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An exploration of the value profit chain for training transfer: a study of the relationship of workplace transfer climate to business goals and objectives in one firm

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An exploration of the value profit chain for training transfer: A study of the relationship of workplace transfer climate to business goals and objectives in one firm

by

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For the Major Program

DEDICATION

Soli Deo Gloria

"To God Alone, Be All The Glory"

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ABSTRACT

Organizations invest significantly in training programs and estimates are that only 10 percent of the learning in training programs is transferred to the workplace. While it is appropriate for Human Resource Development professionals to be advocates for training, it is imperative for the profession not only to increase the training transfer, but also to make connections between the training investment and broader business goals and objectives. Plentiful studies exist which identify various mediating factors for training transfer, including improved training content, learner motivation and ability, and exterior organizational factors such as workplace transfer climate. However, few studies focus on the impact of training transfer factors to the accomplishment of the broader business goals and objectives.

Within the literature, a newer strand of inquiry focuses specifically on the impact of workplace transfer climate as a promising transfer catalyst. In the wider organizational development field, Value-Profit Chain studies are beginning to uncover links between employee situational factors (loyalty, commitment, satisfaction) and both customer satisfaction and other organizational key performance indicators (i.e. sales growth, profit growth, turnover). The intent of this study was to determine potential links between workplace transfer climate and the attainment of business goals and objectives in a particular firm, and in so doing, to provide a possible connection between training transfer research and Value-Profit Chain analysis.

Results of the study indicate that stores with a more positive workplace transfer climate showed stronger operational results than did stores with a less positive workplace transfer climate. Further, the study found that the individual factors relating to workplace transfer climate were not homogeneous. Finally, study results indicated employees' perceptions regarding certain workplace climate factors were mediated through their perceptions of the managerial support variable.

Past studies have suggested that workplace climate supports transfer of trained skills to the workplace. This study supports and extends that knowledge and indicates that workplace transfer climate is supportive in the attainment of business goals and objectives. As such, this study provides a preliminary, yet important, link between training transfer research and Value-Profit Chain analysis of organizational effectiveness.

CHAPTER 1.

INTRODUCTION

Historical Perspective

Human Resource Development (HRD hereafter) professionals have struggled for years to improve training effectiveness and to prove the value of such training to the organizations they serve. Training programs have long been considered generically valuable to organizations; however, both the effectiveness of the individual training programs themselves and the macro-level impact of the training programs to the larger business goals and objectives of the firm, such as sales, profits, turnover, have proven to be evasive concepts.

Developing and conducting effective training programs is no easy task. Careful consideration must be given to a seemingly infinite number of variables and issues. Fortunately, there is a great deal of information in the training literature, as well as the instructional design and education literature, that can be used as a guide and reference. For example, factors associated with the training context such as appropriate sequencing and opportunities for practice have been shown to be critical for effective training programs (Gagne & Dick, 1983; Goldstein, 1991). Additionally, research has found that variables outside the training context, such as trainees' self-efficacy (Quiñones, 1995) and appropriate pre-training motivation (e.g., Mathieu, Tannenbaum, & Salas, 1992) may influence training preparation, performance, and transfer. While there is still much to be learned, the attention to factors beyond content, design, and implementation has provided a much clearer understanding of the variables that may influence training effectiveness.

One branch of training transfer research that has been particularly insightful is in the area of workplace climate and the connection of a positive workplace climate to training effectiveness. Several studies have examined various organizational factors that influence pre-training motivation and relevant training outcomes. For example, Mathieu, Tannenbaum, & Salas (1992) found that perceptions about situational constraints in the workplace had a negative effect on pre-training motivation, which in turn influenced training reactions and learning. Similarly, Holton, Bates, Seyler, & Carvalho (1997) studied workplace transfer climate and found that supervisor support, resistance to change, opportunity to use new skills, and perceived personal outcomes all impacted the transferability of newly trained skills.

Simultaneous with HRD training professionals' increasing appreciation of the importance of workplace climate for learning improvement, other organizational researchers have been busy linking climate measures to organizational success. Beginning with the landmark study, *Corporate Culture and Performance* (Kotter & Heskett, 1992) and continuing through to *The Value Profit Chain: Treat Employees Like Customers and Customers like Employees* (Heskett, Sasser, & Schlesinger, 2003), the findings of this branch of organizational development research hold important keys to unlocking high performance and market value for companies through understanding the power of climate and culture.

Workplace Transfer Climate and The Impact on Training Effectiveness

Goldstein (1991) stated that the work environment may have a substantial influence on an individual's motivation to learn and subsequent performance during training. Indeed,

several studies have shown that characteristics of the work environment, such as the amount of choice afforded to individuals to attend a training program (Hicks & Klimoski, 1987; Baldwin, Magjuka, & Loher, 1991), may have a direct influence on motivation to learn, as well as on knowledge and skill acquisition. In addition, Tannenbaum (1997) found that the extent to which the work environment supports learning and development activities varies significantly across organizational settings. As such, this variance must be taken into account in order to understand why training efforts succeed or fail in different organizational contexts.

While research in the area of workplace factors related to training transfer appears to be insightful and meaningful, inquiry must push deeper to determine how workplace climate factors impact both training effectiveness in the immediate training context and also how, and if, macro-level organizational performance is impacted positively through the effectiveness of the training efforts. This study specifically pushes the line of inquiry in this direction.

This study utilizes a three-dimensional construct of the work environment, *workplace transfer climate*, that has been shown to influence personal motivation and subsequent performance during training, as well as training transfer. This construct was hypothesized and tested by Tracey, Tannenbaum, & Kavanagh (1995) and by Tracey (1998). These researchers derived the three dimensions, job support, managerial support, and organizational support, in part from diagnostic theories of organizations (e.g., Nadler & Tushman, 1980; Daft, 2000), which define work contexts in terms of social, job-related/technical, and organizational systems. They also utilized constructs from prior

research on transfer of training climate (Rouiller & Goldstein, 1993). This classification scheme provides a clear and simple foundation for examining the major elements of the work environment that influence training effectiveness and those that may impact overall organizational performance. The present study also attempts to extend the theoretical construct of workplace transfer climate by adding a fourth experimental construct, namely peer support.

The preceding discussion suggests that if trainees are involved in their jobs, committed to their organizations, and engaged in their immediate work environment by way of managerial and peer support for training and development, then trainees will believe they can benefit from training and subsequently will be prepared, willing to learn, motivated to build on new skills, and thus, able to impact the organization through the application of trained skills to the work context.

Corporate Culture and Performance and The Value Chain

Corporate culture as identified by Kotter & Heskett (1992) operates at two distinct levels within most organizations. At the visible level, culture represents common or pervasive ways of acting within a working group. These mannerisms of the group are taught to new members of the group in both formal and informal ways. At the deeper, and less visible level, culture refers to the shared values of a group or organization that tend to persist over time, without regard to the changing make-up of the group's membership. Although usually referred to in the singular, all companies tend to have multiple cultures, all operating simultaneously in various functional groups or geographic locations. Thus,

the overall corporate culture is an amalgam of these smaller cultures or climates within the wider organization.

Research on the questions of how corporate culture determines performance in a business setting is a relatively young field of inquiry. One of the important events in the founding of the field was the rise of Japanese companies to world-wide prominence in the 1970's. Ouchi (1981) coined the term "Theory Z" to describe the unique corporate culture of many of these firms and the unique contribution of these cultures to the performance of the firm. Research on corporate culture and performance by Kotter & Heskett (1992) indicated that strong cultures can have a significant impact on long-term economic performance and can be shaped to become performance enhancing. The researchers suggested that the performance impact of corporate culture would likely be of growing importance in the coming years.

Seeking to understand corporate culture more systematically, Heskett, Sasser, & Schlesinger (1997) researched and developed the concept of the *Service Value Chain*. This chain employs a quantifiable set of relationships that were found to directly link profit and growth to not only customer loyalty and satisfaction, but also to employee loyalty, satisfaction, and productivity. Rucci, Kirn, & Quinn (1998) applied this construct to Sears, Roebuck, and Company with tremendous success and found the employee link so strong that the model was renamed *The Employee-Customer-Profit Chain*. Most recently, Heskett, Sasser, & Schlesinger (2003) continued their development and research of these systems and found that firms create value through a web of value relationships or "equations" at the employee, customer, partner, and investor level. While none of these

relationships or "equations" exists in a vacuum, the employee value equation was certainly a critical component to the creation of long-term customer, partner, and investor value within the self-reinforcing system.

Statement of the Problem

During the past 20 years, organizations of all types have committed a significant amount of resources toward professional development programs and more traditional training programs focused on everything from raw skill development to more obtuse concepts of leadership development.

The goal of all training programs is, or should be, to equip organizational members with the knowledge, skill, and ability to be effective in their positions and to help the organization meet its business goals and objectives. However, the historical trends for job performance application of training have been poor, and organizational leaders are reluctant to make larger training investments without proven results. The challenge for HRD professionals is how to the make the training investment worthwhile for the organization by increasing the transferred percentage of knowledge, skill, and abilities, ostensibly gained in training, to the work environment.

Typically, when training fails to produce acceptable learning and transfer results, HRD professionals and HRD researchers have tended to focus improvement efforts on the quality of the training program itself (Fleishman & Mumford, 1989). These surface-level efforts have produced only small incremental gains in training transfer. There is now evidence that additional work environment factors play a significant role in affecting the performance of the training initiatives (Baldwin and Ford, 1988). These factors are part of

a larger system in which training takes place, including organizational processes, content and context factors of the training design, individual characteristics of the trainee, and the work environment. In addition, when faced with organizational scrutiny for investments in training, HRD professionals have most often framed the question as one of training transfer instead of one of organizational value. Thus, most of the effort in the HRD community has been on improving learner outcomes directly with the assumptions, but very little proof, of improvements in organizational outcomes. As a business decision, organizational investments in training should be justified by demonstrable benefits for the business goals and objectives of the firm. Therefore, it could be argued that much of HRD's research on training to date has not been focused on the primary business efficacy questions.

Implications of this situation are clear; a problem exists somewhere in the overall training process and in its connection to organizational value. Unless this problem can be identified and resolved, organizational support for future investments in HRD activity, specifically training, will be dramatically reduced (Broad & Newstrom, 1992). Given that past efforts focused on trainee characteristics and training program design have failed to optimize training program effectiveness, more effort and resources must be focused on organizational and work environment variables in the training effectiveness equation. In addition, if HRD professionals do not push beyond simple learning outcomes in the transfer of training research and move toward making the link between training transfer and the attainment of the business goals and objectives of the firm to add customer-focused

value to the organization, further depletion of financial support for training investment by senior leaders is certainly likely.

Significance of the Study

The primary intent of this study was to examine the work environment factors that have been previously shown to support training transfer and to determine if these work environment factors impact the macro-level business goals and objectives of the firm, i.e. sales, profits, turnover. If work climate barriers to the transfer process are identified and trainees are able to utilize and apply a higher percentage of trained knowledge, skill, and ability, then the potential should exist for increased organizational performance. If it can be shown that workplace climate factors have a positive relationship with the business goals and objectives of organizations, then the potential exists for organizations to focus attention and investment on improvement of these climate factors in support of the attainment of their business goals and objectives.

As such, this study fills a critical gap in the field of HRD research to extend the line of sight in training transfer research and moves the field from the training classroom to the boardroom. For too long, HRD practitioners have limited their scope of inquiry to providing better learning for trainees without making the critical link between better training and improved organizational results.

This study is also a first attempt to link the training field's increasing appreciation for workplace transfer climate to the broader organizational development field's increasing appreciation for corporate culture as a driver of organizational performance. Workplace climate factors in this study are potentially important components of the larger emerging

arena of corporate culture research. Thus, a secondary contribution of this study may provide linkages for future fruitful research between workplace transfer climate and overall corporate culture and the value chain concept.

Until the profession makes these critical leaps, CEOs and other executives will continue to simply view HRD as a soft-headed, soft-hearted group of educators on the periphery of organizational life. However, if senior management can be assured that supportive workplace transfer climate and corporate culture factors lead to increased organizational effectiveness by way of increased revenue, increased profit, decreased employee turnover, increased employee retention, increased employee promotional opportunities, and increased operational efficiency, then the opportunity exists for HRD professionals to increase their credibility in the minds of senior management and to take a rightful organizational seat at the boardroom table. While full arrival at this future state will require additional research on these connections, this study makes an important first step in that direction.

