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A Study of Support for Transfer and the Alignment of the Training with the Strategic Direction of the Organization

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A STUDY OF SUPPORT FOR TRANSFER AND THE ALIGNMENT OF THE TRAINING WITH THE STRATEGIC DIRECTION OF THE ORGANIZATION

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A STUDY OF SUPPORT FOR TRANSFER AND THE ALIGNMENT OF THE TRAINING WITH THE STRATEGIC DIRECTION OF THE ORGANIZATION

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The purpose of this study was to explore the relationship between the presence of practices to support transfer of training and the perception of trainees and managers of the alignment of training with the strategic direction of the organization in a targeted training program of a Fortune 200 company, in Michigan. A secondary purpose was to investigate the relationship between awareness of and commitment to the strategic direction of the organization among trainees and their managers. The subjects of the study were 147 sale representatives (96% of the targeted sample size) and 36 field managers. The study consisted of a survey and three follow-up discussions with 30 trainees. An investigator-developed questionnaire was used to measure the variables. Its validity was established by an expert panel and a quantitative technique for content validation. The reliability was established through the use of the Cronbach's alpha coefficient.

Four hypotheses were tested in this study. Parametric techniques (Pearson product-moment correlation coefficient and t-test for independent means) and non-parametric techniques (Spearman rank-order correlation coefficient and

Mann-Whitney U test) were used to test the hypotheses for trainees and field managers at 0.05 level.

This study found a low-to-moderate positive correlation between the perceived alignment of training with the strategic direction of the organization and the presence of practices to support transfer of training and also a positive correlation between awareness of the strategic direction of the organization and commitment to that strategic direction for both trainees and managers. The group of trainees that reported very-high transfer of training, perceived significantly higher alignment of the training program with the strategic direction of the organization than the group of trainees that reported low-to-high transfer of training. Field managers did not differ significantly in this variable. Trainees who reported very-high transfer of training also reported significantly higher presence of practices to support transfer throughout the training program than the group of trainees that reported low-to-high transfer of training. Field managers did not differ significantly in this variable either. These findings show the importance of linking training to the strategic goals of the organization, and building partnerships trainers-trainees-managers for enhancing transfer of training. Further research in other training settings is recommended.

DEDICATION

To my wife, Mercedes Gonzalez, and my children, Max Jose and Paola Mercedes, who accompanied me in this long journey, and were deprived of my time for so many hours, days, months, etc.

To my parents, Manuel and Mercedes...que tuvieron que despegarse de su hijo por tanto tiempo.

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Para mi pueblo Dominicano en su lucha constante.

Con mucho amor....

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CHAPTER I

INTRODUCTION

Background and Statement of the Problem

Corporate education and training programs have become one of the fastest growing industries in the United States in the last two decades. This growth has been the result of an increased awareness of the importance of training and development activities for performance improvement and organizational effectiveness and adaptability. However, low transfer of training to the work place represents a serious challenge to the human resource development profession. This limited evidence of the bottom-line impact of training seems to be related to the lack of organization-wide systems to support transfer and unclear connection to the organization's business goals.

The tremendous growth of human resource development activities is evident in the estimations of several scholars. In 1991, Anthony and Norton (p. 75) wrote:

> "The New York Times" estimated that US companies spent $300 billion in 1988 to provide such programs [corporate education and training programs] for their employees; more than the rest of the higher learning institutions combined.

The perspective for the future seems to follow the same trend. The same authors cited above referred that "Fortune Magazine" predicts that by the year

2000, corporate education will account for 25% of the gross national product.

The estimates explained above show that investment in adult learning at corporate level has become an increasingly important business activity. However, according to the estimations of some researchers, a huge proportion of this investment returns little value to the organizations because of low transfer of training-acquired skills to the job. Some studies in different training settings (Baldwin & Ford, 1988; Georgenson, 1982; Newstrom, 1986) suggest that no more than 20% of the training investment actually results in transfer to the job.

Many reasons for this low transfer of training to the job have been proposed. Two studies regarding best practices in corporate training settings stressed the lack of alignment of many training programs with the strategic direction of the organization (Carnevale, Gainer, & Villet, 1990; Cassner-Lotto & Associates, 1988), as one of the roots of low transfer of training.

In an account of his experience as a management trainer, Thomas Quick (1991) points out the weak relationships built between trainers, trainees and line managers. In an empirical study, Michalack (1981) found that the phases before and after delivery in many training programs, are neglected by trainers and managers. Similar pattern regarding the neglect of the phases before and after training emerged from a literature review done by Tannenbaum & Yukl (1992), including the latest research publications in the area of training and development in work organizations, as of 1992. Finally, the lack of a training support system to manage the transfer process, has been mentioned as a strong reason for low transfer

(Brinkerhoff & Montesino, 1993; Broad, 1982; Glenn, 1988; Nadler, 1970; Newstrom, 1986; Zemke & Gunkler, 1985).

In sum, the actual impact of the growing training industry in corporate America seems unclear. It seems apparent that low transfer of training has something to do with the lack of a support system and the kind of alignment training has with the strategic direction of the organization. Therefore, current trends in the field of human resource development at corporate level, call for further research into the problem of transfer of training and the alignment of training with the strategic direction of the organization.

Purpose of the Study

This study explores the relationship between the perception of trainees and managers of the alignment of training with the strategic direction of the organization, and the perceived presence of practices to support transfer of training on the part of trainees and their managers. The researcher wanted to know whether trainees and their immediate supervisors engage themselves in more or less transfer-enhancing behaviors, depending upon their perception of the alignment of training with the strategic direction of the organization. A secondary purpose was to investigate the relationship between awareness of and commitment to the strategic direction of the organization among trainees and their managers. The two key training constituencies that participated in the study were sales representatives and their field managers in a Fortune 200 Company in Michigan.

In the last two decades, the training field has experienced an important qualitative growth. But, according to several scholars, human resource development practitioners have emphasized more, and have been able to develop, sophisticated delivery devises at the expense of the critical connection training-site/work-environment. For that reason, several scholars and practitioners call for a more active role of the key training players (that is, trainers, trainees, and immediate supervisors) in bridging the gap between training and job performance by managing the transfer of training process, beyond the emphasis given thus far to the instructional design and delivery aspects of training (Broad & Newstrom, 1992; Huczynski & Lewis, 1980; Marx, 1986a; Tracey, 1992). The present study was intended to add new knowledge in the direction of strengthening that critical connection training-site/work environment, by exploring the relationship between the presence of practices to support transfer of training and the perception of key training constituencies of the alignment of training with the strategic direction of the organization.

The emphasis of this study is not on the classical transfer-of-learning research tradition based on classroom-formal-education and instructional-design principles. Its focus is on the practices that take place within the work environment of the adult learner in corporate training programs before, during, and after training; and the alignment of training with the strategic business goals.

Little is known about the two main aspects of this study (presence of practices to support transfer of training and alignment of training with the strategic

direction of the organization) considered together. Many anecdotal accounts, suggestions, and expert opinions are offered about their relationship. But not too much empirical evidence is available about that relationship. Therefore, the main concern of the present study is to provide empirical evidence of their relationship, by studying retrospectively a specific sales training program in a Fortune 200 company in Michigan.

Significance of the Study

According to Robinson & Robinson (1989), for a training program to add any value to the organization, it has to contribute to the attainment of organizational goals and results on application to the job. Therefore, strategic alignment and transfer of training are at the heart of any value adding training endeavor.

Many research undertakings have attempted to improve the delivery phase of training, without paying too much attention to the phases before and after training. Just a few studies have taken a look at the involvement of key role players (trainers, trainees, and managers) in the phases before, during, and after training; aimed at improving the transfer of training. Among those studies can be mentioned Brinkerhoff and Montesino (1993), Broad (1982), Broad and Newstrom (1992), Glen (1988), Gradous (1991), Michalack (1981), Newstrom (1986), Zemke and Gunkler (1985). Even fewer studies have been aimed at inquiring into the critical linkage of training with the strategic goal of the organization; in spite of the growing concern about this issue in the training

community. Among the few studies in this area are: Carnevale et al., (1990), Casner-Lotto & Associates (1988), Rosow & Zager (1988), Training Strategies (1992).

Research on transfer of training has been largely limited to laboratory settings and the examination of simple experimental tasks, according to Sawczuk (1990). Several studies report research findings on the impact of isolated activities on augmenting the transfer of training (Baldwin & Ford, 1988; Cormier & Hagman, 1987; Stolurow, 1964). But few have attempted to study a comprehensive set of practices throughout the whole training process, aimed at creating a model for the management of the transfer of training. The present study is aimed at extending the knowledge base in that direction.

In broader terms, this study will contribute to the understanding of two critical elements of a training paradigm more responsive to organizational and individual needs, and more accountable for organizational pay off. In that regard, this study will extend preceding research initiatives aimed at building and improving a model for the management of the transfer of training process. At the level of concrete application, this study is aimed at helping human resource development practitioners to leverage the transfer of training process; thus increasing the organizational impact of training.

Research Questions

This study was directed at answering the following research questions:

1. What is the relationship, if any, between the perceived presence of

practices to support transfer of training (before, during, and after training; among trainees and managers) and the perceptions of trainees and managers of the alignment of training with the strategic direction of the organization?

The researcher wanted to know whether trainees and their immediate supervisors engaged themselves in more or less transfer-enhancing behaviors, depending upon their perception of the alignment of training with the strategic goal of the organization. Furthermore, the researcher wanted to explore common sense tenets that suggest that training gets transferred more often when trainees and their immediate supervisors sense that it is well aligned with the organization's business goals. By the same token, it appears that the more trainees and managers engage themselves in transfer enhancing behaviors, the higher the likelihood of achieving high transfer of training to the job situation. Three research hypotheses (1, 2, and 3) were formulated from research question 1, based on past experience and trends identified in the literature review.

2. What is the perceived awareness of and commitment to the strategic direction of the organization, among trainees, and managers? Common sense suggests that the more knowledgeable of the strategic direction of the organization the employee is, the more committed that person may be to that strategic direction. Hypothesis 4 was formulated from research question 2.

Research Hypotheses

From the two research questions explained above, four research hypotheses

were formulated: hypotheses 1, 2, and 3 from research question 1, and hypothesis 4 from research question 2. The research hypotheses are the following:

1. There will be a positive relationship between the perceived presence of practices to support transfer of training and the perceptions of trainees and managers of the alignment of the training program with the strategic direction of the organization.

2. There is a relationship between the variable "reported transfer of training" and the variable "perceived alignment of training with the strategic direction of the organization", so that the subjects may have reported more or less transfer of training taking place depending upon their perception of the alignment of the training program with the strategic direction of the organization.

3. There is a relationship between the variable "reported transfer of training" and the variable "perceived presence of practices to support transfer of training", so that the subjects that reported very-high transfer of training may also have engaged themselves in more transfer enhancing behavior, and vice versa.

4. There is a positive relationship between the perceived awareness of the strategic direction of the organization and the degree of commitment to that strategic direction; so that the subjects that reported high awareness of the strategic direction of the organization may have reported high commitment to that strategic direction, and vice versa.

The Setting of the Study

By agreement with the organization where the study was conducted, to further protect the anonymity of the subjects, the organization is identified here as "a Fortune 200 Company in Michigan". This is a large organization with many divisions and several training programs in each division. Its training investment is voluminous enough to deserve the close attention of upper management. The top leadership of this organization has been interested in strengthening the internal role of training. This study is part of that effort.

The environment within which the organization operates is a very competitive one; therefore, sales skills are at the heart of this company's competitive capability. The sales curriculum at the company where the study was conducted consists of four levels: (1) sales representative, (2) sales specialist, (3) sales consultant, and (4) senior sales consultant. Level 1, Sales Representative (the level within which the program studied fits), in turn, consists of eight (8) phases: (1) phase 1, five weeks in the sales area; (2) phase 2, three weeks centralized training at headquarters in Michigan; (3) phase 3, 18 weeks on-the-job training; (4) phase 4, one and a half week centralized training at headquarters in Michigan; (5) phase 5, 24 weeks of on-the-job training; (6) phase 6, one week of regional skills development; (7) phase 7, twenty-four weeks of on-the-job training; and (8) phase 8, one week of centralized training again.

Each of the four levels and the eight phases of level 1 cover basic

competency. These competencies include: product knowledge, communication/ selling skills, territory management, marketplace, corporate culture, and personal development.

Phase 2 is the first centralized training in level 1. Before getting to phase 2, the sales representatives are assigned to the sales district to get acquainted with the sales teams, the fundamentals of the company, and to study at their own pace a series of pre-course materials to come to Michigan for phase 2 training. When they finish phase 2 training, then they are assigned to work in the field as sales representatives. This program is the substantive focus of the present study.

The subjects of the study were 147 sales representatives that went through phase 2 (level I of the sales curriculum at the company) from January 1992 to November 1993; and their respective 36 field managers. The study consisted of a survey and follow-up discussions with 30 trainees. The target sample size was 152. The survey was sent to 180 trainees. One hundred forty seven (147) trainees responded the survey, for a response rate of 81.6%. Those 147 trainees that responded the survey represented 96.7% of the targeted sample. Once the survey was sent out, the researcher matched the questionnaire sent to the 180 trainees with their respective "field managers", to be surveyed too. The modified version of the questionnaire was sent to eighty three (83) field managers throughout the continental United States. Thirty six (36) of these field managers returned the questionnaire; for a response rate of 42%.

An investigator-developed questionnaire was used to gather the data to

measure the variables. Its validity was established by an expert panel and a quantitative technique for content validation. A pilot test of the instrument took place in December 8, 1993, with 21 sales representatives from the same population that was later surveyed. The reliability was established through the use of the Cronbach' alpha coefficient.

The variables studied in the present study were: (a) perceived presence of practices to support transfer of training, (b) alignment of training with the strategic direction of the organization, (c) awareness of the strategic direction of the organization, (d) commitment to the strategic direction of the organization, and (e) reported transfer of training. The first four variables were measured by the construction of four indexes. The fifth variable was measured through the use of one question in the survey.

Assumptions

The basic assumptions of this study were:

1. Given the competitive environment in which organizations similar to the one where the study was conducted operate, knowledge of the strategic business goals is critical to tie individual employee's contribution to the overall goal of the organization.

2. The extent of knowledge about the strategic direction of the organization varies among the two populations studied: participants in the training program and their respective field managers.

3. The researcher assumes that the respondents have an understanding of the statements used in the survey instrument.

4. The researcher assumes that one of the best witnesses of work improvement resulting from training is the immediate supervisor of the trainee.

5. The researcher assumes that the participants in this study provided accurate answers that reflect their genuine perception of the issues asked in the questionnaire.

6. The researcher assumes that, by mailing the survey at different times to the trainees and field managers, no communication about the study took place among them.

Summary of Chapter I

Chapter I covered the introduction to the study. It included the necessary background information and the statement of the problem investigated. The purpose of this study was to explore the relationship between the perception of trainees and managers of the alignment of training with the strategic direction of the organization, and the perceived presence of practices to support transfer of training on the part of trainees and their managers.

The present study was intended to contribute to the understanding of two critical elements of a training paradigm more responsive to organizational and individual needs, and more accountable for organizational pay off. In that regard, this study will extend preceding research initiatives aimed at building and

improving a model for the management of the transfer of the training process. At the level of concrete applications, this study is aimed at helping human resource development practitioners to leverage the transfer of the training process; thus increasing the organizational impact of training.

Two broad questions were addressed in this study:

1. What is the relationship, if any, between the perceived presence of practices to support the transfer of training (before, during, and after training; among trainees and managers) and the perceptions of trainees and managers of the alignment of the training with the strategic direction of the organization?

2. What is the perceived awareness of and commitment to the strategic direction of the organization, among trainees and managers?

Three hypotheses were derived from research question 1, and one hypothesis was formulated from research question 2.

This study took place in a targeted training program of a Fortune 200 company in Michigan, whose name was omitted to protect the anonymity of the subjects. Several guidelines of survey research and program-specific concerns were assumed by the researcher in the conduct of this study.

The next chapter covers the literature review.

CHAPTER II

REVIEW OF THE LITERATURE

This study sought to answer the following research questions:

1. What is the relationship, if any, between the perceived presence of practices to support transfer of training (before, during, and after training; among trainees and managers) and the perceptions of trainees and managers of the alignment of training with the strategic direction of the organization?

2. What is the perceived awareness of and commitment to the strategic direction of the organization, among trainees, and managers?

The first aspect explained in this review of the literature is the conceptual framework in which the study is grounded. The review is completed with an exploration of the two main aspects studied: (1) practices to support transfer of training and (2) strategic alignment of training with organizational goals. The review of available literature on the issue of transfer of training includes: (a) an analysis of the magnitude of the transfer of training problem and a discussion of the forces that encourage or discourage transfer, and (b) an exploration of the efforts in building a model to manage the transfer process.

In regard to the strategic alignment of training with organizational goals, the review of the literature includes: (a) a review of the problem of strategic-linked training, (b) a description of the two scenarios built in terms of low and

high alignment of training with the strategic direction of the organization, (c) some insight into the two internal customers of training that have implications for this study, and (d) a list of success cases of American organizations that have succeeded in linking training with their strategic direction, as reported by several major studies.

The research on transfer of training is very extensive. This is not the case of the research on strategic alignment of training. Considered separately, then, the research on the two variables studied here is very extensive. Therefore, what follows is not a totally inclusive review of the literature on transfer of training and strategic alignment of training; but rather a selective review of those research reports and other accounts that are relevant to the substantive topic, the concrete problem studied here, and the methodology of the present study.

This review of literature is mostly focused on the management of the transfer of training process before, during, and after training, rather than on the aspects of training design and delivery. In other words, its focus is on work-environment practices to support transfer (from which the survey items emerged) and the linkage of training with the strategic direction of the organization.

Conceptual Framework

A growing concern is observed in the training and development community regarding the impact of training, and the responsiveness of the human resource development (HRD) function within the organization. For some, the success of

the HRD function depends upon the power it reaches within the organizational structure (Watson, 1991). Others believe that support for HRD comes when it addresses strategic problems of the organization (Carnevale et al., 1990). Those who hold the second position mentioned before argue that training is an investment, and as such, its return is assured only when learners apply back at work what they acquired during training (Parry, 1990).

This emerging new training paradigm has received different names. In 1989 Robinson and Robinson made the distinction between "training for activity" and "training for impact". Brinkerhoff (1989) called the first "program-driven training", and the second "needs-driven training". This emerging training paradigm establishes that training within the organization should: (a) be an integral part of the organization's business strategy, (b) be linked to strategic business objectives, (c) be focused on job-specific tasks, (d) be developed and conducted with full involvement of line senior management, (e) be marketed internally as a business intervention, and (f) be accompanied by measurement of impact on the bottom line.

The present study based its theoretical foundation on this emerging training paradigm. An important aspect of this training paradigm is the linkage between the alignment of training with the business strategy and its transferability from training site to work place.

