinson (1989) expanded the Kirkpatrick model (1967) and suggested that questions developed for this level should be specific, high-yielding, and constructed in a neutral manner. They also suggested that this is an excellent opportunity to direct the participants' focus toward identifying potential barriers in the work environment that could inhibit the use of what is being learned—an exercise critical to transfer (Broad, 1997). Emphasis is also placed on allowing enough time for participants to think about their responses while completing the questionnaire: Using a closed-question approach, 15-20 minutes is suggested as an ideal time for completion.

Consideration should also be given to the collected reactions of the instructors or leaders of the program (Robinson & Robinson, 1989). Questionnaires might assess their reactions to the content and design, their observations on how participants responded to the program's design, and what might be helpful in the future.

Level 2: Learning

Evaluating learning should include measuring the knowledge acquired, skills developed or improved, and attitudes changed as a result of the educational event. The importance of this measurement is that Level 3, behavioral change, is predicated on meeting one of these learning objectives: Measurement of behavioral change without

knowing what was learned could be erroneous. As the external environment influences changes in behavior, learning could have occurred, but the application climate might not have been conducive to a behavioral change.

This measurement is more difficult than the reaction measurement and is guided by (a) the use of a control group whenever possible; (b) the evaluation of skills, knowledge, and attitudes pre- and postprogram; (c) the use of a paper-and-pencil test for measuring attitudes and knowledge and a performance test for skills; (d) getting 100% response; and (e) the use of results for appropriate action (Kirkpatrick, 1998, p. 40). Robinson and Robinson (1989) expressed the importance of this level with their resultant formula: Learning Experience x Work Environment = Business Results. Because business results are the use of what was learned in the work environment, a zero on either side of the multiplication sign will sabotage the results.

Standardized inventories may be used for those programs where content is related to the objectives of the program, particularly as they relate to skills and knowledge. The challenge in measuring what was learned is in determining what individuals believe or value as a result of the education event, as these are unobservable behaviors.

From a Level-2 learning-frame-of-reference, Robinson and Robinson (1989) emphasized the critical importance of determining criteria for tracking these nonobservable beliefs and values, such as the following: Who is the client? What is the business need? What are

the specific outcomes in terms of the mental skills, values, and benefits? What methods will be used to measure of the outcomes? And what period of time may elapse before measuring? Participating in a partnership with the client is imperative to the success of the program, because coordinating the components to be tracked with those desired by the client and also meeting a business need will ensure client support for the results obtained. Other components may obtain to measurement of changes in values and beliefs in the participant, because by definition they are not directly observable as actions. One-on-one interviews are suggested to measure mental skills with questions designed to assist the participant in reconstructing the thought processes he or she used and comparing the results with what was taught (Robinson & Robinson, 1989).

Sudman and Bradburn (1982) suggested the use of closed questions for measuring beliefs and values; although harder to construct, they are more representative of the responder's beliefs and less subject to interviewer and coder variances. It is highly recommended that base-line information be collected before the training, immediately after the program, and a few months later, in order to see trends in beliefs and values (Kirkpatrick, 1998; Robinson & Robinson, 1989). If an educational event is to be considered effective, these trends should be in the desired direction by the end of the program and also at some later time if the work environment is reinforcing the belief. Often, change is seen at the end of a program

with little evidence of positive movement later (Robinson & Robinson, 1989); therefore, this information is critical to measuring beliefs and attitudes.

Level 3: Behavior or Transfer of Learning

In assessing the impact of training, it is important to consider differences that occur between immediate and long-term changes. Although skills and knowledge are acquired immediately following attendance at a program, changes in productivity, employee turnover, and attitudes are subsequent occurrences (Bakken & Bernstein, 1987).

Enhancing the Kirkpatrick model (1967), Robinson & Robinson (1989) suggested that the four levels of learning outcome to be considered for evaluation of transfer should be (a) affective learning, which focuses on attitudes, values, and beliefs as discussed above; (b) the cognitive learning of concepts representing principles and knowledge sets to be used in the workplace; (c) observable behavioral skills, such as technical skills or coaching; and (d) operational outcomes in the form of improved productivity, sales increases, or reduction in customer complaints. Kirkpatrick (1959) focused on behavior or skills application, whereas Robinson and Robinson (1989) combined these two levels and called these measurements "tracking for change" (p. 209), where all the possible outcomes mentioned above

are integrated and the degree to which change has occurred after a training program is determined.

In tracking behavioral change, questions similar to those put forth in determining learning outcomes are asked: Who is the client? What is the business need? What behavioral outcomes are anticipated? How will one know the outcome has been achieved? And what is the waiting time for determining the outcome? (Robinson & Robinson, 1989). Of great importance in this level of the evaluation model is the data collection process, particularly the need to collect data that are meaningful, credible, useful, and measures discrete behaviors. Although few developmental programs have behavioral outcomes identified, it is imperative that the specific technique, behaviors, or skills being taught relative to a behavioral objective are isolated and that outcomes to be measured are determined early in the development of the program. Once determined, behavioral observations, interviews, questionnaires, and Q-sorts are used.

Robinson and Robinson (1989) pointed out that the time following the immediate return to work is when the new learning is most vulnerable. If the transfer measurement is taken at this time, a decline may be experienced as the participants are learning to apply the new behavior or skill. In order for successful transfer, the work environment must have managers who coach and reinforce the use of the skills and eliminate punishment for any decline in productivity; 87% of the learning from a program can disappear, depending on the

conditions during the transfer period (Rackham, 1979). Ford (1997) posited that to measure adaptive expertise, it is important to identify early in the design the frequency of opportunity and the setting required for a trainee to demonstrate effective transfer of knowledge, skills, attitudes, and behaviors learned. In general, the optimum time for measuring effective transfer of behavior is from 3 to 6 months after conclusion of the program, depending on the context of the learning and the frequency of use (Kirkpatrick, 1998; Robinson & Robinson, 1989). Daily or weekly use can be measured in 3 months, with a 6-month measurement suggested for monthly skill use.

The process of evaluating this level of learning is complex. Controls are often necessary for optimum measurement. The choice of methods depends upon the number of participants, evaluators, and time available. Determining whether to contact the immediate supervisor, peers, or subordinates for evaluating measurable behavioral changes can be complicated, and a lengthy transfer time is often impacted by changes in the availability of participants and others. It is for these reasons that most companies measure only Levels 1 or 2 or both of these (ASTD, 1997).

Level 4: Results

Determining the final results due to training is the most important part of the evaluation model, albeit the most difficult and, therefore, the least accomplished one. Companies are looking for

tangible evidence from training and development programs, such as productivity gains, quality improvement, reduction in turnover, improvement in quality of work life, reduction in costs, effects of leadership, time management, and decision making. In some cases, evidence that Kirkpatrick (1998) called "beyond a reasonable doubt" can be calculated; however, most results evaluations are based on "a preponderance of evidence" (p. 64). For example, the impact on turnover as the result of a management training program in recruiting, orientating, and training new hires can be evaluated by tracking the turnover rates posttraining. With consideration for the employment rates during the tracking period, this is an objective way to evaluate the turnover rate as a result of training. In other cases, too many factors may be impacting the transfer of learning and ultimate results, and only Levels 1 or 2 or both can be measured. Kirkpatrick (1998) argued that positive-reactions sheets from supervisors and managers are often enough to convince management of the success of the program, because company leaders place confidence in their management team's opinions of a worthwhile program.

Summary of the Literature Review

The literature review showed that research concerning the outcomes of experiential education is limited, particularly when the approach is that of a Tavistock-style conference. This study sought to add to the research literature by exploring perceived authority

relations in a group context and the ability of a human relations program modeled in the Tavistock style to mobilize change in the participants. Additionally, evaluating this learning event by means of the Kirkpatrick model has the potential to provide business practitioners with a meaningful way of determining the effectiveness of the experiential approach. Both quantitative and qualitative paradigms were used to link these areas of inquiry in a meaningful way, providing more substantive research to the practitioner.

CHAPTER 3

RESEARCH DESIGN AND METHODS

Introduction

This study was designed to explore and evaluate the effectiveness of an experiential education approach in providing professional development for business executives. Effectiveness was investigated from four perspectives: (a) changes in perception of authority relations as experienced by business executives participating in a group-relations conference modeled in the Tavistock tradition, (b) the role of locus of control in changing perceptions of authority relations, (c) the executives' satisfaction with the learning they experienced and the approach taken to provide it, and (d) the transfer of learning (i.e., changes made) to the work environment.

Of central interest was to demonstrate measurable changes in perception of authority relations resulting from a Tavistock-style workshop and the participants' satisfaction with this experiential approach to learning. The use of both quantitative and qualitative methods was deemed most appropriate. Triangulation served to counterbalance the limitations of each method alone in generating new insights into the complexity of the process (Jick, 1979).

The limited number of participants, the subjectivity associated with exploring perceptions, and the use of only one workshop of limited duration informed the decision to use the Q-methodology for

the quantitative portion of this study. The Q-methodology examined the participants' points of view of authority relationships through their subjective engagement with a group of statements used as one of the research instruments. Factor analysis of the Q-sorting resulted in several factors, representing each respondent's point of view, and the association of each respondent with each point of view as indicted by the magnitude of his or her loading on that factor. Factor or group interpretations were made relative to three mental models of authority—dependency, counterdependency, and interdependency—as defined in the design of the Q-statements. Before the workshop, immediately after the workshop, and 6 weeks after the workshop, factors were compared to answer the threefold question: What are the participants' points of view about authority relations, do they change after a workshop, and is the role of locus of control involved?

Interviews were used to enrich the inquiry with insights that expanded on the interpretation of factors and group membership. A questionnaire administered 6 weeks after the workshop answered two questions: Does learning from the workshop transfer to the work environment? What is the level of satisfaction of the participants with this type of experiential education program? The results of the quantitative and qualitative inquiry were integrated to operationalize the Kirkpatrick model for evaluating employee development programs.

The flow of quantitative and qualitative ideas is presented in the concept map of Figure 1, modified from Creswell (1994). The major

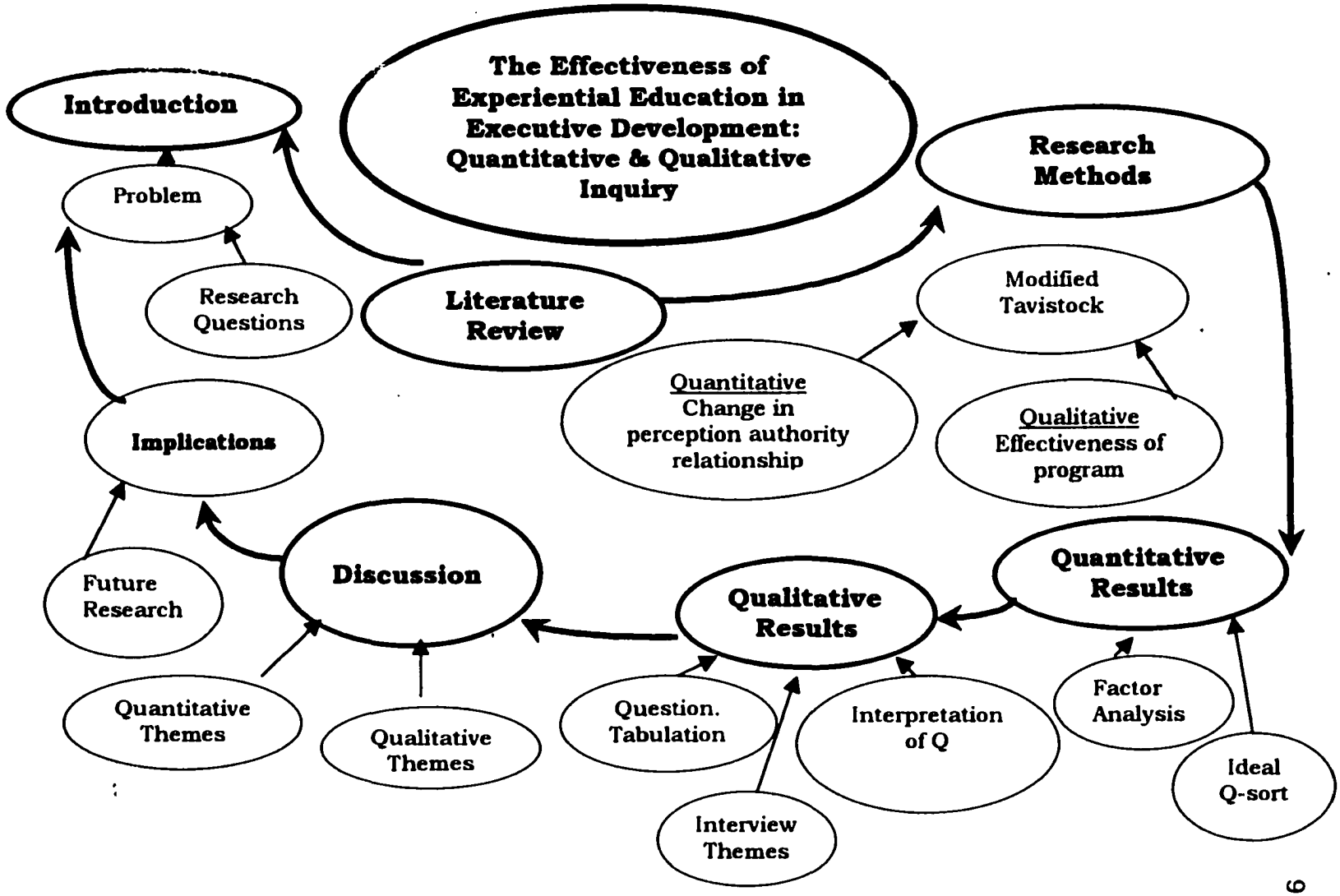

Figure 1. Overview of program flow.

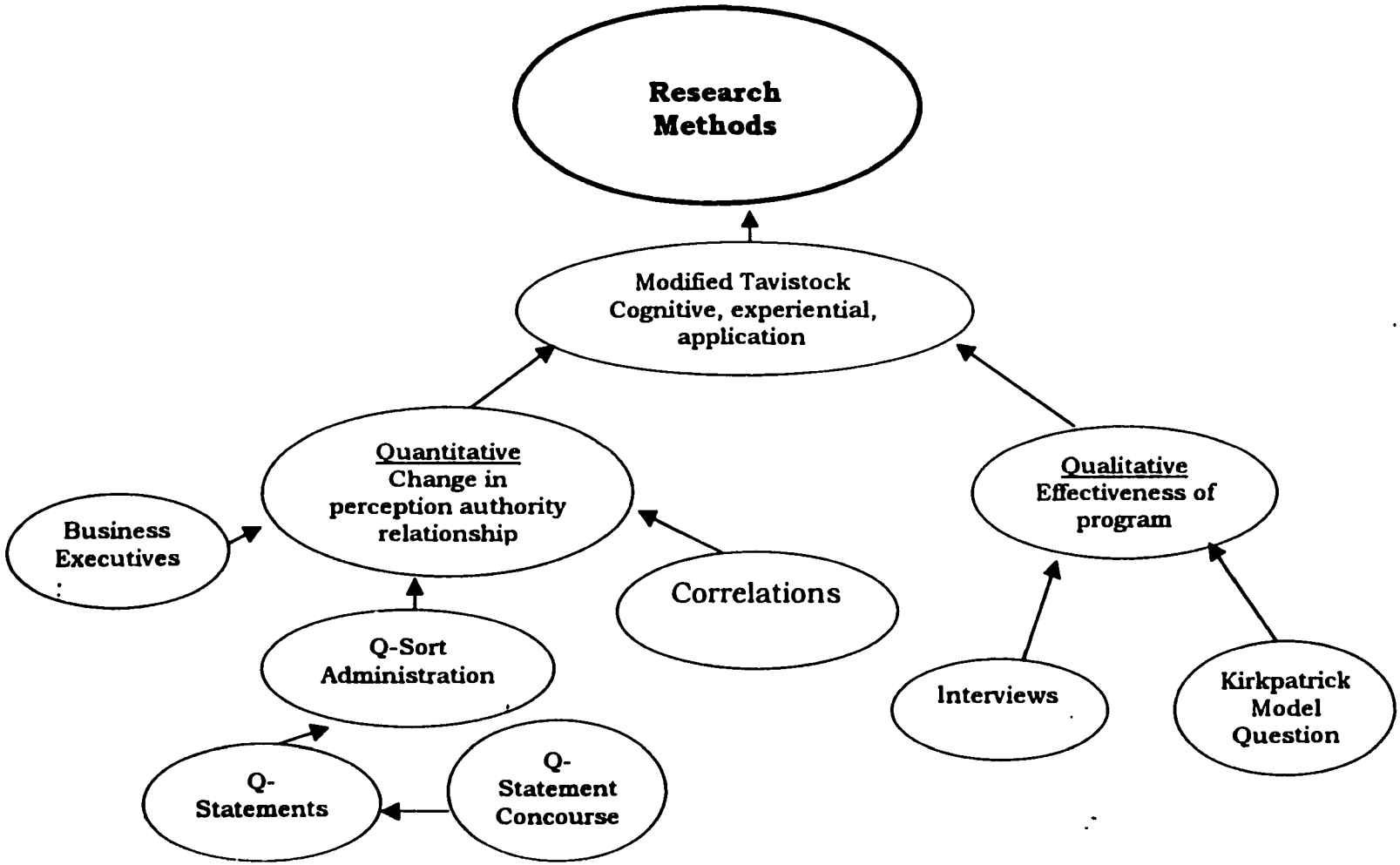

Figure 2. Flow detail for research methods.

chapters of this study are represented by the topics boldly encircled. The diagram unfolds from the introduction with related research to advance the quantitative and qualitative inquiry and other research methods. It moves from the two paradigms to the results phase—a discussion of quantitative and qualitative results—followed by a summary discussion and ending with an implications section. Details of the data collection are depicted in Figure 2.

Rationale, Setting, and Samples

Rationale and Setting

The intervention was an experiential education program in the Tavistock style. The traditional model was modified and positioned as the Leadership Learning System 2000 Workshop with three components: (a) didactic learning in the form of a 1-day, traditional classroom lecture, intended to accelerate the learning process without interfering with the objectives of the Tavistock concept; (b) a 2-day experiential event with traditional small-group and intergroup programs; and (c) a 1-day application event, in which participants applied their learning to real and specific work situations. The workshop faculty was directed to focus on explicit analogies to routine organizational life, as suggested by Frugé and Bell (1997) and Thomas (1995), and to include language more conducive to the business world. For example, the Tavistock conference was called a workshop, and

group consultants were called faculty. An application group on the final day of the workshop provided sufficient time for the participants to explore and analyze the relationship of their learning to a real work situation, whereas the traditional weekend program would not usually include an extensive application session.

The Leadership Learning System 2000 Workshop was held in New Brunswick, New Jersey, from 6 December through 9 December 2000, 8 a.m. to 9 p.m. Unlike the traditional Tavistock program, which is held on a college campus or in a modest conference center to heighten the deprivation believed to mobilize learning, this workshop was held at a Hilton Hotel. It was believed that attendance by business executives would be limited were the workshop not held in a hotel setting.

The faculty for the workshop were selected to reflect the anticipated diversity of the participants. Because faculty members bring their own identity group membership to an experiential program and represent more than one organizational group to the participants, the mix of identity groups (gender, race, ethnicity) was as follows: There were five women, seven men, two African Americans, and one African. Because questions about ethnicity and age were not asked, it can only be surmised that several of the individuals were of Jewish background, and one was Latino; approximately one quarter of the group were in their 30s, with the remainder between 40 and 60 years of age. Two members may have been over 60. Individuals with

significant experience in Tavistock conferences and, more importantly, with organizational consulting practices were selected because this would be one of the identity group compositions of the participants.

The Samples

Q-methodology comprises two types of samples: the person-, or P-sample, and the statements or collection of stimuli presented to the P-sample, the Q-sample. Because this method is a process of discovery and not of prediction, deduction, or hypothesis testing, the P-sample is not used for generalization to a larger population. It provides the opportunity for all viewpoints about a topic to appear, not as quantitative differences but as differences in ways of thinking (Smith, 2001). Brown (1996) suggested that the factors themselves compromise generalization.

The P-Sample

The P-sample was workshop participants recruited through the typical Tavistock process of mailing a conference brochure to a defined population. Once the participants had registered, they were invited to participate in the study. Those who accepted completed the forms found in Appendix A. The target audience was business executives of corporations, which included private and public companies and independent consultants. Names for the target

audience were purchased from commercially available lists of human resource, training, and development managers and middle managers in various job functions, primarily from the northeast, mid-Atlantic, and southeast regions. The objective was to recruit 40 participants from heterogeneous backgrounds, representing a wide variety of businesses and government. Business professors were accepted but not actively recruited.

Because Q-methodology has applications ranging from discerning similarities and differences between persons or between conditions for a single person, the number of subjects is not important (Smith, 2001). Conventional validity and reliability tests are not necessary because small numbers of samples, even single cases, are psychometrically acceptable since the observational objective is from the viewpoint of the respondents (McKeown & Thomas, 1988). The requirement for 40 participants was determined by the workshop director and staff on the basis that this number would efficiently and effectively meet the design of the program.

Forty respondents to the direct marketing program, which was communicated through the U.S. postal service, electronic mail, and the telephone, were confirmed for the workshop. All but four participants were from a business discipline, representing Fortune 500 companies, independent executive training organizations, and public utilities. Industries represented were telecommunications, information systems, banking, health care, utilities, and independent

training services. Two participants were business professors from higher education institutions, and two came from social services. Organizational functions represented were sales, marketing, customer service, corporate training, information services, and production. Appendix B provides the demographic data for individuals who remained for the entire workshop. At the close of the first day, nine registrants left the program; 27 of the original workshop participants attended the final session. Although the literature is limited regarding casualties from a workshop of this type, interviews and the final survey provided the following patterns of reasoning for participants' not completing the workshop: It did not meet their expectations, the faculty treated the participants in a manner not conducive to learning, it was too psychological and heavy for them at this time, and they were not getting enough out of the sessions to justify their time.

The Q-Sample

The Q-sample is discussed in the data collection section, which follows.

Data Collection

Q-Methodology

The Q-methodology—first popularized by William Stephenson in 1935 and designed to provide the researcher with a systematic means

of exploring individuals' judgments, attitudes, and points of view on a particular topic or situation (Brown, 1999; McKeown & Thomas, 1988)—was used to measure changes in perception of authority relations as a result of the workshop. This approach relies on methods of impression to uncover the intraindividual significance a respondent places on stimuli. The emphasis is on the individual's internal frame of reference and its use in making decisions about the significance of individual test stimuli. Stephenson (1953) distinguished between subjectivity (using methods of impression) and objectivity (using methods of expression) on the basis of self-reference in the former and reference to others in the latter. In this study, the test stimuli were statements on cards, or Q-statements, based on the flow of language-based communication relative to authority relationships in organizational life.