The final intent of this study was to amend and extend the previous construct of workplace climate transfer factors beyond job support, organizational support, and managerial support by testing the addition of peer support to the construct. If a richer, more complete construct of workplace transfer factors is found, the potential exists to further support both the effectiveness of individual training programs and the macro-level business goals and objectives of the firm.

Research Questions

This research study addresses the following specific research questions concerning work environment factors that are known to improve training transfer to determine if these same factors positively impact organizational performance.

1. What positive relationships exist between the workplace transfer climate factor of job support and the attainment of the business goals and objectives of the firm?
2. What positive relationships exist between the workplace transfer climate factor of organizational support and the attainment of the business goals and objectives of the firm?
3. What positive relationships exist between the workplace transfer climate factor of managerial support and the attainment of the firm's business goals and objectives?
4. What positive relationships exist between the workplace transfer climate factor of peer support and the attainment of the business goals and objectives of the firm?
5. Do differences in store personnel perceptions of the Tracey (1998) construct of workplace transfer climate have a statistically significant positive relationship with the business goals and objectives of the firm?
6. Do differences in store personnel perceptions of the hypothesized single construct of workplace transfer climate have a statistically significant positive relationship with the business goals and objectives of the firm?

7. Do differences in managers' perceptions of workplace transfer climate factors have a statistically significant positive relationship with the promotion activity of those managers?
8. What similarities and differences exist in the perceptions of managers and employees with regard to both the various individual factors of workplace transfer climate (managerial support, job support, organizational support, and peer support) and with regard to the single construct of workplace transfer climate (both the Tracey [1998] model and the hypothesized WTC model)?

The target population for the research questions included all store managers and store employees of a chain of small retail paint and decorating stores in the United States.

Study Limitations

As this study breaks new ground by attempting to connect workplace climate issues to operational measures that describe the overarching business goals and objectives of the firm, several inherent limitations exist.

First, the operational measures utilized in this study were of relevance to the specific cooperating organization. Other organizations, including both for-profit and not-for-profit organizations, may have different business goals and objectives that may or may not have similar findings from the objectives in this study. In addition, since the cooperating organization did not gather and retain formal measures of customer satisfaction, a key organizational performance driver, such measures were not available for this study.

Second, this study, while utilizing a specific construct of workplace transfer climate previously shown to support training transfer (Tracey, 1998), does not specifically measure that construct with regard to an immediate training intervention. Rather, this study stands on the shoulders of previous studies relating to training effectiveness and drives that construct further to consider the attainment of business goals and objectives of the firm. Care must be taken, therefore, to differentiate the results of this study to diffuse potential confusion regarding the impact of climate factors on transfer (clearly not the specific interest of this study) from the issue of the impact of climate factors on operational business objectives (the specific interest of this study).

Further, this study was conducted in cooperation with a single firm. The nature of the firm (closely-held, family-owned, with stores located in primarily non-metropolitan settings) certainly creates a specific context for workplace transfer climate. This study limitation may create difficulties for the transfer of study findings to other organizations.

Finally, this study must be taken as a preliminary attempt to connect previously unconnected phenomena. As such, the type of analysis performed, the type of measurements utilized, and the significance of the findings must all be considered both in light of previous research in the field and as a modest beginning in the broadening of the field. Implications must not be drawn too widely from this study alone; rather future research in the area should take the findings of this preliminary work and build upon the basic approach in the quest for HRD to attain full membership in the senior leadership of today's organizations.

Definition of Key Terms

Business Goals and Objectives-- In this study, the generic term Business Goals and Objectives is used to denote organizational level performance measures commonly focused on across companies. Specifically in this study, sales growth, gross profit growth, employee turnover, and promotion activity are utilized as dependent variables representing the business goals and objectives of the firm. Other generic measures, not included in this study, focus on market share, customer loyalty, customer satisfaction, cost of sales, etc.

Employee Turnover -- Employee Turnover refers to the number of employees lost during a given period of time from the normal employment of the store. For this study, all turnover data were included without regard to the reasons behind the turnover. For the study, the turnover statistics for a period of two years were used. If employees are generally pleased with the working conditions, negative employee turnover is expected to be lower than if employees are not pleased with some aspect of the working conditions. Employee turnover is an important operational measurement because of the high "hard costs" in replacing employees (recruitment, training, etc.) and the high "soft costs" of losing employees (customer service, employee morale, etc.).

Job Support -- Job Support refers to the workplace climate dimension that is part of an organization's job-related/technical system. The nature of work assignments and the design of jobs can create substantial demands and pressures on employees, which can have a significant impact on the extent to which individuals are prepared and motivated for training. If a job does not allow for flexibility and growth and the opportunity to use newly trained skills, then individuals may not have much confidence that developmental

opportunities will be beneficial. It is likely that the nature and type of job assignments may also have an influence on perceptions of importance of training to the organization.

Managerial Support -- Managerial Support refers to the workplace climate dimension that is a part of an organization's social system. The professional and personal relationships among managers and their subordinates can send strong messages about the value and importance of training. Managers who articulate their support for training can positively influence an individual's confidence about gaining relevant knowledge and skills from professional development opportunities and therefore be more motivated for training.

Gross Profit Growth -- Gross Profit Growth refers back to the generic term Gross Profit, which is the dollar amount remaining when the variable costs of merchandise and the fixed costs of store operations are subtracted from the store revenue. For purposes of this study, Gross Profit Growth was chosen to represent both the revenue generating power of the store along with the efficiency of store operations and the growth of that power over the relevant analysis period of one year. In this study, Gross Profit Growth is a percentage figure of the change in gross profit dollars at each store from 2001 – 2002.

Hypothesized Workplace Transfer Climate -- In general, workplace transfer climate refers to the perceptions of individuals about the supportiveness of their workplace to training, innovation, and change. In this study, two types of workplace transfer climate are considered, both Tracey's (1998) Workplace Transfer Climate and the Hypothesized Workplace Transfer Climate. Hypothesized Workplace Transfer Climate, considered in Research Question 6, is a four-dimensional construct consisting of managerial support, job

support, and organizational support (Tracey, Tannenbaum, & Kavanagh, 1995 and Tracey, 1998), with the additional dimension of peer support.

Organizational Support -- Organizational Support refers to the workplace climate dimension dealing with formal organizational systems, such as the appraisal and reward systems that may have an important role in preparing individuals for training.

Peer Support -- Peer Support refers to the climate dimension dealing with *esprit de corps* or the level of support experienced from co-workers at the store level. Specifically in this study, Peer Support refers to the supportiveness of store staff toward training, development, innovation, and trying out new learning and skills on the job.

Promotion Activity -- Promotion Activity refers to the number of employees supervised by a particular manager who were asked to "move up" into the managerial ranks of the organization during a given period. This measurement is thought to be indicative of the leadership pipeline health of a given store and will be measured for purposes of this study over a five-year period. This measure was self-reported by managers at each location as an item on the Workplace Survey for Managers.

Sales Growth -- Sales Growth refers to the dollar amount of sales conducted during a given period of time in relation to the immediately preceding period. For purposes of this study, Sales Growth is a percentage figure based on the change in sales at the store level from 2001 – 2002.

Training Transfer -- Training transfer refers to the long-term effectiveness of training by way of skill usage or knowledge retention after a period of time following training.

Tracey's (1998) Workplace Transfer Climate -- In the generic sense, workplace transfer climate refers to the perceptions of individuals about the supportiveness of their workplace to training, innovation, and change. In this study, two types of workplace transfer climate are considered, both Tracey's (1998) Workplace Transfer Climate and the Hypothesized Workplace Transfer Climate. Tracey's (1998) Workplace Transfer Climate, considered in Research Question 5, is a three-dimensional construct consisting of managerial/supervisor support, job support, and organizational support (Tracey, Tannenbaum, & Kavanagh, 1995 and Tracey, 1998).

Value Profit Chain -- Value Chain is a general conceptual model of linkage and systems thinking applied to organizational behavior. Used generically, many value chains are in existence in any organization at any given time (i.e. purchasing value chain, manufacturing value chain, recruitment value chain, etc.) In this study, two specific value chains, the Value Profit Chain (Heskett, Sasser, & Schlesinger, 2003) and the Employee-Customer-Profit Chain (Rucci, Kirn, & Quinn, 1998), are used as conceptual models to show linkages between employee experiences, activities, and perceptions and the business goals and objectives of the firm.

Assumptions

It is assumed that the store managers in the study were a representative sample of managerial ranks in similar studies.

It is assumed that data measuring revenue, profitability, employee turnover, and promotion activity, are all indicative measures of performance relating to the business goals and objectives of many firms.

Conceptual Frameworks

The field of HRD has provided the general theory of learning transfer with a significant gift in the past 20 years of research on workplace training transfer; namely, the inclusion of the organizational or social support systems for facilitating and sustaining transfer. This gift has not been without sacrifice, as the field of training transfer began where more traditional educational theory on learning transfer had earlier led, specifically focusing early on issues of learner characteristics of readiness, personality, motivation, and ability, as well as classroom/course design factors as sequencing, content issues, and learning theory issues. While these may be important issues, focusing on them has tended to impede the more relevant issues of researching business organizations themselves to determine if, and how, training transfer issues and training results are related to the broader corporate cultures, goals, and objectives of the business organizations funding the training.

Since this study attempts to build a bridge between traditional transfer research and the on-going research regarding both corporate culture and performance and the value chain concepts, four different conceptual frameworks are relied upon in this study. Two conceptual models from the transfer research field take serious account of workplace climate issues in the transfer equation. Two conceptual models from the value chain/corporate culture camp take significant account of the importance of employee satisfaction and workplace climate in the accomplishment of organizational aims.

Baldwin and Ford (1988) conceptualized the HRD transfer model, shown in Figure 1, with the addition of workplace/social/organizational factors to the learner and course-related factors. These researchers found these workplace factors to be integral to

the training transfer equation, based on their review of early climate research by Huczynski and Lewis (1980), Baumgartel, Reynolds, and Pathan (1984), and Kozlowski and Hults (1987). It is this transfer conceptualization, taken further in the work of Mathieu, Tannenbaum, and Salas (1992), Noe and Wilk (1993), Rouiller and Goldstein (1993), Facteau, Dobbins, Russell, Ladd, and Kadish (1995), and Tracey, Tannenbaum, and Kavanagh (1995), that forms the conceptual basis for the workplace climate factors in this study. From the Baldwin and Ford (Figure 1) conceptual model, this study focuses specifically on the work environment factors previously shown to support training transfer by way of support for learning, retention, generalization, and maintenance of training concepts. The specific conceptualization of work environment (Figure 2), consisting of organizational support, job support, and managerial support, is taken specifically from the work of Tracey (1998) and that of Tracey, Hinkin, Tannenbaum, and Mathieu (2001).