For some scholars, the notion of "teaching for transfer" (Hunter, 1971; Phye, 1992) and "designing for impact" (Clarke, 1992) are the key to assure

transfer of training. Recognizing the importance of design and delivery in encouraging transfer of training, other scholars go beyond the design and delivery phases and stress the need for a more active role of the training constituencies in "managing the transfer process" before, during and after training (Broad & Newstrom, 1992; Tannenbaum & Yukl, 1992; Zemke & Gunkler, 1985). These scholars recognize the value of designing and teaching for transfer, but believe that leveraging transfer of training goes beyond the act of instruction, calling for other actors to play their role in assuring training usage.

The "teaching for transfer" approach places the major responsibility for learning and application on design and delivery principles, while the "management of the transfer process" approach advocates for the involvement of all training customers during the whole training cycle. Several research findings support the later approach (Broad, 1982; Glenn, 1988; Newstrom, 1986; Zemke & Gunkler, 1985).

One of the features of the "management of the transfer-of-training process" approach is its recognition of the importance of work-environment factors as contributors or deterrents to transfer. Empirical evidence suggests that factors outside the formal training context are vital for training effectiveness (Huczynski & Lewis, 1980; Sawczuk, 1990; Tracey, 1992; Vandenput, 1973; Xiao, 1992). The present study embraces this theoretical assumption.

The Transfer of Training Problem

The unsatisfactory transfer of training is a concern for training practitioners, managers, and researchers. The training community is seeking to understand why the formidable amount of money invested in training is not showing the results intended. Marx (1986b, p. 29) once said:

> While trainers can be applauded for their ingenuity in creating state-of-the-art modules, they must be criticized for their intense focus on skill acquisition efforts at the expense of transfer and retention efforts.

Although most of the reference about actual transfer of training in the literature is of an anecdotal nature, several sources suggest a low return of the investment in the multimillion-dollar training industry. In 1992, Broad and Newstrom estimated an average expenditure, across the entire workforce, of more than $400 per employee per year. Baldwin and Ford (1988) estimated that not more than 10% of these expenditures actually result in transfer to the job. Then, as Nadler (1971) says, it is a time in which the word "accountability" will enter the vocabulary of those in the field of training and development.

Several factors seem to affect the likelihood of transferring from the training site to the work place. Some of these factors are related to the individual learner, the immediate supervisor, the training program, and the whole work environment. Tannenbaum and Yukl (1992) stress the fact that personal skills, ability, and willpower that trainees possess at the conclusion of the training are potential determinants of transfer. Individual motivation to learn (Cohen, 1990;

Huczynski & Lewis, 1980; Noe & Smith, 1986) and motivation to change (Bahn, 1973) play an important role too. Gist, Stevens, & Bavetta (1991) found that pre-test self-efficacy contributes positively to both initial and delayed performance of complex interpersonal skills.

Research done in several organizational settings indicates that many forces within the work environment operate as facilitators of transfer, while some others operate as countertransfer forces. Among them are: crisis work (Huczynski & Lewis, 1980), unpredictability of the work environment (Marx, 1986b), job autonomy (Berger, 1977), the reward system (Mosel, 1957; Quick, 1991), peer's influence (Mmobuosi, 1987; Stiefel, 1974), and organizational climate, policies, and values (Vandenput, 1973). According to Huczynski and Lewis (1980): "These inhibiting and facilitating factors emerge from organizational structures, processes, and goals; and it is unlikely that the variables identified will be universally valid for all organizations."

Factors related to the training program exert an important influence on training transfer. Research on mandatory versus voluntary training shows mixed results regarding motivation to learn. Cohen (1990) found that trainee's motivation to learn was higher when they perceived attendance as voluntary; however, Tannenbaum and Yukl (1992) reported that it depends on the organization's culture. The achievement of a critical mass at work unit level has also been mentioned as an important factor in helping transfer (Bahn, 1973; Mmobuosi, 1987).

Some program-related factors have been identified as important in encouraging or discouraging transfer. Face validity of training has been consistently

cited as impacting transfer (Anderson & Wexley, 1983; Byham, 1976; Katz & Bolletino, 1981) as well as environmental fidelity between training site and work setting (Bramley, 1991; Zemke & Gunkler, 1985). But the most abundant suggestions refer to the use of design principles. It has been present in the transfer research literature since the beginning of the century. According to Baldwin & Ford (1988), a large proportion of the empirical research on transfer of training has concentrated on improving the design of training programs through the incorporation of learning principles. They contended that four of the most studied principles are: (1) teaching identical elements, (2) teaching general principles behind the skills, (3) stimulus variety, and (4) various conditions of practice. A comprehensive account of these principles can be found in Binder (1990), Butterfield and Nelson (1989), Cormier and Hagman (1987), Ellis (1965), Hunter (1965), Klark and Voogel (1985), Laker (1990), Pea (1987), Royer (1979), Salomon and Perkins (1989), and Stolurow (1964).

Most of the literature suggests that the intervention of the immediate supervisor is the single most important factor in facilitating or hindering on-the-job application of skills learned in training programs. This is a common finding at corporate training level (Broad, 1982; Cohen, 1990; Huczynski & Lewis, 1980; Leifer & Newstrom, 1980; Michalack, 1981; Vandenput, 1973).

Taking into account the multiple factors that facilitate or hinder transfer of training, it is possible to assess the forces that operate in these directions within the work environment. Huzcynski & Lewis (1980) and Vandenput (1973)

did so in different organizational settings in the United Kingdom and Belgium, respectively.

The Need for a Comprehensive Model to Enhance Transfer

The need for a comprehensive model to manage the training process has been voiced by several training scholars (Brinkerhoff, 1991; Nadler, 1970; Newstrom, 1986; Wexley Baldwin, 1986). An emphasis on research in that direction is observed in the last 20 years. Leonard Nadler (1970) reported an observational study of a system to support training in five companies in the east coast that absorb the urban poor into their work forces. He started to suggest a model of support systems for training that includes: organizational involvement, pre-training activities, training activity, job-linkage actions, and follow-up. Several scholars have built on this original proposition by Nadler.

This model-building effort was continued by Mary Broad (1982), who surveyed a select group of HRD leaders-the 1978 presidents of all non-student chapters of the American Society for Training and Development-to review a list of 74 actions management can take to support the transfer of training to the job. Broad followed the same sequence developed by Nadler, including 5 categories of actions: management involvement, pre-training preparation, support during training, job linkage, and follow-up. She was able to identify those practices that the training leaders found more important; but her study did not include the other actors in the training scenario; that is to say, trainers, and trainees.

In the same line of research, Michael Glenn (1988) surveyed 106 naval managers to identify which post-learning job linkage and follow-up management and supervisory support actions are important for encouraging the use of leadership and management skills taught in a leadership training. He found that the most important support actions involve some aspects of goal setting and role modeling. This study only included post-training actions and did not include the aforementioned key role players (trainees and trainers) either.

An effort in the direction of inquiring into the whole training cycle was a study done by Michalack (1981), in a quasi-experimental project to evaluate the effects of various maintenance-of-behavior activities, as experienced by supervisors of an industrial organization. Michalack included activities before, during and after training; and found that the single most important factor in the success of training is the support from managers.

An important effort aimed at summarizing the literature on the best practices to support transfer was done separately by Zemke and Gunkler in 1985 and Newstrom in 1986. Zemke and Gunkler explained with details 28 techniques for transforming training into performance. They arranged those strategies in 5 categories, as follows: pre-training, good training, transfer-enhancing, post-training, and finessing strategies. On his part, John Newstrom (1986) produced a fine account of the practices to support transfer, proposing a model called "role-taker/ time-differentiated integration of transfer strategies", that includes the primary responsibility of managers, trainers, and trainees; before, during, and after

training. Borrowing from the classical Paretto principle, Newstrom (1986) contends that 20% of our efforts on transfer management might become responsible for 80% application results; and vice versa, 80% of our efforts on training design and delivery, might account for only 20% on application results (pp. 37-38). Based on this model, Mary Broad and John Newstrom (1992) published a book that explain the whole range of practices in which trainers, trainees, and managers engage to support transfer before, during, and after training. The survey instrument used in this study included several practices suggested by Broad and Newstrom (1992).

Finally, an important contribution to this model-building effort was made by B. Deane Gradous (1991) at the University of Minnesota. It was a three-phase study that developed a transfer-of-training model and a check list to assist the key players in implementing the model. The model then was validated by 5 experts in the field of training and two professional groups, and finally applied in a government agency. The author found, through qualitative techniques, that the model is a useful aid to decision makers when planning performance-based training.

The present study builds on those models by Nadler (1970), Michalack (1981), Broad (1982), Newstrom (1986), Glen (1988) and Gradous (1991), to study the practices to support transfer of training and its relationship with key players' perception regarding the alignment of training with the strategic direction of the organization.

Training: Its Alignment With Business Goals

Linking training to organization strategy has been a growing concern in the training profession in the last decade. In a survey conducted among a number of Fortune 500 companies (Stephan, Mills, Pace, & Ralphs, 1988), HRD practitioners said that having the HRD function a more central part of the business strategy is one of the biggest challenges facing training professionals. In a study published in 1986 (McDonogh III, p. 20) human resource executives interviewed reported that "in the next five years their most important activity would be related to developing human resource strategies and overall business planning". Several scholars and practitioners call for an alignment not only of the training function with the organizational goals, but also the whole human performance function, included personnel management (Garavan, 1991; Sandy, 1990; Schuler, Galante, & Jackson, 1987; Weiss, 1986).

Among organizational leaders, there is a growing recognition that human resources are critical to the fulfillment of organizational objectives. However, according to a survey of human resource and strategic business planers in 53 diverse organizations in the U.S. and Canada, the integration of long-range strategic business planning and human resource planning is occurring at only relatively low levels of sophistication (Burack, 1985). A similar trend is observed in the United Kingdom. A study by the Industrial Society (Webb & Smith, 1991) revealed that although training and development are becoming a regular item on

board agendas, they have yet to become an integral part of business planning. Levy (1988) appropriately asserted that if training and development efforts are to be successful, they must be integrated with the company's business plan.

According to John Peters (1992), organizational success occurs when all the major forces in an organization are pulling the same way and when this pull is consistent with what is happening in the markets outside of the organization. Woolfe (1993) says that strategic alignment describes the state in which the goals and activities of the business are in harmony with the systems that support them.

Garavan (1991) listed a series of characteristics of what has been called strategic human resource development. They are: (a) integration with organizational mission and goals, (b) top management support, (c) environmental scanning, (d) HRD plans and policies, (e) line management commitment and involvement, (f) existence of complementary human resource management activities, (g) expanded trainer role, (h) recognition of culture, and (i) emphasis on evaluation.

Low or High Alignment of Training With the Strategic Business Goals

In spite of the growing concern about the need for linking training with the business strategy, relatively few cases of strong linkage are found. The review of the available literature helped to visualize two different scenarios in the real world: (1) the organization that integrates training into the strategic business planning and implementation processes (scenario 1), and (2) the organization that marginally inserts the training function into these processes (scenario 2).

The following paragraphs describe several features of scenario 1. In this type of organizations, the corporate mission and HRD mission are identical. HRD plans are constructed in the same context and by the same process as the business plan, and are viewed in direct relationship to it. According to Brown & Read (1984) and Linkemer (1987), in scenario 1, trainers are policy-creators rather than policy-followers. Both the business plan and the training plan are developed at strategic and operational levels (Hales, 1986).

In scenario 1, leadership from the CEO provides tremendous leverage for integrating training with strategic goals (Carnevale et al., 1990). This leadership support is translated into administrative processes and structures that guarantee a sturdier commitment. The HRD director sits at the strategic planning table and is an active participant in formulating corporate strategies, directly influencing strategic decisions from the outset (Brewster, 1990; Casner-Lotto & Associates, 1988; Catalanelo & Redding, 1989; Latham, 1988; Linkemer, 1987). From this involvement are derived training plan drivers which act as linkages with business activities. These plan drivers guide the focus of training and the needs analysis process and establish parameters to evaluate the value added from training and the return on investment from training dollars (Hales, 1986).

In this type of organizations, each single training activity is connected, through a sort of strategic map, to the strategic business goals. Training progress is reviewed with progress in achieving the business plan (Latham, 1988). Strategic partnerships between trainers and line management is fostered as a crucial link

(Adams, 1989; Garavan, 1991).

The other scenario shows less developed linkages between training and corporate strategy. In scenario 2, corporate strategy is formulated by a small, select group of top officers. It is then transmitted to lower levels in the organization in diminishing communication that reduces the ability to translate strategy into training needs (Rosow & Zager, 1988).

In this scenario, the training plan, if any, and the business plan do not stem from the same process. They are viewed in isolation and usually are short-term and schedule-driven. The result is that the training plan remains at operational level (Hales, 1986).

In scenario 2, the HRD function acts as an observer of the strategic planning process, without involvement in key decisions. It acts as a consulting entity and receives strategic clues indirectly, usually at the implementation stage-too late to impact these key decisions (Carnevale et al, 1990). The HRD unit is viewed as a firefighting, program-maintenance entity, that responds to line managers' requests (McDonough III, 1986). The HRD staff has to rely on several survival strategies to receive strategic clues and to become involved in the strategic planning process (Linkemer, 1987); playing the double role of trainer and in-house lobbyist to advocate in favor of training.

This study intended to capture the perception of key training participants regarding the alignment of training with the strategic direction of the organization. In that regard, it was possible to come across with situations that would fall

into any of these two scenarios described above.

Training Customers: Business Goals and Individual Development

According to Clark (1992), at organizational level there are at least two internal customers for training: the short-and-long-term strategic business targets and the people who work in the organization. For some, training should be directed toward the organization's goals, and not necessarily toward the individual employee's goals (Miller, 1991). Others stress the importance of expected job and career utility of training for the employee (Clark, 1990). Some others see a need for integration of both objectives (Clover, 1991; Clark, 1992; Robinson & Wick, 1992).

Two exemplary practices in integrating the goal of the organization and the individuals match are offered by Clover (1991) and Robinson and Wic (1992). Clover describes how an executive development program enabled executives to take actions that lead to the development of business goals at TRW Inc. Robinson and Wick describe success cases of the impact of two other executive development programs aligned with business goals.

Since the present study dealt with people's perception about the strategic alignment of training, it was possible to find that trainees and managers can see either of the two objectives (the strategic business goal or individual development), and, consequently, engage in transfer enhancing behavior for either of these reasons.

Strategic Alignment and Transfer of Training: Success Stories

Several accounts of qualitative research endeavors on the linkage of training with the organization's strategy are found in the literature. No quantitative study of this relationship was found. Best-practice accounts on the way organizations make that critical connection made possible the identification of 15 success-case descriptions; including a wide range of American business organizations that have been linking training with the organization's business strategies and achieving high rate of training usage.

All the cases listed in this paragraph fall into the scenario 1 described earlier, and show several of the characteristics listed in that scenario. Some of the organizations include: Motorola (Bolt, 1985; Carnevale et al., 1990; Casner-Lotto & Associates, 1988; Rosow & Zager, 1988), American Transtech (Casner-Lotto & Associates, 1988), Travelers Corporation (Carnevale et al., 1990; Casner-Lotto & Associates, 1988), Corning Glass Works (Carnevale et al., 1990), New England Telephone Company (Casner-Lotto & Associates, 1988), Carrier Corporation (Carnevale et al., 1990), Gilroy Foods, Inc. (Casner-Lotto, & Associates, 1988), Ford Motor Company (Rosow & Zager, 1988), Caterpillar (Rosow & Zager, 1988), Northern Telecom (Carnevale et al., 1990), Frito-Lay, Inc. (Carnevale et al., 1990), Xerox (Bolt, 1985; Galagan, 1990), Becton Dickinson and Co. (Gilmartin, 1991), and Maid Bess (McManis & Leibman, 1988). All of them seem to have succeeded in implementing a more responsive training program that

actually transfers to the job. Their success suggests a researchable relationship between transfer of training and its alignment with organizational strategic goals. This is exactly the purpose of this study.

Summary of Chapter II

Chapter II covered the review of the literature. The present study based its theoretical foundations on an emerging training paradigm that seeks to improve the return on the training investment by linking it to the organizational strategy, and managing the transfer process through the involvement of key training constituencies before, during, and after training.

The unsatisfactory transfer of training is a concern for training practitioners, managers, and researchers. The training community is seeking to understand why the formidable amount of money invested in training is not showing the results intended. Several factors seem to affect the likelihood of transferring from the training site to the work place. Some of these factors are related to the individual learner, the immediate supervisor, the training program, and the whole work environment.

The need for a comprehensive model to manage the training process has been voiced by several training scholars. The present study builds on models advanced by Nadler (1970), Michalack (1981), Broad (1982), Newstrom (1986), Glen (1988) and Gradous (1991), to study the practices to support transfer of training and its relationship with key players' perception regarding the alignment

of training with the strategic direction of the organization.

Linking training to organization strategy has been a growing concern in the training profession in the last decade. Strategically-linked training has been characterized by: (a) integration with organizational mission and goals, (b) top management support, (c) environmental scanning, (d) HRD plans and policies, (e) line management commitment and involvement, (f) existence of complementary human resource management activities, (g) expanded trainer role, (h) recognition of culture, and (i) emphasis on evaluation.

In spite of the growing concern about the need for linking training with the business strategy, relatively few cases of strong linkage are found. A review of the available literature helped to visualize two different scenarios in the real world: (1) the organization that integrates training into the strategic business planning and implementation processes (scenario 1), and (2) the organization that marginally inserts the training function into these processes (scenario 2).

At the organizational level, usually there are at least two internal customers for training: the short-and-long-term strategic business targets and the people who work in the organization. For some scholars, training should be directed toward the organization's goals, and not necessarily toward the individual employee's goals. Others stress the importance of expected job and career utility of training for the employee. Some others see a need for integration of both objectives.

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training with the organization's strategy are found in the literature. No quantitative study of this relationship was found. Best-practice accounts on the way organizations make that critical connection made possible the identification of 15 success-case descriptions; including a wide range of American business organizations that have been linking training with the organization's business strategies and achieving high rates of training usage. Their success suggested a researchable relationship between transfer of training and its alignment with strategic organizational goals.

The following chapter will cover the methods and procedures.

CHAPTER III

METHODS AND PROCEDURES

The purpose of this study was to explore the relationship between the presence of practices to support transfer of training, and the perception of trainees and managers of the alignment of training with the strategic direction of the organization in a target training program of a Fortune 200 company in Michigan. A secondary purpose was to investigate the relationship between awareness of and commitment to the strategic direction of the organization among trainees and their managers. The study took place between December 1993 and February 1994.

This chapter describes the methodological approach, research questions, hypotheses, design of the study, data collection, survey instrument (content validation and pilot test), operationalization of the variables, population and sample, and data analysis.

The Methodological Approach

The methodological approach followed by this study have been widely used in studying the substantive problem. Survey research has been used in several organizational settings to study several aspects of transfer of training (Clarke, 1992; Tracey, 1992; Trefz, 1991; Xiao, 1992). Likewise, several studies on

strategic alignment of training have used survey research too (Brewster, 1990; Hendry & Pettigrew, 1986; McDonough III, 1986; Stephan et al., 1988). Qualitative methodology (site visits, observation, face-to-face and phone interviews, etc.) has been used in studying the alignment of training with the organization's strategy (Training Strategies, 1992). In working with both variables, the study of people's perceptions has also been widely used (Loewy, 1983; Tracey, 1992; Williamson, 1991). Focus-group interviews have also been employed in the study of the two variables (Brown & Read, 1984).