Smith (2001) most recently elaborated on the work of Stephenson (1935) and suggested that the Q-method, or operant subjectivity, offers solutions to the shortcomings of cognitive psychology, psychoanalysis, behaviorism, postmodernism and social construction, interbehaviorism, and phenomenology in the research process by offering an alternative to the R-methodological approach to measurement. Smith reiterated Stephenson's rejection of the rationalistic research approach, which supports the dualistic ontology of the individual and the world as distinct entities and adopts a principle of specificity focusing on the subjectivity of concrete

interactions between persons and their world. To Smith, *operant* means that when respondents sort Q-samples according to some feeling about them, "they operate with them in such a way as to indicate their viewpoint; and this is independent of any constructed effects on the part of the investigator" (p. 320).

Q-Sample Development

A set of statements developed on topics of authority, particularly as it relates to dependent, counterdependent, and interdependent mental models (Hirschhorn, 1990; Kahn & Kram, 1994) and locus of control in two dimensions of internality and externality (Rotter, 1966; Spector, 1988), comprised the concourse, or the flow of commonality around a topic. This concourse, based on opinions and self-reference, was developed from the literature on authority relations, attachment theory, Tavistock, Spector's Work Locus of Control scale (see Appendix C), and oral interviews with 45 executives in a college business program. The Work Locus of Control was administered separately to support the development of the Q-statements.

Brown and McKeown (1988) suggested that Q-samples are a collection of stimulus items, which may be derived from naturalistic, ready-made, or quasi-naturalistic approaches. Naturalistic statements are drawn from the correspondents' oral or written communication and literature on the subject. Ready-made statements are derived from sources other than communication, such as conventional rating scales

or standardized Q-sorts. The samples incorporated in this study were a hybrid of the two methods, a quasi-naturalistic approach, whereby hypothetical consideration was given to the initial development of the concourse, including the literature and Spector's Locus of Control scale.

Using the literature, this researcher developed 100 statements from three frames of reference of authority—dependency, counterdependency, and interdependence—as they might be perceived from an internal and external perspective. The test group of 45 business executives was provided with background text on the three mental models, experienced from an internal and external perspective, and asked to complete a Q-sort of the 100 statements. The sorting was based on what the participants believed to be the perspective of the author of the text rather than on the way the Q-sorter perceived the subject (Peterson, Owens, & Martorana, 1999). Each statement was reviewed for clarity and redundancy by this group of 45 executives. From the original list of statements, a 3 x 2 matrix of six cells (shown in Table 1) was developed with five statements planned for each category (a total of 30 descriptive statements). The initials used for each category will be used in the remainder of this study. They are as follows:

CI = Counterdependent, internal locus of control

CE = Counterdependent, external locus of control

DI = Dependent, internal locus of control

DE = Dependent, external locus of control

II = Interdependent, internal locus of control

IE = Interdependent, external locus of control

The statements were randomly assigned numbers from 1 to 30 for subsequent reporting purposes and typed on small cards for sorting by the workshop participants. The final 30 statements can be found in Appendix D.

Table 1

Categories of the Concourse

	LOCUS OF CONTROL		
MENTAL MODELS OF AUTHORITY	Internal (I)	External (E)	Total
Dependent (D)	5	5	10
Counterdependent (C)	5	5	10
Interdependent (I)	5	5	10
Total	15	15	30

Q-Sort

The procedure of Q-sorting is the technical means for obtaining the data for factoring. The Q-sort was given to members who, through their sorting, were expected to define a factor or factors, although factors might not have been found, because finding factors is an empirical matter determined by factor analysis. Subjective individual attitudes of the participants were revealed by their rank ordering of

statements along a continuum of significance from *most characteristic* to *least characteristic*. This is the Q-sort process (McKeown & Thomas, 1988). Although the sorting represents individual opinion, the rankings are subject to factor analysis, justified by the statistical reasoning underpinning Q-methodology. Resulting factors indicated that segments of subjectivity existed in this work (Brown, 1999).

A forced-choice format is most often used, requiring respondents to sort items into a fixed number of categories within a distribution. Because there were 30 statements, the distribution range was from +4, defining statements most characteristic of the participant to -4, defining statements least characteristic of the participant. Members were instructed to sort statements according to their view of what they believed to be most and least representative of their perceptions of authority relations. The conditions for instruction were to force-rank the number of statements into nine categories, resembling a normal distribution, as shown in Table 2.

Table 2

Ranking of Statements

	Most characteristic					Least characteristic			
Categories	+4	+3	+2	+1	0	-1	-2	-3	-4
No. of Statements	2	3	3	4	6	4	3	3	2

There is no evidence to suggest that one particular type of item distribution should be used in the conditions of Q-sorting (Stephen, 1985); however, quasi-normal distributions, those that permit more items to be placed in the middle categories than on the ends, help to insure that between-person analyses (based on items that evoked meaningful reactions from test stimuli with little relevance to the sorters) will be more likely placed near the middle of the distribution. Appendix E contains the conditions of instruction for the sorting.

The Q-sort was completed by 39 participants prior to the conference, by 27 participants immediately following the conference, and by 22 participants 6 weeks after the conference. A factor analysis was conducted on the 22 members who had sorted the statements on all three occasions.

Summary of the Q-Sort

The strength of Q-methodology is its usefulness in theory development and testing, the ability to use a small sample to study relationships among points of view, and the minimization of problems with missing data and item-set bias often encountered with pencil-and-paper scales. It may also control issues associated with the social desirability of responses and interviewer bias (McKeown & Thomas, 1988). The method is often criticized because of issues related to the generalizability of small sample sizes typical of Q-studies. This criticism comes from a lack of understanding of the Q-methodology's

purpose, which is to determine why and how people believe as they do, not how many people believe something (McKeown & Thomas, 1988).

Q-methodology can provide a systematic approach to exploring human subjectivity. It offers an attractive tool for researchers to sample consumers' perspectives about various practices along a continuum of significance. Customer attitudes, aesthetic judgment, poetic interpretation, perceptions of organizational roles, political attitudes, appraisals of health, experiences of bereavement, and perspectives on life may be sampled (McKeown & Thomas, 1988; Stevenson, 1953). More recently, consultants and members of Tavistock conferences have been studied using the Q-methodology (Bradley, 1987; Granda, 1992; Lipgar, 1986). Peterson, Owens, and Martorana (1999) developed a Q-sort (CDQ) for studying the dynamics of group processes across a wide variety of situations and with a wide variety of data sources. The present study focused primarily on the consultants' characteristics and role in the workshop.

Interviews

Twenty personal, open-ended, in-depth interviews were conducted with the participants for the purpose of understanding the experience of the participants and the meaning they ascribed to the workshop. Lincoln and Guba (1985) suggested that in-depth interviews are a way for obtaining "here-and-now construction of

feeling, motivations, . . . and other entities; reconstructions of such entities as experienced in the past; projections of such entities as they are expected to be experienced in the future" (p. 268). An interview approach for in-depth, phenomenological interviewing, adapted from Siedman (1991), was used. This model was well-suited for this study because it assumes that people's behavior becomes meaningful and understandable when placed in the context of their lives and the lives of those around them. It is commensurate with Q-methodology, which provides a systematic means for respondents to model their viewpoint.

Although Siedman (1991) suggested conducting three separate interviews, he emphasized that the major task is to explore participants' responses to open-ended questions with the objective of having the participants reconstruct their experience within the topic of study. The overall design of this study followed the directives of Siedman (1991) in the one interview that was conducted, beginning with the establishment of the context of the participant's experience, followed by the participant's reconstruction of the details of the experience within the context in which it occurred, succeeded by a discussion of the utility in the work environment, and finalized by the participant's reflection on the meaning of the experience.

The researcher and one assistant developed open-ended questions used in building upon and exploring the participants' understanding of the use of authority during the workshop (see Appendix F). They discussed any changes they believed resulted from

their experience in the workshop and reflected on any new examples of the use of authority they might have experienced. A secondary focus of the interview was the reconstruction of experiences by the participants within the topics of the workshop: their specific learning, feelings, and transformational experiences during the workshop. The interview was structured to the point that questions were developed from background information for the purpose of guiding the interview. The questions were asked broadly enough to "encourage the interviewees to express their thinking and knowledge, but narrowly enough to provide specific data" (Rubin & Rubin, 1995). Steering probes were developed to keep the interview on target and eliminate issues not relevant to the objectives. The interviews lasted from 20 to 30 minutes.

Participant selection for the interviews was based on the results of the Q-analysis and availability of individuals after the workshop. To guard against unreliable collection of interview data (often a challenge for the qualitative researcher), the protocols of Rubin and Rubin (1995) and Lincoln and Guba (1985) were used, including audiotaping each interview to assure accurate transcription, writing analytical comments immediately after reviewing the written transcript, and summarizing main issues or themes.

Spector's Work Locus of Control

Spector's Work Locus of Control (1982) was administered to the 31 participant's attending the workshop at the first Q-sort session to explore the role of locus of control in authority relations. This scale consists of 16 items, to which the participants must respond on a 6-point scale, where 1 means *disagree very much* and 6 means *agree very much*. The items measure generalized control beliefs in work settings. Appendix C includes the instrument, reliability and validity data, instructions for scoring, and permission to use by Paul Spector. The total score is calculated as the sum of all items; it ranges from 16 to 96 and is scored so that externals receive high scores. The U.S. norms are based on 3,969 people and have a score of 39.9 with a mean standard deviation across samples of 10.0 and a mean coefficient alpha of 0.83. Information on this instrument can be found on the Web site http://chuma.cas.usf.edu/~Spector).

The Questionnaire

A self-report measure of satisfaction of learning was used 6 weeks after the conference to assess members' perceived outcomes and satisfaction as a result of the experiential learning program. The learning satisfaction questionnaire was modeled after Kirkpatrick (1998) and Foddy (1993); it determined (a) Level 1—the emotional acceptance of the material, (b) Level 2—the degree to which the members felt they achieved the objectives of the program, (c) Level

3—the degree to which achieving conference objectives resulted in behavioral changes on the job, and (d) Level 4—the degree to which behavioral changes improved their organization's productivity.

When no instrument could be found in the literature specifically to measure these four evaluation levels after a Tavistock-style conference, 14 questions were developed, consisting of a series of single ratings on a 7-point Likert scale, as well as four simple, open-ended questions. Schuman and Presser (1996) suggested this approach when seeking information about specific topics. The general satisfaction questions were modeled after the work of Frugé and Bell (1997), who measured the level of learning and overall satisfaction of a similar workshop.

Prior to administration, the questionnaire was subjected to the editing rules of Foddy (1993), including clarification and relevancy of subject, minimization of bias, and elimination of complexity. To test the questionnaire, Foddy's think-aloud method of testing was used, whereby a sample of 16 individuals are asked to write down their verbalizations as they formulate answers to the questions. Perceived difficulties were examined and questions adjusted accordingly. The resultant questions underwent a second testing with another group of 25 business executives who had participated in developing the Q-statements (see Appendix G for the final questionnaire).

Data Analysis

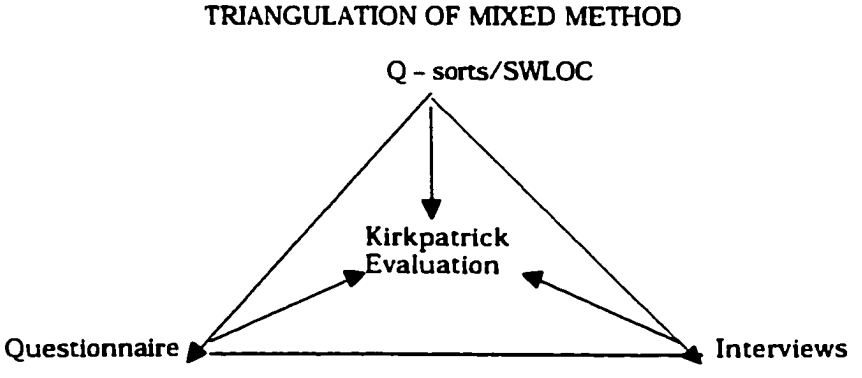

Figure 3. Triangulation of mixed method.

Data analysis of the Q-methodology included maximum likelihood factor analysis, varimax rotation of the factors, factor scoring by z-score calculation (McKeown & Thomas, 1988), and Spearman correlation of the factors immediately after and again 6 weeks after the workshop with the preworkshop factors. Spector's Work Locus of Control—used to determine the role played by a participant's perception of control over his or her work environment—was calculated from the standardized instrument (Spector, 1988).

Qualitative analysis of the interview data entailed making thematic connections, or the process of identifying, coding, and categorizing the primary patterns from the transcribed interviews (Siedman, 1998). The Kirkpatrick model incorporated standard

survey tabulations. In simultaneous triangulation, the qualitative and quantitative research questions were answered at the same time, although the results of each method did not necessarily relate to or confirm the results of the other methods.

Q-Methodology

Data analysis involved common factor analysis using maximum likelihood factor extraction and varimax rotation for each sorting of statements at three different times (Wave 1, Wave 2, Wave 3) for 22 P-samples. These 22 P-samples came from respondents who had repeated the sorting in both the second and third time frame. The analyst used the SPSS® Graduate Pack 10 to conduct the factor analysis, simplifying the diverse and complex relationships represented by the unobserved dimensions of the participants' perceptions about authority relationships.

Common factor analysis assumes that each variable (P-sample) consists of common and unique components. The common is shared with other variables; the unique is specific to that variable alone. Kline (1994) suggested that common factor analysis has the advantage when compared with principal component analysis because the common variance is separated from the unique variance. This means that any one factor may account for the correlations among variables without being completely defined by them. The commonalities for each variate (in this case, the variate was the P-sample's responses to the sorting of

the 30 statements) were calculated for each sorting to determine how well the variate accounted for the retained factors extracted.

The number of factors was determined by the maximum-likelihood method because of the availability of associated statistical tests for significance of each factor as it was extracted. Rotation of the factors was accomplished by the varimax rotational scheme. This is the method most frequently employed with Q-studies because its purpose is "to maximize the purity of saturation of as many Q-sorts as possible on one or the other of the factors extracted initially" (McKeown & Thomas, 1988, p. 52)

Factor loading or factor membership, the correlation of a factor with a variable, was calculated; factor loads were significant at the $p > .05$ level. A factor array, or model Q-sort—one for each factor with scores ranging from +4 to -4—was generated. Factor scores were computed as z-scores and converted to whole numbers (+4, -4) to facilitate comparison. These factor arrays provided additional insight into the factors. By looking at the items comprising the greatest scores, a logical relationship could be discovered between important findings and a theory on authority relationships and locus of control.

These analyses attempted to provide answers to the following questions: (a) Do changes in perception of authority occur during a human-relations workshop? (b) What kind of members do and what kind of members do not experience changes in perception? and (c) What is the nature of the changes that occur?

Qualitative Analysis

Analyzing thematic connections—the process of identifying, coding, and categorizing primary patterns from the transcribed interviews (Siedman, 1998)—was used to seek connections among the interviews, explain them, and build interpretive categories. This process can be used to develop theory by conceptualizing data, which results in new insights and suggests hypotheses about the categories of data and their relationship (Strauss, 1987). Tesch's (1990) eight steps for a systematic process of analyzing textual data were combined with the methods of Miles and Huberman (1984) to identify conceptual anomalies and other emerging insights.

Data items from the questionnaires were considered singly, dyadically, and collectively with the thematic analysis of the interviews and the Q-methodology, comparing and contrasting patterns of learning when appropriate.

The Role of the Researcher

Mixing qualitative and quantitative methods requires impeccable role clarity in the research design. In keeping with the role of researcher in quantitative inquiry, this researcher was involved in the conference in the role of research director only, having responsibility for designing the research methods, specifically the Q-technique, and directing and analyzing the Q-sort. The researcher conducted the

interviews and administered the questionnaires, using herself as an instrument of data gathering with the ability to refine interview protocols in contexts immediately relevant to the microcultural nuances of the business community.

Reliability and Validation of the Study

In Q-methodology, the subject determines the meaning and significance of items, and the researcher interprets the meaning after the subject has sorted the statements. The idea of validity has no relevance, because there is no external criterion for the subjectivity of an individual's point of view (Stephenson, 1953).

In searching for an effective and practical method of mobilizing change processes in executive development programs and in pursuing empirical knowledge, this researcher had to construct variables and categories for coding beyond those of the Q-methodology and the Kirkpatrick model. The research design incorporated the following protocol to strengthen the reliability of the research effort and to enhance the external, internal, and construct validity:

1. The objective of the qualitative analysis was to search for variations in the participants' conception of their workshop experience and to make explicit the basic meaning of these conceptions. This phenomenological approach provided descriptive meanings of an aspect of reality for the people studied (Lincoln & Guba, 1985). The results of the interviews and questionnaires were

subject to pragmatic validity (Kvale, 1996), which included three different ways of gathering data to determine the participants' perceptions: (a) structuring questions to inquire what the statements and experiences meant to them in practice; (b) probing extensively during interviews to find out how the workshop or what, precisely, in the workshop related to their perceptions; and (c) adding open-ended questions to the questionnaire to triangulate with the other two methods of interviewing and Q-sorting.

2. Consultation in Q-methodology, particularly the required process to answer the research questions and the development of the Q-sample, was sought and received.

3. The human-relations conference was directed by individuals experienced in Tavistock-style conferencing. The conference program was augmented by a preworkshop program, conducted by a consultant with expertise in both organizational behavior and experiential education.

4. Although multiple perspectives exist regarding the importance of verification in qualitative research—with some researchers continuing to use positivist terminology and others purporting that such language is not congruent with qualitative work (Creswell, 1998)—this study incorporated the validity, reliability, and credibility of scientific inquiry (Strauss, 1987) when appropriate.

Construct validity was maximized through triangulation of the overall research design, using data from multiple sources and

supported by multiple methods (Currell, Hammer, Baggett, & Doniger,1999; Jick, 1979). Reliably-coded interviews to help interpret the results of the Q-sort and the participants' perceptions of the program were triangulated with the final questionnaire in operationalizing the Kirkpatrick model (1998). External validity was enhanced with the use of a standardized Q-methodology (McKeown & Thomas, 1988; Smith, 2001), the Work Locus of Control instrument by Spector (1988), an interviewing process with the suggested protocol by Siedman (1991), the tested questionnaire, and a relatively standardized Tavistock-style intervention.

From the data analysis emerged a description of the participants' perception of the effectiveness of experiential learning, and its validity was enhanced by linking the interpretations with the literature. It is anticipated that the study can be replicated in other organizations regardless of the business context. The research design required rigor and thoroughness to make the findings substantive and testable.

Chapter Summary

This chapter delineated the research methods used in a study of the effectiveness of an experiential learning approach to executive development. Research design, data collection, and data analysis were explained. The Q-methodology and its value in exploring the subjectivity of perceptions and attitudes were elaborated. Table 3 shows the operationalization of the study design as it evolved in

Table 3

The Components of the Mixed Method

RESEARCH QUESTIONS	DATA COLLECTION METHODS	ANALYTICAL METHODS
1. Do changes in perception of participants' authority relations occur during an experiential education program?	Q-sorting of statements.	Factor extraction; Factor scores; Description of groups; Identification of changes in participants' perceptions.
2. What is the relationship between change in perception and the individual's locus of control?	Q-sorting of statements; Spector's Locus of Control.	Development of statements. Comparison with mental models.
3. Are changes that occur transferred to the workplace?	Interviews; Questionnaire.	Coding of interview themes; Expansion of group descriptions; Perceptions of change; Overall experience.
4. What is the overall satisfaction level?	Interviews; Questionnaire.	Perceptions of change; Satisfaction with program.

answering the research questions. The researcher opted to include a qualitative approach in the design of the study in order to fill a gap in the literature, namely, how executives experience a professional development program based on experiential learning. Participant perceptions of outcomes of this Tavistock-style workshop were explored with interviews and questionnaires to complement the quantitative analysis portion of the study.

CHAPTER 4

RESULTS

Introduction

Previous chapters introduced the rationale for using experiential learning in executive development and the theoretical underpinnings for the inquiry methods employed in this study, particularly within the quantitative paradigm and for the Tavistock (Rice, 1965) approach to experiencing leadership dynamics and mobilizing change. This chapter presents the results of a mixed-method design of inquiry and includes a description of the demographic characteristics of the workshop attendees, outcomes of the quantitative approach of Q-methodology, and the themes gleaned from personal interviews and questionnaires.

The results of the quantitative analysis of the study include factor extraction, factor scores, and factor interpretation from the three sortings of statements. Factor interpretation was expanded using the theoretical criteria for mental models of authority informing this study.

The results of the qualitative design aimed at decreasing the gap in the literature on experiential learning outcomes and were also harmonious with the desire to understand the construct of the Tavistock model (Rice, 1965) from the perspective of the participants. The qualitative analysis offers the coding of themes developed from

narrative vignettes, written after the interviews to provide the reader with some entrance into the participants' espoused perceptions. The results of the questionnaire were tabulated to complete this inquiry into the participants' overall satisfaction with the program.

The final section of this chapter triangulates the results from the Q-sorts, interviews, and questionnaires. The data are integrated to operationalize the Kirkpartick (1998) model of development evaluation and include the four levels of measurement: Level 1—reaction to the program; Level 2—learning, skills, attitude changes; Level 3—behavioral changes; and Level 4—improvement in business productivity.

Demographic Groupings

Demographic information about the participants was collected primarily for the purpose of group assignments in the workshop and to explore outcomes that might be related to gender, age, race, or ethnicity. A total of 40 individuals (26 females and 14 males) were accepted as registrants into the workshop. Five men and eight women left the workshop prior to its completion. Appendix B contains the grouping of participants who completed the workshop by age, gender, race, and private or public sector positions.

Nine men and 18 women remained throughout the entire program. Ages ranged from late 20s through 59 for the 21 participants who provided all the information sought. About half of those reporting

were in the age range of 40-49, seven were under 40 years of age, and four were older than 49. Six European Americans, one African American, one Asian, and one Latino/Hispanic male, along with 17 European-American and one Latino female represented identity groups similar to those of the faculty.

Twenty-three participants were from a business discipline representing Fortune 500 companies, independent executive training organizations, and public utilities. Industries represented were telecommunications, information systems, banking, healthcare, utility, and independent training services. Two participants were business professors from higher education institutions; two came from social services. Organizational functions represented were sales, marketing, customer service, corporate training, information services, and production. Two men and two women had prior Tavistock experience.