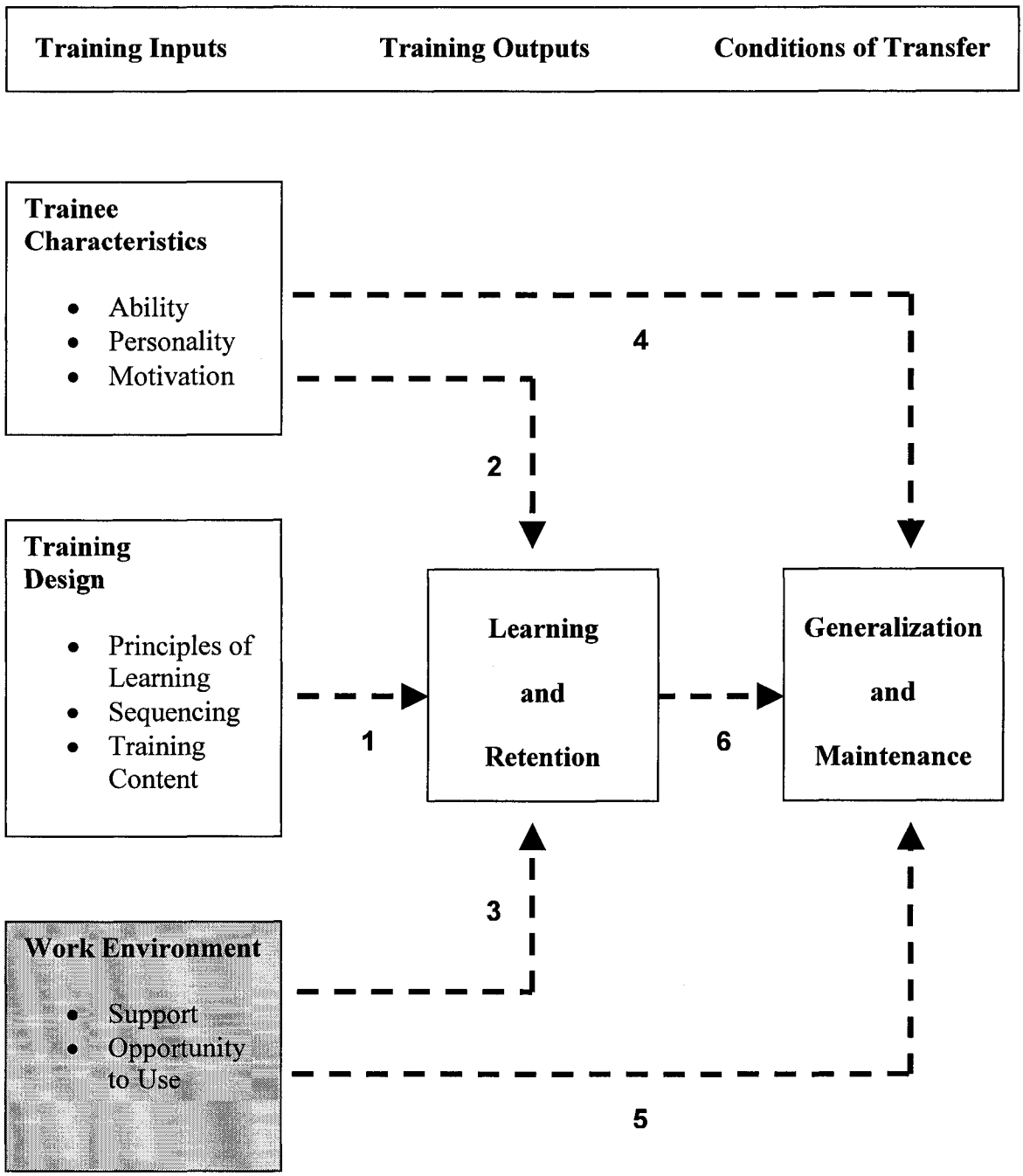
Additional conceptual support for this study is provided by the Employee-Customer-Profit Chain model (Figure 3) used by Sears, Roebuck, and Company (Rucci, Kirn, & Quinn, 1998) and by the Value Profit Chain model (Figure 4) of Heskett, Sasser, & Schlesinger (2003). The present study focuses on the Rucci, Kirn, & Quinn (1998) conceptualization of a compelling place to work and the Heskett, Sasser, & Schlesinger (2003) conceptualization of the Employee Value Equation.

Borrowing from each of these frameworks, the present study hypothesized that workplace transfer climate had the potential to add demonstrable value to organizations beyond the simple questions of how workplace transfer climate creates more learning. Since workplace transfer climate has previously been shown to increase training

effectiveness, it should follow that strong workplace transfer climates create organizational value more broadly in ways similar to those explained by the two value chain/corporate culture models. First, strong workplace transfer climates should increase value by making the organization a more "compelling place to work," the key driver of the Rucci, Kirn, & Quinn (1998) model. Second, strong workplace transfer climates should increase value by increasing the capability of both managers and employees and by increasing the quality of the workplace, the two numerator level variables in the Employee Value Equation of the Heskett, Sasser, & Schlesinger (2003) model.

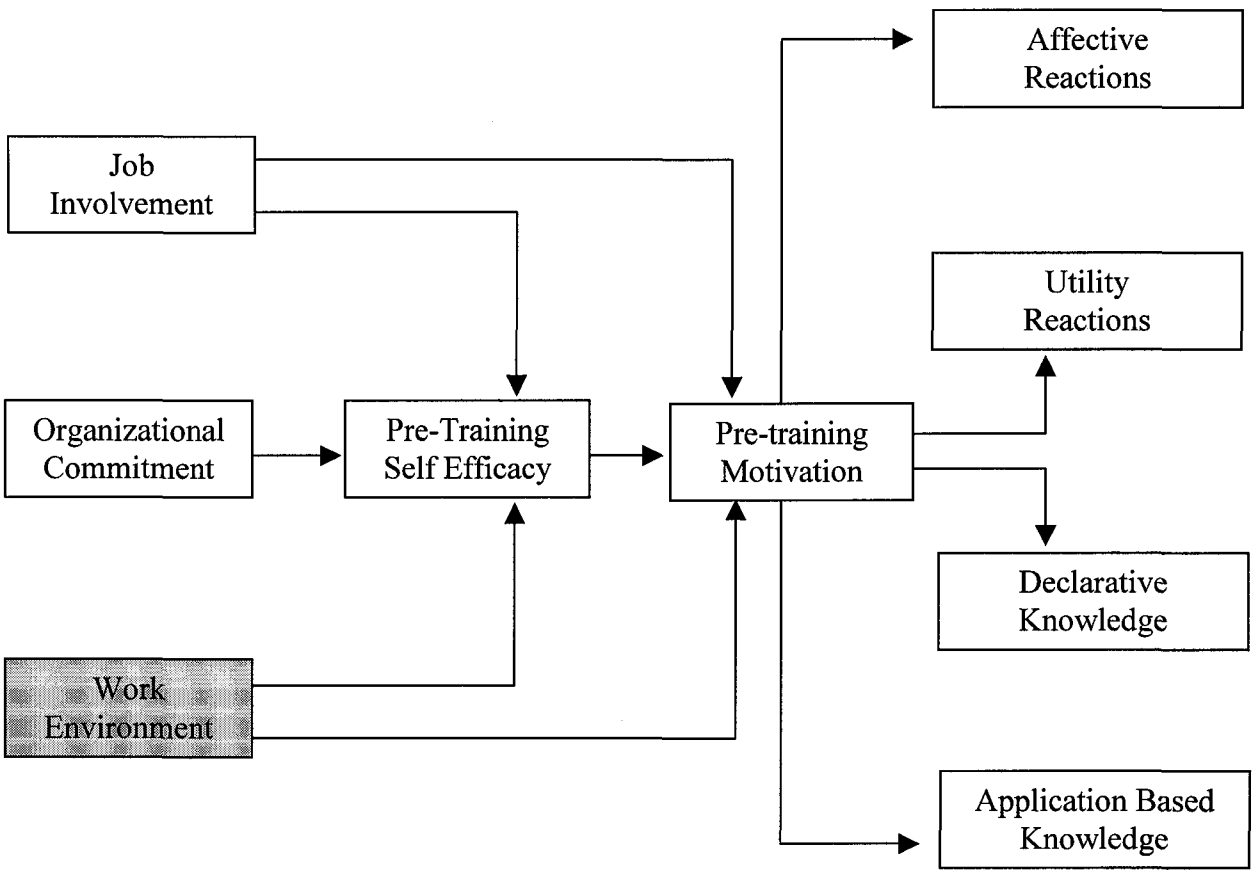
From the outset of this study, it was understood that the climate factors relating to training transfer are only a small part of the overall "compelling place to work" equation and only a fraction of the solution to increase employee capability or create a quality workplace. Therefore, focusing on the connections between workplace transfer climate as the independent variable in the study and the business goals and objectives of the organization as the dependent variables in the study had the potential to move the field of training transfer research ahead in this direction. This larger contribution to future HRD research was a key decision point in pursuing the present study. Therefore, any statistically significant findings linking workplace transfer climate to the business goals and objectives of the firm were believed to have practical significance for the future direction of the field.

Figure 1. Baldwin & Ford's Model of the Transfer Process



From: Baldwin, T. T., & Ford, J. K. (1998). Transfer of Training: A Review and Directions for Future Research. Personnel Psychology, 4, (1), 65.

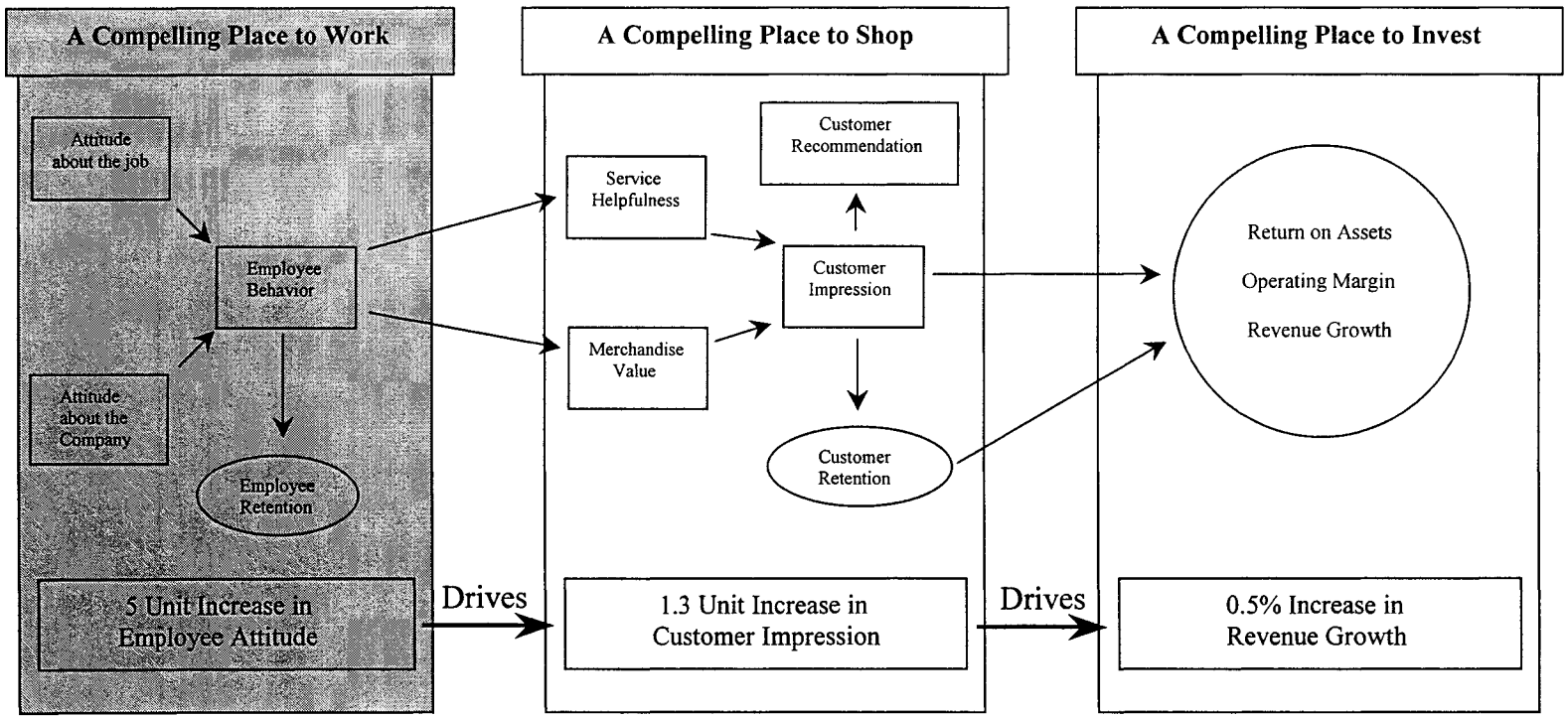
Figure 2. Tracey (1998) Transfer Model



From: Tracey, J. B. (1998). A three-dimensional model of the transfer of training climate. In W. E. K. Lehman, & M. Cavanaugh, (Co-Chairs), Recent trends in the study of transfer climate: Research, theory, and consultation, Symposium presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, Dallas, TX.