In sum, previous studies have used the same mixture of methodological techniques used in the present study. This successful methodological eclecticism in studying the subject, gave the researcher the confidence to use survey research and focus-group discussions to address the questions posed in this investigation.

Research Questions

This study was directed at answering two research questions:

1. What is the relationship, if any, between the perceived presence of practices to support transfer of training (before, during, and after training; among trainees and managers) and the perceptions of trainees and managers of the alignment of training with the strategic direction of the organization?

The researcher wanted to know whether trainees and their immediate supervisors engaged themselves in more or less transfer-enhancing behaviors, depending upon their perception of the alignment of training with the strategic

goal of the organization. Furthermore, the researcher wanted to explore common sense tenets that suggest that training gets transferred more often when trainees and their immediate supervisors sense that it is well aligned with the organization's business goals. By the same token, it appears that the more trainees and managers engage themselves in transfer enhancing behaviors, the higher the likelihood of achieving high transfer of training to the job situation. Three research hypotheses (1, 2, and 3) were formulated from research question 1, based on past experience and trends identified in the literature review.

2. What is the perceived awareness of and commitment to the strategic direction of the organization, among trainees, and managers? Common sense suggests that the more knowledgeable of the strategic direction of the organization the employee is, the more committed that person may be to that strategic direction. Hypothesis 4 was formulated from research question 2.

Research Hypotheses

1. There will be a positive relationship between the perceived presence of practices to support transfer of training and the perceptions of trainees and managers of the alignment of the training program with the strategic direction of the organization.

2. There is a relationship between the variable "reported transfer of training" and the variable "perceived alignment of training with the strategic direction of the organization", so that the subjects may have reported more or less transfer

of training taking place depending upon their perception of the alignment of the training program with the strategic direction of the organization.

3. There is a relationship between the variable "reported transfer of training" and the variable "perceived presence of practices to support transfer of training", so that the subjects that reported very-high transfer of training may also have engaged themselves in more transfer enhancing behavior, and vice versa.

4. There is a positive relationship between the perceived awareness of the strategic direction of the organization and the degree of commitment to that strategic direction; so that the subjects that reported high awareness of the strategic direction of the organization may have reported high commitment to that strategic direction, and vice versa.

Based on these four research hypotheses, four operational hypotheses were formulated. They are included in the section called "data analysis", in this chapter.

Design of the Study

The present study used survey research and focus-group interviews, as the main methodological approaches. The study was conducted in two phases: (1) a cross-sectional survey, to investigate retrospectively the perception of the participant in the training program regarding the five variables studied; and (2) a more in-depth interview follow-up, aimed at cross-validating the results.

Fred Kerlinger (1973, p. 300) once contended that "research design has

two basic purposes: (1) to provide answers to research questions, and (2) to control variance. According to Kerlinger (1973, p. 306), "one of the main technical functions of research design is to control extraneous systematic variance."

Following Kerlinger's suggestions for controlling extraneous variables, the researcher picked the subjects at random from the accessible population, matched the trainees with their respective field managers, chose very homogeneous subjects (sales representatives with certain common background and experience, and their respective field managers with similar title and responsibilities), and finally built several potential extraneous variables into the design to minimize their influence. This control of extraneous variables was achieved by including them into the construction of four indexes to represent the variables studied.

To more accurately represent four of the variables studied, the researcher constructed four indexes, four composite measures of the variables, each based on several items in the questionnaire. A more detailed description of this index construction is offered in the description of the instrument.

The "perceived presence of practices to support transfer of training" index included practices that trainees and managers engage themselves before, during, and after training, to support its transfer to the job situation, adapting the matrix from the one developed by Broad (1982), Newstrom (1986), and Broad & Newstrom (1992). In this case, the researcher only included in the index those practices that trainees and field managers self-reported. The questions that made up the index were included in the three versions of the questionnaire (trainees,

trainers, and managers); each one was accompanied by a four-point scale from 1 to 4, meaning "Not at all" to "A great deal".

To construct the other three indexes, the researcher took into account several questionnaire items in each case. The "perceived alignment of training with the strategic direction of the organization" index was created taking into account five indicators (five items in the questionnaire), after the process of content validation and pilot test. The central question in this index was an item that asked the subjects to what extent this training program (phase 2, level I of the sales curriculum) was aligned with the strategic direction of the organization. Four (4) more indicators were taken into account to construct the index in a manner that would minimize the influence of the potential extraneous variables (Kerlinger, 1973, p. 309). These indicators were: (1) the extent of knowledge of the strategic direction of the organization (how much do you know about the strategic direction of the company), (2) the state of definition/refinement of that strategic direction (how well defined is that strategic direction), (3) the extent of the respondent agreement with the strategic direction of the organization (to what extent do you agree that the strategic direction of your company is the right one), and (4) the subject's commitment to his/her organizations's strategic direction (to what extent are you committed to that strategic direction).

The other two indexes (awareness of and commitment to the strategic direction of the organization) were created with two items each. The "awareness of the strategic direction of the organization" index included the items that asked:

(1) how much do you know about the strategic direction of the company, and (2) how comfortable are you with your current knowledge of the strategic direction of the company? By the same token, the "commitment to the strategic direction of the organization" index included the items that asked: (1) to what extent do you agree that the strategic direction of your company is the right one, and (2) to what extent are you committed to that strategic direction?

A correlational analysis was needed to test hypotheses 1 and 4. This correlational analysis assessed the relationship between the two variables studied based on correlation and rank-order-correlation coefficients (Borg & Gall, 1983; Liebetrau, 1983). For the other two hypotheses (2 and 3), means and mean-ranks differences were used for testing. Hypotheses 2, and 3 were tested using Mann-Whitney U test (Popham & Sirotnik, 1992) and t-test for independent means (Glass & Hopkins, 1984). Each hypothesis was tested for trainees and field managers as well.

Data Collection

Permission to conduct the study at the training program was granted several months earlier (Spring 1993). The Director of Sales Training at the company took care of mailing the survey to the subjects chosen.

A written questionnaire was mailed to 180 sales representatives randomly chosen, asking them to provide with feedback useful for training program improvement, on December 20, 1993. Two slightly modified versions of the same

questionnaire were sent to 83 field managers of the 180 trainees and to a few trainers at the end of January, 1994. Internal mailing facilities were used to stress the company's ownership of the survey, and thereby eliciting more cooperation from the subjects.

Provisions were taken to ensure the highest return rate possible; such as mailing the questionnaire with a cover letter from the General Sales Training Director, sending reminders three weeks later, and following up on non-returned questionnaires. No names were attached to any questionnaire, so as to assure anonymity and confidentiality.

The survey was sent to 180 trainees. After the first mailing and a reminding letter, two months later, one hundred forty seven (147) trainees responded to the survey, a response rate of 81.6%. Since the actual target sample size was 152 (as established in the section on "population and sample"), with 147 questionnaires returned, the response rate was 96.7% of the targeted sample. For the purpose of this study, this sample was considered large and representative enough to make statistical inferences from the sample to the population.

A modified version of the questionnaire was also sent to eighty three (83) field managers throughout the continental United States. Thirty six (36) of these 83 managers returned the questionnaire, a response rate of 42%.

The second phase of the study consisted of three focus-group discussions, with ten (10) subjects each. The 30 trainees that participated in the focus-group discussions agreed to do so with the director of sales training, after receiving

assurance of complete anonymity. Their participation was absolutely voluntary. Conversations were not recorded. The researcher took notes of the most relevant issues raised during the discussions. These discussions took place as follows: (a) first group of 10 trainees that went through phase 2, six (6) months before, on December 8, 1993; (b) second group of 10 trainees that participated in phase 2, twenty months before, on December 8, 1993; and (c) third group of 10 trainees that participated in phase 2, ten months before, on February 15, 1994. These focus-group discussions followed a protocol to address qualitatively some of the elements related to the research problem. The purpose of this phase of the research was to cross-validate the data collected through the survey. These group discussions with former participants in the program yielded rich information to substantiate the findings from the survey.

Description of Survey Instrument

To collect data for this study, an investigator-designed questionnaire was used. The questionnaire items addressed the research questions explained in the first chapter. Three final versions of the survey questionnaire were used. One version was sent to the trainees, one to their respective field managers, and a third version to a few trainers that played a role in previously implementing the program (only two trainers responded; therefore, the researcher did not take their perspective into account in this study). The questionnaire basically addressed questions related to the variables studied. The three versions had 46 questions

in common. These common questions were: 41 practices (of which 13 and 12 were used from trainees and managers) to build the index called "perceived presence of practices to support transfer of training", five questions to build the index called "perceived alignment of training with the strategic direction of the organization", two questions to build the index called "awareness of the strategic direction of the organization", two questions to build the index called "commitment to the strategic direction of the organization", and one question that represented the variable "reported transfer of the training program to the job". Another common element in the three versions of the questionnaire was a restatement of the company's mission statement, to make sure that the three groups surveyed had in common at least one element of the strategic direction of the company at hand to refer to. The company's mission statement was included to overcome part of the difficulties derived from the fact that the three groups of subjects might have different knowledge of the strategic direction, given the varying degree of access to the strategic scenario that each group might have. The three versions of the questionnaire also had a few questions geared to the particular groups (trainees, trainers, and managers).

Content Validation

According to Borg and Gall (1983, p. 276), the survey instrument is supposed to measure "what it purports to measure". For them, content validity is the degree to which the sample of test items represents the content that the test is

designed to measure. For that reason, the process of questionnaire validation for the present study included: (a) an exhaustive review of the literature on the two variables studied and best-practices identified in benchmarking exercises in other organizational settings, (b) a preliminary face validity check of the items initially chosen for the questionnaire, and (c) a more quantitative determination of content validity.

As stated in Chapter II, the researcher took into account several works to produce a comprehensive, well-researched list of practices to support transfer of training beyond the traditional emphasis given to training design and delivery in the research on transfer literature, and five questionnaire items to represent the variable called "alignment of training with the strategic direction of the organization".

The validation continued with an initial face validity check by the researcher, the dissertation committee, and three experts from the organization where the study was conducted. According to Babbie (1989, p. 413), face validity "means that an indicator seems, on face value, to provide some measure of the variable". This initial face validity check helped to eliminate six (6) items. Some other aspects of this review included the wording of several questions, phrase structure, and some reordering of a few questions. The format of the questionnaire was greatly enhanced by this expert panel. After the introduction of these modifications, the expert-panel members agreed that the content of the instrument and the item construction were appropriate to measure the variables in this

study.

The final step in content validation was a more quantitative approach based on the work of Biner (1993), who used a technique adapted from one developed by Lawshe (1975) for the assessment of content validity. The researcher wanted to make sure that the set of items in the questionnaire were "a relevant, representative sample of the full domain of content", as stated by Biner (1993, p.67) citing Anastasi, Cronbach, and Jewell and Siegel.

Biner (1993, p. 67) explains his adaptation of Lawshe's approach in these terms:

> An evaluation instrument with good content validity should include only items that assess relevant and essential attitudes and behaviors....the purpose [is] to identify the factors deemed essential by a group of content matter experts....subjects [are] sent the list of factors and asked to rate each on a three-point scale (1="it is not necessary that a question be asked of the [subjects] on this topic"; 2="it is useful, but not essential that a question be asked of the [subjects] on this topic"; and 3="it is essential that a question be asked of the [subjects] on this topic")...from the scale rating, a Content Validity Ratio (CVR) is calculated for each [item]. The CVR formula, as outlined by Lawshe (1975), is as follows: $CVR = \frac{Ne - N/2}{N/2}$
> where Ne= Number of subjects rating an item as "essential" and N= Total number of subjects...similar to the correlation coefficient, the CVR ranges from +1.00 (where all judges rate an item as essential) through .00 (where 50% of judges rate an item as essential) to -1.00 (where none of the judges rate an item as essential...

The researcher followed this approach explained by Biner (1993) to conduct the final step in content validation. The questionnaire were sent to twelve subject matter experts (five to training managers of the organization where the

study was conducted, two to independent training consultants, and five to senior doctoral students in the human resource development program of the department of educational leadership at WMU). All the twelve content matter experts returned their rating of the items according to the scale explained above. A Content Validation Ratio (CVR) was computed for each item. Following Biner's experience, the researcher decided that all of the items with CVRs greater than zero would be included in the final instrument. Three (3) items that got CVR lower than zero were eliminated from the questionnaire. To be sensitive to the content experts suggestions, all of their worded suggestions were taken into account. The 46 common items in the three versions of the questionnaire (the common items that represent the variables in the three versions of the questionnaire) were accompanied by a four-point scale ranging from "not at all" to "A great deal". The remaining items were accompanied by different scales according to the nature of the questions, addressing particular concerns pertaining to trainees and managers.

Pilot Study

The pilot study was carried out with 21 sales representatives who went through phase 2 training earlier. These 21 sales representatives happened to be at headquarters for some other training from December 6 to December 10, 1993. Given that coincidence, the pilot study had the advantage of using subjects from the same population from which the sample was drawn. The pilot test took place on December 8, 1994, after the researcher received the approval letter from

WMU Human Subjects Institutional Review Board. The sales representatives that participated in the pilot study agreed to do so with the director of sales training, after receiving explanation for the purpose and assurance of complete anonymity.

The subjects in the pilot study were given the full version of the questionnaire (trainees version) that had been already content-validated, and asked to answer it in a meeting that took place on December 8, 1993. Then the researcher used the Statistical Package for Social Science SPSS/PC+ for IBM PC, to conduct the reliability test with the data gathered from the sales representatives in the pilot study. According to Cronbach (1951), reliability refers to the fact that a good test is one which yields stable results. It was the purpose of this pilot test.

Since the researcher was interested in validating the four indexes constructed to represent four of the five variables studied, the reliability test was performed with the four indexes. Babbie (1989) contends that if an index has been carefully constructed, the validity of the index should be confirmed with each individual item correlating with index scores. Babbie (1989, p. 405) explained it this way:

> Because identical response categories are used for several items intended to measure a given variable, each such item can be scored in a uniform manner....each respondent would then be assigned an overall score representing the summation of the scores he or she received for responses to the individual items....this method is based on the assumption that an overall score based on responses to the many items reflecting a particular variable under consideration provides a reasonably good measure of the variable....Essentially, each item is correlated with the large, composite measure. Items that

> correlate highest with the composite measure are assumed to provide the best indicators of the variable, and only those items would be included in the index ultimately used for analyses of the variable.

The researcher wanted to examine the characteristics of the individual items, the characteristics of the overall index, and the relationship between the individual items and the entire index. That is why the researcher used one of the most commonly used reliability coefficients: Cronbach's Alpha; which is based on the internal consistency of a test. Norusis (1990b, p. B-190) explains the logic of Cronbach's Alpha in these terms:

> That is, it [Cronbach's Alpha] is based on the average correlation of items within a test, if the items are standardized to a standard deviation of 1; or on the average covariance among items on a scale, if the items are not standardized. We assume that the items on a scale are positively correlated with each other because they are measuring, to a certain extent, a common entity. The average correlation of an item with all other items in the scale tells us about the extent of the common entity. If items are not positively correlated with each other, we have no reason to believe that they are correlated with other possible items we may have selected... Cronbach's Alpha tells us how much correlation we expect between our scale and all other possible scales measuring the same thing.

According to the design, only trainees were included in the pilot test, since matching with field managers was done after the trainees received the questionnaires. The purpose of the pilot test was to determine the reliability for the four indexes constructed, and to determine any change in the questionnaire that had been content-validated before. Therefore, only the standardized alpha coefficient data is presented here. A more detailed account of the actual figures for the indexes after the final data was collected from the total sample studied is given

in the section Operationalization of the Variables Studied. Only initial pilot-test reliability data is presented here.

In the pilot test, the standardized alpha reliability coefficient obtained for the "perceived-presence-of-practices-to-support-transfer-of-training" index was 0.88. For the "perceived-alignment-of-training" index, the standardized alpha reliability coefficient obtained was 0.71. The index constructed to represent the variable "awareness of the strategic direction of the organization" obtained a standardized alpha coefficient of 0.88. Finally, for the index constructed to represent the variable "commitment to the strategic direction of the organization", the standardized alpha coefficient was 0.96. These alpha values were considered adequate for establishing the reliability of the instrument for the pilot test.

While analyzing the item-total statistics of the four indexes, the researcher noted that none of the questionnaire items, if deleted, would contribute to significantly increase the alpha coefficient in the four cases. For that reason, there was no need to eliminate any of the original questionnaire items as a consequence of the pilot test.

The Cronbach Alpha Coefficient is based on the internal consistency of a test. Since the internal consistency for this self-reported instrument is considered adequate, the reliability of the measures for the four variables was sufficiently established.

Operationalization of the Variables Studied

The variables investigated in this study were: (a) perceived presence of practices to support transfer of training, (b) perception of the alignment of training with the strategic direction of the organization, (c) perceived awareness of the organization's strategic direction, (d) commitment to the organization's strategic direction, and (e) reported transfer of training.

The variable "perceived presence of practices to support transfer of training" is defined by a list of well-supported, research-and-best-practice-based synthesis of transfer enhancing behaviors that has been singled out from the literature review and suggestions from field experts. As stated in the review of literature, the researcher took into account several works to produce a comprehensive, well-researched list of practices to support transfer beyond the traditional emphasis given to training design and delivery in the research on transfer literature. In that regard, this list is rooted in works such as those by Nadler (1970), Michalack (1981), Broad (1982), Zemke and Gunkler (1985), Newstrom (1986), Glen (1988), Gradous (1991), Broad and Newstrom (1992).

Suggestions from experts of the organization where the study was conducted, dissertation committee members, and independent training consultants were also taken into account in building the list of practices to support training. The final version of the list was then validated and pilot tested with 21 subjects similar to those that would receive the survey.

During the process of questionnaire validation, an expert panel reviewed the list and improved it, before a second group of experts rated their relative importance. The final list of 41 practices (9 before training, 15 during, and 17 after training) was included in the questionnaires sent to trainees, trainers, and managers. In each phase (before, during, and after) each of the role players (trainers, trainees, and immediate supervisors) were assigned certain number of practices to support training.

The questionnaire was organized so that 16 different practices were assigned to the trainer, 13 to the trainees, and 12 to the immediate supervisor before, during, and after training. The subjects were asked to identify the extent to which each practice was in place during the training they participated (phase 2, level I of the Sales Curriculum), in a scale of 1-to-4, from "Not at all" to "A great deal".

The 147 trainees and 36 field managers who responded to the questionnaire identified the extent to which they were engaged in carrying out these practices that concerned them in the questionnaire, and estimated the extent to which the other role players were also engaged in carrying them out. In other words, trainees identified the extent to which they were engaged in carrying out these practices, and then estimated the extent to which the trainers and field managers carried out these practices. On their part, field managers identified the extent to which they were engaged in carrying out these practices, and then estimated the extent to which trainees and trainers were also engaged

in carrying them out. For the purpose of better representing the variable "perceived presence of practices to support transfer of training", the researcher built an index with those practices that both trainees and field managers identified by themselves.