Quantitative Results

The data analysis of the Q-methodology involved the statistical procedures of factor analysis and factor scoring for identifying groups of participants with similar perspectives. These factors were labeled by describing the various groups and their representative mental models based on the theoretical underpinnings used for the Q-statements and sorted by the participants on a scale from *most characteristic* to *least characteristic* of their perceptions of authority. Changes in mental models were determined by correlating factors

over time and determining changes in factor membership pre-, post-, and 6 weeks postprogram.

Extraction of Factors

The maximum-likelihood method of extraction with varimax rotation determined the number of factors representing common variance in the participants' Q-sorts. The solution for each sorting—preworkshop (Wave 1), immediately postworkshop (Wave 2), and 6 weeks postworkshop (Wave 3)—was selected to extract as many stable, statistically viable factors as were representative of different perspectives of authority relations. The terms *factors* and *groups* are used interchangeably in this chapter; in the tables, they are labeled a, b, and c to denote Waves 1, 2, and 3, respectively. Interpretation of the factors, or group membership, and the comparison of groups among Waves 1, 2, and 3, was the initial step in exploring whether perspectives of authority relations changed as a result of the workshop.

The factor analysis included the transition of raw Q-sorts into correlation matrixes for factor extraction in each wave and rotation of the factors using the verimax rotation method and Kaiser normalization. Results of the rotation are shown in Tables 4, 5, and 6. Six factors were extracted from Wave 1 sorting of Q-statements, 7 factors from Waves 2 and 3. Following factor extraction, the verimax rotation aided in interpreting the perspectives, because this method

maintains the total variance explained, while rotating axes orthogonally, and simplifies variate loadings distributed among the various factors. McKeown and Thomas (1988) reported that this method of rotation is most frequently used in Q-methodology. Based on the 30 Q-statements of this study, the level of significance for factor loading was .05.

McKeown and Thomas (1988) suggested that determining the significance of a factor (versus factor loading) is not as straightforward in Q- methodology as in R-methodology. They stated that a variety of statistical as well as theoretical methods can be used, the most common statistical approach being the employment of the eigenvalue criterion. By convention, eigenvalues of greater than 1 were used to statistically determine the final factors as a result of the verimax rotation. The percentage of total variance for the factors for each wave are reported at the end of Table 4, 5 and 6. Complete eigenvalue calculations for each factor of each wave are included in Appendix H.

Factor Labels

Factor scores and theories of authority relations were used to define the factor or group mental model. In Q-methodology, interpretations of factors are based on factor scoring. The objective is to generate a factor array, one for each factor, which represents the ideal sort for the factor. Factor scores were computed as z-scores and converted to ranges, which anchor the positive and negative ends of

Table 4

Rotated Factor Matrix—Wave 1

	Factors					
Participants	1	2	3	4	5	6
P06	.80**	.37*		.12		.16
P02	.64**		.37*	.21	.27	.18
P13	.63**		.14		.18	.22
P11	.61**	-.22	.37*		.14	
P15	.58**	.21		.30	-.34	
P20	.56**	.54**	.38*		.17	
P24	.53**	.41*	.45*	.13	.14	
P25	.44*	.23		.40*	.33	
P18	.43*	.37*	.19	.15	.17	-.17
P12	.41*	.27	.14	-.22	.14	.33
P14	.23	.74**	.20	.23	.33	
P10		-.56**		.13	.14	
P07		.53**	.13		.42	
P01	.12	.52**		.16	.13	.35
P26	.22	.42*	.70.**	.28	.26	
P16	.17		.68**	.13	.20	.22
P17	.47**	.45*	.53**	.12	.28	
P27	.12		.20	.96**	.17	
P08	.22		.38*	.51**		.38*
P19	.18		.37*	.23	.86**	.11
P28	.44*	.20	.27	.22	.47**	.22
P09	.51*	.16	.34	.23	.14	.72**
Eigenvalues	4.2	2.8	2.5	2.0	1.8	1.2
Percentage of total variance	19.1	12.2	11.4	9.0	8.4	5.3

Note. *$p < .05$. **$p < .01$.

Rotation Method: Varimax with Kaiser normalization.

Spaces in correlation matrix represent numbers less than the decimal values shown.

Table 5

Rotated Factor Matrix—Wave 2

	Factors						
Participants	1	2	3	4	5	6	7
P26	.85**			.14			-.13
P19	.83**	.14	.25	.14		-.16	.13
P24	.60**	.18	-.18	.26	.23	.25	
P08	.58**		.12	.27		.18	
P28	.58**		.45*	-.21	.39*	.14	.17
P25	.57**	-16	.44*		.28		
P07	.49**		.11	.41*	.23	-.11	.14
P14	.49**	.30	.31	.35	.34		
P12		.92**					
P15	.42*	.56**	-.14	.13	.25	.28	.21
P13	.38*	.48**	-.21	.17	.14	39*	
P10	.18		.65**	.26			
P18		.20	.59**	-.12	-.25	-.10	.19
P01	.45	.25	.27	.64**	-.19		
P17	.26			.59**		.13	.29
P11			-.20		.60**		.11
P02	.43*	.27			.57**		
P20							
P06	.15	.13	.16		.13	.69**	-.16
P16	.38**	.29		.18	.25	-.48**	.20
P09		.14		.11		.45*	
P27				.16	.19		.92*
Eigenvalues	4.2	1.9	1.6	1.5	1.5	1.3	1.2
Percentage of total variance	19.2	8.6	7.4	6.7	6.7	6.1	5.4

Note. *$p < .05$. **$p < .01$.

Rotation Method: Varimax with Kaiser normalization

Spaces in correlation matrix represent numbers less than the decimal values shown.

Table 6

Rotated Factor Matrix—Wave 3

	Factors						
Participants	1	2	3	4	5	6	7
P08	.73**	.23	.18		.51*	.14	.31
P24	.64**	.24	.20	.23			.38**
P06	.60**	.35	.27		-.48**	.40**	-.26
P09	.58**	.27	.20	.48*			-.23
P14	.55**	.27	.39*	.40*			.28
P15	.11	.97**		.11		.11	.19
P13	.28	.61**	.22	.18	-.10		
P16	.15	.52**	.15	.15	.43*	.22	
P20	.33	.47**	.31	.21			-.18
P19	.13		.71**	.11	.21	.30	.57*
P12	.16	.55**	.67**	.12	.13	.28	
P17	.17	.13	.60**	.22	-.13		
P26	.52**		.59**	.32	.13		.13
P27	.41*	.13	.46*		.10	.19	
P01	.31	.21	.10	.73**			
P07		.15	.40*	.68**		.20	.12
P10					.88**		
P02	.13		.20	.34	.34	.81**	.22
P11	.41*	.15			-.12	.45*	.20
P28	.41*	.28	.27	.32	.15	.44*	.32
P25	.32	.38*		.25		.32	.58**
P18							.40*
Eigenvalues	3.1	2.8	2.7	2.0	1.7	1.7	1.6
Percentage of total variance	13.2	12.9	12.1	9.2	7.9	7.5	7.1

Note. *$p < .05$. **$p < .01$.

Rotation Method: Varimax with Kaiser normalization.

Spaces in correlation matrix represent numbers less than the decimal values shown.

the continuum of the Q-sorts administered (factor scores are shown in Appendix I). In this study, the range was from -4 to +4, because this provided the range of nine values used in the Q-sorting process. From the sorting of converted z-scores for each factor, the statements that best (usually with factor values of +3 and +4) and least (usually factor values of -3 and -4) defined the group were determined for each wave of the sort. For example, Table 7 shows the statements and array of factor scores for the statements that best represented Group 1 (+/-4, +/-3). Attaching the original mental model reference of dependent (D), counterdependent (C), and interdependent (I) from an external (E) or internal (I) locus of control to each Q-statement simplified interpretation of the factor. Based on the ideas the participants accepted and rejected, the theme for Factor 1 was defined as counterdependency with an internal locus of control (CI). This group accepted the idea of insisting on making one's own decisions and strongly rejecting any dependency on the team or the leader. This factor is differentiated from Factor 2, where members indicated that they strongly rejected (-3) the idea of making their own decisions.

Individual Factor Interpretations

An analysis of the major differences in the primary groups of each wave is provided. The primary groups are those with five or more members or high factor loadings. Although conventional factor analysis suggests five people to define a factor (Kline, 1994), the general

principle for selecting these primary groups representative of the mental model in this interpretation is found in the concept of operancy, which implies that the best factor solution is that which most clearly reflects the situation and context from which it emerged (Brown, 2001; Smith, 2001). Factor arrays for all factors can be found in Appendix J.

Table 7

Group1 Factor Scores with Factor Array—Wave 1

	STATEMENTS	FACTOR SCORES					
	Group is most characterized by:						
CI	I insist on making my own decisions	3	-3	1	1	0	2
	Group is least characterized by:						
DI	I am likely to stick my neck out with a suggestion as long as it fits within the team's charter or objectives	-3	-2	-3	0	2	3
CE	It's the leader's responsibility to provide direction for the team	-4	1	0	0	3	1
DI	I am willing to discuss whatever issues the team thinks important	-4	2	2	-2	-1	2

Note. CI = Counterdependent, internal locus of control.

CE = Counterdependent, external locus of control.

DI = Dependent, internal locus of control.

Wave 1 Factors

Individuals in Factor 1 represent a counterdependent mental model from an internal perspective of control (CI). Individuals with this stance look for relationships where there is limited authority; they describe their primary characteristic as insisting on making their own decisions (CI), thus resisting external demands and substituting their own behaviors and beliefs. They reject the idea that the leader is responsible for providing direction to the team (CE), denying the authority and boundaries of defined leadership relations. The group also rejects a willingness to discuss whatever issues the team thinks important (DI), suggesting a deauthorization of the group's authority (Hirschhorn, 1985, 1990). There were 10 participants in this group, with 6 of them in the private consulting practice.

Group 2, Table 8, differed from Group 1 in that their primary focus was one of dependency, where they distinguish themselves by focusing on planning of the personal aspect of team activities (DI). Other groups scored this characteristic as neutral, 0, with one group totally rejecting the idea. Individuals with dependent mental models tend to believe that personal relationships undermine the authority relationship upon which they depend; this is in conflict with this group's most accepted characteristic. Their dependency arises from the strength of their rejection of the importance of their involvement in a plan of action for the team and the idea that they would disagree

Table 8

Group 2 Factor Scores with Factor Array

	STATEMENTS	FACTOR SCORES					
	Group is most characterized by:						
DI	I enjoy planning the personal aspect of planning team activities with other members of the team	0	3	0	0	-3	0
	Group is least characterized by:						
DI	I readily input into establishing a working routine for the team	-2	-3	1	-1	0	0
II	I will disagree with the leader and other team members when the situation calls for it	-2	-3	0	-3	-1	-1
CE	I insist on making my own decisions	3	-3	1	1	0	2
II	It is important to me to be involved in the development of a plan of action for a project	-1	-4	0	4	-1	-3

Note. DI = Dependent, internal locus of control.

II = Interdependent, internal locus of control.

CE = Counterdependent, external locus of control.

with the leader and other team members when necessary. Both of these rejected statements represent interdependent authority where leadership is a property of the group and effective team dynamics require expressing feelings. This group also rejected the construct of insisting on making their own decisions (CE), thus distinguishing themselves from Group 1. The group includes four participants; two work in private industry, one in education, and one is an independent consultant. Groups 1 and 2 comprised 14 of the 22 participants.

Group 3, Table 9, with three members, did not differentiate significantly between dependency and counterdependency (CI/CE/DE) and displayed a tendency toward an external frame of reference. Their counterdependency differed from the similar mental models of Group 1 in that they expressed a willingness to test their leadership skills against other team members (CI) and their preference for a leader just like any other member (CE). By bringing the leader to the group level, they eliminated the boundary, thus facilitating scapegoating and other destructive group behaviors (Alderfer, 1995). Their dependency rests in their need to know the expectations of others before making suggestions (DE). This group of three strongly denied three approaches to interdependence: the idea that the team can accomplish what it wants (II), the leaders responsibility to listen and inspire others (IE), and the importance of team sharing (IE). Expressing these stances as least characteristic of the group suggested that the group felt neither self-sufficient nor trusting of leadership. Interdependent individuals recognize status differences without losing the personal dimensions of self and others.

Table 9

Group 3 Factor Scores with Factor Array

	STATEMENTS	FACTOR SCORES					
	Group is most characterized by:						
CE	I like a leader who acts like just another member	2	1	3	-2	-4	0
DE	It's important for me to know what is expected by the leader & team before I make suggestions	-1	1	3	0	2	-2
CI	I enjoy testing my leadership skills against those of the other members	0	-1	3	2	1	-1
	Group is least characterized by:						
DI	I am likely to stick my neck out with a suggestion as long as it fits within the team's charter or objectives	-3	-2	-3	0	2	3
CE	I think the team shouldn't accept a leader's suggestions any more readily than a member's suggestions	2	-1	-3	-4	1	0
IE	A primary responsibility of the leader is to listen and inspire others to make suggestions	0	0	-3	-2	-1	-3
IE	A productive team shares in and expresses the importance of the project	-1	2	-3	1	-3	-2
II	With almost any project, the team can accomplish whatever it sets out to	0	1	-4	1	1	1

Note. CI = Counterdependent, internal locus of control.

CE = Counterdependent, external locus of control.

DI = Dependent, internal locus of control.

II = Interdependent, internal locus of control.

IE = Interdependent, external locus of control.

Only Group 4, Table 10, contained two members who had a primary characteristic of interdependence from an internal locus of control, which differentiated them from the other groups. They accepted the idea that their involvement in the development of a plan of action for the team was most characteristic of them (II), while other groups rejected this concept. This group rejected several counterdependent and dependent ideas around team interaction, supporting their interdependent stance. Along with four other members sorting in this wave, this group also found it difficult to express disagreement with the leader and the team.

Table 10

Group 4 Factor Scores with Factor Array

	STATEMENTS	FACTOR SCORES					
	Group is most characterized by:						
II	It is important to me to be involved in the development of a plan of action for a project	-1	-4	0	4	-1	-3
CI	When I am upset with the team, I refrain from letting the team members know	2	2	1	3	0	2
DI	I am inclined to support the suggestions of the leader even when I have different ideas	2	1	0	3	3	1
IE	There is a measure of luck in successful team collaboration	1	0	0	3	-1	1

(table continues)

	Group is least characterized by:						
DE	The team should not discuss issues in the team that it would not discuss outside the team	2	1	1	-3	1	0
CE	Team members should say what they feel even though it may hurt some one's feelings	2	1	-1	-3	0	4
II	I will disagree with the leader and other team members when the situation calls for it	-2	-3	0	-3	-1	-1
CE	I think the team shouldn't accept a leader's suggestions any more readily than a member's suggestions	2	-1	-3	-4	1	0

Note. CI = Counterdependent, internal locus of control.

CE = Counterdependent, external locus of control.

DI = Dependent, internal locus of control.

DE = Dependent, external locus of control.

II = Interdependent, internal locus of control.

IE = Interdependent, external locus of control.

Wave 2 Factors

This Q-statement sorting immediately after the workshop resulted in seven groups with similar perspectives. Group 1, Table 11, and Group 2, Table 12, contained 11 of the 22 participants and expressed a counterdependent mental model; the other 11 participants adopted an interdependent stance with three of them rejecting some expressions of dependency and interdependency.

Groups 1 and 2 accepted counterdependent stances as most characteristic of their groups, differing primarily in their locus of control. Group 1, denying the authority of others, insisted on making

their own decisions (CI), and would not let the team members know when they were upset with the team (CI). This group also strongly rejected the idea of disagreeing with the leader or the team even when the situation called for it (II); thus, they avoided taking their own authority.

Table 11

Group 1 Factor Scores with Factor Array–Wave 2

	STATEMENTS	FACTOR SCORES						
	Group is most characterized by:							
CI	When I am upset with the team, I refrain from letting the team members know	2	-2	-1	0	0	2	-1
CI	I insist on making my own decisions	2	-1	1	-3	1	-1	0
DI	I am inclined to support the suggestions of the leader even when I have different ideas	2	0	0	0	-2	-2	0
	Group is least characterized by:							
II	I will disagree with the leader and other team members when the situation calls for it	-3	-1	0	1	2	-1	-2

Note. CI = Counterdependent, internal locus of control.

DI = Dependent, internal locus of control.

II = Interdependent, internal locus of control.

Unlike Group 1, Group 2 rejected the idea of refraining from letting the team know when upset (CI). They also weakly rejected (-2) interdependent ideas about the leader's responsibility to inspire the team (IE) as well as thoughts of eliciting others to participate in

making suggestions (II). This group, like Group 1, maintained counterdependency as the primary position; however, it came from an external frame of reference. The statement most characteristic of the group was that they thought team members should say what they felt even at the expense of the feelings of others (CE).

Table 12

Group 2 Factor Scores with Factor Array

	STATEMENTS	FACTOR SCORES						
	Group is most characterized by:							
CE	Team members should say what they feel even though it may hurt some one's feelings	-1	3	-2	0	-1	0	1
	Group is least characterized by:							
CI	When I am upset with the team, I refrain from letting the team members know	2	-2	-1	0	0	2	1
II	I try to elicit others to participate in making suggestions	0	-2	-2	-1	-3	1	0
IE	A primary responsibility of the leader is to listen and inspire others to make suggestions	-2	-2	1	-1	0	0	0

Note. CI = Counterdependent, internal locus of control.

CE = Counterdependent, external locus of control.

II = Interdependent, internal locus of control.

IE = Interdependent, external locus of control.

The remaining five groups, Groups 3-7, (see Appendix J), containing 11 of the 22 participants, were defined by interdependence as their primary position toward authority relations,

with four of the five groups viewing from an external locus of control (IE). Group 6 had a tendency also to hold a counterdependent mental model (CI) along with their interdependent stance (IE). Groups 3, 4, 5, and 6, with 9 members recognizing interdependence in authority relations, characterized the idea of some luck associated with team success (IE) as their primary trait. Group differentiation resided in their secondary definition of characteristics most exemplifying the group and the stances of authority they denied: Group 4 rejected the counterdependent position of making their own decisions (CI), Group 6 denied the dependent stance of giving strong leaders what they want (DE), Group 5 not only accepted an interdependent stance as discussed but also rejected getting others to participate (II) and the importance of consensus (IE). Group 7 with one participant had a mental model of interdependence from an internal frame of reference affirming that a team can accomplish whatever it wants (II) and the importance of involvement in planning a project (II). This participant rejected the idea of the leader's activities intending to control the team (CE).

Wave 3 Factors

Six weeks after the workshop, seven factors were extracted with Groups 1, 2, 6, and 7, comprising 14 participants and holding a counterdependent mental model. Group 1, Table 13, with five participants, strongly identified with withholding their anger from the

group (CI), thus denying the productivity and authority of the group. This group was consistent with several others of the two previous waves and this wave in that they avoided any confrontation with other team members or the leader.

Table 13

Group 1 Factor Scores with Factor Array—Wave 3

	STATEMENTS	FACTOR SCORES						
	Group is most characterized by:							
CI	When I am upset with the team, I refrain from letting the team members know	4	0	-1	1	0	2	1
	Group is least characterized by:							
CE	Team members should say what they feel even though it may hurt someone's feelings	-3	2	2	2	0	0	-1
II	I will disagree with the leader and other team members when the situation calls for it	-4	0	-1	-1	-1	-1	2

Note. CI = Counterdependent, internal locus of control.

CE = Counterdependent, external locus of control.

II = Interdependent, internal locus of control.

Group 2, Table 14, did not pay much attention to the leader (CI), thus ignoring role-determining boundaries. They liked to share personal aspects of team planning (DI) and rejected the interdependent idea of developing a plan of action for the team. Three of the above four groups—Groups 1, 2, and 7—rejected interdependent mental models from both an internal and external frame of reference.

Group 6 rejected the dependent position of giving strong leaders what they want (DE).

Table 14

Group 2 Factor Scores with Factor Array

	STATEMENTS	FACTOR SCORES						
	Group is most characterized by:							
DI	I enjoy the personal aspects of planning team activities with other members of the team	0	3	0	0	1	-1	-1
CI	I don't pay much attention to what the leader does	2	3	1	0	1	-1	0
	Group is least characterized by:							
II	It is important to me to be involved in the development of a plan of action for a project	0	-3	-2	-1	1	1	1

Note. CI = Counterdependent, internal locus of control.

DI = Dependent, internal locus of control.

II = Interdependent, internal locus of control.

Groups 3 and 4 with 7 participants are differentiated in their stance on interdependency: Group 3 defined itself by the belief that members have some control over team outcomes (II), whereas Group 4 rejected this concept. Group 3 also identified with the need for direction from leader and team (DE). (See Appendix J for these factor arrays.)

The results of the factor analysis of the Q-sort indicated that 20 participants entered the workshop with counterdependent and

dependent frames of reference, expressing some form of deauthorization of self. Some showed a desire for direct confrontation or passive withdrawal from authority. The majority of participants, upon entry, rejected some aspects of the dependency and interdependency mental models. Eleven members had a counterdependent tendency in Wave 2 (which may not be the same members as in Wave 1), but there was a shift with the other participants to an interdependent model of authority (IE) where half of the participants felt free to emphasize the mutuality of giving and receiving in the group relationship and deciding on actions based on their own grounding. The defining characteristic was the belief that there is some luck associated with successful team collaboration. Participants in Wave 2 reject various other aspects of interdependence, but weakly.

Six weeks after the workshop, only Group 5 with one member and Group 3 with 5 members had an interdependent mental model. Five groups with a total of 16 participants rejected any statements of interdependence, suggesting that although changes occur as a result of the workshop, the majority of the participants will return to strongly held (+4, +3) positions of counterdependency and dependency.

Overview of Factor Labels in Three Waves

Table 15 provides an overview of the factor structures in terms of the primary mental model of authority relations for each factor, or

group, based on the factor scores of what the group believed to be the characteristics most representative (+4, +3) and least representative (-4, -3) of their stance on three occasions: (a) upon entry to the workshop, (b) at the end of the program, and (c) 6 weeks postsession. Groups with more than one mental model descriptor had statements with the same factor scores.

Table 15

Results of Factor Structure (*n* = 22)

		GROUPS (*n* = 22)						
WAVE		1	2	3	4	5	6	7
1	*Accepts*	*CI*	*DI*	*CI/CE/DE*	*II*	*DE*	*CE*	—
1	Rejects	DI/CE	II	IE	CE	CE	DE/II	—
2	*Accepts*	*CI*	*CE*	*IE*	*IE*	*IE*	*IE*	*II*
2	Rejects	II	CI/IE	II	CI	IE	DE	CE
3	*Accepts*	*CI*	*CI/DI*	*II/DE*	*DI*	*IE*	*II/IE*	*CI*
3	Rejects	II	II	DI	II	CE	DE	IE

Note: CI = Counterdependent, internal locus of control.

CE = Counterdependent, external locus of control.

DI = Dependent, internal locus of control.