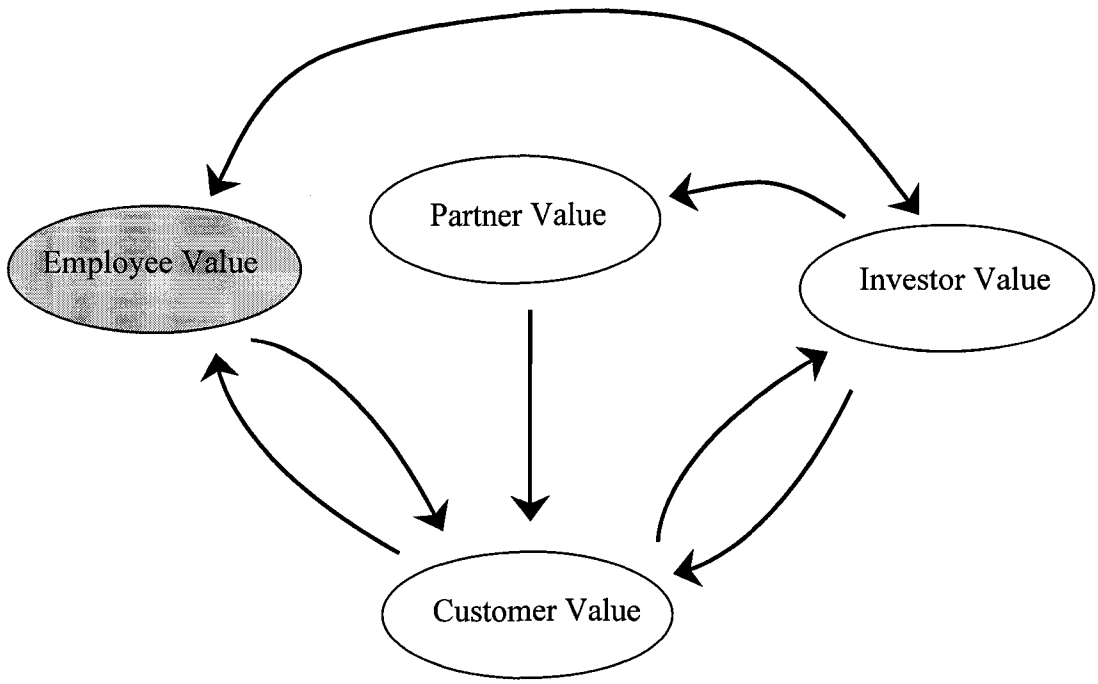
From: Tracey, J. B., Hinkin, T. R., Tannenbaum, S., & Mathieu, J. E. (2001). The influence of individual characteristics and work environment on varying levels of training outcomes. Personnel Psychology, 12, (1), 18.

Figure 3. Rucci, Kirn, & Quinn's (1998) Employee-Customer-Profit Value Chain



From Rucci, A. J., Kirn, S. P., & Quinn, R. T. (1998).
The employee-customer-profit chain at Sears.
Harvard Business Review, January - February, 91.

Figure 4. Heskett, Sasser, & Schlesinger's (2003) Value Profit Chain Model



$$\text{Employee Value Equation} = \frac{\text{Capability to Deliver Results} + \text{Quality of Workplace}}{1/\text{Total Income} + \text{Job "Access Costs"}}$$

$$\text{Partner Value Equation} = \frac{\text{Revenue} + \text{Quality of Relationship}}{\text{Costs of Doing Business}}$$

$$\text{Investor Value Equation} = \frac{\text{Returns to Investors} + \text{Investments in R \& D, Employees, Customers, and Partners}}{\text{Investment Base}}$$

$$\text{Customer Value Equation} = \frac{\text{Results} + \text{Process Quality}}{\text{Cost (Price)} + \text{Customer Access Costs}}$$

From: Heskett, J. L., Sasser, W. E., Schlesinger, L. A. (2003). The value profit chain. New York: The Free Press. p. xviii.

Summary

In order to understand more comprehensively how and why training efforts are successful or not successful in accomplishing specific training goals and in moving the business goals and objectives of the firm ahead, consideration must be given to the factors beyond the learner, the classroom setting, and the training session. The aim of this study was to move beyond those issues in the training transfer context to look specifically at the issues of workplace climate and determine the impact these factors have on the attainment of the business goals and objectives of the firm.

CHAPTER 2.

REVIEW OF LITERATURE

Training Transfer Overview

Corporate and government spending on training activities aimed at improving employees' job performance represent an enormous budget commitment in the United States. In 2002, organizations earmarked over $54.2 billion in direct training dollars for this purpose (Galvin, 2002). With the addition of the indirect costs and other informal on-the-job training efforts, estimates range from three to six times that amount (Carnevale & Gainer, 1989). It is widely thought that less than 10 percent of these total training dollars actually result in improved performance in job settings (Georgenson, 1982; Baldwin & Ford, 1988, Hoffman, 1983).

While the exact amount of learning transferred to the job setting is speculative, the problem is believed to be so pervasive that leading writers suggest there is scarcely a learning-performance situation in which such a problem does not exist (Broad & Newstrom, 1992). Given that grim reality, it is incumbent on HRD professionals to continue searching for means to improve that statistic in their quest to improve individual and organizational performance. In addition, given the large investment by organizations in the training effort, it is further incumbent on HRD professionals to provide empirical data to validate this training investment relative to the accomplishment of the business goals and objectives of the organizations making these investments.

Training transfer is referred to as the degree to which trainees apply knowledge, skills, behaviors, and attitudes learned in training to their jobs (Holton, Bates, Rouna, & Leimbach, 1998). In reference to earlier cited statistics regarding training dollars, transfer is the effective 10 percent portion of the dollars spent that translate into performance-enhancing activity at the worker level.

Baldwin & Ford (1988) took the notion of transfer deeper and defined it as the generalization of the skills acquired during the training phase to the work environment and the maintenance of these acquired skills over time. These researchers were on the trail of the "stickiness of training" problem that became clear at the very earliest days of transfer research. In their review of research and formulation of transfer maintenance patterns based on the earlier work of Blum & Naylor (1968), they differentiated five distinct types of learning and retention patterns, only one of which maintained a strong degree of transfer for any significant period of time.

While generations of managers have expressed frustration with the lack of lasting change from training efforts, the earliest research involving the concept of transfer was carried out in the United States only about 50 years ago. Fleishman, Harris, & Burtt (1955) conducted one of the first formal research studies related to transfer of training by studying changes in behavior of manufacturing foreman at International Harvester. They found that immediately following the training, nearly all the foreman displayed new behavior consistent with the training received; however, after a period of several months, most had returned to their original behavior. Goldstein (1980) further found that skills learned and used during training tend over time to fall into disuse. In Fleishman, Harris, &

Burtt (1995), longer-term change and behavior modification was only achieved by those foremen whose supervisors themselves consistently demonstrated the desired principles and behaviors. These findings fall in line with one or more of the maintenance curves postulated by Baldwin & Ford (1988), as noted earlier.

Another early study on transfer by Mosel (1957) identified three critical elements as conditions for positive transfer of training to the job: training content must be applicable to the related job context, the trainee must learn the content of the training, and the trainee must be motivated to change job behavior to apply what was learned. This research pointed out that this last condition is the most critical and unfortunately the most difficult for the trainer to impact from the vantage point of the traditional classroom. Only the manager, not the trainer, can supply the motivation to apply new skills by way of reinforcement of the new behavior on the job in the form of rewards, incentives, deterrents, and punishments. Mosel's analysis of the disconnect between trainer and manager is both insightful and prescient, but also quite sad: insightful, as a result of the researcher having caught the heart of the matter so early in the research process, but also sad, in that the major struggles of the training movement are still focused on this very issue today (Brinkerhoff & Gill, 1994; Gilley & Maycunich, 2000).

Sadder still is the sobering realization that until recently most researchers and practitioners have focused their efforts on Mosel's first two elements, content and learning, by way of training activity, delivery, and mechanics (e.g. Gagne & Briggs, 1979; Nilson 1997) to the near complete exclusion of research on the third element, namely, motivation to transfer the training to job performance (Noe, 1986) and the involvement of the manager

as a key participant in training transfer (Quiñones, Sego, Ford & Smith, 1995). As a result, many managers are continually skeptical of training as a solution to performance problems in organizations (Gilley & Boughton, 1996).

Broad & Newstrom (1992) picked up on the differentiation of activity versus results and termed the two camps of training transfer effort voluntary and stimulated transfer, respectively. Voluntary transfer theory represents the attempted actions by the trainee to use the training to modify job-related behavior based on the design and delivery components of the training program. In this voluntary transfer mode, the trainer becomes nothing more that a wizard or ringmaster, conducting interesting, fun training sessions that inform, entertain, and delight. Following such efforts, trainees leave the classroom saying, "That was a great class." However, after several such entertainment sessions and continued frustration due to lack of transfer and job impact, trainees often repeat and add to the remark noting, "That was a great class, but..." (Rossett, 1997).

Stimulated transfer, for Broad & Newstrom (1992), moves the trainer from pure entertainer to manager of training transfer. In this role, the trainer takes responsibility for the application of trained knowledge, skills, and behaviors to the trainees' job setting. This responsibility creates a different set of preparation, delivery, and follow-up activities by the trainer, which combine to re-enforce the learning and create positive training transfer.

It is this type of stimulated transfer that will be required for trainers to positively impact personal and organizational performance and move the training department from the shoulder of the road to the main thoroughfare of organizational life. The management challenge for trainers goes far beyond managing a successful class, seminar, or training

program; rather, training professionals must migrate and evolve to the management of the complete training process so that every trainee achieves the objective of adding permanent value to the organization by the application of trained skills (Brinkerhoff & Gill, 1994).

Themes in Transfer Research

To more fully conceptualize the thematic threads in the relatively recent history of transfer of training research, it is helpful to develop a framework for such conceptual understanding. Baldwin & Ford (1988) provide a useful heuristic for such conceptualization. Breaking apart the training context into three parts, namely trainee characteristics (ability, motivation, personality), training design (learning principles, sequencing, content), and work environment (support, climate, opportunity to use), the researchers were able to focus on the literature in each of these parts, while keeping an eye on the overall issue of training transfer.

Taking Baldwin & Ford (1988) as a starting point and moving away from the training design factors, Elangovan & Karakowsky (1999) provide a different exploratory framework for understanding and conceptualizing the transfer challenge and literature. They suggest that recent research shows transfer effectiveness to be much more firmly rooted in trainee factors (motivation and ability) and environmental factors (job-related and organization-related) than in design or learning factors (instructional methods). Thus, they provide a transfer framework that goes beyond the earlier models, increasing the focus on trainee and environmental factors and minimizing the place of instructional design factors.

Working from this framework is helpful in understanding the problem of transfer and the relevant research strands to date. However, given the research thrust begun by

Mosel (1957) and continuing today (Tracey, Hinkin, Tannenbaum, & Mathieu, 2001), namely, that individual motivational and job context factors influence training transfer far more than do training design factors, the following literature review is limited to trainee characteristics and workplace climate factors in the transfer equation, while leaving the instructional design literature behind. In addition, literature on specific post-training transfer strategies will also be considered.

Trainee Characteristics

Locus of Control

While primarily researching relapse prevention as a training strategy, Tziner and Haccoun (1991) found an interaction effect between relapse prevention, personality of the trainee, and the transfer of training. Using Rotter's (1966) locus of control theory as a personality variable, the researchers found trainees' locus of control to have a significant impact on training transfer. In the study, subjects with high internal locus of control who employed relapse prevention techniques exhibited a greater degree of training transfer than did those with a more external locus of control employing similar relapse techniques. Building on the work of Storms & Spector (1987) related to locus of control and frustration, the researchers speculated that the difference in heightened transfer for "internals" may have been due to the internals' ability to continue with high productivity outputs during periods of frustration related to practicing new skills, relative to "externals" who typically demonstrate "anti-output" behaviors when faced with frustration.