The variable "perceived alignment of training with the strategic direction of the organization" was defined by 5 questions in the survey. The variables "awareness of the organization's strategic direction" and "commitment to the organization's strategic direction" were defined by two questions in the survey, respectively. In these cases, the literature pieces most used were: Carnevale et al. (1990), Casner-Lotto and Associates (1988), Rosow and Zager (1988), and Training Strategies (1992). The variable "reported transfer of training" was defined by a question in the survey, used by Brinkerhoff and Montesino (1993) in another study.

To more accurately represent four of the five variables studied, the researcher constructed four indexes; that is, four composite measures of the variables, based on several items in the questionnaire, in each variable. These four indexes were: (1) perceived presence of practices to support transfer of training, (2) perception of the alignment of training with the strategic direction of the organization, (3) awareness of the organization's strategic direction, and (4) commitment to the organization's strategic direction.

The researcher followed the procedure outlined by Babbie (1989), to construct the four indexes. According to Babbie (1989, p. 413):

> Single indicators of variables seldom have sufficient clear validity to warrant their use....Composite measures, such as scales and indexes, solve this problem by including several indicators of a variable in one summary measure.

In the section called "pilot study" in this chapter, is explained the reliability check done with 21 sales representatives (called "trainees" throughout this paper) of the four indexes constructed to represent four of the variables. In that section are given the standardized alpha values for the pilot-test. Having established the reliability of the instrument with regards to these four indexes in the pilot study, the researcher sent out the questionnaire to the subjects of this study. What follows is a description of the final-data reliability of the four indexes constructed, taking into account the scores for the total 147 trainees and 36 field managers who responded to the questionnaire.

Perceived Presence of Practices to Support Transfer of Training

This index included practices that trainees and managers engage themselves before, during, and after training, to support its transfer to the job situation. As explained earlier in this section, the researcher only included in this index those practices that trainees (in one case) and field managers (in the other case) self-reported. Trainees' perception of the extent of engagement of trainers and managers is not used in this index. By the same token, managers' perception of the extent of engagement of trainers and trainees is not used in this index either. For the trainees' data used to test hypotheses, this variable was measured

through the use of 13 items in the researcher-developed questionnaire. The 13 items were presented in separate sections of the questionnaire. They appear in Table 1.

As per field managers, this variable was measured through the use of 12 items in the researcher-developed questionnaire. The 12 items are shown in Table 2.

These items were presented to the subjects in a scale from 1 to 4. In that scale, 1 = not at all, 2 = somewhat, 3 = very much, 4 = a great deal. The responses of 145 trainees and 30 field managers to these items were summed to build an index called "perceived presence of practices to support transfer of training" in each case. These indexes were constructed using the "reliability" procedure in the SPSS program. The Cronbach's standardized alpha coefficient for trainees was 0.79, and for field managers was 0.61. These alpha values represent an acceptable reliability for the variable. Tables 3 and 4 show the indexes' frequency distributions, and measures of variability and central tendency, for trainees and field managers, respectively.

Perceived Alignment of the Training Program With the Strategic Direction of the Organization

This variable was measured through the use of five (5) items in the researcher-developed questionnaire that was sent to trainees and field managers. In both cases, the same 5 items were worded exactly the same (see trainees'

Table 1

Perceived Presense of Practices to Support Transfer of Training Index for Trainees

Item #	Practice
	PART I (last set of items)
	Before training, I myself:
1	Participated in advance activities in preparation for training
2	Knew that a few of the trainees were involved in designing the training
	PART II (last set of items)
	During training, I myself:
3	Engaged myself in actively learning the course content
4	Linked with another trainee to practice skill application
5	Became part of a subgroup of trainees to support skill application after-training among ourselves
6	Planned for applications back on the job
7	Created a behavioral contract with my immediate supervisor to apply what I learned in Phase 2 training
	PART III (last set of items)
	After training, I myself:
8	Practiced self-management of skill application
9	Reviewed training content and learned skills
10	Became a mentor to help other(s) on the job
11	Found a mentor to help me with on-the-job application
12	Maintained contact with other trainees
13	Monitored my personal goals in implementing new skills

Table 2

Perceived Presense of Practices to Support Transfer of Training Index for Field Managers

Item #	Practice
	PART III (second set of items) Before training, I myself:
1	Briefed my employee on the importance of the course in terms of job application
2	Provided time for trainee to complete pre-course assignments
3	Developed an agreement with the trainee specifying mutual commitment to maximize results from the course
	PART IV (second set of items) During training, I myself:
4	Monitored my employee's attendance to the training sessions
5	Communicated to the trainee, very clearly, my support for the training they were participating in
	PART V (second set of items) After training, I myself:
6	Planned my employee's entry to the unit after the course was over
7	Provided my employee with opportunities to practice new skills soon after training
8	Encouraged my employee's attempts to apply the newly acquired skills
9	Discussed after-training follow-up activities with the trainers
10	Gave my employee positive reinforcement for the demonstration of behaviors taught in the course
11	Encouraged a briefing of my employee's co-workers on the skills/ knowledge taught in the course
12	Publicized examples of successful after-training skill usage among those employees who had attended Phase 2 training

Table 3

Perceived Presence of Practices to Support Transfer of Training Index

Trainees Data		
Index Value	Frequency	Percentage
23	1	0.7
24	0	0.0
25	1	0.7
26	3	2.1
27	0	0.0
28	0	0.0
29	2	1.4
30	2	1.4
31	1	0.7
32	5	3.4
33	2	1.4
34	8	5.5
35	9	6.2
36	14	9.7
37	6	4.1
38	11	7.6
39	12	8.3
40	10	6.9
41	12	8.3
42	9	6.2
43	11	7.6
44	3	2.1
45	5	3.4
46	7	4.8
47	5	3.4
48	2	1.4
49	1	0.7
50	1	0.7
51	2	1.4
Total	145	100.0

Mean=38.9 Standard Deviation=5.3 Cronbach's standardized alpha=0.79
Skewness=-0.31 Possible Range=13-52 Minimum=23 Maximum=51

Table 4

Perceived Presence of Practices to Support Transfer of Training

Field Managers Data

Index Value	Frequency	Percentage
28	1	3.3
29	0	0.0
30	1	3.3
31	3	10.0
32	0	0.0
33	1	3.3
34	3	10.0
35	1	3.3
36	2	6.7
37	4	13.3
38	2	6.7
39	3	10.0
40	4	13.3
41	4	13.3
42	0	0.0
43	1	3.3
Total	30	100.0

Mean=36.7 Standard Deviation=3.8 Cronbach's standardized alpha=0.61
Skewness=-0.55 Possible Range=12-48 Minimum=28 Maximum=43

questionnaire, items 1-to-5, part IV; and managers' questionnaire, items 1-to-5, part II; in Appendixes B). The five items were:

1. How much do you know about the strategic direction (business goals) of the company?

2. How well defined is that strategic direction?

3. To what extent is the Phase 2 course in which you (or you employee) participated aligned with the strategic direction of the company?

4. To what extent do you agree that the strategic direction of your company is the right one?

5. To what extent are you committed to that strategic direction?

The responses of 146 trainees and 35 field managers to these items were summed to build an index called "perceived alignment of training with the strategic direction of the organization" in each case. These indexes were constructed using the "reliability" procedure in the SPSS program. The Cronbach's standardized alpha coefficient for trainees was 0.72 and for field managers was 0.84. These alpha values represent an acceptable reliability for the variable. Tables 5 and 6 show the indexes' frequency distributions, measures of variability and central tendency for trainees and field managers, respectively.

Awareness of the Strategic Direction of the Organization

This variable was measured through the use of two similar items in the researcher-developed questionnaires sent to trainees and field managers (see items 1 and 7, part IV in the trainees' questionnaire; and items 1 and 7, part II in the field managers' questionnaire). The two items were:

1. How much do you know about the strategic direction (business goals) of the company?

2. How comfortable are you with your current knowledge of the strategic

Table 5

Perceived Alignment of Training With the Strategic Direction of the Organization Index

Trainees Data		
Index Value	Frequency	Percentage
5	1	0.7
6	1	0.7
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	4	2.7
12	5	3.4
13	11	7.5
14	15	10.3
15	35	24.0
16	26	17.8
17	18	12.3
18	15	10.3
19	13	8.9
20	2	1.4
Total	146	100.0

Mean=13.4 Standard Deviation=2.1 Cronbach's standardized alpha=0.72
Skewness=-1.05 Possible Range=5-20 Minimum=5 Maximum=20

direction of the company?

The responses of 147 trainees and 36 field managers to these two items were summed to build an index called "awareness of the strategic direction of the organization" in each case. These indexes were constructed using the "reliability"

Table 6

Perceived Alignment of Training With the Strategic Direction of the Organization

Field Managers Data

Index Value	Frequency	Percentage
10	1	2.9
11	1	2.9
12	2	5.7
13	4	11.4
14	2	5.7
15	6	17.1
16	4	11.1
17	7	19.4
18	3	8.6
19	4	11.4
20	1	2.9
Total	35	100.0

Mean=15.6 Standard Deviation=2.5 Cronbach's standardized alpha=0.84
Skewness=-0.36 Possible Range=5-20 Minimum=10 Maximum=20

procedure in the SPSS program. The Cronbach's standardized alpha coefficient for trainees was 0.78 and for field managers was 0.74. These alpha values represent an acceptable reliability for the variable. Tables 7 and 8 show the indexes' frequency distributions, measures of variability and central tendency for trainees and field managers, respectively.

Table 7

Awareness of the Strategic Direction of the Organization Index

Trainees Data

Index Value	Frequency	Percentage
2	2	1.4
3	1	0.7
4	20	13.6
5	10	6.8
6	81	55.1
7	25	17.0
8	8	5.4
Total	147	100.0

Mean=5.9 Standard Deviation=1.1 Cronbach's standardized alpha=0.78
Skewness=-0.78 Possible Range=2-8 Minimum=2 Maximum=8

Table 8

Awareness of the Strategic Direction of the Organization

Field Managers Data

Index Value	Frequency	Percentage
4	4	11.1
5	8	22.2
6	13	36.1
7	6	16.7
8	5	13.9
	36	

Mean=6.0 Standard Deviation=1.2 Cronbach's standardized alpha=0.74
Skewness=0.10 Possible Range=2-8 Minimum=4 Maximum=8

Commitment to the Strategic Direction of the Organization

This variable was measured through the use of two identical items in the researcher-developed questionnaire (see items 4 and 5, part IV in the trainees' questionnaire; and items 4 and 5, part II in the field managers' questionnaire). The two items were:

1. To what extent do you agree that the strategic direction of your company is the right one?

2. To what extent are you committed to that strategic direction?

The responses of 147 trainees and 36 field managers to these two items were summed to build an index called "commitment to the strategic direction of the organization" in each case. These indexes were constructed using the "reliability" procedure in the SPSS program. The Cronbach's standardized alpha coefficient for trainees was 0.71, and for field managers was 0.83. These alpha values represent an acceptable reliability for the variable. Tables 9 and 10 show the indexes' frequency distributions, measures of variability and central tendency for trainees and field managers, respectively.

As Kerlinger (1973, p.308) once put it: "The experimenter's most obvious... concern is to maximize...the experimental variance...the variance of the dependent variable influenced by the independent variable or variables of the substantive hypothesis". Therefore it is expected that variations in the independent variable provoke variations in the dependent variable.

Table 9

Commitment to the Strategic Direction of the Organization Index

Trainees Data		
Index Value	Frequency	Percentage
2	1	0.7
3	1	0.7
4	2	1.4
5	4	2.7
6	40	27.2
7	46	31.3
8	53	36.1
Total	147	100.0

Mean=6.9 Standard Deviation=1.1 Cronbach's standardized alpha=0.71
Skewness=-1.29 Possible Range=2-8 Minimum=2 Maximum=8

Table 10

Commitment to the Strategic Direction of the Organization

Field Managers Data		
Index Value	Frequency	Percentage
4	1	2.8
5	3	8.3
6	7	19.4
7	9	25.0
8	16	44.4
Total	36	100.0

Mean=7.0 Standard Deviation=1.1 Cronbach's standardized alpha=0.83
Skewness=-0.90 Possible Range=2-8 Minimum=4 Maximum=8

In this study, hypothesis 1 implies that the trainees and field managers' perceptions of the alignment of training with the strategic direction of the organization (independent variable) might provoke variations in the presence of practices to support transfer of training (dependent variable). In other words, it is expected that trainees and field managers will engage in more transfer enhancing behaviors as they perceived the training program more aligned with the strategic business goal, and vice versa.

For hypotheses 2 and 3, the researcher did not venture to predict any direction. Since there have been little empirical research regarding the relationship hypothesized, non-directional statements were made regarding hypotheses 2 and 3; and, therefore, 2-tailed tests were used to test these two hypotheses.

Hypothesis 4 implies that the more aware the subject is of the strategic direction of the company (dependent variable) the more committed to that strategic direction (dependent variable) he or she is, and vice versa.

Population and Sample

This study was conducted with the two hundred and fifty trainees that participated in phase 2, level I (three weeks centralized training at headquarters in Michigan) from January 1992 to November 1993. These 250 participants in the program nation-wide constituted the population from which the sample was drawn. The training program was studied retrospectively; in the sense that the subjects were asked to reflect back to answer the questionnaire. The training

program was, therefore, the substantive focus of the research. Its participants in the prior two years constituted the accessible population. The sampling frame was made up of the lists of the different groups of sales representatives that went through the training program during that period of time mentioned before and their immediate supervisors. These subjects chosen in the sample constituted the unit of analysis.

Since different groups of trainees have gone through the training program during the period studied, a stratified random sample from the accessible population was drawn, to administer the survey. The random stratification provides the opportunity to achieve a more representative sample (Fink and Kosecoff, 1985). Following that logic, the sample was drawn from the list of 250 trainees that participated in the program from January 1992 to December 1993.

To determine the sample size, the researcher used the table developed by Krejcie and Morgan (1970), based on the "small-sample techniques" underlined by the NEA (1960). Krejcie and Morgan's formula establishes the required sample size as a function of: X^2 NP(1-P)\d^2(N-1) + X^2P(1-P). In this formula, X^2 represents the table values of chi-square for 1 degree of freedom at the desired confidence level (3.841), N is the population size, P is the population proportion (assumed to be .50 since this would provide the maximum sample size), and d is the degree of accuracy expressed as a proportion (.05).

Since Krejcie and Morgan's (1970) table is applicable to any defined population, to obtain the required sample size, the researcher entered the table at

N=250. The sample size representative of the trainees in this population size was 152. That way, the target sample size was established to be 152. The survey was then sent to 180 trainees. After the first mailing and a follow-up letter, two months later, one hundred forty seven (147) trainees responded to the survey. The response rate was 81.6%. Since 147 responses were received out of the target sample size of 152, 96.7% of the targeted sample was covered. For the purpose of this study, this was considered a large enough sample to make statistical inferences from the sample to the population.

Once the trainees questionnaire was mailed out, the researcher matched the questionnaire sent to the 180 trainees with their respective "field managers", to be surveyed too. The list of the sale districts from where the trainees came, turned out to be 83. In several instances, more than one trainee worked under the supervision of one field manager; which explained why the survey was mailed to 180 trainees and only to 83 field managers. Therefore, the modified version of the questionnaire was then sent to these eighty-three (83) field managers throughout the continental United States. Thirty-six (36) of these 83 managers returned the questionnaire. For field managers, the response rate was 42%.

In the case of the questionnaires sent to field managers; the researcher's concern was not on achieving a determined sample size, but rather in achieving a match between trainees and their respective immediate supervisors (in this case the field managers). Therefore, for the purpose of this study, the 35 questionnaires returned by field managers were more than enough for the purpose of data

analysis.

Data Analysis

As previously stated, 250 participants in the training program nation-wide constituted the population from which the sample was drawn. The training program was, therefore, the substantive focus of the research. Its participants in the last two years constituted the accessible population. These subjects chosen in the sample constituted the unit of analysis.

Two tests took place for each hypothesis formulated (trainees and field managers data). The Statistical Package for Social Science SPSS/PC+ for IBM PC (Norusis, 1990b) was utilized for the statistical analysis of responses. For each of the questionnaire items, frequency distributions and measures of central tendency and variability were computed. For hypotheses testing, two parametric (Pearson product-moment correlation coefficient and t-test for independent means) and two non-parametric (Spearman rank-order correlation coefficient and Mann-Whitney U test) statistical models were used.

From the first research question, three research hypotheses were formulated. Based on these research hypotheses, three operational hypotheses were formulated, as follows:

Hypothesis 1

The correlation coefficient between the variables "perceived presence of

practices to support transfer of training" and "alignment of training with the strategic direction of the organization" will be higher than zero.

Its null form was that: The correlation coefficient between the variables "perceived presence of practices to support transfer of training" and "alignment of training with the strategic direction of the organization" will be negative or equal to zero.

This hypothesis was tested by computing a Spearman rank-order correlation coefficient (Healey, 1990, pp. 293-296) between the variables, for trainees; and a Pearson product-moment correlation coefficient (Kachigan, 1986, p.203) for field managers. It was tested for significance using the 0.05 level.

Hypothesis 1 was tested with the non-parametric Spearman rank-order correlation coefficient for trainees, due to the fact that the index called "perceived alignment of training with the strategic direction of the organization" for the trainees data seemed to depart significantly from normality (skewness=-1.05). In the case of field managers data, the two indexes did not show too much departure from normality (skewness of -0.55 and -0.36 respectively), and the researcher decided to use the parametric Pearson product-moment correlation coefficient.

Hypothesis 2

There will be a significant difference between the group of trainees/ field-managers that reported low-to-high transfer of training and the group that reported very-high transfer of training, in the mean rank perceived-alignment-of-

training-with-the-strategic-direction-of-the-organization scores.

Its null version was: There will be no difference in the mean rank alignment of training with the strategic direction of the organization between the subjects that reported low-to-high transfer of training and those that reported very-high transfer of training.

Two Mann-whitney U tests (Popham & Sirotnik, 1992, p. 256) were used to test this hypothesis for trainees and field managers at .05 level. The question on reported transfer of training was recoded to form two groups (low-to-high=1+2+3 and very-high=4). The index "alignment of training with the strategic direction of the organization" was used as the interval level variable.

In the case of hypothesis 2, the researcher used Mann-Whitney U test for the trainees' version, because the interval level variable (perceived alignment of training with the strategic direction of the organization) showed a bigger than acceptable skewness (-1.05). In the case of field managers, the use of the Mann-Whitney U test was due to the small number of field managers that answered the survey (36 subjects). Given this group size, at the moment of subdividing the groups of field managers into those who reported low-to-high and very-high transfer of training, the subgroups were too small to be handled by the parametric t-test. Given the fact that Mann-Whitney U test is functionally equivalent to t-test using mean ranks and is equipped to handle small sample sizes (Popham & Sirotnik, 1992, p. 256) and ties in the data, the researcher decided to use it to test the field managers' version of hypothesis 2.