DE = Dependent, external locus of control.

II = Interdependent, internal locus of control.

IE = Interdependent, external locus of control.

Locus of Control

Goleman (1998b) suggested that at the core of self-concepts are individuals' beliefs about the controllability of what happens to them, a construct derived from early social learning theory (Rotter, 1966). To expand this understanding, Spector's Work Locus of Control (LOC) was used along with the literature and executive interviews to develop the concourse for the Q-statements and add another dimension to the mental model constructs of authority. The participants completed Spector's Work Locus of Control scale prior to the workshop. The results were compared with the results of the Q-sorting of statements. Appendix C includes the instrument, reliability and validity data, instructions for scoring, and permission to use from Paul Spector.

The total score for determining the work locus of control is calculated as the sum of all items, ranging from 16 to 96, and is scored so that externals receive high scores. The U.S. norms are based on 3,969 people and have a score of 39.9, with a mean standard deviation across samples of 10.0 and a mean coefficient alpha of 0.83. Information on this instrument can be found on the Web site http://chuma.cas.usf.edu/~Spector.

Twenty-seven of the participants completed the Work Locus of Control scale, which was scored according to Spector's instructions. The mean score for these participants was 36.3, with a mean standard deviation across samples of 9.7 and a mean coefficient alpha of 0.89. Considering just those scores of the 22 individuals who sorted the Q-

statements and completed the scale, the mean score was 34.7, with a mean standard deviation of 6.3 and a mean coefficient alpha of 0. 87. Because low scores represent internality, the participants of this workshop skewed toward internality, which is in line with Rotter's (1966) I-E scale and Spector's work (1988).

When comparing the results of the scaling instrument with the sorting of statements, the correspondence between the internality scored and the sorting of statements upon entry is shown. Fifteen of the 22 (68 %) sorted from an internal stance, as seen in Table 15, Groups 1, 2, part of 3, and 4. Most of these individuals rejected the external frame of reference, denying that their own reactions would not lead to attainment of rewards or avoidance of punishment. The three participants in Groups 5 and 6 expressed their externality in the leadership role, looking for leaders to provide direction (DE) and giving the leader what they want (DE). The scoring of two of these three participants on the LOC scale was below the mean for the group with one of the participants scoring a 49, which is still within the internal side, considering the range of 16 to 96 as possible scores.

Wave 2, indicated a shift to an external frame of reference in Groups 2, 3, 4, and 5, representing 12 participants. The Q-statement representing the characteristic most like Groups 3, 4, 5, and 6 was "there is some measure of luck in team success." Although the 9 individuals in these four groups did not all score high on the statements of Spector's scale that focus on the idea of external forces

of fortune (e.g., luck, and knowing the right people for success on the job), several of them were above the mean for the question. The mean score for these Spector statements ranged from 1.8 to 2.7 with 2-4 of the participants in this group scoring above the mean for each of these defining questions, implying some change to an external view as it relates to group success.

The primary locus of control held by 16 of the participants in the last Q-sort was internal and expressed by the belief that the individual controls the outcome. This indicated that the shift to an external stance was temporary because most participants returned to their entry position.

Changes in Authority Relations

Statistical correlation and inductive interpretation were used to determine changes in attitude about authority and leadership that might have occurred as a result of the workshop. The following process was used:

1. Spearman correlation was used to determine the statistical significance of correspondence between factors of the three waves. Table 16 shows the corresponding factors. The correlations are not straightforward between waves; for example, Factor 1 of Wave 1 (a1) corresponds with Factor 2 of Wave 2 (b2) and with Factors 1, 2, and 6 of Wave 3 (c1), (c2) and (c6).

Table 16

Spearman Correlation Between Factors of Three Waves (n = 22)

	FACTORS OVER TIME							
	a1	a2	a3	a4	a5	b1	b2	b3
b1	-	-	.45*	.55**	-	-	-	-
b2	.40*	-	-	-	-	-	-	-
b6	-	-	-	-	-.47**	-	-	-
b7	-	-	-	-	-	-	-	-
c1	.37*	-	-	-	-	.48**	-	-
c2	.54**	-	-	-	-.38*	-	-	.55*
c3	-	-	-	-	.56**	-	.42*	-
c4	-	.57**	-	-	-	-	.42	-
c5	-	-	-	-	-	-	-	-
c6	.50**	-	-	-	-	.36*	-	-
c7	-	-	.42*	-	-	-	-	.39*

Note. a = Wave 1. b = Wave 2. c = Wave 3. Factors 1 to 7 = 1, 2, . . . 7. Only significant correlation coefficients are included. * $p < .05$ two-tailed. **$p < .01$ two-tailed.

2. Table 17 was developed to simplify the data required to determine changes in stances on authority, when the change occurred—immediately after or 6 weeks postsession—and whether the change was maintained throughout the study. Participant samples with their factor or group membership based on factor loadings are presented for all three waves. Factors with correlation coefficients of $p < .05$ from the Spearman correlation are defined with an asterisk (*). An asterisk by the factor numbers indicates that these individuals were statistically related to another group in another wave and thus present no change in authority position.

Table 17

Change in Mental Models of Authority for Each Participant for Each Wave (n = 22)

SAMPLE		WAVES 1	2	3
Limited Change Three Waves				
13	Accepts	CI *	CE*	CI/DI*
	Rejects	DI/IE	II	II
15	Accepts	CI*	CE*	CI/DI*
	Rejects	DI/IE	II	II
24	Accepts	CI*	CI*	CI/DI*
	Rejects	DI/IE	II	II
12	Accepts	CI*	CE*	DE/II*
	Rejects	DI/IE	II	II
25	Accepts	CI*	CI*	CI/DE*
	Rejects	DI/IE	II	IE/II
No Change Wave 2, Change Wave 3				
26	Accepts	CI-E/DE-I*	CI*	DE/II
	Rejects	DE-I	II	DI
27	Accepts	II*	II*	DE/II
	Rejects	CE	CE	DI
Change Wave 2, Return to Stance of Wave 1				
6	Accepts	CI*	IE/CI	CI
	Rejects	DI/IE	DI/DE	II
2	Accepts	CI*	CE	CI
	Rejects	DI/IE	II	DE
9	Accepts	CE*	IE/CI	CI
	Rejects	DE	DI/DE	II

(table continues)

11	Accepts Rejects	CI* DI/IE	IE IE	CI DE
20	Accepts Rejects	CI* DI/IE	——	CI/DI II
7	Accepts Rejects	DI* II	CI II	DI II
1	Accepts Rejects	DI* II	IE D/IE	DI II
16	Accepts Rejects	CI-E/DE-I* DE-I	CI/II IE/CI/DI-E	CI/DI II
17	Accepts Rejects	CI-E/DE-I* DE-I	IE CI	DE DI
18	Accepts Rejects	CI* DI/CE	IE II	CI/DE IE/II
19	Accepts Rejects	DE* CE	CI II	DE DI
		Change Wave 2, No Change Wave 3		
8	Accepts Rejects	II CE	CI* II	CI* II
10	Accepts Rejects	(DI) II	IE* II	II* IE
14	Accepts Rejects	DI II	CI* II	CI* II
28	Accepts Rejects	DE CE	CI* II	CI* DE

Note. An asterisk by the factor indicates that the p-sample is statistically related to another group in another wave; thus, no change in position. * indicates Spearman correlation coefficient of $p < .05$

Analyzing the results of the individual changes shows that five of the participants, identified as the "Limited Change Three Waves" section of Table 17, made no significant change in their perception of

authority from the time of entry to 6 weeks postworkshop. They entered with a counterdependent mental model from an internal locus of control (CI), denying dependent/internal (DI) and interdependent/external constructs (IE). Although participants 13, 15, and 12 shifted their frame of reference to an external view immediately after the session, or Wave 2, counterdependent aspects of the entry stances correlated, therefore, change is of limited significance. This group maintained a desire for limited authority (CI) through the Wave 3, when they picked up, in addition, some dependency on authority (DI). They strongly rejected both external and internal interdependent positions (II, IE) throughout the three Q-sorts.

Two participants experienced no change immediately after the workshop, or Wave 2, but showed a change after 6 weeks. One begins with little differentiation between counterdependency and dependency and held this through the second sorting, shifting to a strong dependency (DE) and interdependency (II) position in Wave 3. The other person in this group, P-27, maintained the interdependent entry (II) position immediately postsession but acquired a dependent stance along with interdependency 6 weeks later. These two samples can also be considered as having limited change in their mental models.

Eleven individuals made some changes immediately after the workshop but returned to their entry mental model tendencies in the last sorting of statements. They all began the program with a

counterdependent or dependent stance or with little differentiation between the two, most being counterdependent. Seven changed to some level of interdependence, with a few holding their counterdependent stance. All return to their respective beginning positions. Of importance in the overall analysis of this group is that they became more aware of interdependent positions either as they changed toward acceptance immediately after the workshop or as they rejected them in all three waves.

The last group in Table 18 shows participants with a change in attitude immediately after the workshop who maintained that mental model after 6 weeks. Three of the four began with a dependent stance, either internal (DI) or external (DE), one with an interdependent internal position (II). Three changed to a counterdependent internal stance (CI), one to an interdependent position. These positions held through the third wave.

Summary of Quantitative Results

Mental models that were functional for the individual, rather than being logical for the investigator (Smith, 2001), were developed in the original Q-statement concourse for sorting by the workshop participants. Factor analysis of the Q-sorts in the three waves resulted in differentiation among points of view about authority relations. Correlation among the waves showed, both statistically and holistically, that 17 (77%) of the participants in the workshop made some change

in their mental model either immediately after the program or 6 weeks postsession. Of these 17 participants, 11 (i.e., 50% of the total number of attendees who sorted in all three waves) returned to their original stance at the end of 6 weeks. Six individuals (27%) made a change and held that change; 5 participants (23%) made no significant change. From these results it can be inferred that a Tavistock-style program has the potential to mobilize a change in attitude about authority relations.

Based on the findings, dependent and interdependent individuals are more likely to change their mental models. Counterdependent participants may change but are likely to return to their original position. Although individuals entered the workshop primarily with a counterdependent mental model, the workshop raised the awareness of 9 participants (53%), who changed to an interdependent stance. Two held this stance throughout the 6 weeks.

Qualitative Analysis

This section includes the results of the qualitative inquiry, which were triangulated with the quantitative analysis of the Q-methodology to operationalize the Kirkpatrick model of executive training evaluation in the last section of the chapter. The qualitative analysis expanded the evolving body of knowledge and went beyond Q-methodology to explore perceptions of and meanings for the participants through a survey process that included postworkshop

interviews and a questionnaire 6 weeks postprogram. A total of 20 interviews were conducted, three of which were held with individuals who entered the workshop for at least the opening session but did not complete the workshop. The other 17 interviewees remained throughout the entire session and completed the three Q-sorts along with five other attendees. The interviews were conducted during the 3 weeks following the workshop, when the participants had returned to their respective work environments.

A questionnaire was administered to evaluate the overall satisfaction with the program and self-reporting of the transfer of learning from workshop to workplace. The questionnaire, modeled after the process defined by Kirkpatrick (1998), consisted of 14 questions with a series of single-rating, 7-point Likert scales and four simple open-ended questions. The questions were designed to explore Kirkpatrick's suggested four levels: (a) Level I—the emotional acceptance of the material, (b) Level II—the degree to which the members felt they increased knowledge and/or measured attitudes before and after the program, (c) Level III—the degree to which behavioral changes were experienced on the job, and (d) Level IV—the degree to which behavioral changes improved their organizations' productivity. Some of the questions mirrored the work of Frugé and Bell (1997), who had measured the level of learning and overall satisfaction with a similar workshop. The questionnaire was sent, guarding anonymity of the respondents, to two different groups: the

group of 27 who completed the workshop and the 13 who attended at least the opening session. Differentiation was made by color-coding the paper. An email was sent to remind the participants of their agreement to complete this section of the research.

Interviews

The researcher and one assistant developed open-ended questions used in building upon and exploring the participants' understanding of the use of authority during the conference (Appendix F). The interviews explored participants' responses to open-ended questions with the objective of having the participants reconstruct their perceptions of authority during the workshop, discuss any changes in authority relations they believed resulted from their experience in the workshop, and reflect on any new examples of the use of authority they might have experienced after the session. A secondary focus of the interviews was reconstructing experience within the topics of the workshop, their specific learning, feelings, and transformational experiences during the program. The results were used to expand on the mental models constructed as a result of the Q-sort and to enrich the overall understanding of the outcomes of this experiential learning event.

The telephone interview was structured to the point that questions were developed from background information for the purpose of guiding the interview. The questions were asked broadly

enough to "encourage the interviewees to express their thinking and knowledge, but narrowly enough to provide specific data" (Rubin & Rubin, 1995, p. 125). Steering probes were developed to keep the interview on target and eliminate issues not relevant to the objectives. The interviews lasted from 20 to 30 minutes.

Participant selection for the interviews was based on the willingness of the participants during the 3 weeks following the workshop to discuss their experience. Of the 20 participants in interviews, 3 left before the workshop ended, while 19 remained through the last day. It was important to interview the individuals who left the program to look for patterns of rationale given for not completing the workshop.

Although the interviewees presented remembered experiences, individuals who completed the program expressed some common impressions: The program was hard, frustrating, bizarre, difficult to describe, and for two responders it was "life changing." Authority in the workshop was viewed as lacking direction, confusing, relegated to the faculty, and in a few cases recognized as a property of the group. The majority of participants did not find the faculty helpful to their learning; their rigidity and "stone faces" were experienced as a deterrent to the learning process, yet several individuals believed that this demeanor was important to their learning. Significant learning was thought to come from peers in the group. On the whole, the program was determined to be valuable, particularly the learning about

"self" and the "group," but should be recommended only for individuals ready to make changes. Examples of learning transferred to the work situation varied; most expressed greater understanding of how they behave and respond to authority figures in their work and personal lives and greater awareness of their own and others' behavior in a group.

Coding of Results

All interviews were audio taped and transcribed immediately upon completion. Copious notes were written about the theme of the interview, and examples were noted that underscored the pattern, repeated ideas or thoughts, and compatible and contradictory concepts. The coding process included the following steps, based on Lincoln and Guba (1985), Rubin and Rubin (1995), and Tesch (1990):

1. Reading of transcribed reviews several times.

2. Notes taken on the transcription of themes and patterns, such as frustration with happenings, discomfort with rigid faculty, and need for direction from others.

3. Development of a vignette of each interview to begin the coding of major themes with their subcategories. Underscoring the themes and patterns that emerged (see Appendix K for examples).

4. Sorting of data into categories; changing of themes and recoding them when necessary.

5. Exploration of compatible, contradictory, and unexpected outcomes of events within categories and across categories.

6. Formulation of themes and refinement of concepts (see Appendix K for examples of interview summaries).

7. Linking of final concepts with Q-methodology and questionnaire. (Triangulation of results is discussed in a later section.)

8. Interpretation in terms of the literature and theories in the field (presented in chapter 5).

Summary of Themes

Themes and patterns of responses articulated the results of the Q-sorts regarding views of authority relations and leadership, defined participants' motivations for coming to the session, identified the role of the faculty and other members in the learning process, and gave examples of learning transferred to the workplace. Table 18 describes the primary themes of participants who remained through the last session of the program.

Table 18

Summary of Themes in Interviews

1-Description of the Experience

Didn't understand why the faculty was so "rigid, unavailable, stone-faced." (10)

Participants believed that the objectives (tasks) were not clearly defined, ambiguous. (8)

Difficult, confusing, uncomfortable, bizarre, although several were eventually able to work. (7)

Several found the workshop interesting but couldn't identify why or what they got out of it. (6)

Belief that people left because they were not prepared for the discomfort in this type of learning. (4)

Described (unprompted) the experience as "life-changing." (3)

2-Understanding of Authority Relations During Workshop

Ignored the faculty because they were "unavailable". (9)

Self-awareness: need to exercise own authority. (6)

Dependency on leader: leaders need to be clear about the goals, need for approval from the designated leader. (5)

Self-awareness: resistance to authority. (4)

Won't challenge any authority—individual in the role or other team members. (2)

(table continues)

3-Examples of Learning Transferred to Work

Attention to the roles that "I" and "others" take when at work. (7)

Need to make clear what trying to accomplish in the group or with another. (6)

Exercised own authority in a work situation. (6)

The need to implement the idea of boundaries in time and expectations. (5)

Trust, respect of others. (4)

Awareness of covert agendas in work group situations. (3)

Have to work within the system. (2)

4—Change in Perception of Authority Relations as Result of Workshop

Leader doesn't have the knowledge, so have to use own authority. (11)

Value of other members of group in meeting the objectives. (8)

Debilitation as a result of resistance. (5)

Role of boundaries. (4)

No change in perception. (4)

Can make decisions without approval of leaders. (3)

5—Utility of Program in Employee Development

Changes needed are some preworkshop materials: raising awareness of this as a nontypical program, more clarity, may be uncomfortable, talk in "our" language, some theoretical material ahead of time. (12)

Has significant utility with changes. (11)

Recommend for people in teams or working in group environments. (3)

People have to be ready to see differently, to make change, be introspective. (5)

Do not recommend for anyone. (5)

Too personal, invasive, deep. (3)

(table continues)

6—Motivation for Attending

Better understanding of leadership. (10)

Recommended by manager. (3)

Evaluate new way of understanding. (2)

Wanted to attend an experiential event. (2)

Previous Tavistock experience and wanted to repeat. (2)

7—Role of Faculty in Learning

Hard to know, because so rigid and nonresponsive. (8)

Hostility so great that I couldn't understand what they were trying to do. (5)

To get participants to think differently. (4)

Push participants to think for themselves. (4)

Working in leaderless groups. (2)

Faculty behaviors most helpful:

Forced into self-awareness because no help from faculty. (10)

None. (9)

Insights into what was generally happening. (6)

Understanding of the group dynamics made obvious. (4)

Faculty behaviors that hindered or distracted:

Rigid, expressionless, "ceremonial arrogance." (13)

Lack of nurturing or facilitative stance. (13)

Language hard to understand. (12)

Not clear about objectives or insights. (11)

Reading of scripts to define objectives detracts from content. (8)

Boundaries were too rigid, wouldn't say "hello" outside, ate separately, wouldn't give any simple direction to meeting place. (3)

Infighting was public. (4)

(table continues)

8—Role Workshop Participants Played in Learning

Opportunity to see how others manage anger. (13)

Sharing of happenings after sessions. (11)

Understanding of group interactions in general. (6)

Liked idea of research, evaluation, and feedback. (5)

Learned how others take up leadership roles. (3)

The Questionnaire

The self-report questionnaire developed to assess participants' perceived outcomes and satisfaction as a result of the experiential program was sent to the 27 individuals who completed the workshop and the 13 who left prior to the last session. Twenty of the 27 (74%) and 3 of the 13 (23%) returned their responses. The questions were developed to expand on the results of the Q-methodology and the interviews. They focused on emotional acceptance of the material, achievement of objectives defined by the program, behavioral changes believed to be an outcome, and any espoused improvement in their organizations' productivity as a result of their leaning. The responses were tabulated from the single rating scales in Table 19. The total number of responders for each question was tabulated as a percentage of the total number responding. All 20 participants responding to the questionnaire answered the 14 questions.

Table 19

Overall Satisfaction with Leadership Learning System Workshop 2000 (n = 20)

	TOTALS		PERCENTAGE OF RESPONSES						
QUESTIONS	TF	TU	SA	MA	LA	N	LD	MD	SD
Expectations Were Met	45	30	10	25	10	25	10	5	15
Objectives/Language Were Clear	35	60	10	20	5	5	20	15	25
Defined Objectives Were Met	55	20	10	35	10	25	5	10	5
Directions Were Clear	30	50	5	15	10	20	20	15	15
Can Apply Learning	75	20	20	40	15	5	10	0	10
Understanding of Team Interaction	85	10	25	40	20	5	0	5	5
Difficult to Describe Learning	70	30	40	10	20	0	15	10	5
Improved Effectivity	70	20	15	35	20	10	5	10	5
Learned from Others	95	5	55	25	15	0	0	0	5
Important for Others in the Field	60	25	30	25	5	10	10	10	10
Better Understanding of Authority Relations	75	10	25	35	15	15	5	0	5
Motivated to Learn	60	40	30	0	30	0	5	20	15
Will Recommend to Peers	40	35	5	25	10	25	10	5	20
Faculty Helped Learning	50	35	10	30	10	15	5	25	5
Percentage of all 280 Questions	61	28	26	23	14	11	9	9	10

Note. TF= Total Favorable. TU= Total Unfavorable. SA= Strongly Agree. MA= Moderately Agree. LA= Slightly Agree. N= Neither Agree nor Disagree. LD= Slightly Disagree. MD= Moderately Disagree. SD= Strongly Disagree.

The overall satisfaction with the program—the percentage of responders who *strongly agreed, moderately agreed* or *slightly agreed* with the statements presented—was 58%, whereas 28% experienced some level of dissatisfaction. The areas of significant satisfaction were the ability to transfer learning to the work environment (75%), better understanding of team interaction (85%), improving effectivity on the job (70%), contribution of other group members to learning (95%), and a better understanding of authority relations (75%). Seventy percent of the responders believed that it was difficult to describe their learning. Even though more than half of the responses were favorable toward the program, only 40% would recommend the program to peers. Sixty percent believed that the program would be beneficial to others in their field. Although only 45% believed the program met their expectations, 55% believed that it did meet the defined objectives.

The areas of dissatisfaction were the lack of clarity in defining the objectives and the language (60%), the lack of clear direction (50%), and the faculty's lack of helpfulness in the learning (35%). *Neither agree nor disagree* or *don't know* positions were limited, because most participants took either a favorable or unfavorable stance. Areas of neutrality with 25% each were meeting expectations, meeting the defined objectives, and recommendation to peers. All other neutral responses were less than 25%.

Table 20

Themes from Open-Ended Questions

Areas Most Beneficial	Improvement in Job Performance
Small groups (7)	Greater general awareness of group and self (6)
General group interaction (6)	Better manager/leader (5)
Application group (5)	Improved awareness of defenses in self and others (4)
Awareness of self and group (3)	Improved listening skill (4)
Here-and-now experience (2)	Giving clearer directions to others (2)
Faculty/participant dynamics (1)	Don't know (2)
What Transferred to Work	**Suggested Program Improvements**
Understanding of resistance to leadership (8)	A more facilitative faculty (5)
Giving clear directions to others (5)	Clarification of objectives (5)
Awareness of leader's role (5)	Preview/preparation before attending:
Understanding of covert agendas (4)	—Tavistock information (3)
Nothing (3)	—Nontraditional program (3)
Leaders have their own issues (2)	—Possible discomforts (2)
Understanding of boundaries (2)	Language more familiar to group (3)
Value of silence (1)	Time with faculty out of role (2)
Complexity of groups (1)	Nothing (2)

Four open-ended questions were included on the questionnaire. They were coded, and the themes are provided in Table 20. The results of these questions completed the triangulation of data explored in the next section, where all data reduction is incorporated into the operationalization of the Kirkpatrick (1967, 1998) model.