Given that such frustration usually accompanies change and the display of newly trained skills on the job, this line of argument, while needing replication and further

testing, seems to have a high degree of face validity. Trainees returning from a class, session, or program with intentions to transfer the learning to the job setting will face some degree of frustration during their transfer attempt. Those who have high internal locus of control will more readily be able to deal with that frustration and persevere to establish positive training transfer. While this personality trait study is interesting, a potentially more powerful transfer variable can also be inferred from the study; namely, the supervisor's responsibility to reduce such frustration within the return-to-work setting for trainees.

Self-Efficacy

Another characteristic that has been shown to be important in a training context is self-efficacy (Gist, Schwoerer, & Rosen, 1989). Self-efficacy is defined as an individual's expectation or confidence that tasks can be successfully performed (Bandura, 1977). In relation to training transfer, Quiñones (1995) found that pre-training self-efficacy is significantly related to motivation to learn, which was further found to have a direct influence on the knowledge and skill acquisition during the training event. Noe (1986) has suggested that an individual's self-efficacy will have an impact on his/her motivation to transfer. Other research has shown significant relationships between pre-training self-efficacy and performance outcome expectancies (Tannenbaum, Mathieu, Salas, Cannon-Bowers, 1991). Hill, Smith, & Mann (1987) found that individuals high in self-efficacy were more likely to actively seek opportunities to improve computer skills. Thus, it seems that the personality characteristic of self-efficacy does have an important role to play in our understanding of training transfer.

The antecedents or building blocks of self-efficacy are particularly germane to this particular line of organizational training inquiry. While self-efficacy is by definition a personal construct, the factors that influence an individual's self-efficacy have been shown to be both internal (personal/individual) and external (work context related) by Gist, Schwoerer, & Rosen (1989). It is the external or work context related self-efficacy factors that should be of primary importance to organizational behavior professionals in the training and development field, as these are the macro-level factors that can be shaped and manipulated to enhance training transfer and organizational performance through such a process. Research regarding the organizational or work environment variables that influence self-efficacy has shown that support for trainees' self-efficacy is provided by job support, organizational support, and managerial support (Tracey, Hinkin, Tannenbaum, & Mathieu, 2001). This line of research is a critical step in bridging the gap between the personal characteristics of training transfer and the work environment characteristics that will be explored in more depth shortly.

Purpose or Choice of Training

Trainee choice has also been found to have a significant role on the degree to which individuals are willing and able to generalize the concepts, skills, and knowledge gained in training to the work context. Using as a starting point Maier's (1973) assertion that even if individuals possess the prerequisite ability to learn the content of a course and that performance will likely be poor if motivation is low or absent, Baldwin & Magjuka (1991) set out to test the impact of trainees' choice of training on motivation and learning. In this study, one group of trainees was given no choice of which training to attend, one group

was given a choice and was assigned to the chosen training, and a final group was given a choice but assigned to non-chosen training. It was found that participants who received their choice had a higher level of motivation to learn prior to entering the training than those who were not provided a choice or those having made a choice that they did not receive. Additionally, not receiving one's choice was associated with a significantly lower motivation to learn and learning outcomes. Thus, the study empirically supports the notion that motivation to learn can be enhanced by providing trainees with choices of training content, but only under the condition that they ultimately receive the training they choose. Interestingly, while the higher motivation in the choice-received condition was expected to be a precursor to higher learning, in this study, there were no significant differences in learning between those who received their choice and those not given any choice.

In an earlier empirical study designed to investigate the connection between choice and transfer motivation, Hicks & Klimoski (1987) found that those trainees who perceived they had a high degree of freedom to attend training reported more favorable post-training reactions and had higher achievement scores than those who perceived they had little freedom in their choice to attend.

Goal Setting

Goal orientation, defined as the broad goals held by an individual as he or she faces a training event or learning task, has been demonstrated to affect how individuals learn and transfer (Dweck & Leggett, 1988). Goal orientation approaches can be summarized into two categories: task/mastery orientation and ego/performance orientation (Farr, Hofman, & Ringenbach, 1993). Task or Mastery orientation is a dedication to increasing one's

competence on a task. Ego or Performance orientation is the dedication of the learner to improve task performance on a comparison basis with others.

Kanfer and Ackerman (1989) suggest that motivational variables drive the allocation of intentional effort in skill acquisition and direct the allocation of effort within the learning task. Goal orientation may also serve these functions. Learners with a high mastery orientation will direct attention to the task and learn for the sake of learning and therefore will devote greater effort to the learning (Button, Mathieu, & Zajac, 1996). Learners with a high performance orientation will direct attention toward performing well on learning indicators and thus devote less effort to the task because they also devote resources to ego management.

To summarize, goal orientation by the learner is a motivational factor that has been shown to impact the amount of effort expended in a training context. Such effort has further been shown to impact the long-term transfer and retention of learning.

Workplace Climate Characteristics

A growing body of empirical work supports the notion that the work environment is a critical aspect in determining whether trainees apply skills on the job after training. Huczynksi & Lewis (1980) found that trainees' perceptions of supervisory support in terms of discussing course goals, listening to and championing new ideas, and allowing experimentation increased transfer. Early work by Baumgartel, Reynolds, & Pathan (1984) further indicated that managers working in organizations with favorable environments (i.e. appreciation for performance and innovation) were more likely to exert effort in applying new knowledge to their job. Following this, Noe (1986) developed the

concept of environmental favorability and found a positive correlation between such favorability and increased transfer. In a study of Air Force aviators, Ford, Quiñones, Sego, & Sorra (1992) noted that when trainees described their immediate work groups as supportive, they performed more complex and difficult trained tasks. This prodigious body of early work created an interest in the concept of transfer climate on the part of organizational behavior researchers who have gone on to produce more rigorous quantitative analysis around climate and its impact on training transfer.

Organizational climate addresses the summary perceptions that are descriptive of specific, observable, and pertinent organizational elements (Tracey, Tannenbaum, & Kavanaugh, 1995). Transfer climate is regarded as a facet-specific climate, which means that it is focusing on a particular aspect (or facet) of an organization's climate—the climate for training transfer (Rousseau, 1988). Specifically, transfer climate refers to those perceptions describing characteristics of the work environment that may facilitate or inhibit the use of trained skills. These characteristics can include the immediate supervisor's influence, the nature of employee attitudes toward training, and the extent of formal training policies and practices that exist to support training initiatives. Transfer climates may, therefore, be described as either supportive (i.e. favorable, positive) or unsupportive (i.e. unfavorable, negative) in relation to these characteristics.

Rouiller & Goldstein (1993) reported a groundbreaking investigation of transfer climate using a sample of new managers who, after attending a mandatory management training program, were randomly assigned to one of 102 restaurants of a large fast-food franchise operation. Results indicated that in locations with more positive transfer

climates, as rated by managerial co-workers at each location, trainees demonstrated significantly more trained behaviors and performed better on the job. From this study, they developed a conceptual framework for transfer climate consisting of two general types of workplace cues that included eight distinct dimensions. The first set of workplace cues, situational cues, remind trainees of what they have learned or provide the opportunity for them to use what they have learned. There are four types of situational cues: goal cues, social cues, task cues, and self-control cues. The second set of workplace cues, consequence cues, is on-the-job outcomes that affect the extent to which training is transferred. There are four types of consequence cues as well: positive feedback, negative feedback, punishment, and no feedback.

Tracey, Tannenbaum, & Kavanaugh (1995) replicated this study and expanded on it using items drawn from Rouiller & Goldstein (1993) as well as an additional dimension termed "continuous learning culture." This study used 33 items from Rouiller & Goldstein's instrument and 24 others designed to measure continuous-learning culture and workplace transfer climate. Drawing on data gathered from more than 500 supermarket managers in more than 50 stores, the researchers found similar results to Rouiller & Goldstein—transfer climate and a continuous learning culture were directly related to post-training transfer effectiveness by way of demonstrating learned behaviors.

On the basis of this work, Tracey (1998) theorized a three-factor construct for workplace transfer climate, including managerial support, job support, and organizational support, which was put into use by Tracey, Hinkin, Tannenbaum, & Mathieu (2001). In a study of 402 hotel managers and managerial trainees, the research was conducted in

conjunction with a two-and-a-half day managerial skills training program offered on a voluntary basis during an eight-month time period. Using both pre-session surveys and post-session measures, the study determined that workplace climate was significantly related to pre-training motivation, pre-training self-efficacy, and training outcomes. Further, this study confirmed the efficacy of the three-factor construct of workplace transfer climate as both a single collapsed construct and as dimensional construct.

The first dimension of the work environment that was shown to influence training transfer effectiveness is managerial support. This dimension is part of an organization's social system. The professional and personal relationships among managers and their subordinates can send strong messages about the value and importance of training. Managers who articulate their support for training can positively influence an individual's confidence about gaining relevant knowledge and skills from professional development opportunities and thus be more motivated for training. Cohen (1990) found that trainees with supportive supervisors entered training with stronger beliefs that training would be useful. These perceptions of value may boost motivation to learn and transfer, and in turn, enhance training performance.

The second dimension of the work environment that influences training transfer is job support. This dimension is part of an organization's job-related/technical system. The nature of work assignments and the design of jobs can create substantial demands and pressures on employees, which can have a significant impact on the extent to which individuals are prepared and motivated for training. If a job does not allow for flexibility and growth, then individuals may not have much confidence that developmental

opportunities will be beneficial. In a study on training transfer, Ford, Quiñones, Sego, & Sorra (1992) found that trainees had differential opportunities to perform trained tasks, which had a subsequent impact on the transfer of training. It is likely that the nature and type of job assignments may also have an influence on perceptions of importance of training to the organization.

The third dimension of the work environment that influences training transfer is organizational support. Formal organizational systems, such as the appraisal and reward systems, may have an important role in preparing individuals for training. Baldwin & Magjuka (1991) found that when trainees understood they would be held accountable for learning, they reported greater intentions to utilize their training on the job. This finding suggests that the use of formal procedures to account for newly acquired knowledge and skills may "cue" individuals that training is important and that they will be expected to demonstrate their training on the job. Moreover, if individuals believe there is a link between the use of training and rewards, then it is likely they will be enthusiastic about training and be willing to put forth effort to acquire desired knowledge and skills.

Bates, Holton, & Seyler (1997) also studied climate factors and the effect of climate relating to the transferability of training to the work context. Testing of a conceptual model of transfer containing the primary variables of ability/enabling elements (e.g. ability, transfer design), environmental elements (e.g. reaction to training, transfer climate, external events), motivational elements (e.g. motivation to learn/transfer, expected return on investment), and secondary transfer influences (e.g. job attitude, personality characteristics), they found a positive observed impact on transfer with each variable.

Within this framework, however, the environmental element of transfer climate was found to have the most significant and positive impact on effective training transfer.

In one of the most recent and most crucial studies supporting transfer climate as a key variable in training effectiveness, Burke & Baldwin (1999) found immediate workgroup climate to be such a strong indicator of transfer effectiveness that the impact of their core hypotheses related to relapse prevention would have been missed had they not included transfer climate in the study. Indeed, they call for the training research field to consider the effect of climate in on-going research, stating, "much of prior training research could be subject to reinterpretation if contextual factors and trainee perceptions had been measured and reported. This does not mean abandoning the core of training research, but it does mean more careful attention to the variables that have been ignored or controlled for" (p. 237). This warning had earlier been sounded by Holton, Bates, Seyler, & Caravalho (1997): "Without controlling for the influence of the transfer climate, evaluation results are likely to vary considerably and lead to erroneous conclusions about intervention outcomes" (p. 97). These two recent calls for the HRD field to re-examine the impact of transfer climate make clear the need for such climatic factors to be more strongly represented in the research and literature of organizational behavior and training transfer.

Given the need for such representation, Holton, Bates, & Rouna (2000) developed and validated a Learning Transfer System Inventory (LTSI) instrument as a diagnostic tool to measure transfer system constructs across multiple organizations and intervention types. A main goal for the development of this instrument was to attempt a comprehensive climate construct that could serve researchers in the HRD field. Having written about and

studied transfer for many years, these researchers were interested in developing a psychometrically strong instrument to move the field of HRD into a position to provide more definitive answers to questions about the nature of learning in the workplace and about barriers and enablers to transfer. While recognizing that this attempt was only an intermediate step in the construct validation of the LTSI, and while noting limitations and directions for further validation of the instrument, the promise of the LTSI appears to be substantial.