Since there have been little prior quantitative empirical evidence of the relationship hypothesized here, the researcher did not venture to predict a direction for hypothesis 2. Therefore, given the exploratory nature of the study, a non-directional statement was made for hypothesis 2; and consequently, a two tailed test was performed for hypothesis testing.

Hypothesis 3

There will be a significant difference between the group of subjects that reported low-to-high transfer of training and the group of subjects that reported very-high transfer of training, in the mean perceived-presence-of-practices-to-support-transfer-of-training scores.

The null hypothesis was: There will be no significant difference in the mean perceived-presence-of-practices-to-support-transfer-of-training scores between the group of subjects that reported low-to-high transfer of training and the group of subjects that reported very-high transfer of training.

A t-test for independent means (Glass & Hopkins, 1984, p.240) was used to test this null hypothesis for trainees, and Mann-Whitney U test for field managers; in both cases at .05 level. The index "perceived-presence-of-practices-to-support-transfer-of-training" was used as the interval level variable. The question that asked "how much have you actually used what you learned in the course" was recoded to form two groups (low-to-high=1+2+3 and very-high=4).

According to Norusis (1990a, p. 102) "it is almost impossible to find data

that are exactly normally distributed. For most statistical tests, it is sufficient that the data are approximately normally distributed". For that reason, the parametric t-test for independent means was used for trainees data. In this case, the index "perceived presence of practices to support transfer of training" showed little departure from normality (skewness=-0.31). As per field managers, hypothesis 3 was tested through Mann-Whitney U test, mostly because of the small sample of 36 field managers.

Hypothesis 4

From research question 2, one hypothesis was formulated:

The correlation coefficient between the variables "perceived awareness of the strategic direction of the organization" and "commitment to the strategic direction of the organization", as reported by trainees and field managers, will be higher than zero.

Its null form was that: the correlation coefficient between the variable "awareness of the strategic direction of the organization" and the variable "commitment to the strategic direction of the organization", as reported by trainees and field managers, will be negative or equal to zero.

This hypothesis was tested by computing a Spearman rank-order correlation coefficient between the two variables for trainees, and a Pearson product-moment correlation coefficient for field managers, at.05 level. The trainees' version was tested through the Spearman rank-order correlation coefficient because the index

"commitment to the strategic direction of the organization" was too skewed (-1.29) to be handled with a parametric technique. The field managers' version, on the contrary, did not show too much departure from normality in both indexes (0.10 and -0.90, respectively), and was, therefore, tested through Pearson product-moment correlation coefficient.

Data obtained from the three focus-group discussions, and responses to the open-ended questions in the field-managers questionnaire, were used to substantiate the findings in the two research questions.

Summary of Chapter III

This chapter describes the methods and procedures used in this investigation. The present study used survey research and focus-group interviews as the main methodological approaches. The study was conducted in two phases: (1) a cross-sectional survey, to investigate retrospectively the perception of the participant in the training program regarding the five variables studied; and (2) a more in-depth interview follow-up, aimed at cross-validating the results. The methodological approach followed by this study have been widely used in studying the substantive problem.

Two research questions were explored in this study. Four hypotheses were formulated from the two research questions. A researcher-developed written questionnaire (quantitatively validated and pilot-tested) was mailed to 180 sales representatives and 83 field managers. One hundred, forty-seven (147) trainees

responded to the survey, for a response rate of 81.6%. Since the actual target sample size was 152, with 147 questionnaires returned, the response rate is 96.7% of the targeted sample. Thirty-six (36) of the 83 field managers surveyed returned the completed questionnaire. The second phase of data collection consisted of three focus-group discussions with 30 trainees.

The variables investigated in this study were: (a) perceived presence of practices to support transfer of training, (b) perception of the alignment of training with the strategic direction of the organization, (c) perceived awareness of the organization's strategic direction, (d) commitment to the organization's strategic direction, and (e) reported transfer of training. Four indexes were built to represent the first four variables. Cronbach's alpha coefficient was used to assess the reliability of the indexes.

This study was conducted with the two hundred and fifty trainees that participated in phase 2, level I (three weeks centralized training at headquarters in Michigan) from January 1992 to November 1993. These 250 participants in the program nation-wide constituted the population from which the stratified-random sample was drawn. The training program was studied retrospectively; in the sense that the subjects were asked to reflect back to answer the questionnaire. The training program was, therefore, the substantive focus of the research. Its participants in the prior two years constitute the accessible population. The sampling frame was made up of the lists of the different groups of sales representatives that went through the training program during that period of time mentioned before

and their immediate supervisors. These subjects chosen in the sample constituted the unit of analysis.

Two tests took place for each of the four hypotheses formulated (trainees and field managers data). The Statistical Package for Social Science SPSS/PC+ for IBM PC (Norusis, 1990b) was utilized for the statistical analysis of responses. For each of the questionnaire items, frequency distributions and measures of central tendency and variability were computed. For hypotheses testing, two parametric (Pearson product-moment correlation coefficient and t-test for independent means) and two non-parametric (Spearman rank-order correlation coefficient and Mann-Whitney U test) statistical models were used.

Data obtained from the three focus-group discussions, and responses to the open-ended questions in the field-managers questionnaire, were used to substantiate the findings in the two research questions.

The next chapter provides a summary and the findings of the study.

CHAPTER IV

SUMMARY AND FINDINGS OF THE STUDY

This chapter discusses the results of the study. The first part is devoted to provide an overview of the study, as described in the three precedent chapters. A second part describes the response characteristics. The third part provides descriptive findings for the two research questions. Finally, the fourth part offers the hypotheses testing.

Study Overview

The purpose of this study was to explore the relationship between the presence of practices to support transfer of training and the perception of trainees and managers of the alignment of training with the strategic direction of the organization in a targeted training program of a Fortune 200 company in Michigan. A secondary purpose was to investigate the relationship between awareness of and commitment to the strategic direction of the organization among trainees and their managers.

The subjects of the study were 147 sales representatives (96% of the targeted sample size) that went through phase 2 (level I of the sales curriculum at the company) in the last 20 months before December 1994; and their respective 36 field managers. The study consisted of a survey and follow-up discussions with

30 trainees. An investigator-developed questionnaire was used to gather the data to measure the variables. Its validity was established by an expert panel and a quantitative technique for content validation. The reliability was established through the use of the Cronbach' alpha coefficient.

The variables studied in the present study were: (a) perceived presence of practices to support transfer of training, (b) alignment of training with the strategic direction of the organization, (c) awareness of the strategic direction of the organization, (d) commitment to the strategic direction of the organization, and (e) reported transfer of training. The first four variables were measured by the construction of four indexes. The fifth variable was measured through the use of one question in the survey.

Four hypotheses were tested in this study. Parametric techniques (Pearson product-moment correlation coefficient and t-test for independent means) and non-parametric techniques (Spearman rank-order correlation coefficient and Mann-Whitney U test) were used to test the hypotheses for trainees and field managers at 0.05 level.

Survey Response Rate

Two-hundred-and-fifty sales representatives constituted the population studied. The target sample size was 152. The survey was sent to 180 trainees. One hundred forty seven (147) trainees responded the survey, a response rate of 81.6%. Those 147 trainees that responded to the survey represented 96.7% of the

targeted sample.

Once the survey was mailed out, the researcher matched the questionnaire sent to the 180 trainees with their respective "field managers", to be surveyed too. The modified version of the questionnaire was sent to eighty three (83) field managers throughout the continental United States. Thirty six (36) of these field managers returned the questionnaire, a response rate of 42%. In the case of the questionnaires sent to field managers, the researcher's concern was not on achieving a determined sample size, but rather in achieving a match between trainees and their respective immediate supervisors (in this case the field managers); therefore, for the purpose of this study, the 35 field managers' questionnaires returned were more than enough for the purpose of data analysis.

Descriptive Findings

The data collected provided the basis for answering the two research questions of the study. The data analysis included: (a) computation of descriptive statistics for all the questionnaire items (including those whose answers were used for hypotheses testing and those that were not used for that purpose), (b) interpretation of the answer to open-ended questions in the questionnaire sent to field managers, (c) the testing of four hypotheses, and (d) interpretation of qualitative data from three focus-group discussions with subjects in the study. For each hypothesis stated, two tests took place: one for the trainees and the other for field managers.

The following sections include descriptive data from all items included in the survey. Another section in this chapter contains the hypotheses testing.

Managers' and Trainee's Overall Perception of the Training Program

This section contains description of data from survey questions and qualitative accounts that are not used for hypotheses testing in this study.

As shown in Table 11, seventy nine percent (79.5%) of the field managers (27 out of 36) rated from good to excellent the overall quality of the phase 2 training program. Table 12 shows that the field managers rated the overall preparedness of trainees (sales representatives) after phase 2 with an average of 2.75 in a scale of 1 to 4. Sixty six percent (66.7%) rated this preparedness above 3 in the same scale. The trainees also valued the knowledge/skills they learned at phase 2 training. Some of the comments from the focus-group discussions with trainees included:

> The fact is that we came to this first training experience with diverse backgrounds. What they did was to induct us into the reality of our job as sales representatives. I think they did a marvelous job at getting us truly acquainted with the fundamentals of our job.
>
> When I came, I had not sold anything before. When I left, I was able to present the company in a good way to my customer. I felt prepared to do so.
>
> Phase 2 was a tremendous confidence booster. This comfort level provided by phase 2 was very important. Phase 2 did make a difference in our confidence. Without the background information given, it would be impossible to go out there and talk to a [customer].
>
> The higher preparation as perceived by field managers was in "knowledge

Table 11

Field Manager's Assessment of the Overall Quality of Phase 2 Training, Scale From 1 to 4

Question	Not Good		Somewhat good		Good		Excellent	
	#	%	#	%	#	%	#	%
How would you rate the overall quality of phase 2 training?	1	2.9	6	17.6	21	61.8	6	17.7

Table 12

Field Managers' Assessment of Trainees' Preparedness for Work After Phase 2 Training
Scale 1 to 4

Questions	# valid Cases	Mean	Std. dev.	% low (1+2)	% high (3+4)
How well prepared were your employees at the end of phase 2 training?	33	2.75	.70	33.3	66.7
How would you rate trainees' preparation after phase 2 in terms of?					
- Knowledge of the products	34	3.05	.54	11.8	88.2
- Selling skills	34	2.70	.62	38.3	61.7
- Planning day-to-day work	34	2.44	.70	50.0	50.0
- Adapting to emergent situations in the field	34	2.41	.65	55.9	44.1
- Achieving concrete results with clients	34	2.52	.61	47.1	52.9

of the product" (mean of 3.05). Table 12 shows how strong product knowledge is perceived by field managers: eighty eight percent (88.2%) of the field managers rated this component above 3, in the 1-to-4 scale. This was corroborated by the trainees (sales representatives) in focus-group discussions:

> [Customers] challenge you in the field to see how much you know about a product. Phase 2 training gave us the comfort we needed to face that kind of challenges.
>
> I think that the two objectives of phase 2 were: (1) to provide knowledge of the products, and (2) to teach us how to sell. And we got that. I got what I was supposed to get from phase 2; that is, knowledge of the products and selling skills.

Excerpts from the open-ended questions asked to field managers further confirm their satisfaction with the knowledge of products exhibited by the trainees once they returned from phase 2 training:

> Most trainees come back with a very high level of product knowledge.
>
> In several instances, reps have come back with good fundamental product knowledge, enough to impress the [customers].
>
> I have heard from our customers compliments about reps' product knowledge.

The aspects in which field managers felt that sales representatives were less prepared were the reps capacity to adapt to emergent situations in the field (2.41 mean), followed by "planning day-to-day work (mean 2.44), achieving concrete results with clients (mean 2.52), and "selling skills" (mean 2.70). Some of the written comments by field managers in an open-ended question regarding the aspects they perceived needed more work included:

Product knowledge has been pretty solid. Overall low marks from so much change in trainers and schedules. Reps returned with less than expected knowledge and skills in several classes. Biggest concern: reps returned with little questioning skills...field managers had to break that and start over.

Product knowledge has been good; competition knowledge somewhat less; handling objections and being able to discuss them has been less satisfactory.

Sales skills have to be improved...they could use more practice in listening, questioning, and closing. Sales skills are sometimes too "canned". What occurs in the field is not necessarily what they are taught in [Michigan].

Descriptive Findings for Research Question 1

Question 1 concerned with the relationship between the perceived presence of practices to support transfer of training (before, during, and after training; among trainees and managers) and the perception of trainees and managers of the alignment of training with the strategic direction of the organization. Tables 13 and 14 show data on the individual items that were used to build the index

Table 13

Descriptive Data on the Individual Items That Made Up the Index Called "Perceive Presence of Practices to Support Transfer of Training", as Reported by Trainees

Practice	Valid Cases	Mean	Stan. Dev.	% Low (1+2)	% High (3+4)
Before training, the trainee:					
- participated in advance activities preparation for the training.	146	3.15	.89	23.3	76.7

Table 13--continued

Practice	Valid Cases	Mean	Stan. Dev.	% Low (1+2)	% High (3+4)
Before training, the trainee:					
- knew that a few of the trainees were involved in designing the training.	147	1.73	.87	80.9	19.1
During training, the trainee:					
- engaged in actively learning the course content.	147	3.70	.45	0	100
- linked with another trainee to practice skill application.	146	3.39	.79	10.9	89.1
- became part of a subgroup of trainees to support skill application after training among themselves.	147	3.03	.95	27.2	72.8
- planned for applications back on the job.	147	3.24	.68	11.6	88.4
- created a behavioral contract with his/her immediate supervisor to apply what he/she learned in Phase 2 course.	147	2.35	.92	55.1	44.9
After training, the trainee:					
- practiced self-management of skill application.	147	3.39	.58	55.8	49.2
- reviewed training content and learned skills.	147	3.23	.75	14.9	85.1
- became a mentor to help other(s) on the job.	147	2.44	.82	53.1	46.9
- found a mentor to help him/her with on-the-job application.	147	3.05	.5	22.5	77.5
- maintained contact with other trainees.	147	3.08	.89	25.9	74.1
- monitored my personal goals in implementing new skills.	147	3.10	.68	15.7	84.3

Table 14

Descriptive Data on the Individual Items That Made Up the Index Called "Perceive Presence of Practices to Support Transfer of Training", as Reported by Field Managers

Practice	Valid Cases	Mean	Stan. Dev.	% Low (1+2)	% High (3+4)
Before training, the district manager:					
- briefed the trainee on the importance of the course in terms of job application.	34	3.17	.83	14.7	85.3
- provided time for the trainee to complete pre-course assignments.	32	3.46	.80	6.3	93.7
- developed an agreement with the trainee specifying mutual commitment to maximize results from the course.	33	2.90	.76	27.2	72.8
During training, the district manager:					
- monitored trainee's attendance to the training session.	34	1.94	.88	70.6	29.4
- communicated to the trainee, very clearly, his/her support for the training he/she was participating in.	34	3.00	.81	20.6	79.4
After training, the district manager:					
- planned trainee's entry to the unit after the course was over.	33	3.69	.52	3.0	97.0
- provided trainee with opportunities to practice new skills.	34	3.79	.47	2.9	97.1
- encouraged trainee's attempt to apply newly acquired skills.	35	3.88	.32	0	100

Table 14--continued

Practice	Valid Cases	Mean	Stan. Dev.	% Low (1+2)	% High (3+4)
After training, the district manager:					
- discussed after-training follow-up activities with the trainers.	35	1.77	.94	77.1	22.9
- gave positive reinforcement to the trainee for the demonstration of behaviors taught in the course.	35	3.65	.63	2.9	97.1
- encouraged a briefing of trainee's co-workers on the skill/knowledge taught in the course.	35	2.45	1.17	51.4	48.6
- publicized examples of successful after-training skill usage among those employees who had attended Phase 2 training.	35	2.45	1.09	48.6	51.4

"perceived presence of practices to support transfer of training." In these tables can be seen how importantly trainees and field managers perceived each practice.

Table 15 shows descriptive statistics about the individual items that made up the index called "perception of trainees and managers of the alignment of training with the strategic direction of the organization." The index was used for the purpose of hypotheses testing. The rest of this paragraph is devoted to describe the data collected in each individual item. Field managers and trainees self-reported differences in terms of their knowledge of the strategic direction of the organization (means of 3.08 and 2.94, respectively). Both groups reported

Table 15

Descriptive Statistics on the Individual Items That Made Up the Index Alignment of Training With the Strategic Direction of the Organization as Reported by Trainees and Managers on a Scale of 1 to 4

	Trainees					Managers				
	# valid cases	Mean	Std. dev.	% low (1+2)	% high (3+4)	# valid cases	Mean	Std. dev.	% low (1+2)	% high (3+4)
How much do you know about the strategic direction (business goals) of the company?	147	2.94	.61	19	81	36	3.08	.69	19.4	80.6
How well defined is that strategic direction?	147	2.91	.73	25.9	74.1	36	2.80	.66	33.3	66.7
To what extent is the Phase 2 course aligned with the strategic direction of the company?	146	2.77	.76	34.9	65.1	35	2.74	.61	34.3	65.7
To what extent do you agree that the strategic direction of your company is the right one?	147	3.29	.65	8.1	91.9	36	3.33	.67	11.1	88.9
To what extent are you committed to that strategic direction?	147	3.63	.56	2.7	97.3	36	3.66	.53	2.8	97.2

almost similar rating of their perception of the extent to which the organization's strategy has been well defined (2.91 and 2.80). Three other items were rated (on the average) very similarly by trainees and managers: perception of the alignment of the training program with the organization's strategy (2.77 and 2.74), agreement with the strategy (3.29 and 3.33), and self-reported commitment to that strategy (3.63 and 3.66).

The majority of the subjects studied perceived a high connection of phase 2 training with the strategic direction of the organization (65.1% of trainees and 65.7% of field managers). However, almost thirty five percent (34.9%) of sales representatives and 34.3% of the field managers perceived phase 2 was little connected to the organization strategic direction. Some statements from the focus-group discussions with trainees exemplify the way some of them assessed that connection:

> I think that training has evolved to reflect that alignment you mentioned [with the company's strategy]. My contention is that training was behind the strategy by the time we came to phase 2.
>
> There were certain products covered in phase 2 that are not so critical for the strategic survival of the company. We should maybe cut time on those products and devote it to other more critical products.
>
> But a product could be important in one region while not in the other. This is a matter of core corporate learning. Those [products] that have been mentioned here are still important for the company. That is why they were included in the curriculum, despite the fact that we probably have not had the opportunity to talk about them in the field yet.