Responses from Casualties

Three individuals who attended on the first day of the program were very dissatisfied; two answered all questions of the questionnaire as *strongly dissatisfied*. The third participant agreed that the other participants contributed to his learning and that this type of workshop is an important educational experience for individuals in his field. He *strongly disagreed* that the workshop met his expectations, that the objectives and language were clear, that he was motivated to learn, that the faculty facilitated learning, and that he would recommend a program like this to peers. All three responders felt that if they had "known what it was about," they would not have attended. One participant stated, "This kind of work is not tailored for leadership in corporations."

The Kirkpatrick Model

Although there is disagreement among human-resource professionals (Broad, 1997; Philips, 1996) about measuring return on investment for training and development programs, most

practitioners acknowledge that they must show some measurement of outcomes in order to maintain employee education funds. Given that this study measured the effectiveness of experiential learning in terms of changes in perception of authority and overall satisfaction with a Tavistock-style workshop and given that the Kirkpatrick model for evaluation is most often used by corporations to measure some return on investment, it would follow that integrating the results into the operationalization of the model should provide a *holding environment*, or container, for final data reduction and exploration of the topic. Figure 3 shows the three components of the study that were integrated in this chapter.

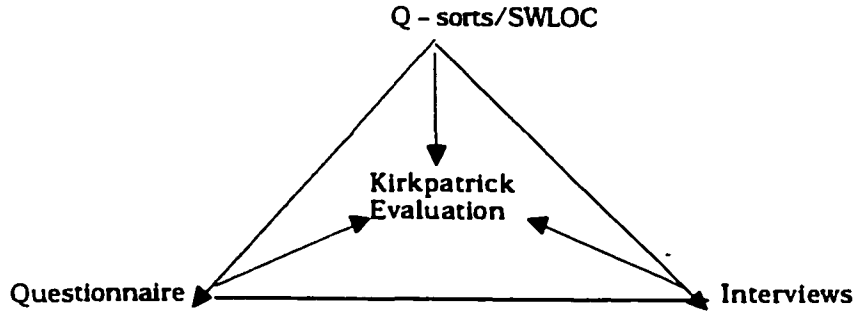

Figure 3. Triangulation of mixed method.

Level 1—Reaction

This is the level of evaluation designed to measure overall customer satisfaction. Effective training and development programs are dependent on participants' reactions, since a favorable reaction impacts learning as well as decisions about future programs. Themes from the interviews were supported by the results of the

questionnaire. Eleven interviewees believed that the workshop had significant utility but would require changes, such as providing preworkshop material to raise awareness that this is not a traditional learning event and to warn prospective attendees about the possible discomfort to be experienced. Clarity in definition of objectives, the language used in providing the groups with insights, and a more facilitative faculty would need to be addressed. This was supported by the results of the questionnaire—when all aspects were taken into account, such as learning, behavior changes, and productivity on the job—with an overall satisfaction rating for the program of 58%. Responders to the questionnaire also suggested that the Tavistock primer be updated and sent prior to any future workshop to give potential registrants some background on the theory behind the workshop.

Two interviewees stated that they perceived the workshop as "life changing," because they had implemented their learning of greater awareness of their own and others' behavior to benefit their work groups and families. They discussed recognition of their resistance to change and, by incorporating this knowledge while working with corporate clients, stated that they have transformed difficult relationships. An open-ended question on the questionnaire about suggested changes in the program brought the response from two individuals that they would not recommend any changes in the program. However, these two participants, along with others (i.e., 40%

of attendees), would not recommend the program to their peers. Twenty-five percent did not know whether they would recommend the program.

Level 2—Learning

This phase of the evaluation process included measuring the knowledge learned, skills developed, and attitudes changed as a result of the educational event. This is important to know because the behavioral changes of Level 3 are predicated upon meeting one of the learning objectives. No change in behavioral measurement might be marked as *no learning,* or *no change,* having occurred. Kirkpatrick (1967, 1998) and Robinson and Robinson (1989) recommended measurement pre- and posttraining, suggesting that for the educational event to be considered effective, trends should be in the desired direction. All phases of this study resulted in some degree of measurement for this learning level.

Q-methodology, the quantitative phase of this study, resulted in operant categories of authority relations defined by the sorting of Q-statements. Individuals with similar perspectives (i.e., dependent, counterdependent, or interdependent mental models of authority) were identified based on their factor loading pre-, immediately post- and 6 weeks postworkshop. Analysis of the three phases of measurement resulted in measurable changes in mental models with 77% of the participants showing a change in either the second or

third wave of Q-sorting. Whether these changes were in the desired direction cannot be determined, because there is a gap in the literature on measurement of Tavistock outcomes and limited literature on the desired direction of change for these mental models. Some researchers suggested that the change process is an evolution from dependency through counterdependency to interdependency (Gillette & McCollom, 1995; Hirschhorn, 1990; Kets de Vries & Miller, 1987). Lewin (1951) proposed that change occurs in the three phases of unfreezing the individual's view: recognition of authority, differentiating from the authority, and acting independently and interdependently (pp. 228-229). The literature suggests that the ideal, or ultimate, phase is interdependency, and the Q-methodology results of this study indicated that, although 21 of 22 Q-sorters entered the program with a dependent or counterdependent stance, six changed to an interdependent position immediately after the program and one of the six held the interdependent mental model 6 weeks after the program. There was also a greater awareness of the interdependent stance, not only as an accepted defining group characteristic but also as the stance least characteristic of several groups. The sorting of Wave 2 indicated significantly greater awareness of interdependent, collaborative constructs with their corresponding statements on the polar ends of the continuum.

The qualitative phase of this study expanded the understanding of the learning outcomes of the program and its effectiveness as an

executive development program. The interviewees supported their Q-sorting results, espousing themes of recognition of resistance to change, dependency on the designated leader, a shift to the taking of personal authority, and recognition of their own and others' behavior in groups. The results of the questionnaire suggested a greater learning experience than just those of the quantitative stances taken in the Q-sorts. Table 21 shows that 75% of the responders believed that they had a better understanding of authority relations, while 15% did not know. The idea that 85% have a better understanding of team interaction and 95% leaned from others, with 70% finding it difficult to describe the learning, implies that participants espoused a shift to greater understanding of collaborative requirements of group work.

Level 3—Behavioral Change and

Level 4—Improvement in Business Results

These two levels are combined, because Level 4 results are limited. This researcher believes that a more sophisticated study is needed than the individuals' self-report to evaluate the impact on business results. Bakken and Bernstein (1987) suggested that it is important to consider differences that occur immediately as well as long-term, because skills and knowledge are acquired immediately following attendance, but changes in attitude are subsequent occurrences. Giber, Carter, and Goldsmith (2000), in their review of best practices for human resource development, argued that

Table 21

Percentage of Responses to Learning Questions with Total Favorable/Unfavorable (n = 20)

QUESTIONS	TOTALS TF	TU	PERCENTAGE OF RESPONSES SA	MA	LA	N	LD	MD	SD
Understanding of Team Interaction	85	10	25	40	20	5	0	5	5
Difficult to Describe Learning	70	30	40	10	20	0	15	10	5
Learned from Others	95	5	55	25	15	0	0	0	5
Better Understanding of Authority Relations	75	10	25	35	15	15	5	0	5
Faculty Helped with Learning	50	35	10	30	10	15	5	25	5
Percentage of all Learning Questions	75	18	31	28	16	7	5	8	5

Note. TF= Total Favorable. TU= Total Unfavorable. SA= Strongly Agree. MA= Moderately Agree. LA= Slightly Agree. N= Neither Agree nor Disagree. LD= Slightly Disagree. MD= Moderately Disagree. SD= Strongly Disagree.

evaluations of Levels 3 and 4 need to be conducted on a formative, summative, and longitudinal basis and are conducive to action research models that incorporate continuous feedback mechanisms.

Interview themes indicated that participants perceived behavioral changes, although the length of time to discussion was only about 2 weeks postworkshop for many of the interviewees. They expressed greater exercise of personal authority in work situations; an increased awareness of covert activities in work groups and, thus, a

different response on their part; changing their boundaries in time for meetings and management discussions; experimentation with changing expectations of themselves and others; greater attention to roles that they and others take in the group; trust and respect for team members; and increased assertiveness in voicing feelings, beliefs, and ideas. Table 22 shows that 75% of the responders believed that they could transfer their learning to work, with the open-ended part of the questionnaire suggesting that the transfer would occur as greater understanding of their own and others' resistance to leadership boundaries; importance given to providing clear direction; awareness of the leader's role, their own as well as others; and reinforcement of the importance of boundaries in general.

Determining the impact on business results as a result of training and development programs is the most important part of the evaluation model, the most difficult, and the least accomplished (Kirkpatrick, 1967, 1998; Robinson & Robinson 1987). The questionnaire showed a 70% response in perceived improvement of effectivity. Open-ended questions and interviews showed improvement in the areas of awareness of self and group, improvement in leadership and management skills, improved awareness of defenses of self and others and their impact on the group, and improved listening skills.

Table 22

Levels 3 and 4: Percentage of Responses to Behavioral-Change and Productivity Questions with Total Favorable/Unfavorable (n = 20)

	TOTALS		PERCENTAGE OF RESPONSES						
QUESTIONS	TF	TU	SA	MA	LA	N	LD	MD	SD
Can Apply Learning	75	20	20	40	15	5	10	0	10
Improved Effectivity	70	20	15	35	20	10	5	10	5
Percentage of all Change/Productivity Questions	73	20	17	37	17	8	8	5	8

Note. TF= Total Favorable. TU= Total Unfavorable. SA= Strongly Agree. MA= Moderately Agree. LA= Slightly Agree. N= Neither Agree nor Disagree. LD= Slightly Disagree. MD= Moderately Disagree. SD= Strongly Disagree.

Chapter Summary

This chapter offered an overview of the findings by describing the results of two paradigms: quantitative and qualitative inquiry. Q-factor analysis was presented with an inductive interpretation of groups with similar perspectives. Although the Tavistock model focuses on the group-as-a-whole concept, changes in individual perspectives were discussed because each individuals' subjective understanding of effectiveness in terms of program satisfaction will be taken back to the organization. Themes and patterns were delineated and allowed to flow loosely around the research questions. The objective of this chapter was to engage the reader in the program participants' learning experience. The findings will be used in the following chapter in an effort to make sense of the study.

CHAPTER 5

DISCUSSION

Introduction

The idea for this study about leadership processes and executive development originated in the experiences of the researcher as a seasoned business executive of a Fortune 100 company, a successful entrepreneur, and participant in two Tavistock conferences. The first conference was recommended by a friend as a different way to learn about leadership. The experience was one of tremendous frustration and suppressed hostility when participants were faced with what seemed to be ambiguous directions; unprofessional consultants who, themselves, lacked leadership skills; and group discussions that centered on seemingly irrelevant issues, such as gender and race. After 2 days of trying to understand the nonbusinesslike behaviors of the participants and consultants, the researcher rationalized her departure 1 day early as being the result of excessive fatigue from long and chaotic days that had overwhelmed rationality. However, within a short time, reflection about the program and introspection into her own mental models allowed this researcher to recognize that the experience had been transforming; that some change processes had been mobilized; and that awareness, integration of emotions, and leadership dynamics were central to this program. The paradoxes, which are part of this program—anxiety and serenity, vulnerability and

defensiveness, resistance and freedom, and conflict and collaboration—energized this researcher to look deeper into the Tavistock technology and explore its potential for integration of a new style of learning about change into development programs for business executives. The researcher sought deeper understanding of client relationships, in particular of interactions where resistance to change persists in spite of proven and publicly acknowledged success with new business philosophies. Her goal was to find ways to influence the so-called late adopters, who account for approximately 50% of any marketplace, according to Pride and Ferrell (2000). She was also interested in the changing dynamics of leadership as organizations flatten and authority relations change.

This chapter discusses leadership and executive development programs in light of the findings of the Leadership Learning System 2000 Workshop. Purpose and research questions of the study are briefly recapitulated, and answers to the questions are provided based on the findings. The social impact of the study is discussed, and suggestions for future research and practice are offered.

Purpose of the Study and Research Questions

The purpose of the study was to explore the effectiveness of an experiential approach to motivating change in business executives with respect to their perceptions of authority relations in the workplace. The intervention was a group relations event styled after

the Tavistock model. The goal was not only to identify normative assumptions about leadership and authority but also to determine how a program rooted in sociopsychological theory, sociotechnical theory, and systems theory and enjoying significant success in the fields of psychology and academia might be tailored to the needs of a different market, namely the business community. Effectiveness was measured from the perspective of the Kirkpatrick (1967, 1998) model of training evaluation. The study sought to answer the following four research questions:

1. Do changes in perception of the participants' authority relations occur during an experiential education program?

2. What is the relationship between any change in perception and the individual's locus of control?

3. Are any changes that occur transferred to the workplace?

4. What is the overall satisfaction level of the participants with this type of experiential education program?

Changes in Perception of Authority Relations and the Effect of Locus of Control

Changes in Perception of Authority Relations

The conventional notion of leadership studied here was that of an individual at the top of a hierarchy who has exceptional qualities and abilities to manage an organizational structure and its members.

Theories abound that overemphasize a leader's responsibility to create an environment in which followers' behavior can be obtained to meet desired outcomes, thus counting among leadership abilities a certain superpower to control others' motivational forces. The definition of leadership is changing, and with it comes a need to understand the process of leadership not as a function of the person at the top of the hierarchy but as a "function of individual wills and of individual needs, and the result of the dynamics of collective will organized to meet those various needs. . . . a process of adaptation and of evolution . . . a deviation from convention. . . . a process of energy, not structure" (Barker, 2001, p. 491).

Understanding authority relationships between individuals and the larger social system, with a focus on social practice where the systems are both medium and outcome (Giddens, 1986), appears to serve as one way to understand a leadership process more conducive to today's organizational forms, a process not explained by defining the leader. The present study considered leadership and changes in authority relations from a systems perspective by measuring the recursive activities of individuals over time within a structure (Giddens, 1986).

The Q-sorting process showed that individuals entered the workshop with mental models that either remained the same over the duration of this study, changed immediately after the workshop but had returned to the original position 6 weeks after the program, or

changed and possibly resulted in transformation for the individual. Mental models of counterdependency, dependency, and interdependency were defined upon entry to the workshop, with results showing that the model of role authority determined the basis of leadership attribution on workshop entry. The majority of participants (77%) presented a counterdependent stance with a focus on authority itself rather than on the dynamics of authority. These individuals often refused to accept authority, as witnessed by their sorting of Q-statements, which focused on their insistence on making their own decisions, enjoyment in testing their leadership skills against other members, a refusal to discuss feelings when angry, and an unwillingness to be involved in the development of a plan of action for the team.

These views and behaviors most likely played out in the workshop as a resistance to power taking, or a refusal to accept or exercise the power available to them in a group. This avoidance of taking and using power creates a sense of powerlessness in individuals and ultimately the group. Smith and Berg (1987) suggested that this feeling of powerlessness is paradoxical, because it creates an even greater wish for power, which makes it more difficult for anyone to exercise authority because the feeling of deprivation is even greater as the resistance grows.

A few of the participants sorted Q-statements representing some level of dependency upon group entry, with several holding more than

one stance. Although mutual dependency is a function of a successful team and its denial inhibits the capacity for the group to work as a whole, these individuals had not yet worked as a group; they characterized themselves as unwilling to make their own decisions and expressed a need to know what is expected of them and a belief that the leader should provide directions for the team. The majority of these individuals changed to a counterdependent stance immediately after the workshop. Smith and Berg (1987) observed that, in groups, individuals will be most troubled by feelings of dependency when those depended upon are experienced as untrustworthy; they then turn to a more independent, in this case counterdependent, stance. The paradoxical effect is that the counterdependent behavior used to defend against untrustworthiness creates a greater need for trust in the group.

One of the developmental tasks of the groups in the Leadership Learning System 2000 Workshop was to learn to simultaneously authorize themselves and others, a process representative of an interdependent position, more commensurate with collaborative processes and the work forms of today. Resistance to change is one of the many obstacles to successful collaboration (Gray, 1989); it is imperative to understand how it affects positions of authority in order to understand leadership and group processes. By not resisting the resistance, the Tavistock model is designed so that the faculty manages the splitting process—represented in the participants'

resistance and dependency—thus empowering the participants in the group. Participants in a Tavistock workshop search for individual expertise as the source of self-efficacy and reassurance in the midst of explicit ignorance. They are surprised by the lack of authoritative leadership and either flee from the experience—literally or by tuning out—or they search for a voice within themselves and try to determine how best to authorize themselves and the group. This is the frustrating, angry, and often bizarre chaos of group activity by which a new order forms and success depends on understanding and changing former assumptions and habits to realize new ways for the group to relate.

Examining the changes in mental models immediately following the workshop showed that individual resistance and dependency positions had shifted toward interdependency as the characteristic most representative of several individuals with similar perspectives. A few participants changed from dependency to counterdependency, a few from dependency to interdependency in this phase. This suggests that some change in mental models of authority was mobilized as a result of the group processes associated with the Leadership Learning System 2000 Workshop. Sixteen of the participants showed a change in mental models, as expressed in the sorting of Q-statements from a predominately counterdependent to a somewhat more interdependent stance. This was also supported by the self-report of individuals who expressed greater recognition of their own and others' resistance to

authority as key learning from the workshop. Fifty percent of the groups that changed Q-sorted into a position of interdependence as most characteristic of their group, in spite of their simultaneous rejection of the interdependent constructs of eliciting participation of others and the importance of reaching consensus in teamwork. Their common accepted perspective was that luck plays a role in successful team collaboration. The idea of successful team collaboration was of greater importance to the group that changed to an interdependent stance than to the others who changed their mental models during this phase. An in-depth interview revealed that, although this group had been paralyzed upon starting the workshop, a description of their feelings and group behavior (frustrating, angry, frightening, bizarre, chaotic) mobilized an adaptive dimension that enabled them to make the necessary shift to empathy and the emotional clarity required to accomplish the group's tasks. Individuals in this group were very cognizant of their own and other's defenses and behaviors in the group; they also expressed successful accomplishment of their group's tasks. This group's shift to a more collaborative style was dependent upon their relinquishing the comfort of traditional hierarchical patterns of relating to each other in groups, accepting the direction from authority when appropriate, and authorizing themselves to work in the group.

The final Q-sorting indicted whether the changes in perception of authority had the potential to transfer to the work environment and

cause long-term transformations. The findings confirmed that perceptions of traditional hierarchical, role-defined authority relations are difficult to change with a program modeled in the Tavistock style and within the timeframe it allows. Although the program mobilized the majority of participants to relinquish some aspects of their original perceptions and entertain different constructs of authority immediately following the program, only 4 participants (18%) showed a sustained change in the final phase of the program, as measured by Q-sorting. Most of the participants returned to their original mental models. Many possible reasons exist for the inability to maintain the new mental models; they are explored in the section on training transfer.

The Effect of Locus of Control

Locus of control in trainees was explored to provide insight into possible predispositions and their impact on learning, but the results were inconclusive. Spector's Locus of Control instrument determined that the majority of the participants operated from an internal locus of control. In the postworkshop experience, some shifted to a more external stance, but most returned to their original position. Those who shifted did so in describing successful teamwork as requiring some luck. During the interview, these participants revealed strong feelings that external forces, such as a personal relationship with managers ("who you know, not what you know"), influences the

success of teamwork. Other statements of external forces controlling outcomes were not expressed.

Although studies of trainee characteristics that effect transfer of learning are limited in number, the following conditions are described: trainee success early in the process (Downs, 1970; Gordon, 1955) and certain personality characteristics and situations that enhance the effectiveness of transfer (Tziner, Haccoun, & Kadish, 1991). Several studies on locus of control produced inconsistent results. Noe and Schmitt (1986) indicated limited support for locus of control effecting pretraining motivation and learning. However, a high need for achievement, self-efficacy, and an internal locus of control increased the likelihood for managers in a development program to apply learning in the work setting (Baumgartel, Reynolds, & Pathan, 1984; Ford, Quinones, Sego, & Sorra, 1992). Cheng and Ho (1998) contributed guidelines for practitioners in the dimensions of locus of control and self-efficacy. They suggested that participants with an internal locus of control are more likely to apply new knowledge to increase their performance, as corroborated by Baumgartel, Reynolds, and Pathan (1984) and Ford, Quinones, Sego, and Sorra (1992). From this, Cheng and Ho (1998) deduced that individuals with a strong personal belief in training are better candidates for development programs: They learn more effectively and apply the learning to the work setting.

Self-efficacy, or "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391), is also perceived as a determinant of performance. When this social learning theory is applied to participant selection, the potential for successful transfer is increased (Latham & Saari, 1979). Because none of the participants in the present study expressed an external view, different outcomes for internal and external views could not be tested.

Transference of Learning and Changes in the Workplace

Companies, as well as schools, governmental agencies, and other organizations have become increasingly interested in the evaluation of transfer of learning from training and development programs to the workplace. Business competition is moving from building the proverbial better mouse trap to viewing employees as competitive advantage; thus, the trend for continuous learning permeates management philosophy. Coupled with this growing need for life-long learning and development (and the tremendous training budgets it fuels) is the concern that most of what the training programs teach does not transfer or bring about change (Broad & Newstrom, 1992; Ford & Weissbein, 1997; Royer, 1979). Although some significant advances have been achieved, as an examination of the factors of effective training and transfer has shown, research examining the dimensions of the transfer is still limited (Ford & Weissbein, 1997).

This study attempted to explore the transfer of learning from workshop to the work. The Q-sort at the 6-week phase indicated that, although the majority of participants experienced some change immediately after the workshop, their changed perceptions of authority relations were not sustained. However, during interviews and in questionnaires, all attendees expressed some learning through examples of how they had or would use this new knowledge in work situations. They discussed how better understanding of their own behavior and that of others in the group improved the way they managed their relationships with managers, subordinates, or clients and thus improved business results. The behaviors that changed included better listening, more empathy, less defensiveness within themselves, and better understanding of the defenses of others used to reduce anxiety in their work groups.

The literature on training transfer suggested four areas with the potential to inform transfer results: (a) limited understanding of the multidimensionality of training transfer and the operationalization of transfer constructs (Ford, 1997; Ford & Weissbein, 1997), (b) better understanding of the application of results from training design studies to the job (Schmidt & Bjork, 1992), (c) trainee characteristics to be examined for impact on transfer as discussed in the locus of control section of this chapter (Ford, Quinones, Sego & Sorra, 1992; Warr & Bunce, 1995), and (d) the conceptualization and

operationalization of work environment factors that impact the transfer (Brinkerhoff & Motesino, 1995).