Holton, Bates, & Rouna (2000) built upon the earlier construct of Rouiller & Goldstein (1993) in devising and testing the LTSI. Using a 66-item instrument that included the 49 items from Rouiller & Goldstein, they used exploratory factor analysis to attempt to replicate the earlier findings. However, the earlier research results were generally not supported. Thus, further factor analysis was conducted on the expanded item set, which resulted in an interpretable factor structure of latent transfer climate constructs that may at first glance seem similar in some dimensions with Rouiller & Goldstein, but at their core are dynamically different. The key difference in the findings is that while Rouiller and Goldstein sought the psychological cues, the analysis of Holton, Bates, & Rouna found organizational referents (supervisor, peer/task, or self) to be the dominant foundation in participants' concept of transfer climate. The factor structure that emerged includes the following seven transfer climate constructs and two transfer design constructs (p. 110-111):

Transfer Climate Constructs:

1. Supervisor support refers to the extent to which supervisors reinforce and support use of learning on the job. Item content included setting goals to use learning, giving assistance, and offering positive feedback.

2. Opportunity to use is the extent to which trainees are provided with or obtain resources and tasks that enable them to use their new skills on the job. Items covered include the availability of equipment, financial resources, materials and supplies, and other information necessary to use their training on the job.

3. Peer support measures the extent to which peers reinforce and support use of learning on the job. Item content included setting goals to use learning, giving assistance, offering positive feedback, and having equipment similar to that used in training.

4. Supervisor sanctions refer to the negative responses of the supervisor if training is not used on the job. Items addressed indifference to use of training, negative feedback, active opposition to the use of training, and no feedback at all.

5. Personal outcomes—positive refers to the degree to which application of training on the job leads to positive outcomes or payoffs for the individual. Items included raises, career development, and advancement.

6. Personal outcomes—negative refers to the degree to which application of training on the job leads to negative outcomes for the individual. Items included reprimands, being overlooked for raises, etc.

7. Resistance refers to the extent to which prevailing group norms are perceived to discourage use of new skills. Items included in resistance are the degree to which colleagues ridicule employees for use of new training or resist new skills.

Transfer Design Factors:

1. Content validity is the extent to which the trainees judge the content of the training to accurately reflect job requirements. Items addressed the degree to which skills, instructional aids, and content matched the job.

2. Transfer design is the extent to which training gives trainees the ability to transfer their learning to job applications and the extent to which training instructions match the job requirements. Items included practice, experiential activities, and real world applications.

Given the earlier review of the training research and literature, the LTSI instrument does seem to offer a comprehensive definition of climate that appears to cover significant portions of the non-instructional, performance portion of the transfer question. As such, this tool provides a significant step forward for researchers interested in quantifying the transfer experience in most organizations.

Noe (1986) found that trainees' positive attitude toward the training had a significant impact on higher levels of training transfer. This was found to stem both from the expectation that the training would be relevant and applicable to the job and from the trainees' confidence in their ability to use the skills in a positive, supportive organizational context. While this positive attitude factor would seem to be a simple trainee factor, the specificity with which Noe and others provided antecedents for and determinants of

motivation actually shows that motivation is more correctly viewed as a climate level factor rather than a trainee level factor.

Testing a special type of motivation, Magjuka, Baldwin, & Loher (1994) looked at increasing participant accountability on a pre-training basis as a possible learning enhancement tool and transfer stimulus. Motivational aspects of the workplace climate have also been noted by Keller (1983) and Hicks (1984).

Facteau, Dobbins, Russell, Ladd, & Kudish (1995) provide the most comprehensive understanding of individual motivation and its impact on training effectiveness and transfer. In their study of 967 managers and supervisors, they considered seven distinct factors related to pre-training motivation and found a positive, significant relationship between such motivation and training effectiveness and transfer. While this finding is informative at the macro-level, a micro-level analysis of the individual variables determining motivation provides a clearer picture of precisely what constitutes pre-training motivation as a construct.

Facteau, Dobbins, Russell, Ladd, & Kudish considered the following motivational characteristics in their study and determined that each had a differing relationship with motivation within the training context:

1. Intrinsic incentives (the extent to which training met internal needs or provided employees with growth opportunities) played the most significant positive role in predicting training motivation.

2. Training reputation (trainees' perception of the content relevancy and quality of the trainers) was shown to have a significant positive impact on pre-training motivation.
3. Organizational commitment (the extent to which trainees showed a personal dedication or allegiance to the company) was found to be positively correlated with pre-training motivation.
4. Compliance (the degree to which trainees were required or coerced to attend training) had a significant negative influence on pre-training motivation.
5. Extrinsic incentives (the degree to which trainees perceived the training to lead to external rewards and benefits outside of the organization or beyond the individual level) was shown to have a positive, yet non-significant, impact on pre-training motivation.
6. Career planning (the extent to which trainees had a well-defined and actionable career development path) was found to have a small positive, non-significant role in determining pre-training motivation.
7. Career exploration (trainees' desire to consider alternative career paths and discover possible interests) was found to have no influence on pre-training motivation.

After operationalizing pre-training motivation in this way, the research went on to show that such pre-training motivation, based on workplace climate factors, played a highly significant role in both trainee intent to and accomplishment of transferring the training to the job context.

Post Training Activity Strategies for Transfer

While much of the training transfer literature is devoted to activity either prior to the training session (participation, cognitive ability, motivation) or during the training session (instructional design, effort expended), a relatively new strand of training research has evolved that focuses on the post-training activity side of the transfer equation. The main areas of such investigation include research on relapse prevention, one-on-one coaching, and the opportunity to use newly trained skills. Each of these research areas appears to shed significant light on the transfer issue, and thus merits a detailed review.

Relapse Prevention

Originally formulated in behavioral medicine and clinical psychology by Marlatt & Gordon (1980) and moved to the HRD world by Marx (1982, 1986), the use of Relapse Prevention (RP) techniques has been shown to increase transfer of training from the classroom to the work environment. RP was designed to enhance the maintenance stage in the treatment of addictive behaviors. Based on self-management, goal setting, and coping strategy principles, RP's primary goal is to teach individuals how to actively anticipate and deal with a tempting relapse into former behaviors when confronted outside the safety of the training session.

RP acknowledges the importance of the transfer environment in maintaining behavioral change. In the clinical context as in the corporate training context, trainees leave a safe environment and confront situations that may hinder transfer to the "real" context. Although trainees in the corporate setting do not have to deal with the physiological component of addictive behavior, they do have to negotiate disruptive

influences and old habits when they try to sustain trained behavior in familiar confines. By identifying high-risk situations that jeopardize transfer and developing coping strategies, RP can help trainees prevent a relapse into old behavior patterns (Marx, 1982).

In one of the first RP transfer studies, Tziner & Haccoun (1991) researched the strategy of relapse prevention and its effect on training transfer on 95 Israeli military instructors. Borrowing on research conducted in the addiction recovery field, the researchers hypothesized that employing similar addiction recovery strategies would increase training transfer. The method of using RP for a transfer support tool was found to be a significant element in increasing training application to the work context. In addition to relapse prevention as a transfer tool, Tziner & Haccoun found that immediate post-training learning scores were higher for those participants who were exposed to a two-hour relapse prevention session. Thus, it seems that relapse prevention has a positive impact not only in the long run as a tool to retain and reinforce newly trained behaviors, but also at the immediate point of training as an important tool to aid in knowledge accumulation during the training session.

Burke (1997) deepened the analysis, although the efficacy of RP was brought into question, by offering a brief RP introduction to one group of research subjects while providing an extensive RP program to a second group in addition to a non-RP control group. This research reiterated the impact of RP as a transfer tool relative to the control group; however, the short-run impact of RP was not found to increase the immediate learning scores of trainees as mentioned above in Tziner & Haccoun (1991). In addition, the intensive RP group showed lower levels of motivation for transfer in comparison to

both the non-RP group and the group exposed to the shallower introduction to RP techniques. In fact, the control group showed the highest level of transfer motivation when asked about their intention to transfer the training. While many reasons could be given for this finding, the researcher postulated anxiety over knowing the full extent of the transfer problem for both the intensive and shallow RP groups. Further, the researcher acknowledged the limitations of the findings due to selection of subjects, college students without a job context to transfer to, and to the hypothetical research question of "intention to transfer," not the actual measured transfer observed following a period in the "real" world.

Inquiring further into RP and attempting to revitalize its role, Burke & Baldwin (1999) tested the effectiveness of limited and full RP programs in organizations with different transfer climates. Using a sample of 78 research scientists who all participated in a coaching effectiveness training session, Burke and Baldwin re-created the same three groups from Burke (1997), namely a brief RP group of research subjects, an extensive RP program research group, and a non-RP control group. They found that the effectiveness of RP as a transfer strategy differed based on the transfer climate of the organization. For those with a hostile transfer climate, the extensive RP program was significantly more effective than either the control or brief experimental program, while such effectiveness was mollified in a supportive, transfer friendly workplace. In fact, in such a positive transfer friendly climate, the brief RP program was significantly more effective than any of the other techniques.

One-on-One Coaching

Huczysnki & Lewis (1980) first hinted at the notion of supervisor coaching as an effective transfer technique in their study of intent to transfer and transfer effectiveness in a group of managers attending a management skills improvement course. Their research found that participants who engaged in conversations about the training with their supervisors prior to and following the training course had both higher intentions to transfer and more success in transferring new learning to the job situation. Taking the analysis forward, the researchers suggested that "...new learning applications need to be 'sponsored' by superiors if they are to have a real chance of being brought to a successful conclusion and incorporated into the organizational system" (p. 239). Such supervisor involvement by way of conversations with trainees and the sponsorship of training are vital components of the coaching paradigm (Gilley & Boughton, 1996).

Olivero, Bane, & Kopelman (1997) took up the specific question of one-on-one executive coaching as a potential method for increasing the extent to which knowledge acquired during classroom training transfers to the job. These researchers were interested in one facet of the social dimension of behavioral change based on the earlier work of Latham & Saari (1979). Noting that "there is considerable evidence that a critical factor influencing transfer of training is the extent to which the trainee receives the opportunity for practice and constructive feedback" (p. 461), they hypothesized that one-on-one executive coaching could provide a safe, personalized environment in which practice and feedback could take place. This research focuses on the degree to which a post-training coaching regimen would improve skill retention and use following training. In the study,

managers were given the opportunity, through one-on-one coaching, to practice and obtain constructive feedback regarding the subject matter they had "learned about" during training. The study found that the training session alone increased average productivity in the group by 22 percent, while the added dimension of coaching increased the productivity of the managers by an astonishing and statistically significant 88 percent. During the coaching phase, participants and coaches 1) set goals, 2) used collaborative problem solving, 3) practice learned skills, 4) participated in two-way feedback, 5) involved supervisors, 6) evaluated end results, and 7) used public presentations. While the researchers found all the steps impactful, their conclusions were that the goal-setting and public presentation (accountability) were the most critical to increased transfer of the learned skills.

A unique feature of Olivero, Bane, & Kopelman is the use of actual managers in an organizational setting over an extended period of time following the training intervention. This is juxtaposed with much of the transfer research to date that has been conducted on semi-willing college students and is designed to measure only intention to transfer rather than actual transfer performance (e.g. Magjuka, Baldwin, & Loher, 1994; Fisher & Ford, 1998). Given the constraints of research design, such limitations are understandable, and in all cases the researchers discussed the limitations of generalizability of the studies; however, it is worth noting and remembering that the research of Olivero, Bane, & Kopelman does shine in the literature as one of the few studies with such a firm grounding in organizational reality.