In Table 16, it is shown that 61.1% of the field managers responded that they were not sure or did not see any component of the strategic direction of the

Table 16

Evidence of Organizational Strategy Addressed in Phase 2 Training as Reported by Trainees and Managers

Question	Trainees						Managers					
	Yes		Not sure		No		Yes		Not sure		No	
	#	%	#	%	#	%	#	%	#	%	#	%
Did you see any component of the strategic direction of the company addressed in the phase 2 course?	88	60.3	46	31.5	12	8.2	14	38.9	19	52.8	3	8.3
Did anybody (presenters, training managers, etc.) make it explicit to you the linkage of phase 2 training to the strategic direction of the company?	59	40.4	57	39.1	30	20.5	1	2.9	18	51.4	16	45.7

company addressed in phase 2 training. By the same token, 39.7% of the sales representatives did the same. While 59.6% of the sales representatives reported that they were not sure or did not hear from anybody (either presenters, training managers, or trainers) the explicit linkage of phase 2 training to the company's strategy; 97% of the field managers reported that they did not hear about that critical connection either.

Tables 17 and 18 show that both trainees and managers rated high transfer of phase 2 training to the job (mean 3.38 and 3.22, respectively). By the same token, 90.5% of the trainees self-reported high training usage, while 94.3% of the field managers did the same. Table 19 also shows how the majority of the trainees (95%) reported they had an opportunity to use the skills learned immediately after training. Comments by the trainees further attest to this high usage:

> Without phase 2, it would be impossible to go successfully to the field...learning the whole language is extremely valuable. And that is exactly what happened in phase 2. We were exposed to a whole new language.
>
> I felt secured knowing what I new about the products. And I did have the opportunity to talk about a product many months after training.

Comments from field managers also substantiated the survey finding:

> Two of the reps that had gone through [phase 2] showed tremendous value and use of pre-post-call analysis; setting themselves up for future calls.
>
> Solid knowledge base, excellent knowledge of third party sources.

Table 17

Transfer of Training to the Job as Reported by Trainees
Scale 1 to 4

Question	Valid Cases	Mean	Sta. Dev.	Low (1+2)	High (3+4)
How much have you actually used what you learned in phase 2 course?	147	3.38	.65	9.5	90.5

Table 18

Transfer of Training to the Job as Perceived by Field Managers
Scale From 1 to 4

Question	# of Valid Cases	Mean	Std. dev.	% Low (1+2)	High (3+4)
On the average, how much do you think your employee(s) have actually used in the field what they learned in phase 2 training?	35	3.22	.54	5.7	94.3

Table 19

After Training Opportunity to Use the Skills Learned,
as Reported by Trainees

# of valid cases	Immediately after training		A few months later		A year later		Have not had	
	# of cases	%	# of cases	%	# of cases	%	# of cases	%
145	138	95	6	4.3			1	.7

Descriptive Findings for Research Question 2

The concern of research question 2 was the perceived awareness of and commitment to the strategic direction of the organization among trainees and managers. Descriptive data on the two items that made up the index called "commitment to the strategic direction of the organization" were given in Table 15. Data on one of the two items that made up the index "awareness of the strategic direction of the organization" was also given in Table 15. Table 20 contains data on the other item of this index.

As shown in Table 20, trainees and their respective field managers coincided in rating several questions related to awareness of the strategic direction by showing: (a) similar ratings of how well is the strategy communicated to them (2.89 and 2.80), (b) similar ratings of the extent to which they see alignment of phase 2 training with the broader market within which their organization operates (2.72 and 2.82), and (c) extremely similar rating of the extent to which they feel comfortable with their current knowledge of the strategy (2.91 and 2.91).

In regards to how well the strategic direction of the organization was communicated down to the subjects of this study, 29.2% of the trainees rated it low, while 36% of the field managers did the same. Tables 21 and 22 present a striking coincidence in the way trainees and their field managers explained the reasons for either attending or sending people to phase 2 training, respectively. The company's strategic goal, when it came to express the reason for attending phase 2 training, was in

Table 20

Basic Information on Questions Regarding Awareness of the Strategic Direction of the Company as Reported by Trainees and Managers on a Scale of 1 to 4

	Trainees					Managers				
	# valid cases	Mean	Std. dev.	% low (1+2)	% high (3+4)	# valid cases	Mean	Std. dev.	% low (1+2)	% high (3+4)
How well is the strategic direction of the company communicated to you?	147	2.89	.74	29.2	70.8	36	2.80	.71	36.1	63.9
How comfortable are you with your current knowledge of the strategic direction of the company?	147	2.91	.62	19.7	80.3	36	2.91	.64	25.0	75.0
To what extent is there alignment between the demands of the market in which your company operates and the content of the phase 2 course.	147	2.72	.60	31.9	68.1	35	2.82	.45	20.0	80.0

Table 21

Reasons for Attending Phase 2 Training
as Reported by Trainees

Reason	Trainees	
	# of individuals	%
I attended phase 2 training for my individual professional development.	92	62.8
I attended the course because I wanted to contribute to the attainment of the company's strategic goal.	31	21.8
I attended the course because I requested to do so.	19	13.4

Table 22

Reasons for Sending Sales Representatives to Phase 2
Training as Reported by Their Field Managers

Reason	Field Managers	
	# of individuals	Percentages
I sent my employee (s) to phase 2 course for their individual professional development.	23	65.7
I sent my employee(s) because I wanted to contribute to the attainment of the company's strategic goal.	8	22.9
I sent my employee(s) because I was requested to do so.	4	11.4

the mind of only 31 trainees (21.8%) and 8 field managers (22.9%); while 92 trainees (62.8%) and 23 field managers (65.7%) thought of phase 2 training as

mainly an individual professional development program. A small portion of the subjects reported that they went through or sent people to the training because they were required to do so (13.4% of trainees and 11.4% of the field managers). In other words, very few trainees and managers (21.8% and 22.9%, respectively) expressed the reason for attending phase 2 training as one that supported the business goals of the company.

Hypotheses Testing

Based on the research and operational hypotheses stated in chapter III, the following null hypotheses, formulated in advance, were tested:

Hypotheses 1. The correlation coefficient between the variables "perceived presence of practices to support transfer of training" and the variable "perceived alignment of training with the strategic direction of the organization", as reported by trainees and their respective field managers, will be negative or equal to zero.

Hypotheses 2. There will be no significant difference between the group of trainees/field managers that reported low-to-high transfer of training and the group that reported very-high transfer of training in the mean-rank perceived-alignment-of-training-with-the-strategic-direction-of-the-organization scores.

Hypotheses 3. There will be no significant difference between the group of subjects that reported low-to-high transfer of training and the group of subjects that reported very-high transfer of training in the mean perceived-presence-of-practices-to-support-transfer-of-training scores.

Hypotheses 4. The correlation coefficient between the variable "perceived awareness of the strategic direction of the organization" and the variable "commitment to that strategic direction", as reported by trainees and field managers, will be negative or equal to zero.

Null hypothesis 1 stated that the correlation coefficient between the variables "perceived presence of practices to support transfer of training" and the variable "perceived alignment of training with the strategic direction of the organization", as reported by trainees and their respective field managers, will be negative or equal to zero.

To test null hypothesis 1, a one-tailed Spearman rank-order correlation coefficient was computed for trainee data and a Pearson product-moment correlation coefficient was computed for field managers, both a 0.05 level. The rationale for using these two tests is explained in the section called "data analysis", chapter III. Table 23 shows the results of the two correlation coefficients for trainees and field managers data. For trainees, the Spearman rank-order correlation coefficient between the two variables was 0.29. The 1-tailed significance was .001. This significance level means that "the probability that a correlation coefficient of at least [0.29] is obtained when there is no linear association in the population between [the two variables] is less than [0.001]" (Norusis, 1990a, p.187). Since the alpha level previously established was 0.05; based on this probability of 0.001, the researcher decided to reject the null hypothesis of no relationship. Therefore, it is concluded that based on this test, there is sufficient evidence to support the hypothesis that there is a relationship

Table 23

Correlation Coefficient Between the Variables "Perceived Presence of Practices to Support Transfer of Training" and "Perceived Alignment of Training With the Strategic Direction of the Organization" as Reported by Trainees (Spearman) and Field Managers (Pearson)

Sample cases	Valid	Value	1-tailed signif.
Trainees	144	.29 (Spearman r_s)	< .001
Field Managers	30	.38 (Pearson r)	< .03

between perceived presence of practices to support transfer of training and perceived alignment of training with the strategic direction of the organization, as reported by the trainees. This test also revealed that this is a low-positive relationship.

As per field managers, a 1-tailed Pearson product-moment correlation coefficient at 0.05 level was computed to test hypothesis 1. The assumptions of the Pearson r were satisfied: (a) independent groups, (b) random sample, and (c) a skewness of -0.55 and -0.36 for the two indexes showed little departure from normality in the distribution of the variables. The value of the Pearson r was 0.38. The 1-tailed significance was 0.03. Since the alpha level previously established was 0.05; based on this probability of 0.03, the researcher decided to reject the null hypothesis of no relationship. Therefore, it is concluded that based on this test, there is sufficient evidence to support the hypothesis that there is a relationship between perceived presence of practices to support transfer of training and perceived alignment of train-

ing with the strategic direction of the organization, as reported by field managers. This test also revealed that this is a low-to-moderate positive relationship.

Null hypothesis 2 stated that there will be no significant difference between the group of trainees/field managers that reported low-to-high transfer of training and the group that reported very-high transfer of training in the mean rank alignment-of-training-with-the-strategic-direction-of-the-organization scores.

Two 2-tailed Mann-Whitney U tests were performed to test this null hypothesis of no significant difference at 0.05 level. The question on reported transfer of training was recoded to form two groups (low-to-high=1+2+3 and very-high=4). The index called "perceived alignment of training with the strategic direction of the organization" was used as the interval level variable. Mann-Whitney U test does not require any assumption of normality and equality of variance from the data to be computed. Once the scores were ranked and the correction for ties was taken into account, the basic requirement for the test were fulfilled.

Table 24 shows the results of the Mann-Whitney U test for null hypothesis 2. As can be seen, 77 trainees rated the training program as having low-to-high alignment with the strategic direction of the organization; while 69 of them rated it as having very-high alignment. The Mann-Whitney U value was 1866.0 and the z value was 3.1374. The 2-tailed probability was 0.001. Since this significance level is lower than the previously established value of 0.05, the null hypothesis of no difference in the mean-ranks is rejected. The difference between the group of trainees that reported low-to-high transfer of training and the group that reported very-high

Table 24

Comparison of the Groups of Trainees That Reported Low-to-High and Very-High Transfer of Phase 2 Training in the Mean-Rank Perceived Alignment of Training With the Strategic Direction of the Organization Scores

Group	Cases	Mean Rank	U Value	z Value	2-tailed Prob.
Low-to-High	77	63.23	1866.0	3.1374	<.001
Very High	69	84.96			

transfer of training in the mean-rank "perceived alignment of training with the strategic direction of the organization" scores, is found to be significant. The results of this test provide enough evidence to support the hypothesis that there is a relationship between the variables "reported transfer of training" and the variable "perceived alignment of training with the strategic direction of the organization", as reported by trainees.

In regard to field managers, Table 25 shows the results of the Mann-Whitney U test for null hypothesis 2. As derived from Table 25, a total of 25 field managers rated the transfer of training as low-to-high, and only 9 of them reported very-high transfer of phase 2 training. The Mann-Whitney U value was 83.0, the z value was 1.1615, and the 2-tailed probability was 0.24. To establish the significance of the difference between the mean-ranks of the two groups, the 2-tail probability provided by the test (0.24) was found to be higher than the previously established alpha level

Table 25

Comparison of the Groups of Field Managers That Reported Low-to-High and Very-High Transfer of Phase 2 Training in the Mean-Rank Perceived Alignment of Training With the Strategic Direction of the Organization Scores

Group	Cases	Mean Rank	U Value	z Value	2-tailed Prob.
Low-to-High	25	16.32	83.0	1.1615	0.24
Very High	9	20.78			

of 0.05. The results of this test indicate that the difference observed in the mean-ranks of the two groups is not significant. Thus, the researcher failed to reject the null hypothesis of no difference. The difference between the mean-ranks of the two groups could be caused by factors other than perceived alignment of phase 2 training with the strategic direction of the organization, or by chance alone. Consequently, it is concluded that the results of this test do not provide evidence of the relationship hypothesized for field managers, and; therefore, they are inconclusive regarding that relationship.

Null hypothesis 3 stated that there will be no significant difference between the group of subjects that reported low-to-high transfer of training and the group of subjects that reported very-high transfer of training in the mean perceived-presence-of-practices-to-support-transfer-of-training scores.

A t-test for independent means at 0.05 level was performed to test null

hypothesis 3 for trainees. The question on reported transfer of training was recoded to form two groups (low-to-high=1+2+3 and very-high=4). The index called "perceived presence of practices to support transfer of training" was used as the interval level variable. The assumptions of the t-test were satisfied: (a) independent groups, (b) random sample, (c) an F 2-tailed high probability of 0.56 provided the basis to consider the variances as similar, and (d) a skewness of -0.31 for the index "perceived presence of practices to support transfer of training", shows little departure from normality in the distribution of that variable.

As shown on Table 26, seventy six (76) trainees perceived low-to-high transfer of phase 2 training, while 69 of them reported very-high transfer. The t-value for this test was 3.99, with 139 degrees of freedom, and a 2-tail probability of 0.000. Since the computed probability is lower than the previously established alpha level (0.05), the null hypothesis of no difference is rejected. The results of this test provide sufficient support for the hypothesis that there is a relationship between the variable "reported transfer of training" and the variable "perceived presence of practices to support transfer of training", as reported by trainees.

In the case of field managers, a Mann-Whitney U test was computed to test null hypothesis 3. Table 27 shows the results of the Mann-Whitney U test for null hypothesis 3. As Table 27 shows, a total of 21 field managers rated the transfer of training as low-to-high, and only 9 of them reported very-high transfer of phase 2 training. The Mann-Whitney U value was 90.5, the z value was 0.1819, and the 2-tailed probability was 0.85. To establish the significance of the difference between

Table 26

Comparison of the Groups of Trainees That Reported Low-to-High and Very-High Transfer of Phase 2 Training in the Mean Perceived Presence of Practices to Support Transfer of Training Scores

Group	Cases	SD	$\overline{X}$	2-tail F	df	t-Value	2-tail Prob.
Low-to-High	76	4.9	37.4	0.56	139	3.99	<.000
Very High	69	5.2	40.7				

Table 27

Comparison of the Groups of Field Managers That Reported Low-to-High and Very-High Transfer of Phase 2 Training in the Mean-Rank Perceived Presence of Practices to Support Transfer of Training Scores

Group	Cases	Mean Rank	U Value	z Value	2-tailed Prob.
Low-to-High	21	15.69	90.5	0.1819	0.85
Very High	9	15.06			

the mean-ranks of the two groups, the 2-tail probability provided by the test (0.85) was found to be higher than the previously established alpha level of 0.05. The results of this test indicate that the difference observed in the mean-ranks of the two groups is not significant. Thus, the researcher failed to reject the null hypothesis of no difference. The difference between the mean-ranks of the two groups could be

caused by factors other than perceived presence of practices to support transfer of training, or by chance alone. Consequently, it is concluded that the results of this test do not provide evidence of the relationship hypothesized for field managers, and; therefore, they are inconclusive regarding that relationship.

Null hypothesis 4 stated that the correlation coefficient between the variable "awareness of the strategic direction of the organization" and the variable "commitment to that strategic direction", as reported by trainees and field managers, will be negative or equal to zero.

To test null hypothesis 4, a one-tailed Spearman rank-order correlation coefficient was computed for trainees data and a Pearson product-moment correlation coefficient was computed for field managers, both at 0.05 level. The rationale for using these two tests is explained in the section called "data analysis", chapter III. Table 28 shows the results of the two correlation coefficients for trainees and field managers data. For trainees, the Spearman rank-order correlation coefficient between the two variables was 0.26. The 1-tailed significance was .001. Since this alpha level is lower than the previously established level (0.05), the researcher decided to reject the null hypothesis of no relationship. Therefore, it is concluded that based on this test, there is sufficient evidence to support the hypothesis that there is a positive relationship between "awareness of the strategic direction of the organization" and "commitment to that strategic direction", as reported by the trainees. This test also revealed that this is a low-positive relationship.

As per field managers, the Pearson product-moment correlation coefficient

Table 28

Correlation Coefficient Between the Variables "Awareness of the Strategic Direction of the Organization" and "Commitment to That Strategic Direction of the Organization" as Reported by Trainees (Spearman) and Field Managers (Pearson)

Sample	Valid cases	Value	1-tailed signif.
Trainees	147	.26 (Spearman r_s)	<.001
Field Managers	36	.63 (Pearson r)	<.001

was 0.63. The 1-tailed significance was 0.001. Since the alpha level previously established was 0.05; based on this probability of 0.001, the researcher decided to reject the null hypothesis of no relationship. Therefore, it is concluded that based on this test, there is sufficient evidence to support the hypothesis that there is a positive relationship between "awareness of the strategic direction of the organization" and "commitment to that strategic direction", as reported by field managers. This test also revealed that this is a moderate positive relationship.

Summary of Chapter IV

This chapter discussed the results of the study. Several descriptive findings for the two research questions were offered. The findings presented in this chapter were based on descriptive statistics for each survey item, hypotheses testing, analysis of open-ended questions, and interpretation of notes from focus-group discussions.

Overall, trainees and field managers reported that the training program was useful, offered when needed, and of high quality. Both groups reported high transfer of training taking place and the opportunity to use the skills learned immediately after training. Field managers reported they perceived the trainees showing good knowledge of the products as a result of going through the training program, but need to improve in adapting to emerging situations in the field, planning work, and selling skills. Trainees reported the training program inducted them appropriately to their work, prepared them to work, and served as a confidence booster.

The majority of the subjects in the study perceived high alignment of phase 2 training with the strategic direction of the organization; however, one quarter of them perceived it is little connected. A significant number of subjects in this study did not see any component of the organization's strategy addressed in phase 2 training. Roughly one quarter of the subjects rated low the way in which the organization's strategy is communicated to them. Most trainees and field managers thought of phase 2 training as primarily an individual professional development activity. Very few of them expressed the reason for attending phase 2 training as one that supports the business goals.

Four hypotheses were tested in this study. Parametric techniques (Pearson product-moment correlation coefficient and t-test for independent means) and non-parametric techniques (Spearman rank-order correlation coefficient and Mann-Whitney U test) were used to test the hypotheses for trainees and field managers at 0.05 level.

This study found a low-to-moderate positive correlation between the perceived

alignment of training with the strategic direction of the organization and the presence of practices to support transfer of training; and a positive correlation between awareness of the strategic direction of the organization and commitment to that strategic direction for both trainees and managers. The group of trainees that reported very-high transfer of training, perceived significantly higher alignment of the training program with the strategic direction of the organization than the group of trainees that reported low-to-high transfer of training. Field managers did not differ significantly in this variable. Trainees who reported very-high transfer of training also reported significantly higher presence of practices to support transfer throughout the training program than the group of trainees that reported low-to-high transfer of training. Field managers did not differ significantly in this variable either.

The last chapter provides the discussion of the findings and conclusions.

CHAPTER V

DISCUSSION AND CONCLUSIONS

This final chapter contains a discussion of the research and its findings. The conclusions presented here stem from the analysis of the data collected and the hypotheses tested.