The Multidimensionality of Training Transfer

Studies in these areas extend the understanding of factors that might have affected transfer in this study. One dimension of training transfer is building adaptive expertise. Recent studies show advances in a variety of measures and time intervals to evaluate the transfer; they include more objective and rigorous behavior measures than self-ratings, inclusion of manager and peer ratings, and increased time for and accuracy of performance measures (Lintern, Sheppard, Parker, Yates, & Nolan, 1989; Swezey, Perez, & Allen, 1991).

This study used the Q-methodology as a measure beyond self-ratings for a better understanding of the outcome of perceptual changes. Self-reporting enriched the study and could be expanded with the use of the so-called 360-degree process, which evaluates individual performance from the perspective of all those who play a role in the employees' work, including managers, subordinates, clients, and vendors. This would provide greater breadth in understanding the learning process as a system.

Ford (1997) suggested that criterion research into factors that impact the multidimensionality of training needs conceptual and operational examination of the changes expected as a result of the training, that is, the behaviors and settings in which the learner

should show adaptability in transferring newly acquired skills and attitudes and the expected level of proficiency in the continuum of adaptive expertise. He further argued that it is important not only to identify the dilemmas in transfer but also "to begin the difficult process of building theoretical models that link training design strategies with changes in learning outcome" (p. 353).

The Tavistock model purposefully leaves what is to be learned in the hands of the participants. Tavistock promotional materials discuss the key concepts of the conferences in terms of learning from experience; experiences in systems; and concepts of boundaries, authority, and leadership, but not in terms of details of what might be learned. This approach is taken because every participant's experience is different and does not occur in equivalent time frames. The paradoxical situation in this study, however, was that this target audience required a tangible measurement of outcomes, which is predicated on clearly defined expected results and measurements relative to outcomes. This workshop did, therefore, define in the brochure results that might be expected in terms of discovery of patterns of behavior, understanding resistance to change, and integration of thinking with actions (discussed in detail in the next section). Using the Kirkpatrick (1967, 1998) model with its four levels of measurement aided in closing the gap in evaluation of the effectiveness of this approach of executive development.

Application

In the last 15 years, the greatest effort to understand the application of learning of an instructional event has been in the area of defining and measuring the ideal work climate for training transfer, specifically factors such as the support given to the trainee, the transfer climate, and opportunity (Ford & Weissbein, 1997; Tracey, Tennenbaum, & Kavanagh, 1995). Using social learning theory, Rouiller and Goldstein (1993) identified situational cues, such as goals, task, and self-control, and their consequences in the performance of the trained task, 8-12 weeks after the learning event. Ford et al. (1992) examined a similar concept, looking at dimensions of opportunity, such as the breadth of the tasks, the number of times the task was performed on the job, the difficulty of the task when applied to the work setting, the relationship to trainee characteristics (e.g., self-efficacy), and supervisory support in providing opportunity for the tasks. The authors showed that self-efficacy, workgroup support, and supervisory attitudes were related to various dimensions of the opportunity to perform.

Brinkerhoff and Montesino (1995) conducted a study where managers were involved in a pretraining discussion about the objectives of the course, anticipated outcomes, and the importance to the job and the posttraining period. Discussions focused on the extent to which the participants believed they learned the material, barriers to application, and the managers' expectations in using the skills on

the job. The results substantiated improved application of learning by the trainee when the manager participated in this manner in the program.

This study provided participants with an opportunity to discuss the application of their learning to the work environment on the last day of the workshop. The session included the faculty in their traditional consulting role and was considered to be one of the most beneficial aspects of the program. There was, however, no well-defined program for support once the attendees returned to their workplace.

The Transfer Environment

Although the literature shows advancement in the understanding of the work setting and its relationship to transfer outcomes, few studies dealt with strategies for actively intervening and optimizing environmental factors that could impact the application of what was learned (Ford & Weissbein, 1997). More research is needed in all areas of development programs, including identification of participant characteristics conducive to the specific learning objectives of a program, improvement of training design for more adaptive and effective training transfer, and the use of more complex learning tasks to model learning found in the organizational setting (Broad, 1997; Ford & Weissbein, 1997).

Also of importance to this work are sophisticated, theoretical measures of environmental factors, such as the transfer climate, that are critical to understanding training transfer. These needs will accelerate as organizational pressures for accountability of training increases with the increase in budgetary expenditures.

Overall Satisfaction of the Participants

Several researchers suggested that evaluating training results can be a great challenge for organizations, and only 15% of companies measure the transfer of learning (Garavaglia, 1996). It is fairly simple to measure the effectiveness of development programs that are aimed at reducing turnover, increasing sales, or retaining employees, because models exist that incorporate these dimensions and their ultimate effectiveness in return-on-investment measures.

The biggest challenge comes in evaluating the learning of soft skills, such as improvement in leadership skills or better understanding of group dynamics, and the relationship of these new-found skills to business outcomes. Several questions arise: How do we measure soft skills and their outcomes? When we do measure, how do we convert them to monetary units? Can we measure the results of soft skills, such as those garnered in this work? As the trend for continuous learning fuels tremendous expenditures in training budgets and organizational management becomes increasingly aware that only

10% of the $100 billion spent on training is transferred, the pressure to measure more than simple satisfaction will mount.

Although some human resource professionals argue that measuring return on investment for training and development is not possible (Philips, 1996), the most familiar form of evaluation is the Kirkpatrick (1967, 1998) model with its four levels of measurement: (a) Level 1—the emotional acceptance of the material, (b) Level 2—the degree to which the members felt they achieved the objectives of the program, (c) Level 3—the degree to which achieving conference objectives resulted in behavioral changes on the job, and (d) Level 4—the degree to which behavioral changes improved their organization's productivity (American Society for Training and Development, 1997; Kirkpartrick, 1967, 1998).

In the Leadership Learning System 2000 Workshop, participants achieved varying degrees of satisfaction, depending on which of the four level were being considered. Of the participants, 58% expressed overall satisfaction when considering the program's ability to meet objectives, provide new skills or change attitudes that could be transferred to the workplace, and inspire program advocacy. This number has limited significance without further review of the results of the questionnaire, the dominant patterns in the interviews, and the Q-sorts.

The questionnaire with its 7-point Likert scale included a *don't know*, or neutral filter, position, (N), because Schuman and Presser

(1996) suggested that to virtually any attitude, opinion, or belief question there is the possible I-don't-know, or what survey investigators commonly call the DK, response. Schuman and Presser also posited that, even though some theorists suggested that these floaters have characteristics of their own, any decline tends to come from the polar positions and is unrelated to the univariate distribution of opinion. Although their work did not elaborate on the degree of the middle position that is attributed to the polar positions, their work suggests that the favorable and unfavorable responses on the questionnaire in this study are probably higher than the 58% and 28%, respectively, because the 11% of neutral assigned to the polar positions would increase both ends of the scale. Therefore, the overall satisfaction could be as high as 69%.

The findings of the questionnaire also indicated a significant degree of overall satisfaction in Levels 1 and 2. Although 45% of the participants indicated that the program did not meet their expectations, which is important in understanding individual change processes and program marketing (George & Jones, 2001), 55% of the participants believed that the program met its stated objectives, with 25% being neutral. The interviews enriched understanding of participants' beliefs that outcomes were related to stated objectives. Although the Leadership Learning System 2000 promotional brochure did not provide the familiar description of traditional program objectives, it did focus on "results one could expect." One result

claimed by the workshop brochure was an opportunity for the participants "to discover their assumptions, their usual patterns of behavior, and the situational factors that influence their actions."

The greatest reported learning occurred in the area of the participants' understanding of their own behavior and that of others, because the majority of participants in aided and unaided surveys discussed self-awareness with respect to attitudes and behavior and the learning garnered from watching others in the group and the roles their behavior played in group processes. For example, several participants elaborated on their own defenses and those of others who believed that the faculty's rigid leadership style caused several participants to leave the workshop. These participants recognized that these defenses resulted from an inconsistency or discrepancy with either their own or other members' preexisting schemas about authority relations and ideal learning environments; their established expectations were challenged with this program. George and Jones (2001) proposed that this responding to discrepancies with preexisting schemas is the impetus for individual change in organizations. In exploring the process of individual change, they further the discussion by positing that resistance to change occurs when individuals persevere in the beliefs contained in their schemas and rationalize the discrepancy (Miller, 1993) or make sense of it without changing.

Most participants were able to suspend their feelings about the faculty, but a few could not. The resistance became a shared phenomenon, which explains why the hostility persisted with some of the participants who had an intense focus on their belief that the program was not related to leadership development and the demeanor of the faculty not conducive to learning. Some of these participants were reported in interviews to be so insistent on confronting the faculty about their demeanor that the group was unable to accomplish its task, and thus these individuals were believed to have derailed functioning of the group in accomplishing its task. Understanding this resistance to change was one of the promotional claims that participants could experience in this workshop.

The 58% reporting satisfaction, the 75% proclaiming learning, and the idea that the majority of the participants experienced aspects of just these two outcomes—better understanding of their assumptions and their role in behavior and patterns of resistance to change—testified to the power of an experiential event in the Tavistock model as one method of mobilizing change. A paradox, however, exists in whether the participants would recommend this program to their peers. In this study, 40% would recommend the program, 25% were neutral, and 35% would not recommend it. Often a program results in significant learning for the participants but can be derailed by the organization because of the comments by the attendees. Although the structure of Tavistock has been successful in other disciplines, its

perception as an acceptable method of learning about leadership and change may not be positive enough in the format of the Leadership Learning System 2000 Workshop to warrant advocacy to others in the business community, a requisite form of customer bonding for successful marketing strategies (Pride & Ferrell, 2000). Because "we are . . . our perceptions" (Taylor & Marienau, 1995, p. 10), perceptions of the workshop would need to change for effective penetration of the business market. Future research is needed for a better understanding of outcomes as perceived by the participants.

Implications of the Findings

Theoretical and practical implications of the relationship between experiential learning and executive development are relevant to management development, organizational learning, selection and recruitment of executives, and the processes of change and transformation. Because Tavistock has significant underpinnings of sociopsychology and sociotechnical and systems theories and is a cornerstone for learning about authority, leadership, covert processes, and group dynamics, this model is worthy of serious attention for the development of managers at all levels of business organizations concerned with maximizing change processes for collaborative and competitive advantage. The results suggest this approach provides an opportunity for greater understanding of the collaborative process where stakeholders have an opportunity to explore differences within

the context of the system. The program stimulates a reexamination of assumptions and provides the potential for transformation.

Greater self-awareness was a major learning outcome, as interviews and questionnaires disclosed. Such self-awareness relates to collaborative processes and individual effectiveness in group participation and is one of the personal competencies at the heart of effective leadership processes identified by Goleman (1998c) and other researchers concerned with leadership skills for the new millennium. One of the benefits of expanded self-awareness is an increased ability to remain present, particularly in conflictual group situations in which one may otherwise be tempted to leave either by tuning out or physical withdrawing. Remaining in touch with the whole self at work opens an individual to examination in real time of assumptions and the possibility of a more collaborative process, which is required in today's business world of globalization and many divergent ideas and beliefs.

A group of individuals from one company provided a powerful example of using the new-found learning in a more collaborative and participative work situation. These individuals worked in geographically distant facilities, but their attendance was recommended by the corporate office because of an interest in changing the business culture from a competitive frame of reference to more collaboration between groups. In the interview, one participant strongly voiced what bordered on contempt for a fellow

participant, yet talked at the same time about a future meeting of the participating colleagues to share ideas on how they, as a group, had applied the learning in their daily management. Their only prior coherent tasks had been in varying sessions of the workshop. This participant attributed her willingness to fully immerse herself in her work group to her workshop experience. She was able to process her assumptions and suspend judgment in order to plan for the common good as a result of understanding her defenses as stereotyping others; this was played out in one of the group sessions between her, the small group, and another individual. In the workshop, she realized her assumptions were unfounded when confronted by others in the group. During the follow-up interview, she exuberantly expressed her success with working with the troublesome individual, whereby she suspended judgment, stayed focused on the collaborative project, and recognized her ability to authorize the individual and herself to work together. This scenario suggested that understanding of self and self-in-relationship-to-the-group are of great importance in team environments. The method leading to such learning may be of interest in developing a selection process for members and leaders of project teams. Being able to suspend judgment is imperative for inspiring every team member to success as well as for obtaining the respect of other team members regardless of what leadership role one takes.

Authorizing and deauthorizing processes clearly influence collaboration at the core of leadership and team relationships. Implicit

in the literature on traditional authority is the understanding that authority in interaction between leaders and followers is based on negotiation and not simply ligitimation (Kahn & Kram, 1994). The interpretive process, where either can authorize or deauthorize by offering or withholding support, is often unconscious, and little is known about

> the zone of indifference to describe how followers automatically define their leaders' orders as acceptable unless the illegitimate nature of those orders triggered their conscious questioning. What is triggered is the conscious process of authorizing and deauthorizing oneself and others to engage in work. (Kahn & Kram, 1994, p. 31)

This study provided insight into the enduring, often unacknowledged mental models of authority, which are triggered in similar ways across hierarchical and collaborative work forms, and the potential to change these models as a result of an experiential learning event.

Ainsworth (1973) suggested that, when individuals are threatened and experience anxiety, they enact behaviors which aim at recreating a sense of security, and they "cling to, withdraw from, or reestablish connection" in order to create a relationship in which they are familiar (Kahn & Kram, 1994, p. 32). The Tavistock workshop method with the Q-methodology measurement of mental models expanded insight into the proposition of Kahn and Kram that organizational members operate from their internal models of authority when they experience work situations as insecure: "They cling to [dependent], push away from [counterdependent], or establish

ties while remaining independent [interdependent] of given roles and authority relations until they again feel secure" (p. 32). It was apparent that participants in this study experienced overt and covert behaviors triggered by their mental models, as expressed in their descriptions of the program and their own behaviors. They were able to watch the enactment of aggression against authority when the faculty's role did not meet their expectations (dependency), and they either totally ignored their interventions (counterdependency) or searched for ways to integratively work and accomplish the task (interdependency). This study provided an environment where participants and faculty experienced enough anxiety to trigger such mental models, but they also felt safe and secure enough to be able to learn how their behaviors impact the outcome of group tasks. Thus, a greater understanding of mental models of authority and a method for experiencing was effected by the Leadership Learning System 2000 Workshop.

This study also provided the participating Tavistock consultants with an understanding of their own leadership styles. Leadership style comes from the integration of an individual's personality and the group forces at work; thus, it was important for the faculty to understand the various roles they presented. An enacted role may be the result of their own conscious interpretation of their formal position, as defined by the workshop and their personality, or it may be evoked as their solution to a variety of conflicting forces projected onto them as leaders in a group of business executives. Alderfer (1995) suggested

that leadership in group processes requires working with two parts simultaneously: the group as a whole and individual processes within the group. Thus, the leader must accept various individual processes for examination on a temporary basis in the service of the objectives of the group or the workshop as a whole.

Understanding their leadership styles is important work on the part of the faculty because its diagnostic value will promote learning and prevent casualties among the participants. This workshop for business managers was an opportunity for the faculty to experience and examine the roles they assumed, consciously or unconsciously, as well as the underlying dynamics evoked by the group. Alderfer (1995) stated that the professional literature points to the inability of some in the field to detach from a single orientation, behaving as if it were the optimal solution, which renders them immune to the phenomena being studied (p. 268). The faculty of the Leadership Learning System 2000 Workshop significantly participated in the learning of the participants in this program. They also had an opportunity better to understand their own learning and the potential to participate in changing their work environments.

Measuring program outcomes in this study contributed not only to a narrowing of the gap in the literature on experiential learning but also to the understanding of results in terms of a model that is acceptable and adds to organizational learning. By designing the research around the Kirkpatrick (1967, 1998) model for training

evaluation, practitioners can get a good in-depth look at the results, using the four levels of evaluation. This study also adds to the body of work on ways to operationalize the four levels of the Kirkpatrick model.

From a practitioner standpoint, this study can provide the underpinnings for developing a marketing model of the workshop. Implications are that the Tavistock product has potential for the business community. From a product standpoint, the study can serve as the basis for further market research to shape a program such that modifications in the product will not compromise its theoretical underpinnings, yet improve the participants' overall satisfaction. Promotion of the product will require careful positioning to ensure attracting significant cost/beneficial return on investment.

A more detailed exploration of the perceived outcomes related to a market survey of the identified needs in executive development will provide for product positioning commensurate with customers' value requirements. Q-methodology provides a simple model for measuring not only changes in authority perceptions but any outcome of a subjective nature that might be desired or determined as an objective: improved understanding of leadership, listening skills, team dynamics, or collaboration skills, to name but a few. The measurement model could be customized for each workshop to provide immediate feedback to the participants or long-term reports or both. Although a complete market opportunity analysis is desirable, initial studies have

shown that this method of leadership training can contribute to an experiential process of individual learning and, as such, has the potential for organizational transformation.

Limitations of the Study

One limitation of this study was the qualitative measurement of behaviors and improvement of business results provided by self-report in the final questionnaire (Levels 3 and 4 of the Kirkpatrick model). Although these qualitative measures enriched the understanding of outcomes, more sophisticated designs are required to adequately measure Level 2 (behavioral changes) and Level 3 (business outcomes).

The concourse for Q-statements comprised opinions and statements of self-reference in categories that were operant or functional for the P-sample, or workshop participants. Once the Q-statements had been developed from the literature and evaluated by external executives, the final 30 statements were determined to provide unique insights into the richness of participants' subjectivity. They represented three mental models from the two perspectives of internal and external locus of control. The concourse could have been expanded to provide greater breadth of the concept of authority relations relative to the mental models of dependency, counterdependency, and interdependency, had there been more time for in-depth interviews prior to Q-statement development. While the factors extracted represent participants with similar perspectives

based on the Q-statements they sorted, understanding and interpretation of these factors as three mental models might have benefited from a more expansive Q-sort.

Implication for Social Change

This study sought to deepen the understanding of effective executive development, particularly with respect to self-awareness and authority relations, in order to assist executives in overcoming interpersonal behaviors in authority relationships that are ineffective or block their leadership ability, foster changes in their worldviews, build self-confidence, and cause them to take the initiative in leadership and self-management (Conger, 1992). Because little was known about the process of authority (Heifetz, 1994), how authorizing and deauthorizing processes work in organizations (Katz & Kahn, 1994), and what changes in understanding of authority relations are experienced by participants in a Tavistock learning event, this study sought to fill the gap by providing a basis for better understanding change in authority relations in work arrangements.

Evaluating effectiveness of the program from a customer satisfaction standpoint in an organizational training context with the use of the Kirkpatrick model (1967, 1998) countered the criticism that human-relations training does not have obvious application to real work. Brcause the Kirkpatrick model is widely used by the business community, evaluation of this workshop using this model may bring

acceptance and validation of the program by corporations. The addition of the qualitative approach enriched the study and permitted interpretations that will further the understanding of the results by the business practitioner.

This study explored the psychological roots of leadership, the crucial dynamics of authority relationships, and the possibility of changing mental models of authority relationships with an experiential model of learning. Although experiential learning has significant support in the education field and the Tavistock model is employed throughout the world in business, academia, and psychology, there is limited research on the learning outcomes of this approach, particularly in a business environment. This study adds to the body of knowledge about experiential learning and the changes one might expect as a result of participation in an experiential workshop.

Changes in mental models of authority relationships, as perceived by the participants and evaluated through the triangulation of methods, represent learning outcomes that encourage a vision of usefulness and further commercialization of the workshop in the business community. A concerted effort at commercialization of this type of learning approach could provide companies with training opportunities for their employees that are consistent with adult learning theory. The Tavistock style of experiential learning shows a preponderance of the characteristics identified as important by adult learning theorists in that it provides a holding environment in which

safely to explore the unconscious, the source of creativity and effective leadership (Koestenbaum, 1991); to work in real time as the dynamics of group processes are happening; and to practice reflection, so that past events can be brought to a conscious level and used for future thinking, feeling, and behaving.

It is also noteworthy that experiential learning methods, which integrate the cognitive, affective, and behavioral dimensions of learning into one process, have been shown consistently to lead to long-term changes in behavior (Bandura, 1977). Therefore, the results of this study have the potential to support an effective approach to evoke change as part of leadership development programs, particularly as they relate to the enhancement of emotional competencies that are exigent personal capabilities associated with the ability to change.

The formal assessment models for experiential education are under broad attack because traditional assessment procedures, which rely on indirect measures of learning, may be misleading indices of occupation or task readiness (Jackson & MacIsaac, 1994). The traditional approaches to outcome measurement reveal what the learner knows but not how he or she will use what was learned. This study incorporated an applied learning phase where participants in the workshop addressed an important work issue relative to any change they perceived. Several participants focused on that issue and reported in interviews and the questionnaire scenarios where the learning was successfully used. These reported new approaches to

work situations, thus providing the supporting documentation organizations need to justify their extensive expenditures for training.

Finally, this study incorporated what Gardner (1993) offered as two important assessment strategies for learning or product assessment. First, Q-methodology provided the formal assessment, "an objective, decontextualized form of assessment, which can be adopted widely with some assurance that similar results will be obtained" (p. 162). Second, personal interviews and a survey modeled after the Kirkpatrick (1967, 1998) approach to training evaluation relate well to Gardner's (1993) apprenticement assessment, which includes subjective standards and expectations "which [are] implemented . . . within a naturally occurring context and [in] which the particulars of a craft are embedded" (p. 162). This rather flexible, contextually situated, and individualized form of assessment (such as the personal interviews and the Kirkpatrick-style survey of this study) is especially appropriate for experiential learning (Lewis & Caffarella, 1994). The triangulation of methods in this study added to the body of knowledge on change in evaluating outcome measures.

In summary, the results of this study provide the following implications for social change: (a) a better understanding of the psychological underpinnings of authority relations, (b) the potential for an improved and more effective experiential training program for business executives, (c) a better understanding of the outcomes of experiential education, and (d) a method of evaluating the outcomes of

experiential education as it relates to changes in mental models of authority relationships.

Recommendations for Future Research

Adult learning theory suggests that the recognition of context is imperative in learning and cognition (Wilson, 1993). Traditional training and development programs in the business community are primarily classroom-style lectures (ASTD, 1997). Although there is a trend to use some interactive strategies, most programs treat learning as an individual and isolated enterprise, which is not commensurate with adult learning theory. Experiential learning that links the instructional setting to real-world situations, mimicking authentic activities, can be a powerful learning opportunity closely linked to long-term change processes (Bandura, 1977).