While using different actors and terminology, Broad & Newstrom (1992) also advocate the use of post-training coaching as a positive catalyst for training transfer. Noting that Byham, Adams, & Kiggins (1976) found a tri-partite transfer support equation consisting of acquisition of skills, confidence to attempt new skills, and positive reinforcement of new skills, Broad & Newstrom hold both the trainer and the trainee's manager responsible for the transfer of training. They hold the trainer accountable for the both skill acquisition and confidence factors, while the manager's role is to build on the confidence following training and to positively reinforce new skill usage on the job. They suggest that the trainer carry out such a responsibility by applying the Pygmalion effect during the training session, providing follow-up support after training, and by conducting evaluation, feedback, and refresher sessions with the trainees. They suggest that the manager carry out such responsibility by planning for the re-entry of the trainee to the work environment, initially reducing job pressures upon return, providing opportunity for the trainee to practice new skills, supporting transfer through feedback and role modeling, setting mutual expectations with the trainee for transfer, and publicly recognizing successes. In this way, the manager or supervisor truly becomes the performance coach responsible for transfer management following the training event. This radical role for the supervisor in the training equation is one that shows much promise to positively impact training transfer beyond the 10 percent level of present practice. However, Broad & Newstrom's research found that while the impact of supervisor involvement was a high leverage measure, such involvement was sadly lacking in the majority of present training programs and interventions. Gilley & Boughton (1996) have termed this phenomenon

"Pontius Pilate" management, which is based on the attitude that employees are easy to replace and thus managers have no responsibility to develop and mentor their employees. This holdover management attitude from the early period of industrialization must be shed in today's scarce market for human resource talent. Such low supervisor involvement across the board, positively stated, creates tremendous opportunity for firms which do begin to take supervisor involvement seriously in the post-training transfer and performance management.

Opportunity to Use Trained Skills

Within the learning camp of the training profession, task repetition has long been viewed as a critical component of skill retention. Ford, Quiñones, Sego, & Sorra (1992) agreed with the importance of skill retention, but contended that past research on transfer has tended to focus on the learning environment while ignoring the transfer environment. They noted that in the post-training transfer environment, trainees may have very different opportunities to use trained skills; therefore, such trainees may face differing levels of transfer success based on that opportunity. They hypothesized that individuals who have many opportunities to perform trained tasks on the job would be more likely to retain and maintain trained skills than those with fewer opportunities. In the research, this hypothesis was supported based on a three-fold definition of opportunity to perform, consisting of breadth, or the number of trained tasks performed on the job; activity level, or the number of times trained tasks were performed on the job; and task type, or the difficulty and/or criticality of the trained tasks that were actually performed on the job.

Taking Ford, Quiñones, Sego, & Sorra (1992) a bit further, Quiñones, Sego, Ford, & Smith (1995) collected data from 118 U.S. Air Force participants and their supervisors. Utilizing the opportunity to use construct of Ford, Quiñones, Sego, & Sorra, Quiñones, Sego, Ford, & Smith considered the individual and organizational variables influencing an individual's opportunity to perform following his or her return to the workplace. They hypothesized that opportunity to perform consisted of supervisor attitudes and workplace support, both of which were found to have a significant positive impact on an individual's opportunity to perform. While the study was constructed to test the variables of opportunity to perform, one can't help but see the connection between these findings and the studies cited earlier on coaching, workplace climate, and motivation.

Conclusion

While accepting its place as a relatively young field of inquiry, the transfer of training camp in the human resource development profession has come a long way in a relatively short period of time. It seems that since 1980, the research field has, on the whole, begun to move away from the learning/instructional design emphasis to stake out new research ground in the social, contextual, and organizational arenas. Such areas have shown significant impact and advancement of our understanding of training effectiveness and training transfer. As the profession seeks to gain credibility in the boardroom as a strategic business partner, it is imperative that the researchers continue to pay close attention to the development of supervisory involvement in training, the development of workplace climates conducive and supportive of transfer, the insertion of relapse prevention and goal setting strategies in training interventions, and the development of

methods to increase pre-training motivation and commitment to transfer on the part of the trainee.

Additionally, HRD professionals working in the training transfer area appear to have a unique opportunity to connect contemporary understandings of the role workplace transfer climate has in improving training transfer with newer value chain research on the impact of corporate climate more generally in creating motivated, engaged, employees that will then add value to the organization through an intense focus on the customer and other business deliverables. This opportunity may provide HRD a unique and compelling platform from which to leverage change toward the human side of the equation and allow HRD to have more organizational influence.

CHAPTER 3.

METHODOLOGY

At present, HRD professionals continue to struggle with the reasons why a higher percentage of the skills and knowledge acquired during training programs do not transfer to the work environment. Further, the credibility of HRD within the firm is diminished when training transfer remains at dismal levels and when the connection between HRD's focus on creating positive workplace climate is not linked to the broader business goals and objectives of the organization.

Training transfer research appears to be on the rise, and this study adds to the existing literature on the importance of positive workplace transfer climate toward training effectiveness. Further, this study connects workplace climate, training transfer, and the attainment of business goals and objectives of the firm.

In order to do so, this study measured specific work climate factors (organizational support, job support, peer support, and managerial support) that have previously been shown to affect training transfer and examined the connection between such workplace climate factors and the attainment of broader business goals of the firm.

Target Population

This study was conducted in the store operations division of a large regional paint manufacturer in the Midwestern United States. Permissions were gained through communications with the Chief Executive Officer and the Director of Trade Sales and Store Operations (Appendix A). The store operations division operates 82 stores that sell paint and decorating items and supplies to retail and contractor clients. The firm is a

privately-held, family owned and operated company in its third generation of family leadership. Stores are located in both urban and rural areas; however, very few stores are located in large metropolitan markets. The average number of full-time equivalent store employees was 5.98 per store. The average length of employment with the company for managers in the study was between 5-7 years and the average for employees was between 3-4 years.

In each store, data were gathered from both store managers and store employees at each location. Typically, a store consists of a manager, assistant manager, and support staff, including sales (inside and/or outside sales), merchandise handling, delivery, and other related support personnel. Each participant entered the study on a voluntary basis and was advised of the purpose of the study and the confidentiality of the study through a memo from the Director of Store Operations.

Variables

For all the research questions, the independent variables are workplace climate factors: organizational support, job support, peer support, and managerial/supervisor support. The dependent variables are operational factors defined by the organization as key performance indicators of business success: sales growth, gross profit growth, employee turnover, employee promotions, and controllable expenses.

Instrumentation and Data Collection

Surveys were sent to every store employee and every store manager in the cooperating organization's chain of 82 stores. At least one survey was returned from 66 of those stores; however, only stores having both a manager's survey and at least two

employee surveys returned were included in the study. Thus, the total number of stores in the study was reduced to 44.

Dependent variable data on store operations (sales, profit, turnover) were obtained in cooperation with the accounting and human resource departments of the cooperating organization. These data were reviewed by a subject matter expert (C.P.A.) for content validity and reliability. Dependent variable data on employee promotions were self-reported by the managers of the various stores.

Independent variable data on workplace climate were obtained using (with permission, see Appendix A) a survey (Appendix B) from Tracey (1998) to measure the three-dimensional construct of workplace climate, consisting of Job Support, Managerial/Supervisor Support, and Organizational Support. A fourth experimental dimension, Peer Support, was added to the construct as well. Each dimensional construct was represented with five questions each using a 5-point Likert-type scale (strongly agree - strongly disagree). In addition, the Manager's Survey included two additional items on length of service with the company and the number of managerial promotions a given manager had played a part in creating or coaching during the prior five years. In addition, the Store Employee Survey included two additional questions regarding type of employee (full-time/part-time) and the length of service at the particular store location. Data for the independent variables were collected from both the managers and all store personnel at each store in the study.

Data Analysis

The data analysis for this study was done using quantitative statistical techniques. The statistical analysis was completed through applied statistics and Microsoft Excel's Data Analysis Toolbox.

For Research Questions 1-4, dealing with the individual workplace transfer climate factors' relationships to the business goals and objectives of the firm, bi-variate regression analysis was conducted relevant to employees' and managers' perceptions of workplace transfer climate factors and the various stores' dependent variable performance measures.

For Research Questions 5-6, dealing with the overall relationships of workplace transfer climate as a single model and the model's relevance to store performance data, bi-variate regression analysis was performed for both the Tracey (1998) model and the Tracey (1998) model with the addition of peer support, termed the Hypothesized Workplace Transfer Climate Model, for purposes of this study. These two constructs were analyzed against the various stores' dependent variable performance measures.

For Research Question 7, dealing with managers' perceptions of the workplace transfer climate factors and the relationship between those factors and the promotion activity of those same managers at the store level, bi-variate regression analysis was performed on the managers' scores on the workplace transfer climate factors and the self-reported promotion activity of those managers.

For Research Question 8, dealing with differences in employees' and managers' perceptions of the factors of workplace transfer climate, t-tests were performed on the

scores to determine what differences, if any, existed between the two groups' perceptions of workplace transfer climate factors.

For all statistical tests performed, appropriate methods were employed (scatterplots, historigrams, and residuals) to determine the accuracy of the findings and to check for the occurrence of outliers in the data, of which none were found to influence findings.

CHAPTER 4.

FINDINGS

The purpose of this study was to examine previously proven workplace transfer climate factors and to examine for statistically significant relationships between these factors and a variety of relevant business performance indictors at the store level for a chain of paint and decorating centers. Data on workplace transfer climate factors were obtained during the first quarter of the year for which the performance indicators were measured. The findings include information related to the perceptions of employees and managers at the various stores on the workplace transfer climate factors of organizational support, job support, managerial support, and peer support.

Table 1 provides a graphical overview of how the research questions 1-7 were divided into sub-questions to allow for analysis at both the individual factor level and at the single construct level for both the Tracey (1998) model and for the hypothesized model. Each factor, job support (Question 1), organizational support (Question 2), managerial support (Question 3), and peer support (Question 4) were analyzed separately against each of the business performance indicators, sales growth, gross profit, and employee turnover. This individual analysis was done using employee perception scores only, manager perception scores only, and for the combined perceptions of both managers and employees. The same treatment was applied to both the Tracey (1998) model (Question 5) and to the hypothesized model (Question 6). For Research Question 7, manager perception scores for both the individual factors and the two single construct models were analyzed in relation to the promotion activity of those same managers.

Table 1 Overview of Statistical Analyses for Research Questions 1-7

	Sales Growth	Gross Profit	Employee Turnover	Promotion Activity
Job Support				
Employees	Question 1a*	Question 1d**	Question 1g	
Managers	Question 1b	Question 1e	Question 1h	Question 7b*
Combined	Question 1c*	Question 1f	Question 1i	
Organizational Support				
Employees	Question 2a	Question 2d	Question 2g	
Managers	Question 2b	Question 2e	Question 2h	Question 7c
Combined	Question 2c	Question 2f	Question 2i	
Managerial Support				
Employees	Question 3a**	Question 3d	Question 3g	
Managers	Question 3b	Question 3e	Question 3h	Question 7a
Combined	Question 3c*	Question 3f	Question 3i	
Peer Support				
Employees	Question 4a	Question 4d	Question 4g	
Managers	Question 4b	Question 4e	Question 4h	Question 7d*
Combined	Question 4c	Question 4f	Question 4i	
Tracey (1998) Workplace Transfer Climate				
Employees	Question 5a*	Question 5d	Question 5g	
Managers	Question 5b	Question 5e	Question 5h	Question 7e
Combined	Question 5c*	Question 5f	Question 5i	
Hypothesized Workplace Transfer Climate				
Employees	Question 6a*	Question 6d	Question 6g	
Managers	Question 6b	Question 6e	Question 6h	Question 7f**
Combined	Question 6c**	Question 6f	Question 6i	

Significance (* $p<.05$, ** $p<.10$)

Since the stated intent of this study was to determine what preliminary relationships exist between workplace transfer climate factors and business goals and objectives, this type of factor level analysis was determined to be most appropriate. By analyzing each factor directly with each of the business performance measures in the study, a very distinct relationship was tested in each case. This type of analysis makes clearer the potential for organizations and researchers to understand precisely which workplace transfer climate factors have the potential to positively improve individual business goals and objectives, while simultaneously furthering the understanding of workplace transfer climate as both a set of individual factors and as an overall single construct.

Research Question 1

What positive relationships exist between the workplace transfer climate factor of job support and the attainment of the business goals and objectives of the firm?