Chapter V contains: (a) interpretation of the findings, (b) implications of the findings, (c) limitations of the study, (d) recommendations for future research, and (e) conclusions.

Interpretations of the Findings

One-hundred-forty-seven sales representatives that went through a training program in a Fortune 200 company in Michigan participated in this study. The field managers of these trainees were surveyed too. Thirty of the trainees were also interviewed in three focus-group discussions. A researcher-developed questionnaire was used to collect information to measure the five variables studied: (a) perceived presence of practices to support transfer of training, (b) perceived alignment of training with the strategic direction of the organization, (c) awareness of the strategic direction of the organization, (d) commitment to the strategic direction of the organization, and (e) reported transfer of training. Two research questions were investigated: (1) what is the relationship between the perceived

presence of practices to support transfer of training and the perceived alignment of training with the strategic direction of the organization, and (2) what is the perceived awareness of and commitment to the strategic direction of the organization. Four research hypotheses were formulated from the two research questions. The null hypotheses derived from the research hypotheses were the following:

1. The correlation coefficient between the variables "perceived presence of practices to support transfer of training" and the variable "perceived alignment of training with the strategic direction of the organization", as reported by trainees and their respective field managers, will be negative or equal to zero.

2. There will be no significant difference between the group of trainees/ field managers that reported low-to-high transfer of training and the group that reported very-high transfer of training in the mean-rank alignment-of-training-with-the-strategic-direction-of-the-organization scores.

3. There will be no significant difference between the group of subjects that reported low-to-high transfer of training and the group of subjects that reported very-high transfer of training in the mean perceived-presence-of-practices-to-support-transfer-of-training scores.

4. The correlation coefficient between the variable "awareness of the strategic direction of the organization" and the variable "commitment to that strategic direction", as reported by trainees and field managers, will be negative or equal to zero.

For each null hypothesis, two tests took place: one for trainees and one for

field managers. Each hypothesis was tested in its null form at .05 level of significance. Parametric techniques (Pearson product-moment correlation coefficient and t-test for independent means) and nonparametric techniques (Spearman rank-order correlation coefficient and Mann-whitney U test) techniques were used to test the null hypotheses.

Research Question 1

As shown in Table 9, seventy nine percent (79.5%) of the field managers (27 out of 36) rated from good to excellent the overall quality of the phase 2 training program. This was a positive rating for the training program, mostly coming from such an important internal customer. Judging from field managers' comments, product knowledge was a strength to keep up in this training program. Areas that need more attention were the capacity of sales representatives to adapt to new situations, planning day-to-day work, and selling skills.

Overall, sales representatives and field managers reported a high transfer of phase 2 training to the job (90.5% and 94.3% respectively rated it very high in the scale of 1 to 4). Self reports from sales representatives were validated by what field managers perceived. Table 15 shows how the overwhelming majority of the trainees (95%) reported that they had an opportunity to use the skills learned immediately after training. This finding suggested an ideal situation for the training program and was a strength to keep up with, to assure what Brinkerhoff (1991) termed "just-in-time training," borrowing the term from the

total quality literature.

It is shown in Table 12 that 61.1% of the field managers were not sure or did not see any component of the strategic direction of the organization addressed in phase 2 training. By the same token, 39.7% of the sales representatives reported the same. It is also shown in Table 12 that 59.6 % of trainees reported that they did not hear from anybody (presenters, trainers, managers, etc) the explicit linkage between phase 2 training and the organization's strategy. Likewise, 97.1% of the field managers reported the same. It appears that the level of exposure to the training content differ for both groups of participants in this study. This descriptive data suggests an exposure gap in terms of training content and its linkage with the organization strategy that deserves further exploration.

For hypothesis 1, the results of the Spearman rank-order correlation coefficient for trainees and the Pearson product-moment correlation coefficient for field managers provided the basis for rejecting the null hypothesis ($p < .001$ and $< .03$, respectively). A low-positive relationship between the variables was found for trainees (Spearman $r_s = 0.29$), and a positive (low-to-moderate) relationship was found for field managers (Pearson $r = 0.38$). These findings for hypothesis 1 suggest that both sales representatives and their respective field managers did engage themselves in more transfer enhancing behaviors as they perceived more alignment of Phase 2 training with the strategic direction of the organization. Few previous studies of the relationship between these two variables (considered together) were available in the review of the literature. Findings from hypothesis

1 confirmed, from an empirically perspective, theoretical approximations advanced by several scholars (Adams, 1989; Garavan, 1991; Hales, 1986; Levy, 1988; Sandy, 1990; Schuler et al, 1987; Weiss, 1986; Woolfe, 1993; among others), and best-practice in corporate training accounts (Carnevale, Gainer, & Villet, 1990; Cassner-Lotto & Associate, 1988; Rosow & Zager, 1988; Training Strategies, 1992).

For hypothesis 2, the results of the two Mann-Whitney U tests provided the basis for rejecting the null hypothesis in the case of trainees ($p < 0.001$), and for failing to reject the null hypothesis in the case of field managers (p 0.24). A significant relationship was found between reported transfer of training and perceived alignment of training with the strategic direction of the organization, for trainees. These findings suggest that those trainees that reported very-high transfer of the training program to the job, also perceived high alignment of the training program with the strategic direction of the organization, and vice versa. Findings from the trainees version of hypothesis 2 complement the findings of hypothesis 1 and confirm qualitative findings of several accounts of successful training strategies in American organizations (Bolt, 1985; Carnevale et al, 1990; Casner-Lotto & Associates, 1988; Galagan, 1990; Gilmartin, 1991; McManis & Leibman, 1988; Rosow & Zager, 1988). On the other hand, field managers perceived transfer of training taking place, but the data did not reveal any significant connection with their perception of training with the strategic direction of the organization; and, therefore, the findings for field managers are inconclusive

regarding the relationship hypothesized.

Regarding hypothesis 3, the results of the t-test for independent means ($p < 0.000$) indicated the rejection of the null hypothesis at 0.05 level for trainees. On the other hand, the results of the Mann-Whitney U test (p 0.85) provided the basis for accepting the null hypothesis of no difference at 0.05 level for field managers. These findings suggest that those trainees that reported very-high transfer of the training program to the job, also reported their perception of high presence of practices to support transfer of training, and vice versa. Findings from the trainees version of hypothesis 3 also complement the findings of hypothesis 1. This finding for trainees was consistent with the theoretical outcomes suggested by several scholars (Broad, 1982; Broad & Newstrom, 1992; Newstrom, 1986), and confirmed the findings of several studies that stressed the importance of factors outside the training-delivery context in training effectiveness (Huczynski & Lewis, 1980; Michalack, 1981; Sawczuk, 1990; Tracey, 1992; Vandenput, 1973; Xiao, 1992). Field managers, on their part, did not see the connection between transfer of training and the presence of practices to support that transfer. The results of this test did not provide enough evidence to reject the null hypothesis of no difference in the case of field managers; and, therefore, the findings were inconclusive regarding the relationship hypothesized.

Research Question 2

Seventy-eight percent (78.8%) of the sales representatives rated high the

way in which the strategic direction of the organization was communicated to them. Sixty-three percent (63%) of the field managers reported the same. Likewise, 80.3% of the sales representatives said that they felt comfortable with their current knowledge of the strategic direction of the company; and so did 75% of the field managers. Eighty percent (80%) of the field managers rated high the extent to which there is alignment of phase 2 training with the demands of the market within which the company operates: while 68% of sales representatives did the same. This finding suggests that 31.9% of sales representatives and 20% of field managers saw little connection between the content of phase 2 training and the demands of the market. Further explanations of this trend were provided by sales representatives in the three focus-group discussions that took place as part of the data collection procedure.

The two groups surveyed were asked to rank in order of importance three reasons for either attending or sending the employee to phase 2 training. Sixty-two percent (62.8%) of trainees and 65.7% of field managers prioritized individual staff development as the main reason for attending or sending the employee. On the other hand, only 21.8% of trainees and 22% of field managers checked as number-one reason their interest in contributing to the attainment of the organization's strategic goals. Finally, a striking coincidence occurred regarding the expressed commitment of both groups to the company's strategy: ninety seven percent (97.3%) of the trainees and 97.2% of the field managers rated their commitment as high. By the same token, both groups rated high the extent to

which they agreed with the rightness of the company's strategic direction (91.9% and 88.9%, respectively).

For hypothesis 4, the results of the Spearman rank-order correlation coefficient for trainees, and the Pearson product-moment correlation coefficient for field managers provided the basis for rejecting the null hypothesis ($p < .001$ and $< .001$, respectively). A low-positive relationship between the variables was found for trainees (Spearman $r_s = 0.26$), and a positive moderate relationship was found for field managers (Pearson $r = 0.63$). These findings for hypothesis 4 suggest that both sales representatives and their respective field managers did perceive more commitment to the strategic direction of the organization as they felt themselves more aware of that strategic direction, and vice versa.

Implications of the Findings

The results of this study have program-wide and organization-wide implications, as well as implications for the field of educational leadership. This section is devoted to discuss its implication regarding corporate strategy and transfer of training.

The issue of the process through which the corporate strategy is defined was not the focus of this study. For the purpose of this study, the strategic direction of the organization was a given fact; therefore, the researcher focused on the way it trickled down to the subjects studied. The findings of this study suggest that regarding the way corporate strategy filters down to the organization, there

are areas of strength but still enough room for improvement, as it relates to phase 2 training. The findings in this area also may have implications for other training programs and for the organization as a whole.

The findings of this study suggest the probability that an important part of the field managers got a low level of exposure to the content taught in the training program through which their employees went under. The literature on enhancing transfer of training suggests that managers should be made aware of training content, to increase the likelihood of supporting training usage back on the job (Brinkerhoff & Montesino, 1993; Broad, 1982; Georgenson, 1982; Michalak, 1981; Stiefel, 1974; Trost, 1985). Therefore, the findings of this study indicate that trainers should make an effort at involving the managers at the outset of the training program, as a way of eliciting their support.

About 20% of the subjects surveyed confessed knowing little about the strategic direction of the company. One-quarter of the trainees and one-third of the field managers said that this strategic direction was not well defined, according to what they perceive. On the other hand, 91.9% of trainees and 88.9% of field managers agreed that the corporate strategy is the right one, and an overwhelming majority of them (97.3% & 97.2%, respectively) expressed high commitment to it. These findings reveal the need for more organization-wide concerted efforts at making the corporate strategic direction known to the employees.

At several junctures in this study, the findings suggest that the connection of phase 2 training to the corporate strategy was not conveyed as clearly as it

should be to the training constituencies involved in it. On the average, trainees and field managers rated the individual question addressing phase 2 alignment with the company's strategic direction between "somewhat" and "very much" (2.77 and 2.74 in a scale of 1 to 4, respectively). One-third of the subjects in both groups perceived low alignment of phase 2 training to the company's strategic direction. More than half of the trainees (59.6%) reported that they were either not sure, or did not hear from anybody the explicit linkage of phase 2 training to the company's strategy. As per field managers, 96% of them reported that anybody made that connection of phase 2 training to the corporate strategy clear to them.

Data from this study suggests that a more conscious effort should be made to map each individual training activity to the organization's strategy. In a ranking exercise included in the survey, only 21.8% of the trainees and 22.9% of the field managers thought of phase 2 as a deliberate act to contribute to the attainment of the company's strategic goals in the first place; the majority of them thought of it primarily as an individual professional development activity. The literature suggested that the best scenario is the one in which both expected job and career utility and organizational goals get the same attention when it comes to training (Clark, 1992). It is advisable to further study the extent to which this gap of explicit connection between training and corporate strategy affect other training programs in the organization where the present study was conducted.

Another organization-wide issue, with broader system-wide implications,

was the alignment of training not only with the organization's strategy, but also with the market within which the organization operates. Thirty-one percent of the sales representatives and 20% of field managers rated this item as low (1+2 in the 1-to-4 scale). Further anecdotal references from sales representatives interviewed substantiated this survey finding. In some instances, the sales representatives said they were taught in phase 2 training about products but that they rarely had an opportunity to work with these products in the field. On the other hand they spend little time in phase 2 training discussing other products that had by far more demand in the market. This issue raised yet another important researchable question regarding how well aligned the organization's strategy was with the market to strengthen organizational success.

The level of employee's exposure to the strategic arena was another important issue raised by this study. Thirty-six percent (36%) of the field managers and 29% of the trainees in this study felt that the strategic direction of the company was not well communicated to them, and roughly one-quarter of the two groups surveyed reported they did not feel comfortable with their current knowledge of that strategy. The exposure to the strategic arena has been studied before (Carnevale et al., 1990; Hales, 1986; Rosow & Zager, 1988). The literature suggested that in some organizational scenarios, corporate strategy is transmitted to lower levels in diminishing communication that reduced the ability to translate strategy into training needs (Rosow & Zager, 1986). Sales representatives were far more separated from the policy-making arena than field managers and that

might explain their level of comfort with their current knowledge of the company's strategic direction. On the other hand, the explicit discomfort regarding their current knowledge of the corporate strategy reported by one-quarter of the field managers raises a system-wide question related to the process by which the corporate strategy is defined and communicated. As explained before, strategy definition was not part of the design of this study; therefore, further inquiry in that regard is recommended.

The implications of this study for the field of educational leadership, concretely for the human resource development community, are vast. These findings add to the body of knowledge on how training and corporate strategy should relate to each other and suggest a further researchable relationship between the support for transfer and the alignment of training with the strategic direction of the organization.

A significant portion of the subjects of the study saw more value from training, transferred more training to the job, and engaged in more transfer-enhancing behaviors as they saw more alignment of the training program with the strategic direction of the organization. These findings suggests that the more aligned the training is with the strategy, the higher the likelihood of key training constituencies to engage themselves in transfer-enhancing behaviors, and, consequently, the higher the likelihood of transferring training to the job. This study also confirmed the findings of several scholars (Brinkerhoff & Montesino, 1993; Georgenson, 1982; Broad, 1982; Michalak, 1981; Nadler, 1970; Newstrom, 1986;

Wexley & Baldwin, 1986; Zemke & Gunkler, 1986) that found a great need for building support systems for training by building partnerships among trainers, trainees, and managers.

The subjects of this study expressed more commitment to the strategic direction of the company as they confessed being more informed about it. Furthermore, the subjects expressed high agreement with the company goals, in spite of the gaps reported in the way it is communicated to them. These findings point to the suggestion that a more conscious effort should be made to inform, to make them more aware of, and to induct employees into the company's strategic direction, as a way of eliciting understanding and support for the strategy.

Given the limited generalizability of this study beyond the organization where it was conducted, further research in different training settings and incorporating several variables is highly recommended.

Limitations of the Study

This study was limited to the target population within the organization where the study was conducted (Sales Representatives that participated in the training program and their respective Field Managers, in a Fortune 200 company in Michigan). Although the researcher was able to generalize from the sample to the population studied, the findings of this study refer to the population within that specific organization, not necessarily to all corporations in the industry. The ability to generalize the results beyond this organization is limited.

The organization where the study took place is identified as "a Fortune 200 Company in Michigan", under an agreement between the researcher and the company, to further protect the anonymity of the participants. The omission of the organization's name slightly weakens the potential impact of the study in the eyes of human resource development practitioners, who are not able to identify the specific organization to learn more about the implications of the study in changing training practices.

The retrospective nature is another limitation of the present study. Trainees and their managers were asked to remember the extent to which some practices-to-support-transfer-of-training took place in the training program they went through in the 20 months prior to December 10, 1993. Therefore, there were survey respondents who went through the training program 20 months earlier and other respondents who went through the training program only 4 months before the administration of the survey.

Two other limitations derived from modifications of the original design of the study: (1) it was not possible to capture the "trainers" perspective, and (2) the researcher could not get meaningful information about "factors inhibiting transfer of training" from the trainees. Only two (2) trainers returned the questionnaire. One of them was not completed. Therefore, the trainers' perspective was not considered in this study. By the same token, although the trainees responded to all the survey questions, their answers to the last question in the questionnaire, which asked them to list barriers to skill application, were minimal. The

researcher's intention was to build an index of the "push for transfer" within the work environment as it was done in a study at another division of the same organization (Brinkerhoff and Montesino, 1993), but the lack of sufficient answers precluded this exercise from happening. After-the-fact conversations with survey recipients revealed that many of them found this section of the questionnaire redundant and chose not to answer it.

Recommendations for Future Research

The findings of this study raised many questions that need further exploration. In broader terms, some of the results of the present study may even suggest certain research possibilities. Among the issues that need to be further explored are:

1. The issue of the process through which the corporate strategy is defined and communicated to the organizational members. It was not the focus of this study, but as the researcher addressed the questions on how the strategy gets communicated, it became obvious that the process of strategy definition is of equal importance in promoting awareness within the organization.

2. The extent to which there is any gap in making explicit the connection between training and corporate strategy in the other training programs within the organization and in other training settings. This study took place in one of the training programs that the organization operates. The extent to which this is a pervasive feature that affects the other training programs deserves to be studied.

Likewise, this is a question that should be asked of any training program: to what extent is this particular training program aligned with the strategic direction of the organization? How do these two variables interact within this program?

3. How well aligned is the organization's strategy with the market within which the organization operates, is a crucial question to strengthen organizational success. This is as important for sales training as for any training program; and deserves further inquiry.

4. Any follow-up to this study should address several issues to overcome the limitations of the present study: (a) every effort should be made to include trainers perspective on the variables studied here; (b) effort should be made to reach the customer-end of the training spectrum, to validate the use of the content taught in the training program; (c) follow-up closely a group of trainees to document success cases of skill application; (d) collet more extant data on the impact of the training program on bottom-line results.

5. Given the limited generalizability of the findings of this study beyond the organization where it was conducted, further research in different training settings is highly recommended.

Conclusions

The review of literature suggested a researchable relationship among the variables considered in this study. Most of the findings in this investigation confirmed the trends suggested in several theoretical propositions advanced by human

resource development scholars, best-practices accounts, and empirical findings of previous research studies.

With the results of this study, it is concluded that there is a low-to-moderate positive relationship between the presence of practices to support transfer of training and the perception of the alignment of training with the strategic direction of the organization, as hypothesized in advance. It was also found that there is low-to-moderate positive relationship between the awareness of and commitment to the strategic direction of the organization, as previously hypothesized. These findings suggest that the subjects studied engaged themselves in more transfer enhancing practices as they perceived higher alignment of training with the strategic direction of the organization. They also suggest that the subjects expressed more commitment to the organization's strategy as they perceived being more aware of that strategy.

This investigation has also demonstrated that the group of trainees that reported very-high transfer of training, perceived significantly higher alignment of the training program with the strategic direction of the organization than the group of trainees that reported low-to-high transfer of training. Field managers did not differ significantly in this variable. Furthermore, it was demonstrated that trainees who reported very-high transfer of training also reported significantly higher presence of practices to support transfer before, during, and after the training program than the group of trainees that reported low-to-high transfer of training. Field managers did not differ significantly in this variable either.