The Tavistock model is designed as an opportunity to study behavior in a microcosm of organizational life and, when coupled with application to real work situations, can be a powerful learning experience; it has been highly successful in other fields of work. This study indicated that the Tavistock model has the potential to be a powerful learning method in the business environment.

However, an overwhelming, paradoxical theme, which may have had a negative impact on this group of participants, was their perception that the faculty was so rigid, unavailable, and unengaging that it was difficult for many to get beyond the emotions associated

with this impression and work on the task. Although a few of the participants were able to recognize the role of the faculty in their learning process, several suggested that a more facilitative approach, while still maintaining boundaries, might have accelerated their learning, limited the number of casualties, and allowed for greater advocacy of the program. These perceptions prompt one to ask the following questions: Does the hostility evoked by this faculty stance mobilize more individuals than it deters? And even if the hostility serves to mobilize growth in the participants, but they do not recognize the process as effective, how valuable is it for the expansion of the model into the business community?

Other researchers have suggested similar research by "altering the design and roles to approximate more typical organizational situations" (Frugé & Bell, 1997, p. 219) or by the "acceptance or integration of the 'basic assumption' mode of pairing as helpful in the consultant/leader role" (Lipgar & Struhl, 1995, p. 58). However, this study adds another level in that it seeks to understand the personal meaning this perspective held for the participants in this study, which might lead to a more sophisticated cognitive framework for future programs.

One primary work form with which the participants are closely associated is that of interorganizational collaborative arrangements, such as partnerships, alliances, or cross-functional teams, either for business concerns or working with social issues. These are structures

fraught with ambiguities and complexities in both leadership and membership; they continually change either because of external pressures or changes within the member organizations (Huxham & Vangen, 2000). To get the collaborative advantage requires significant managerial skill in all of the individual participants and an indefinite period of nurturing the process (Carlie & Christie, 1992).

Because participants in these programs come from organizations where collaborative or cooperative learning formats are *de rigueur* and the Tavistock model represents working in a microcosm of their environment, it seems that the *holding* environment of Tavistock would lend itself to being designed specifically to create an impression of greater safety, while containing both the surprise of novel context and the strength of socialized deference to role authority. The enacted organizing role and authority of the leaders in this study may have presented a confounding variable because of the participants' pronounced counterdependent stance, thus mitigating the perceived satisfaction of the participants. Even though this study indicates that the approach taken by the faculty was effective, perception is reality, and if the participants do not feel satisfied with their learning, the future of a program of this type in the business community will be limited.

Future research might consider measuring participant outcomes based on the various personal styles of the faculty. Because role authority is most salient in group processes, Alderfer (1995)

suggested that personal style and dynamics evoke either consciously or unconsciously the behavior of individual faculty and thus the perceived learning by the members. He identified four roles group leaders might take: (a) the high priest, (b) the magician, (c) the participant member, and (d) the exemplary leader.

Distant high priests or priestesses place themselves outside the group, recognizing that they are not participants but have special training to manage the activities of the workshop from a different perspective than the participants. The danger comes in when the role suggests to participants that the leader is above being human. Consciously or unconsciously, these leaders adopt the role as a defense against their own feelings of fear and inadequacy. In the name of interpretation, which may be heard as pronouncements or the voice of the oracle, they project their own feelings onto the group and contribute to the difficulty in participant learning. This limiting role often appears when the leader is relatively silent at the start of the group. However, its negative effect can be minimized when the leader recognizes the tendency to feel superior and uses his or her skills to assist member learning with language or tone that is not condescending.

Emotionally engaging magicians accept the request for a messiah or the familiar manager hero and in turn tell the participants what they are thinking and feeling, while receiving "temporary gratification by the adulation associated with members' turning their psychological

lives over to them" (Alderfer, 1995, p. 169). Although the faculty does form strong relationships with the participants and the group as a whole and change can occur in the awareness of self and group dynamics, the leader is using the group for personal gratification. The casualties occur when projected parts of the leader's self causes participants to reject the individual who is accepting the negative projections.

The member or participant leader acts as a peer within the group either by elevating the other members to a place of equal status or by implying that he or she is a participant. Alderfer (1995) suggested that this type of leader is not likely to take the leader's role in interpreting scapegoating dynamics but will instead collude with the group in scapegoating by relinquishing his or her responsibility of leadership.

Model or exemplary member leaders may have characteristics that would be of benefit for the participants to emulate, but there is the danger of confusion between the boundaries of the leader and the participants. Because leadership roles may consciously or unconsciously create identity figures for the participants, the leader's challenge is not to invite the participants to model his or her behavior but to find their own identity and authority.

Any one of these roles may have been played in this study by faculty or participants as they exercised their own leadership skills. Further research into faculty style and participant outcome would

assist in answering the question: What is the most effective style for the greatest perceived outcome? Such inquiry might also pair various faculty styles with various mental models of authority in the participants.

Granda (1992) studied the various executions of prescribed roles by consultants in a Tavistock conference and their own and members' affective responses to authority in the small-group context. Granda audiotaped and examined 10 small Tavistock study groups, totaling 95 members and 10 consultants, to determine the relationship between the consultants' stance, the quality of their verbal consultations, and the affective responses of the members. Findings supported the assumption that personal aspects of authority figures have an impact on the group members' emotional experiences and personal aspects of group members have an equally important impact on the individual in authority as well as on other group members. Granda concluded that greater emphasis must be placed on the interactive process between the participants and the faculty and that the consultants cannot "hide behind the conference structure and attribute all their behaviors to constraints of the role" (p. 94). Granda suggested that future conferences might include organized training events for the consultants' introspection and dissemination of ideas, as well as a structured group time during the conference for consultants and members to analyze the manner in which they defined and executed their particular roles.

Another area for future research is the language of the workshop. In the questionnaire, 60% of the responders expressed that the language was unclear or ambiguous. Unaided in the interviews, participants discussed the difficulty in understanding the interpretations made by the faculty. Review of the literature on knowledge transfer between academicians and practitioners might assist in understanding this phenomenon. Although many of the faculty were employed in organizational and coaching roles, several were psychologists, either now or formerly associated with academic institutions, and the participants believed the language to be their jargon.

Rynes, Bartunek, and Daft (2001) suggested that how academicians communicate when trying to reach practitioners influences the transfer of knowledge. They posit that the typical way of presenting academic information through objective, declarative statements is relatively ineffective for practitioner learning. Practitioners are either less motivated or less able to process information in this format and require greater interpretation. Although the interventions of the faculty in the Tavistock approach are their interpretations of the overt and covert processes of group activity, they are usually filled with explanatory metaphors. This group, however, considered the metaphors difficult to interpret and filled with so-called psychobabble. A future research question might be this: To what extent can the language of the faculty be modified to become

more conducive to learning without sacrificing the integrity of the model? A study to identify the common metaphors of the business community might also serve to alleviate the language problem.

Future research might also include more systematic criteria for creating person samples. This study focused on the mere availability of individuals who self-selected as business executives. Although the participants had titles that in the broadest sense were business executives, a more factorially designed P-sample that overtly attempted to sample people with the same titles or in a specific industry might have minimized the difficulty in correlation between factors over time (McKeown & Thomas, 1988).

Epilogue

This study extended over many months, covered a plethora of theories and experiences, and eventually returned to where it began: a cacophony of voices. Leadership and organizational management theories and the popular press are expounding on the competencies required to lead and follow in a world of increasing global competitiveness and downsizing, rightsizing, or reengineering strategies, which often are fraught with questionable business ethics. Conger's (2000) overview of leadership development focused on competency models, 360-degree feedback, and action learning processes as a means to managing the challenges facing the leadership development field. Best practices of major companies, such as Allied

Signal, Johnson and Johnson, and Motorola, link competitive and business challenges of globalization, productivity improvement, and competitive pressures to the design of leadership development initiatives in an effort to develop such major competencies as team building, business knowledge, and conceptual thinking (Giber, Carter, & Goldsmith, 2000). Some of the best leadership development practices even include yoga, meditation, and other work-life strategies. It cannot be denied that these approaches seem to contribute to successful business outcomes, but the fulcrum of an adaptive organization is the personal management abilities of employees at all levels.

DeWaele, Morval, and Sheitoyan (1993) suggested that at the heart of leadership development is the ability to manage oneself, a dynamic process that

> focuses on the individual as he [*sic*] tries to gain knowledge of himself and his environment as he tries to bring about or restore harmony to the process of his own evolution . . . and to his interactions with the processes that surround him. (p. 23).

Leaders and followers who achieve clarity of their own emotions have a deeper insight into their own motivating forces and can recognize that others have their own compelling mental models and reactions.

From this study it appears that the experiential approach of the Tavistock model can create the intrapsychic space for some individuals to entertain nontraditional perspectives of leadership and their own authority. It provides an opportunity for examining the self, and for those willing to experiment, an experience of discovery and

increased self-awareness. It also predisposes one to greater attentiveness to one's own and others' mental models. Bion (1961) stated that "leaders who [show] neither fight nor flight are not easily understood" (p. 65). Rather than jumping on the latest management-training fad in pursuit of competitive advantage, one might experiment with proven models that take one out of the personal comfort zone and into a new consciousness, a new way of leading, that offers creative alternatives to fight or flight. Thus, this study ends with the recommendation by Václav Havel:

> For the real question is whether the "brighter future" is really always so distant. What if, on the contrary, it has been here for a long time already, and only our own blindness and weakness has prevented us from seeing it around us and within us, and kept us from developing it?

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Appendix A

Research Study: The Effectiveness of Experiential Education in Executive Development

Consent to Participate

You are invited to participate in a research study evaluating executive development using an adult education method. You were selected as a possible participant because you responded to a recruiting program or were recommended by someone in your company. We ask that you read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by Marlene Handley Rodenbaugh, a doctoral candidate at Walden University.

Background Information:
The purpose of this study is: To determine the effectiveness of an experiential education working conference

Procedures:
If you agree to be in this study, we would ask you to do the following things:

1. Participate in the 3-day working conference where you will be part of group activities for the purpose of learning about leadership, authority, and change.
2. The sorting of statements immediately before and after the conference, and at the end of the 6 weeks.
3. Participate in a personal interview immediately after the conference.
4. Complete a self-report questionnaire at the end of the program.

Risks and Benefits of Being in the Study:
The study possesses the following risks: Experiential learning events of this type may be stressful, so individuals who are ill or experiencing a period of personal difficulty may wish to forgo attendance. The benefits of participation are a potential to learn to lead change rather than respond; mobilize collaboration through better relationships; integrate emotional and strategic action for effective change processes; increase productivity; expand awareness and understanding of personal, group, and organizational phenomena, such as leadership, followership, power, and authority; and the rational and irrational dynamics affecting organizational life.

Compensation:
Compensation is in the form of a reduced conference fee, which is less than the usual fee for the same type of program.

Confidentiality:
The records of this study will be kept private. In any sort of report that might be published, I will not include any information that will make it possible to identify a subject. Research records will be kept in a locked file; only the researcher(s) will have access to the records. Tape recordings will be maintained under the same conditions.

Voluntary Nature of the Study:
Your decision whether or not to participate will not affect your current or future relations with Walden University. If you decide to participate, you are free to withdraw at any time without affecting those relationships.

Contacts and Questions:
The researcher conducting this study is Marlene Handley Rodenbaugh and her advisor is Dr. Gary Gemmill. You may ask any questions you have now. If you have questions later, you may contact them at 3760 Concord Road, Doylestown, PA 18901, telephone number: 215-348-1876. You will be given a copy of this form to keep for your records.

Statement of Consent:
I have read the above information. I have asked questions and received answers. I consent to participate in the study.

Signature:_____

Date:_____

Signature of Investigator:_____

Date:_____

Appendix B

Demographic Data for Participants Completing Workshop

27 Total

Age and Gender	Male	Female
	(Total: 9)	(Total: 18)
20 - 29		2
30 - 39	1	4
40 - 49	3	7
50 - 59	1	3
Unknown	4	2
Race		
African American	1	
Asian	1	
Caucasian	6	17
Latino/Hispanic	1	1
Private/Public		
Private Sector	6	18
Public	1	2
Private Consultants	2	6
Previous Attendance Tavistock	2	2

Appendix C

Permission for Use Spector's Locus of Control

E-mail response from Paul Spector - August 30, 2000

Dear Marlene:

You are welcome to use the WLCS in your research. You can find a downloadable copy of the scale and information on my website (URL below). From the main page go to scales.

Paul E. Spector
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Overview of the Work Locus of Control Scale

Paul E. Spector

The Work Locus of Control Scale (WLCS) is a 16-item instrument designed to assess control beliefs in the workplace. It is a domain specific locus of control scale that correlates about .50 to .55 with general locus of control. The format is summated rating with six response choices: *disagree very much, disagree moderately, disagree slightly, agree slightly, agree moderately, agree very much*, scored from 1 to 6, respectively. Total score is the sum of all items, and ranges from 16 to 96. The scale is scored so that externals receive high scores. Internal consistency (coefficient alpha) generally ranges from .80 to .85 in the English language version. Test-retest reliability for a year was reported as .60 by Moyle (1995). The scale has been shown to relate to several work variables, including job performance and job satisfaction. It also relates to counterproductive behavior and organizational commitment. Details of scale development can be found in Spector (1988) and Spector (1992). See the bibliography for the citations, as well as a list of studies that used the WLCS. The 1988 article is the appropriate citation for the scale.

U.S. Norms

U.S. norms are based on 3969 people from 31 samples. Mean of samples is 39.9, with a mean standard deviation across samples of 10.0, and a mean coefficient alpha of .83.

Work Locus of Control Instrument

Work Locus of Control Scale

The following questions concern your beliefs about jobs in general. They do not refer only to your present job.	Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
1. A job is what you make of it.	1	2	3	4	5	6
2. On most jobs, people can pretty much accomplish whatever they set out to accomplish	1	2	3	4	5	6
3. If you know what you want out of a job, you can find a job that gives it to you	1	2	3	4	5	6
4. If employees are unhappy with a decision made by their boss, they should do something about it	1	2	3	4	5	6
5. Getting the job you want is mostly a matter of luck	1	2	3	4	5	6
6. Making money is primarily a matter of good fortune	1	2	3	4	5	6
7. Most people are capable of doing their jobs well if they make the effort	1	2	3	4	5	6
8. In order to get a really good job, you need to have family members or friends in high places	1	2	3	4	5	6
9. Promotions are usually a matter of good fortune	1	2	3	4	5	6
10. When it comes to landing a really good job, who you know is more important than what you know	1	2	3	4	5	6
11. Promotions are given to employees who perform well on the job	1	2	3	4	5	6
12. To make a lot of money you have to know the right people	1	2	3	4	5	6
13. It takes a lot of luck to be an outstanding employee on most jobs	1	2	3	4	5	6
14. People who perform their jobs well generally get rewarded	1	2	3	4	5	6
15. Most employees have more influence on their supervisors than they think they do	1	2	3	4	5	6
16. The main difference between people who make a lot of money and people who make a little money is luck	1	2	3	4	5	6

Appendix D

Q-Statements

It is the leader's responsibility to provide direction for the group. 1

It is important for me to know what is expected by the leader and the group before I make suggestions. 7

The group should not discuss issues in the group that it would not discuss outside the group. 13

It is easier to accomplish our objectives in the group when we do not get bogged down with personal details. 19

When I am working with strong leaders, I try to give them what they want. 25

Most group decisions are driven by personal relationships. 2

The leader's major activities are intended to keep control of the group. 8

I like a leader who acts like just another member. 14

Group members should say what they feel even though it may hurt some one's feelings. 20

I think the group should not accept a leader's suggestions any more readily than a member's suggestions. 26

There is some amount of luck in successful group collaboration. 3

A productive group shares in and expresses the importance of the project. 9

It is important to me for the group to reach consensus on an idea or project. 15

A primary responsibility of the leader is to listen and inspire the others to make suggestions. 21

The idea of a self-directed work group is energizing to me. 27

I readily input into establishing a working routine for the group. 4

I am likely to stick my neck out with a suggestion as long as it fits within the groups charter or objectives. 10

I am willing to discuss whatever issues the group thinks important. 16

I enjoy planning the personal aspect of group activities with other members of the group. 22

I am inclined to support the suggestions of the leader even when I have different ideas. 28

I insist on making my own decisions. 5

I enjoy testing my leadership skills against those of the other members. 11

I don't pay much attention to what the leader does. 17

When I am upset with the group I refrain from letting the group members know. 23

I like to exchange private comments with certain members of the group about what is happening. 29

With almost any project, the group can accomplish what ever it sets out to. 6

It is important to me to be involved in the development of a plan of action for a group project. 12

I will disagree with the leader and other team members when the situation calls for it. 18

I try to elicit others to participate in making suggestions 24

I feel some control of the outcome in a work group even when the situation is chaotic.. 30

Appendix E
Conditions of Instructions

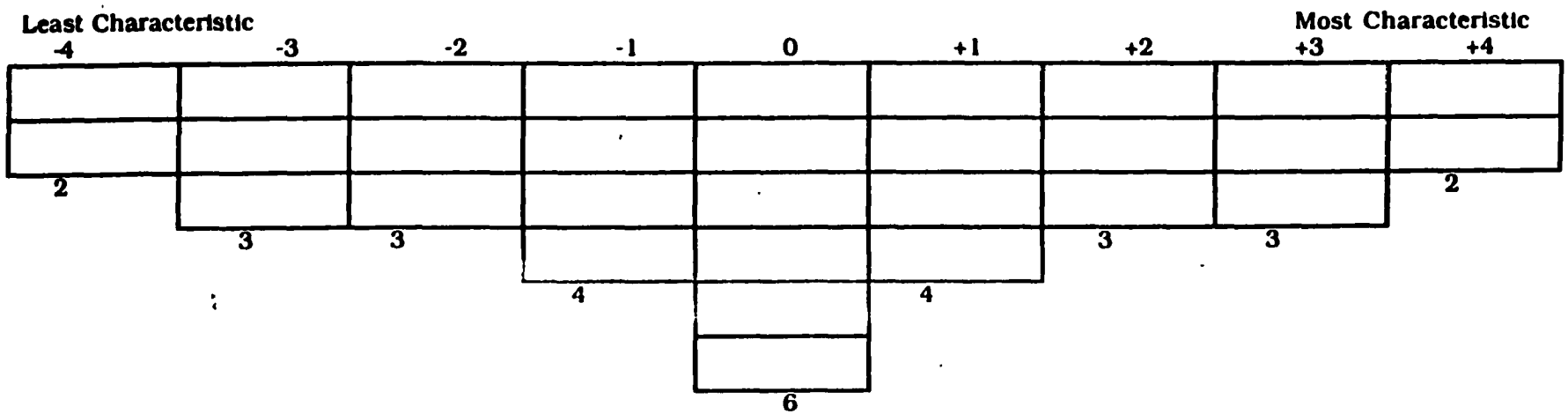
Read through the statements on all 30 cards separating them initially as you go into two or three piles. Place on your right those that best represent your thoughts and feelings; place on your left those that are least characteristic of your thoughts and feelings. (You may change your rankings as you become familiar with all the statements).

1. Read through the *most characteristic* pile on your right; separate them into smaller piles of "most" or "almost" characteristic.
2. Then start with those on the left and do the same thing.

3. Working from the extremes toward the middle (those you consider to be more neutral), return to the stack on your left and pick the two statements you consider to be the least characteristic. Next, identify three cards you think are almost as important, then the three you want to rank next, then the next four, then finally six.
4. Repeat this process working from the other extreme of most characteristic.

5. Please review your choices from most characteristic to least, arranging the exact number of cards for each column indicated in the grid. (The vertical order in the column is unimportant).When you are satisfied with your choices and that you have exactly the right number of cards in each column, please record the item numbers on each card in the boxes provided for each column.

6. It is important to have each statement's item number recorded correctly and not let an item number appear twice on the grid.



Numbers 2 – 6 at the bottom of each column indicate the number of statements you should place in each column

APPENDIX F

Interview Questions

1. If I were a colleague, what would you say about your Leadership Learning System workshop experience? (Probe for thoughts, feelings, and opinions.)

2. What was your understanding about authority relationships during the workshop? Did these attitudes change as a result of the workshop?

3. Why did you come to this workshop? What were the hot buttons that attracted you?

4. What did you learn from the workshop? How can you apply it to your work situation? Give examples of learning.

5. What are your thoughts and feelings about the utility of this type of workshop for employee development?

6. What role did the faculty play in the learning? What behavior on their part was most helpful? What behavior on their part, did you feel, detracted or hindered your learning? What role did other workshop members play in your learning?

Appendix G

Leadership Learning System Workshop Questionnaire

The following questions relate to the Leadership Learning System Workshop. Your personal responses will remain confidential and will be combined with others to provide an understanding of the outcomes of the workshop. Be as candid as you can in your responses. Circle the number which best represents how you feel about the statement.	Strongly Agree	Moderately Agree	Slightly Agree	Neutral	Slightly Disagree	Moderately Disagree	Strongly Disagree
1. The workshop met my expectations.	1	2	3	4	5	6	7
2. The workshop objectives were clearly stated and used understandable language.	1	2	3	4	5	6	7
3. The workshop met the defined objectives.	1	2	3	4	5	6	7
4. The faculty provided direction in a clear, understandable, and professional manner.	1	2	3	4	5	6	7
5. I will be able to apply much of my learning to my job.	1	2	3	4	5	6	7
6. I have a better understanding of the dynamics of team interactions, as a result of the workshop.	1	2	3	4	5	6	7
7. It is difficult to describe what I learned at the workshop.	1	2	3	4	5	6	7
8. I feel that the workshop will help me to be more effective in my job.	1	2	3	4	5	6	7
9. Other participants contributed to my learning.	1	2	3	4	5	6	7
10. This type of workshop is not an important educational experience for someone in my field.	1	2	3	4	5	6	7
11. I have a better understanding of authority relationships, as a result of the workshop.	1	2	3	4	5	6	7
12. The workshop was an enjoyable experience such that I was motivated to learn.	1	2	3	4	5	6	7
13. I would recommend this workshop to others in my company or practice.	1	2	3	4	5	6	7
14. The faculty facilitated my learning?	1	2	3	4	5	6	7

Answer the following as candidly as possible:

15. What areas of the workshop were most beneficial to you?

16. What specifically did you learn at the workshop that you could apply to your work situation? Give examples.

17. What would have made the workshop more effective?

18. How will your learning translate to improved performance on the job?

Appendix H

Eigenvalues for Three Waves

Rotation Sums of Squared Loadings

	Wave 1			Wave 2			Wave 3		
Factor	Total	% V	% C	Total	% V	% C	Total	% V	% C
1	4.208	19.129	19.129	4.222	19.190	19.190	3.038	13.810	13.810
2	2.835	12.887	32.017	1.887	8.578	27.768	2.838	12.899	26.709
3	2.499	11.361	43.378	1.622	7.374	35.142	2.653	12.057	38.766
4	1.972	8.964	53.342	1.475	6.706	41.848	2.024	9.201	47.967
5	1.844	8.381	60.723	1.467	6.669	48.517	1.749	7.948	55.915
6	1.170	5.318	66.041	1.341	6.096	54.613	1.657	7.533	63.448
7				1.187	5.394	60.008	1.570	7.137	70.585

Note. % V = Percentage of variance. % C = Cumulative percentage.

Appendix I
Factor Scores

	Statement	a2	a3	a4	a5	a6
1 DE	It's the leader's responsibility to provide direction for the team	1	0	0	3	1
2 CE	Most team decisions are driven by personal relationships	1	1	2	-2	2
3 IE	There is some amount of luck in successful team collaboration	0	0	3	-1	1
4 DI	I readily input into establishing a working routine for the team	-3	1	-1	0	0
5 CI	I insist on making my own decisions	-3	1	1	0	2
6 II	With almost any project, the team can accomplish whatever it sets out to	1	-4	1	1	1
7 DE	It's important for me to know what is expected by the leader & team before I make suggestions	1	3	0	2	-2
8 CE	The leader's major activities are intended to keep control of the team	1	2	-2	3	-1
9 IE	A productive team shares in and expresses the importance of the project	2	-3	1	-3	-2
10 DI	I am likely to stick my neck out with a suggestion as long as it fits within the team's charter or objectives	-2	-3	0	2	3
11 CI	I enjoy testing my leadership skills against those of the other members	-1	3	2	1	-1
12 II	It is important to me to be involved in the development of a plan of action for a project	-4	0	4	-1	-3
13 DE	The team should not discuss issues in the team that it would not discuss outside the team	1	1	-3	1	0
14 CE	I like a leader who acts like just another member	1	3	-2	-4	0
15 IE	It is important to me for the team to reach consensus on an idea or project	0	-2	1	-1	-2
16 DI	I am willing to discuss whatever issues the team thinks important	2	2	-2	-1	2
17 CI	I don't pay much attention to what the leader does	1	2	0	-2	1
18 II	I will disagree with the leader and other team members when the situation calls for it	-3	0	-3	-1	-1
19 DE	It is easier to accomplish our objectives in the team when we do not get bogged down with personal details	0	-1	1	1	-2
20 CE	Team members should say what they feel even though it may hurt some one's feelings	1	-1	-3	0	4
21 IE	A primary responsibility of the leader is to listen and inspire others to make suggestions	0	-3	-2	-1	-3
22 DI	I enjoy planning the personal aspect of planning team activities with other members of the team	3	0	0	-3	0
23 CI	When I am upset with the team, I refrain from letting the team members know	2	1	3	0	2
24 II	I try to elicit others to participate in making suggestions	0	-1	-2	0	-2
25 DE	When I am working with strong leaders, I try to give them what they want	2	2	1	4	-4
26 CE	I think the team shouldn't accept a leader's suggestions any more readily than a member's suggestions	-1	-3	-4	1	0
27 IE	The idea of a self-directed work team is energizing to me	0	-1	0	-3	-1
28 DI	I am inclined to support the suggestions of the leader even when I have different ideas	1	0	3	3	1
29 CI	I like to exchange private comments with certain members of the team about what is happening	-1	1	0	0	2
30 II	I feel some control of the outcome in a work team even when the situation is chaotic	-2	0	-1	0	1

APPENDIX J

Groups with Factor Scores and Factor Arrays

Wave 1

Group 1 (a1)

Id		Q-Statements	Factor Scores for Factors 1	2	3	4	5	6
CI	5	It is most characterized by: I insist on making my own decisions	3	-3	1	1	0	2
		and is least characterized by:						
DE	1	It's the leader's responsibility to provide direction for the team	-4	1	0	0	3	1
DI	1 6	I am willing to discuss whatever issues the team thinks important	-4	2	2	-2	-1	2

Group 2 (a2)

It is most characterized by:

DI	2 2	I enjoy planning the personal aspect of planning team activities with other members of the team	0	3	0	0	-3	0
		and is least characterized by:						
DI	4	I readily input into establishing a working routine for the team	-2	-3	1	-1	0	0
II	18	I will disagree with the leader and other team members when the situation calls for it	-2	-3	0	-3	-1	-1
CI	5	I insist on making my own decisions	3	-3	1	1	0	2
II	12	It is important to me to be involved in the development of a plan of action for a project	-1	-4	0	4	-1	-3

Group 3 (a3)
It is most characterized by:

CE14	I like a leader who acts like just another member	2	1	3	-2	-4	0
DE7	It's important for me to know what is expected by the leader & team before I make suggestions	-1	1	3	0	2	-2
CI11	I enjoy testing my leadership skills against those of the other members	0	-1	3	2	1	-1

and is least characterized by:

DI 10	I am likely to stick my neck out with a suggestion as long as it fits within the team's charter or objectives	-3	-2	-3	0	2	3
CE 26	I think the team shouldn't accept a leader's suggestions any more readily than a member's suggestions	2	-1	-3	-4	1	0
IE21	A primary responsibility of the leader is to listen and inspire others to make suggestions	0	0	-3	-2	-1	-3
IE9	A productive team shares in and expresses the importance of the project	-1	2	-3	1	-3	-2
II 6	With almost any project, the team can accomplish whatever it sets out to	0	1	-4	1	1	1

Group 4 (a4).
It's most characterized by:

II12	It is important to me to be involved in the development of a plan of action for a project	-1	-4	0	4	-1	-3
CI23	When I am upset with the team, I refrain from letting the team members know	2	2	1	3	0	2
DI28	I am inclined to support the suggestions of the leader even when I have different ideas	2	1	0	3	3	1
IE 3	There is some amount of luck in successful team collaboration	1	0	0	3	-1	1

and least by:

DE	1 3	The team should not discuss issues in the team that it would not discuss outside the team	2	1	1	-3	1	0
CE	2 0	Team members should say what they feel even though it may hurt some one's feelings	2	1	-1	-3	0	4
II	1 8	I will disagree with the leader and other team members when the situation calls for it	-2	-3	0	-3	-1	-1
CE	2 6	I think the team shouldn't accept a leader's suggestions any more readily than a member's suggestions	2	-1	-3	-4	1	0

Group 5 (a5)

It's most characterized by:

DE	2 5	When I am working with strong leaders, I try to give them what they want	-1	2	2	1	4	-4
DI	2 8	I am inclined to support the suggestions of the leader even when I have different ideas	2	1	0	3	3	1
DE	1	It's the leader's responsibility to provide direction for the team	-4	1	0	0	3	1
CE	8	The leader's major activities are intended to keep control of the team	2	1	2	-2	3	-1

and least by:

IE	9A	productive team shares in and expresses the importance of the project	-1	2	-3	1	-3	-2
DI	2 2	I enjoy planning the personal aspect of planning team activities with other members of the team	0	3	0	0	-3	0
IE	2 7	The idea of a self-directed work team is energizing to me	-1	0	-1	0	-3	-1
CE	1 4	I like a leader who acts like just another member	2	1	3	-2	-4	0

Group 6 (a6)
It's most characterized by:

CE	2 0	Team members should say what they feel even though it may hurt some one's feelings	2	1	-1	-3	0	4
DI	1 0	I am likely to stick my neck out with a suggestion as long as it fits within the team's charter or objectives	-3	-2	-3	0	2	3

and least by:

II	2 1	A primary responsibility of the leader is to listen and inspire others to make suggestions	0	0	-3	-2	-1	-3
II	1 2	It is important to me to be involved in the development of a plan of action for a project	-1	-4	0	4	-1	-3
DE	2 5	When I am working with strong leaders, I try to give them what they want	-1	2	2	1	4	-4

Wave 2
Group 1 (b1)
It is most characterized by:

CI	2 3	When I am upset with the team, I refrain from letting the team members know	2	-2	-1	0	0	2	-1
CI	5	I insist on making my own decisions	2	-1	1	-3	1	-1	0
DI	2 8	I am inclined to support the suggestions of the leader even when I have different ideas	2	0	0	0	-2	-2	0

and least by:

II	1 8	I will disagree with the leader and other team members when the situation calls for it	-3	-1	0	1	2	-1	-2

Group 2 (b2).
It's most characterized by:

CE	2 0	Team members should say what they feel even though it may hurt some one's feelings	-1	3	-2	0	-1	0	1

and least by:

CI	2 3	When I am upset with the team, I refrain from letting the team members know	2	-2	-1	0	0	2	-1
II	2 4	I try to elicit others to participate in making suggestions	0	-2	-2	-1	-3	1	0
IE	2 1	A primary responsibility of the leader is to listen and inspire others to make suggestions	-2	-2	1	-1	0	0	0

Group 3 (b3)
It's most characterized by:

IE	3	There is some amount of luck in successful team collaboration	-1	-1	3	3	3	2	1

and least by:

II	1 2	It is important to me to be involved in the development of a plan of action for a project	1	-1	-2	-2	-1	1	2
CE	2 0	Team members should say what they feel even though it may hurt some one's feelings	-1	3	-2	0	-1	0	1

Group 4 (b4)
It's most characterized by:

IE	3	There is some amount of luck in successful team collaboration	-1	-1	3	3	3	2	1

and least by:

CI	5	I insist on making my own decisions	2	-1	1	-3	1	-1	0

Group 5 (b5)
It's most characterized by:

IE	3	There is some amount of luck in successful team collaboration	-1	-1	3	3	3	2	1
CE	8	The leader's major activities are intended to keep control of the team	1	1	2	1	2	-1	-3

and least by:

II	2 4	I try to elicit others to participate in making suggestions	0	-2	-2	-1	-3	1	0
IE	1 5	It is important to me for the team to reach consensus on an idea or project	1	2	-1	-2	-4	0	1

Group 6 (b6)
It's most characterized by:

IE	3	There is some amount of luck in successful team collaboration	-1	-1	3	3	3	2	1

and least characterized by:

DE	2 5	When I am working with strong leaders, I try to give them what they want	1	-1	2	1	-1	-2	1

Group 7 (b7)
It's most characterized by:

II	6	With almost any project, the team can accomplish whatever it sets out to	-1	1	1	-1	0	1	2
II	12	It is important to me to be involved in the development of a plan of action for a project	1	-1	-2	-2	-1	1	2

and least characterized by:

II	1 8	I will disagree with the leader and other team members when the situation calls for it	-3	-1	0	1	2	-1	-2
CE	8	The leader's major activities are intended to keep control of the team	1	1	2	1	2	-1	-3

Wave 3

Group 1 (c1)

It's most characterized by:

CI	23	When I am upset with the team, I refrain from letting the team members know	**4**	0	-1	1	0	2	1

and least characterized by:

CE	20	Team members should say what they feel even though it may hurt some one's feelings	**-3**	2	2	2	0	0	-1
II	18	I will disagree with the leader and other team members when the situation calls for it	**-4**	0	-1	-1	-1	-1	2

Group 2 (c2)

It's most characterized by:

DI	22	I enjoy planning the personal aspect of planning team activities with other members of the team	0	**3**	0	0	1	-1	-1
CI	17	I don't pay much attention to what the leader does	2	**3**	1	0	1	-1	0

and least characterized by:

II	12	It is important to me to be involved in the development of a plan of action for a project	0	**-3**	-2	-1	1	1	1

Group 3 (c3)

It's most characterized by:

DE	7	It's important for me to know what is expected by the leader & team fefore I make suggestions	0	-2	**3**	1	1	0	-1
II	3	I feel some control of the outcome in a work team even when the situation is chaotic	-1	0	**3**	-3	-2	1	-1
	0								

and least characterized by:

DI	16	I am willing to discuss whatever issues the team thinks important	-1	0	**-3**	4	1	-2	0

It's most characterized by:

DI	16	I am willing to discuss whatever issues the team thinks important	-1	0	-3	**4**	1	-2	0
		and least characterized by:							
II	30	I feel some control of the outcome in a work team even when the situation is chaotic	-1	0	3	**-3**	-2	1	-1
Group 5 (c5)									
		It's most characterized by:							
IE	3	There is some amount of luck in successful team collaboration	1	2	1	-1	**3**	-2	-1
		and least characterized by:							
CE	1 4	I like a leader who acts like just another member	2	2	0	0	**-3**	-2	0
Group 6 (c6)									
		It's most characterized by:							
CI	5	I insist on making my own decisions	0	1	-1	-1	1	**3**	2
IE	15	It is important to me for the team to reach consesnus on an idea or project	-1	1	0	-1	-1	**3**	-2
		and least characterized by:							
DE	1	It's the leader's responsibility to provide direction for the team	0	-2	2	-2	-1	**-3**	3

Group 7 (c7)
It's most characterized by:

CI	1	I enjoy testing my leadership skills against those of the other members	-1	2	0	0	2	1	3
DE	1	It's the leader's responsibility to provide direction for the team	0	-2	2	-2	-1	-3	

and least characterized by:

IE	27	The idea of a self-directed work team is energizing to me	-1	1	-2	-1	-1	0	-2
IE	15	It is important to me for the team to reach consensus on an idea or project	-1	1	0	-1	-1	3	-2

APPENDIX K

Interview Vignettes

(Example 1: The following is an example of an interview vignette and coding analysis. This participant is a training consultant).

EXPERIENCE

Hard, brought up dark side, made people dysfunctional...some insights were useful but not a work shop I would recommend

(dark sides) think that people were not taught to be supportive nurturing (like t groups). where faculty could help was brash upset rude and disappointed...feeling hurt

Felt different in leadership and intimacy which was other group I was in. they were competent. When participants didn't have the outside influence of faculty member being involved . . . people worked harder to create environment for people to feel welcome and express themselves....

(no faculty) in room where faculty left after 5 minutes.

Any thing else...useful over lunch discussion...way group members speak up for others members of group. helpful to understand group dynamics...more illuminating....

AUTHORITY RELATIONS

Lot of us went through disgust with authority....how indifferent we are...felt grateful that chosen to be in situation where negative authority issues (counterdependency).

ATTITUDES CHANGE

afterwards...not much change except realization that how debilitating it can be...also realized resistance to teachers and mentors (self awareness). Actually very interest to look at how so often I found someone who is very powerful teacher but will focus on those things that individual has that are not what considered the characteristics. of qualities of perfect teacher...it is a .way of resisting the teaching not the teacher. Occurred after left and returned home (counterdependency).

MOTIVATION

Looking for top quality experiential. workshop...powerful...and way workshop described in brochure felt that may be better than some others. Particularly came because I want to learn how to debrief experiential exercises.

LEARNING

Learned about importance of love people without hard to be effective.

UTILITY

I am reminded about an article I read about different types of experiential learning simulations ....one person wrote on list serve that sometimes you learn from experience. learn that your team members are not team players...are not trustful. As far as employee element I did not find it useful I would not send anyone.

stay through application piece. yes

ROLE FACULTY/PARTICIPANTS IN LEARNING

Huge dislike difficult great insights but such a negative cloud around the methodology starting out stone faced...hard to get that.... Helpful behavior: insights...first group, was actually thrilled to be there thought was going to be like T group . . . Everyone else thought what the hell is this oh no you guys don't know, this is going to be wonderfullllll everything from David was rich helpful, he seemed to listen but the group was so hostile toward each other and particularly towards him ....environment so unpleasant made learning difficult Faculty distracting, behavior: role of staff and hindrance stone face, sitting there is not helpful, don't say anything loving and nice like Groups...they explain to you they are not going to do the work for you -you have to work the work...have a little training up front about how to talk to each other. groups was always hostile....

(Example 2: This participant is an employee in a private corporation)

EXPERIENCE

Invaluable if approach with an open mind. I have a lot of work with the foundation for community encouragement based on the writings of M. Scott Peck.. his approach to building community. . . building the pseudocommunity, chaos, vulnerability and then an emptying process to bring people to community. Found out that those skills brought a lot to people here because in the community building experience everyone signs up and wants to go to those things. In this situation here some people were sent by their bosses and a lot did not know what they were in for where in a community building experience most people are there to build a community with a group of people that they don't know. So I approach each experience like that because my intention is to make a connection because that is what leadership is about making a connection at a real level with people to follow along or to negotiate . . . as it all operates at that level.

Anyway we could have prepped that would have been helpful, By bringing them to a level of vulnerability and establishing that the program will work and trusting that the program will work...lot of these people was a shock to them, they are not at all familiar with this kind of learning, you had a lot of people that leave and you can chuck it up to the fact that they had a lot of problems or didn't want to face certain things. These people are not afraid to flee something that they are not familiar with . . . they do it all the time but one thing that I

offered up at the end. You think that every one learns at your pace and in the time and space boundaries that you have created. but the space and time boundaries that you have set up don't necessarily mean that someone has to experience what you want them to at the close of all this. Some of them might be going through a change a lot sooner and some a lot later than that. Some people might have had some problems and conflicts that they needed to resolve before they could move on and left early. You are making the assumption that your time is their time. You could have dropped three thousand dollars or 10,000 dollars and still walked away early...the question is do they walk away and realize why they are walking away. And if they don't realize there was an opportunity lost in the program. You don't have an opportunity to do exit interviews. You can call them up but they might not be honest with you because they have a lot of feelings that they are juggling sometime but I have thought about how you would prep for retention.

AUTHORITY RELATIONS

I can only speak for myself and then I can share some observations. My self, authority relationships I personally don't have a problem with them in terms of who's and authority and who is not. I was comfortable with the faculty, I was comfortable with different people in the group, I think I exhibited a level of comfort while I was there (Self-awareness) and how other people took it and I was fascinated with how other people took it and that there was such an authority

issue. The presentation from the faculty standpoint was very stern very rigid very impersonal and I think that left people that didn't understand that the faculty was there to simply maintain the boundaries you know what I am saying there doesn't need to be a personality involved. (counterdependent) Whether you love me or hate me these are the boundaries. But a lot of that was unclear and they tried to make personal connections they wanted a loving faculty they wanted a heart warming sympathetic faculty they wanted a nurturing faculty. They wanted all of these types of things that's came out. But I don't think any type of personality would have made a difference because even if you are loving you would have still maintained those boundaries. And it would have still defined the criteria needed to facilitate the events. I don't think that would have mattered.

CHANGES

No, they didn't, not really, not all that much.

ROLE OF FACULTY /PARTICIPANTS IN LEARNING

Um this is interesting I guess I can read some of what was said although it might have been ambiguous to other people, the group was on track with something. But I know for a fact that the group did not feel that way but I understand how this thing works, I understand group behavior. there were people in the group that did not feel they were being given direction and affirmed which becomes very disconcerting and they become very uneasy with that, they don't see a

benchmark and be able to say yes I did it. But a lot is a personal adventure. How do you know when you ride a bike well, some ride it ten feet and they say yah, I did it well and someone else says (unclear) so you don't know. Its kind of a personal thing I did get affirmation from the faculty that yes you were on track I could see that the faculty was deliberately trying to not single out people to give kudos to people because I can see that that creates a competitive element and that people will be left out. I was in the gender group, I didn't have the great desire to go in a sit with the faculty because I already knew what you were trying to do (counterdependency). But at the same time I wasn't adverse to go in. At one time there was a hypothesis proposed so I understood. One of things the faculty defaulted on is that the people understood group dynamics before they came in. A lot don't. The faculty can better articulate that the group is in different phases, not individuals...but where the group is because then at the end if it truly did come together at the end as a functioning organization, the faculty could give its evaluation and the group could agree but there was still a lot of disagree on where they were when they left. And a lot of it was left up to individuals to see how they related to individuals. I received a couple emails who just wanted closure from this whole thing

One other thing I think people need to know that they are going to be uncomfortable with the adventure and that there will be times when they want to leave that is normal they might have been more

comfortable with the program and not left. Like on of the guys who got a call from his boss and reinforced that his feeling of leaving was ok but to stay with it because it will be worth it

UTILITY

You go through an experience you learn that you operate at different levels. The utility that I found is that one I do hear some one come in and they are yelling and screaming that is not one person speaking. That it is a representation of a group of people speaking here so it helps me to put up with that and at the same token and I know someone wants to go there, I use the community approach and remind that we still have to keep a sense of community (projection-group dynamics). You might have a different objective so you have to take with it what you can but so much is do or drop. I heard so many things that this was like brainwashing to a cult. Everyone thought should have to go through this but they need to know more.

I think that offering some clarity the people will more willingly participate I think the learning is still going to happen. I think that you will lose participation if you don't change the language and give them something. We can't get them to learn more but they won't leave.

LEARNING

I learned that I can operate at different levels comfortably. I learned that when working with people they are not always willing to operate

at my level so I found it easier for me to find their level and hone in on it then to try to get them to operate at my level. If people work at different levels the communication breaks down and it gets confusing. I found that I never realized just how much of an authority issue there was in a group until I went to this. so I think that the portrayal of the roles that the faculty played out really accentuated the authority issue so it was kind of nice to see that I know it sounds kind of sick. It was refreshing to see that it played out so well. In the end I said that was great. I was sad I think when I left knowing that there were a lot of unresolved issues in this group.

(Example 3: Participant is a consultant)

EXPERIENCE

Model that difficult to apply in today's work place

Need for faculty to retract to change old positioning-model Needs to let faculty have some lead way

to the extent that lady—who ever she is -..to the extent that she would not even tell me and many of the others where is this room..

bizarre---could still have answered but not engaged in a dialogue—we were all adults...and I am quite sure that the Tavistock model doesn't say that the faculty can't even hum.....really put many of us off.

Overuse of the word covert with business left the workshop to be exploited like a psychological model....I know it was intentional but it became a free for all...

Everything said in group discussion was about let me read your mind because covert was overplayed. leaving work environment and entering shrink...workplace is moving away from making assumptions about people, diverse...

LEARNING

Struggled why would any group have a session where no direction was provided????? why are we creating a model that does not create to work environment...

People do need direction....need a leader in the group (Dependency)...leader can be very misleading and dangerous....let leader become leader by virtue of direction...leaving a lot to chance. leader had no yardstick to be measured by....I was a leader in the group and we were so locked up and bottled and boxed up where we had too many leaders. Group tried to create a different model and come up with conclusions....but couldn't come up with a model that worked .. Group kept trying to get back to faculty and blame IMAt....I led the group and said if we were in a company and had to come up with a solution...what would we do...the group said that I was a renegade and I am a minority...group said no we will go with what we want....so it failed...we could not address what we were supposed to about intimacy so it failed for me.

Suggestion: I would leave a printed hint for the group to share. Don't' want to activate a verbal dialogue when we don't want a verbal dialogue as we don't want people to go to another authority but maybe the cards like you given.....but something that gives a choice to proceed.
(Dependency) We don't have time for this....
We need tools that somehow we can bring into a workshop.

CURRICULUM VITAE

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