The findings from this study have implications for the training program studied, the organization where the study was conducted, and the broader field of educational leadership, concretely the human resource development community. Even though the subjects in this study reported high transfer of phase 2 training to the job, and praised several aspects of the program, some warning signs for the program included: (a) a significant proportion of subjects perceived low alignment of the training program with the strategic direction of the organization, (b) many of the subjects were not told about that strategic connection, (c) the majority of the subjects (trainees and field managers) reported that they were involved in the program chiefly because of their interest in individual professional development, and not with the primary purpose of contributing to the attainment of the company's strategic goals.

This study is also a starting point for framing system-wide questions that have to be addressed at organizational level:

1. Regarding the way corporate strategy filters down to the organization there are areas of strength to be kept and at the same time providing enough room for improvement. Trainees and managers participating in this study showed high commitment to the company strategy, but reported discomfort about their current knowledge of that strategy;

2. The exposure of key training constituencies to the strategic planning scenario seems to vary greatly.

3. Involvement of line management and trainees in defining training

needs and content, as reported by them, seems to need more improvement.

4. A significant proportion of the subjects in this study perceived low alignment of the training program with the market within which the organization operates; which raises the question of how well is the corporate strategy aligned with the market.

For the field of educational leadership, concretely for the human resource development community, this study contributes to the understanding of crucial training concerns: (a) the way corporate strategy and transfer of training relate as important elements of a training paradigm more responsive to individual needs and more accountable for organizational pay off, (b) the importance of mapping each individual training activity to the organizational goals, (c) the need to create support systems for training through the building of internal partnerships trainer-trainees-managers, (d) the importance of informing organizational members about the strategic direction as a way of eliciting commitment to it.

Previous research findings and the results of the present study provide the basis to stimulate more investigation, regarding the relationship between organizational strategy and transfer of training. Further research is recommended to address issues that would shed more light on the relationships found in this study.

Appendix A

Human Subjects Institutional Review Board Approval Letter

Human Subjects Institutional Review Board

Kalamazoo, Michigan 49008-3899
616 387-8293

WESTERN MICHIGAN UNIVERSITY

Date: November 15, 1993

To: Mas U. Montesino

From: M. Michele Burnette, Chair M. Michele Burnette

Re: HSIRB Project Number 93-11-13

This letter will serve as confirmation that your research project entitled "A study of support for transfer and the alignment of training with the strategic direction of the organization" has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

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

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

Approval Termination: November 15, 1994

xc: Brinkerhoff, Ed. Leadership

Appendix B

Trainees and District Managers Questionnaires

SURVEY OF PARTICIPANTS IN THE [redacted] SALES CURRICULUM, PHASE 2 OF LEVEL I (PHARMACEUTICAL SALES REPRESENTATIVE)

PART I. The following is a list of conditions that sometimes exist **before training occurs.** Please indicate, by circling the appropriate number on the response scale, the extent to which they apply to you regarding the **Phase 2** training you participated in. Please use the following scale: 1= Not at all, 2= Somewhat, 3= Very much, 4= A great deal.

Before training, the trainer(s):	Not at all			A great deal
involved me and/or my manager in assessing my training needs.	1	2	3	4
stated application-oriented objectives for the course	1	2	3	4
discussed with me and/or my manager potential threats in the work environment that might keep me from applying the skill/knowledge learned in the course, once I returned to work.	1	2	3	4
developed materials to increase my readiness for training (such as pre-reading assignments, course objectives and content, application to the job highlights, etc.); so that I was able to see up front the value in the training to be received.	1	2	3	4

Before training, my district manager:	Not at all			A great deal
briefed me on the importance of the course in terms of job application.	1	2	3	4
provided time for me to complete pre-course assignments.	1	2	3	4
developed an agreement with me specifying mutual commitment to maximize results from the course.	1	2	3	4

Before training, I myself:	Not at all			A great deal
participated in advance activities in preparation for the training.	1	2	3	4
knew that a few of the trainees were involved in designing the training.	1	2	3	4

Please go to the next page

PART II. What follows is a list of conditions that sometimes exist **during training**. Please indicate with a circle the extent to which they apply to you regarding your participation in the **Phase 2** training. Please rate them as follows: 1= Not at all, 2= Somewhat, 3= Very much, 4= A great deal.

During training, the trainer(s):	Not at all			A great deal
explained what benefits I would gain for my investment of time and energy in learning the skill/knowledge taught in the course.	1	2	3	4
provided realistic work-related tasks.	1	2	3	4
provided individual feedback on my learning (understanding, comprehension, etc.).	1	2	3	4
provided job performance aids to be used on the job.	1	2	3	4
created opportunities for the formation of after-training support groups among the trainees.	1	2	3	4
helped us to prepare individual action plans to put in practice the skill/knowledge learned back on the job.	1	2	3	4
provided opportunities for me to practice what I learned while still at the training site.	1	2	3	4
conducted sessions to anticipate what might trip us up in skill maintenance/application.	1	2	3	4

During training, my district manager:	Not at all			A great deal
monitored my attendance to the training sessions.	1	2	3	4
communicated to me, very clearly, his/her support for the training I was participating.	1	2	3	4

During training, I myself:	Not at all			A great deal
engaged myself in actively learning the course content.	1	2	3	4
linked with another trainee to practice skill application.	1	2	3	4
became part of a subgroup of trainees to support skill application after-training among ourselves.	1	2	3	4
planned for applications back on the job.	1	2	3	4
created a behavioral contract with my immediate supervisor to apply what I learned in **Phase 2** course.	1	2	3	4

Please move to the next page

PART III. The following is a list of conditions that sometimes exist **after training.** Please indicate with a circle the extent to which they apply to you regarding the **Phase 2** training you participated in. Please use the following scale: 1= Not at all, 2= Somewhat, 3= Very much, 4= A great deal.

After training, the trainer(s):	Not at all			A great deal
provided follow-up support after-training.	1	2	3	4
conducted evaluation of training usage on the job.	1	2	3	4
provided refresher/problem-solving sessions after training.	1	2	3	4
administered recognition systems for efforts or achievement in skill application.	1	2	3	4

After training, my district manager:	Not at all			A great deal
planned my entry to the unit after the course was over.	1	2	3	4
provided me with opportunities to practice new skills soon after training.	1	2	3	4
encouraged my attempts to apply the newly acquired skills.	1	2	3	4
discussed after-training follow-up activities with the trainers	1	2	3	4
gave me positive reinforcement for the demonstration of behaviors taught in the course.	1	2	3	4
encouraged a briefing of my co-workers on the skill/knowledge taught in the course.	1	2	3	4
publicized examples of successful after-training skill usage among those employees who had attended **Phase 2** training.	1	2	3	4

After training, I myself:	Not at all			A great deal
practiced self-management of skill application.	1	2	3	4
reviewed training content and learned skills.	1	2	3	4
became a mentor to help other(s) on the job.	1	2	3	4
found a mentor to help me with on-the-job application.	1	2	3	4
maintained contact with other trainees.	1	2	3	4
monitored my personal goals in implementing new skills.	1	2	3	4

Over, please

PART IV. This section includes several questions that explore your perception of the company's strategic direction. We have included here your company's mission statement; which is one of the widely available components of the strategic direction.

The U.S. Pharmaceutical Operation's Mission Statement reads:
"Our mission is to rapidly identify and respond to the needs of our customers in specific markets by marketing and selling high-quality, cost-effective pharmaceutical products that optimize corporate earnings"

Please check the appropriate response category.

		Not at all			A great deal
1	How much do you know about the strategic direction (business goals) of the company?	1	2	3	4
2	How well defined is that strategic direction?	1	2	3	4
3	To what extent is the **Phase 2** course in which you participated aligned with the strategic direction of the company?	1	2	3	4
4	To what extent do you agree that the strategic direction of your company is the right one?	1	2	3	4
5	To what extent are you committed to that strategic direction?	1	2	3	4

6 How well is the strategic direction of the company communicated to you?
☐Not well ☐Somewhat ☐Well ☐Very well

7 How comfortable are you with your current knowledge of the strategic direction of the company?
☐Not at all ☐A little bit ☐Fairly well ☐A lot

8 To what extent is there alignment between the demands of the market in which you work and the content of the **Phase 2** course you participated in?
☐No alignment ☐Minimal alignment ☐Good alignment ☐Excellent alignment

9 Did you see any component of the strategic direction of the company addressed in the **Phase 2** course you participated?
Yes____ Not sure____ No____

Please go to the next page

10 Did anybody (presenters, training managers, district managers) make explicit the linkage of **Phase 2** training to the strategic direction of the company?

Yes____ Not sure____ No___

11 Please rank the following statements in order of importance (1= the most important, and 3= the least important):

_____I attended the **Phase 2** course for my individual professional development.

_____I attended the course because I wanted to contribute to the attainment of the company's strategic goal.

_____I attended the course because I was requested to do so.

12 How much have you actually used what you learned in the course?

☐Nothing at all ☐Just a little bit ☐fairly much ☐A lot

13 When did you have an opportunity to use the skill/knowledge after training?

☐Immediately after ☐A few months later ☐A year later ☐Have not had

14 Place a check (✓) next to each reason below that might explain why you have applied the skills/knowledge you learned in **Phase 2** training to your job assignments (Check all that apply).

_____My manager discussed with me how my new skills would be used on my job assignments.

_____My manager coached me to use the new skills.

_____I received help from others in my work area.

_____I was given the necessary time and/or tools to apply the skills.

_____I received training just in time to provide me with the skills I needed.

_____The skill/knowledge I learned applied directly to my job assignment.

_____I received during-training preparation to transfer what I learned in the training site to my job.

_____There were positive consequences associated with skill/knowledge application.

_____I learned the skill/knowledge thoroughly.

_____A smooth post-training environment helped me to apply the skill/knowledge I learned.

_____Other: Describe_____

_____

_____

Please go to the last page

15 Place a check (✓) next to each reason below that has been a barrier to using what you learned in **Phase 2** training (Check all that apply).

_____The skills did not seem to apply to my job assignment.

_____Nobody discussed with me how my new skill/knowledge would be used on my job assignments.

_____My immediate supervisor did not coach me to use the new skills.

_____I was not given time/tools to implement the skills on the job.

_____There was no one to help me implement the skills on the job.

_____I did not agree with the skill/knowledge taught.

_____I did not receive during-training preparation to transfer the skills/knowledge to my job.

_____My job assignment changed so these skills did not apply.

_____My immediate supervisor did not agree with the skills I learned.

_____The training was not timed right for my job.

_____There were negative consequences associated with skill/knowledge application.

_____I did not learn the skill/knowledge very well.

_____Crisis work or overload kept me from applying the skill/knowledge learned.

_____I did not make any effort to apply the skills learned.

_____Peer pressure kept me from applying the skill/knowledge to my job.

_____Other: Describe_____

_____

PART V. This section covers information about yourself:

1 My current position in the company is:_____

2 I attended **Phase 2** training _____(Month)_____(year).

3. I have been in the company for_____years

THANKS A LOT FOR YOUR TIME AND CONSIDERATION

Please use the enclosed prepaid envelope to mail your completed questionnaire to:

Max Montesino
5508 South Madison #13
Hinsdale, Illinois 60521-5147

SURVEY OF DISTRICT MANAGERS WHOSE EMPLOYEES PARTICIPATED IN [redacted] SALES CURRICULUM, PHASE 2 OF LEVEL I (PHARMACEUTICAL SALES REPRESENTATIVE)

PART I. This section covers questions on your perception of trainees' usage of the **Phase 2** training in the field. **Phase 2** was the first in-house course your Sales Representatives participated (three weeks centralized training in Kalamazoo). To answer these questions, please think of all Sales Representatives from your District that have participated in **Phase 2** training in the last two years.

1 How would you rate the overall quality of **Phase 2** training?

☐Not good ☐Somewhat good ☐Good ☐Excellent

2 How well prepared were your employees at the end of **Phase 2** training?

☐Not well ☐Somewhat ☐Well ☐Very well

3 How would you rate trainee's preparation after **Phase 2**, in terms of:

Knowledge of the products	1	2	3	4
Selling skills	1	2	3	4
Planning day-to-day work	1	2	3	4
Adapting to emerging situations in the field	1	2	3	4
Achieving concrete results with clients	1	2	3	4

4 Please share with us any feedback you have received from the customers (Doctors) regarding your Reps preparation after **Phase 2** training:

5 Could you share with us any specific example of effective skill application after **Phase 2** training?

Please go to the next page

6 On the average, how much do you think your employee(s) have actually used in the field what they learned in **Phase 2** training?

☐Nothing at all ☐Just a little bit ☐Fairly much ☐A lot

PART II. This section includes several questions that explore your perception of the company's strategic direction. We have included here your company's mission statement; which is one of the widely available components of the strategic direction.

The U.S. Pharmaceutical Operation's Mission Statement reads:
"Our mission is to rapidly identify and respond to the needs of our customers in specific markets by marketing and selling high-quality, cost-effective pharmaceutical products that optimize corporate earnings"

Please check the appropriate response category.

		Not at all			A great deal
1	How much do you know about the strategic direction (business goals) of the company?	1	2	3	4
2	How well defined is that strategic direction?	1	2	3	4
3	To what extent is the **Phase 2** course in which your employee(s) participated aligned with the strategic direction of the company?	1	2	3	4
4	To what extent do you agree that the strategic direction of your company is the right one?	1	2	3	4
5	To what extent are you committed to that strategic direction?	1	2	3	4

6 How well is the strategic direction of the company communicated to you?

☐Not well ☐Somewhat ☐Well ☐Very well

7 How comfortable are you with your current knowledge of the strategic direction of the company?

☐Not at all ☐A little bit ☐Fairly well ☐A lot

8 To what extent is there alignment between the demands of the market in which you operate and the content of the **Phase 2** course your employee(s) participated in?

☐No alignment ☐Minimal alignment ☐Good alignment ☐Excellent alignment

Move to the next page, please

9 Did you see any component of the strategic direction of the company addressed in the **Phase 2** course in which your employee(s) participated?

Yes____ Not sure____ No____

10 Did anybody (presenters, training managers, etc) make it explicit to you the linkage of **Phase 2** training to the strategic direction of the company?

Yes____ Not sure____ No____

11 Please rank the following statements in order of importance (1= the most important, and 3= the least important):

_____I sent my employee(s) to **Phase 2** course for their individual professional development.

_____I sent them because I wanted to contribute to the attainment of the company's strategic goal.

_____I sent them because I was requested to do so.

PART III. The following is a list of conditions that sometimes exist **before training occurs.** Please indicate, by circling the appropriate number on the response scale, the extent to which they apply to you regarding the **Phase 2** training your employee(s) participated in. Please use the following scale: 1= Not at all, 2= Somewhat, 3= Very much, 4= A great deal.

Before training, the trainer(s):	Not at all			A great deal
involved me and/or my employee(s) in assessing their training needs.	1	2	3	4
stated application-oriented objectives for the course	1	2	3	4
discussed with me and/or my employee(s) potential threats in the work environment that might keep them from applying the skill/knowledge learned in the course, once they return to work.	1	2	3	4
developed materials to increase trainee's readiness for training (such as pre-reading assignments, course objectives and content, application to the job highlights, etc.); so that they were able to see up front the value in the training to be received.	1	2	3	4

Next page, please

Before training, I myself:	Not at all			A great deal
briefed my employee(s) on the importance of the course in terms of job application.	1	2	3	4
provided time for trainee(s) to complete pre-course assignments.	1	2	3	4
developed an agreement with them specifying mutual commitment to maximize results from the course.	1	2	3	4

Before training, my employee(s):	Not at all			A great deal
participated in advance activities in preparation for the training.	1	2	3	4
Was one of the few trainees involved in designing the training.	1	2	3	4

PART IV. What follows is a list of conditions that sometimes exist **during training**. Please indicate with a circle the extent to which they apply to you regarding your employee(s) participation in the **Phase 2** training. Please rate them as follows: 1= Not at all, 2= Somewhat, 3= Very much, 4= A great deal.

During training, the trainer(s):	Not at all			A great deal
explained what benefits my employee(s) would gain for their investment of time and energy in learning the skill/knowledge taught in the course.	1	2	3	4
provided realistic work-related tasks.	1	2	3	4
provided individual feedback on trainee(s) learning (understanding, comprehension, etc.).	1	2	3	4
provided job performance aids to be used on the job.	1	2	3	4
created opportunities for the formation of after-training support groups among the trainees.	1	2	3	4
helped trainee(s) to prepare individual action plans to put in practice the skill/knowledge learned back on the job.	1	2	3	4
provided opportunities for the trainee(s) to practice what they learned while still at the training site.	1	2	3	4
conducted sessions to anticipate what might trip the trainee(s) up in skill maintenance/application.	1	2	3	4

Please continue.....next page

During training, I myself:	Not at all			A great deal
monitored my employee(s) attendance to the training sessions.	1	2	3	4
communicated to them, very clearly, my support for the training they were participating.	1	2	3	4

During training, my employee(s):	Not at all			A great deal
engaged actively in learning the course content.	1	2	3	4
linked with another trainee to practice skill application.	1	2	3	4
became part of a subgroup of trainees to support skill application after-training.	1	2	3	4
planned for applications back on the job.	1	2	3	4
created a behavioral contract with me to apply the skills learned in Phase 2 course.	1	2	3	4

PART V. The following is a list of conditions that sometimes exist **after training.** Please indicate with a circle the extent to which they apply to you regarding the **Phase 2** training your employee(s) participated in. Please use the following scale: 1= Not at all, 2= Somewhat, 3= Very much, 4= A great deal.

After training, the trainer(s):	Not at all			A great deal
provided follow-up support after-training.	1	2	3	4
conducted evaluation of training usage on the job.	1	2	3	4
provided refresher/problem-solving sessions after training.	1	2	3	4
administered recognition systems for efforts or achievement in skill application.	1	2	3	4

Please go to the last page

After training, I myself:	Not at all			A great deal
planned my employee(s) entry to the unit after the course was over.	1	2	3	4
provided my employee(s) with opportunities to practice new skills soon after training.	1	2	3	4
encouraged my employee(s) attempts to apply the newly acquired skills.	1	2	3	4
discussed after-training follow-up activities with the trainers	1	2	3	4
gave my employee(s) positive reinforcement for the demonstration of behaviors taught in the course.	1	2	3	4
encouraged a briefing of my employee(s) co-workers on the skill/knowledge taught in the course.	1	2	3	4
publicized examples of successful after-training skill usage among those employees who had attended **Phase 2** training.	1	2	3	4

After training, my employee(s):	Not at all			A great deal
practiced self-management of skill application.	1	2	3	4
reviewed training content and learned skills.	1	2	3	4
became a mentor to help other(s) on the job.	1	2	3	4
found a mentor to be help with on-the-job application.	1	2	3	4
maintained contact with other trainees.	1	2	3	4
monitored his/her/them personal goals in implementing new skills.	1	2	3	4

PART VI. Please give us your suggestions for improving **Phase 2** training or the whole Sales Curriculum_____

_____

_____

_____

_____

_____

_____

_____

THANKS A LOT FOR YOUR TIME AND CONSIDERATION

Please use the enclosed prepaid envelope to mail your completed questionnaire to:

Max Montesino
5508 South Madison #13
Hinsdale, Illinois 60521-5147

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