To answer this overarching question, the research question was broken down into the following sub-questions:

Research Question 1a: *Do differences in employees' perceptions of job support have a statistically significant relationship with sales growth?*

Employee scores regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed statistically significant ($p=.007$) relationship between these perceptions and sales growth at the store level. Regression results are described in Table 2. The regression equation for the relationship was found to be $Y= -2.77 + .076X$, with a standard error of .104 and the R^2 was found to be .163.

Table 2 Regression Results Analyzing the Relationship of Perceived Job Support by Employees, Managers, and All Participants on Sales Growth

		df	SS	MS	F	Sig.
Employees' Perception of Job Support on Sales Growth						
Regression		1	.088	.088	8.157	.007
Residual		42	.454	.011		
Total		43	.542			
Intercept	-.277					
Coefficient	.076					
T Statistic	2.856					
Std. Error	.104					
R Squared	.163					
n	44					
Managers' Perception of Job Support on Sales Growth						
Regression		1	.012	.012	.916	.344
Residual		42	.531	.013		
Total		43	.542			
Intercept	-.092					
Coefficient	.029					
T Statistic	.957					
Std. Error	.112					
R Squared	.021					
n	44					
All Participants' Perceptions of Job Support on Sales Growth						
Regression		1	.084	.084	7.688	.008
Residual		42	.458	.011		
Total		43	.542			
Intercept	-.395					
Coefficient	.108					
T Statistic	2.772					
Std. Error	.104					
R Squared	.155					
n	44					

Research Question 1b: *Do differences in managers' perceptions of job support have a statistically significant relationship with sales growth?*

Manager scores regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.344) between these perceptions and sales growth at the store level. Regression results are described in Table 2. The regression equation for the relationship was found to be Y= -.092 + .029X, with a standard error of .112 and the R^2 was found to be .021.

Research Question 1c: *Do differences in perceptions by store staff members (managers and employees combined) of job support have a statistically significant relationship with sales growth?*

Combined scores for managers and employees regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed a statistically significant (p=.008) relationship between these perceptions and sales growth at the store level. Regression results are described in Table 2. The regression equation for the relationship was found to be Y= -3.95 + .108X, with a standard error of .104 and the R^2 was found to be .155.

Research Question 1d: *Do differences in employees' perceptions of job support have a statistically significant relationship with gross profit?*

Employee scores regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed a relationship approaching statistical significance (p=.095) between these perceptions and gross profit growth at the store level.

Regression results are described in Table 3. The regression equation for the relationship was found to be Y= -.162 + .051X, with a standard error of .117 and the R^2 was found to be .065.

Research Question 1e: *Do differences in managers' perceptions of job support have a statistically significant relationship with gross profit?*

Manager scores regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.765) between these perceptions and gross profit growth at the store level. Regression results are described in Table 3. The regression equation for the relationship was found to be Y= -.0003 + .0098X, with a standard error of .121 and the R^2 was found to be .002.

Research Question 1f: *Do differences in perceptions by store staff members (managers and employees combined) of job support have a statistically significant relationship with gross profit?*

Combined scores for managers and employees regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.158) between these perceptions and gross profit growth at the store level. Regression results are described in Table 3. The regression equation for the relationship was found to be Y= -.206 + .064X, with a standard error of .119 and the R^2 was found to be .047.

Research Question 1g: *Do differences in employees' perceptions of job support have a statistically significant relationship with turnover?*

Employee scores regarding their perceptions of job support were tabulated at the

Table 3 Regression Results Analyzing the Relationship of Perceived Job Support by Employees, Managers, and All Participants on Gross Profit Growth

		Df	SS	MS	F	Sig.
Employees' Perception of Job Support on Gross Profit Growth						
Regression		1	.040	.040	2.912	.095
Residual		42	.580	.014		
Total		43	.620			
Intercept	-.162					
Coefficient	.051					
T Statistic	1.707					
Std. Error	.117					
R Squared	.065					
N	44					
Managers' Perception of Job Support on Gross Profit Growth						
Regression		1	.001	.001	.090	.765
Residual		42	.619	.015		
Total		43	.620			
Intercept	.000					
Coefficient	.010					
T Statistic	.301					
Std. Error	.121					
R Squared	.002					
N	44					
All Participants' Perceptions of Job Support on Gross Profit Growth						
Regression		1	.029	.029	2.071	.158
Residual		42	.591	.014		
Total		43	.620			
Intercept	-.206					
Coefficient	.064					
T Statistic	1.439					
Std. Error	.119					
R Squared	.047					
N	44					

store level and a regression analysis revealed no statistically significant relationship (p=.468) between these perceptions and turnover rate at the store level. Regression results are described in Table 4. The regression equation for the relationship was found to be Y= 1.400 + -.130X, with a standard error of .690 and the R^2 was found to be .013.

Research Question 1h: *Do differences in managers' perceptions of job support have a statistically significant relationship with employee turnover?*

Manager scores regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.318) between these perceptions and turnover rates at the store level. Regression results are described in Table 4. The regression equation for the relationship was found to be Y= .185 + .188X, with a standard error of .686 and the R^2 was found to be .024.

Research Question 1i: *Do differences in perceptions by store staff members (managers and employees combined) of job support have a statistically significant relationship with employee turnover?*

Combined scores for managers and employees regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.874) between these perceptions and turnover rates at the store level. Regression results are described in Table 4. The regression equation for the relationship was found to be Y= .739 + .041X, with a standard error of .694 and the R^2 was found to be .001.

Table 4 Regression Results Analyzing the Relationship of Perceived Job Support by Employees, Managers, and All Participants on Employee Turnover

		Df	SS	MS	F	Sig.
Employees' Perception of Job Support on Turnover						
Regression		1	.256	.256	.537	.468
Residual		41	19.520	.476		
Total		42	19.775			
Intercept	1.400					
Coefficient	-.130					
T Statistic	-.733					
Std. Error	.690					
R Squared	.013					
n	43					
Managers' Perception of Job Support on Turnover						
Regression		1	.481	.481	1.022	.318
Residual		41	19.294	.471		
Total		42	19.775			
Intercept	.185					
Coefficient	.188					
T Statistic	1.011					
Std. Error	.686					
R Squared	.024					
n	43					
All Participants' Perceptions of Job Support on Turnover						
Regression		1	.012	.012	.025	.874
Residual		41	19.763	.482		
Total		42	19.775			
Intercept	.739					
Coefficient	.041					
T Statistic	.016					
Std. Error	.694					
R Squared	.001					
n	43					

Research Question 2

What positive relationships exist between the workplace transfer climate factor of organizational support and the attainment of the business goals and objectives of the firm?

To answer this overarching question, the research question was broken down into the following sub-questions:

Research Question 2a: *Do differences in employees' perceptions of organizational support have a statistically significant relationship with sales growth?*

Employee scores regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.142) between these perceptions and sales growth at the store level. Regression results are described in Table 5. The regression equation for the relationship was found to be Y= -1.26 + .044X, with a standard error of .111 and the R^2 was found to be .051.

Research Question 2b: *Do differences in managers' perceptions of organizational support have a statistically significant relationship with sales growth?*

Manager scores regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.688) between these perceptions and sales growth at the store level. Regression results are described in Table 5. The regression equation for the relationship was found to be Y= -.011 + .009X, with a standard error of .113 and the R^2 was found to be .004.

Table 5 Regression Results Analyzing the Relationship of Perceived Organizational Support by Employees, Managers, and All Participants on Sales Growth

		df	SS	MS	F	Sig.
Employees' Perception of Organizational Support on Sales Growth						
Regression		1	.028	.028	2.240	.142
Residual		42	.515	.012		
Total		43	.542			
Intercept	-.126					
Coefficient	.044					
T Statistic	1.497					
Std. Error	.111					
R Squared	.051					
N	44					
Managers' Perception of Organizational Support on Sales Growth						
Regression		1	.002	.002	.163	.688
Residual		42	.540	.013		
Total		43	.542			
Intercept	-.011					
Coefficient	.009					
T Statistic	.404					
Std. Error	.113					
R Squared	.004					
N	44					
All Participants' Perceptions of Organizational Support on Sales Growth						
Regression		1	.017	.017	1.324	.256
Residual		42	.526	.013		
Total		43	.542			
Intercept	-.110					
Coefficient	.038					
T Statistic	1.151					
Std. Error	.112					
R Squared	.031					
N	44					

Research Question 2c: *Do differences in perceptions by store staff members (managers and employees combined) of organizational support have a statistically significant relationship with sales growth?*

Combined scores for managers and employees regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.256) between these perceptions and sales growth at the store level. Regression results are described in Table 5. The regression equation for the relationship was found to be Y= -.110 + .038X, with a standard error of .112 and the R^2 was found to be .031.

Research Question 2d: *Do differences in employees' perceptions of organizational support have a statistically significant relationship with gross profit?*

Employee scores regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.608) between these perceptions and gross profit growth at the store level. Regression results are described in Table 6. The regression equation for the relationship was found to be Y= -.018 + .017X, with a standard error of .121 and the R^2 was found to be .006.

Research Question 2e: *Do differences in managers' perceptions of organizational support have a statistically significant relationship with gross profit?*

Manager scores regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.702) between these perceptions and gross profit growth at the store level.

Table 6 Regression Results Analyzing the Relationship of Perceived Organizational Support by Employees, Managers, and All Participants on Gross Profit Growth

		df	SS	MS	F	Sig.
Employees' Perception of Organizational Support on Gross Profit Growth						
Regression		1	.004	.004	.268	.608
Residual		42	.616	.015		
Total		43	.620			
Intercept	-.018					
Coefficient	.017					
T Statistic	.517					
Std. Error	.121					
R Squared	.006					
n	44					
Managers' Perception of Organizational Support on Gross Profit Growth						
Regression		1	.002	.002	.148	.702
Residual		42	.618	.015		
Total		43	.620			
Intercept	.007					
Coefficient	.009					
T Statistic	.385					
Std. Error	.121					
R Squared	.004					
n	44					
All Participants' Perceptions of Organizational Support on Gross Profit Growth						
Regression		1	.005	.005	.349	.558
Residual		42	.615	.015		
Total		43	.620			
Intercept	-.034					
Coefficient	.021					
T Statistic	.590					
Std. Error	.121					
R Squared	.008					
n	44					

Regression results are described in Table 6. The regression equation for the relationship was found to be Y= -.007 + .009X, with a standard error of .121 and the R^2 was found to be .004.

Research Question 2f: *Do differences in perceptions by store staff members (managers and employees combined) of organizational support have a statistically significant relationship with gross profit?*

Combined scores for managers and employees regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.558) between these perceptions and gross profit growth at the store level. Regression results are described in Table 6. The regression equation for the relationship was found to be Y= -.034 + .021X, with a standard error of .121 and the R^2 was found to be .008.

Research Question 2g: *Do differences in employees' perceptions of organizational support have a statistically significant relationship with turnover?*

Employee scores regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.418) between these perceptions and turnover rate at the store level. Regression results are described in Table 7. The regression equation for the relationship was found to be Y= 1.390 + -.149X, with a standard error of .689 and the R^2 was found to be .016.

Research Question 2h: *Do differences in managers' perceptions of organizational support have a statistically significant relationship with employee turnover?*

Manager scores regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.264) between these perceptions and turnover rates at the store level. Regression results are described in Table 7. The regression equation for the relationship was found to be Y= .387 + .150X, with a standard error of .684 and the R^2 was found to be .030.

Research Question 2i: *Do differences in perceptions by store staff members (managers and employees combined) of organizational support have a statistically significant relationship with employee turnover?*

Combined scores for managers and employees regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.688) between these perceptions and turnover rates at the store level. Regression results are described in Table 7. The regression equation for the relationship was found to be Y= .616 + .084X, with a standard error of .693 and the R^2 was found to be .004.

Research Question 3

What positive relationships exist between the workplace transfer climate factor of managerial support and the attainment of the firm's business goals and objectives?

To answer this overarching question, the research question was broken down into the following sub-questions:

Research Question 3a: *Do differences in employees' perceptions of managerial support have a statistically significant relationship with sales growth?*

Table 7 Regression Results Analyzing the Relationship of Perceived Organizational Support by Employees, Managers, and All Participants on Employee Turnover

		df	SS	MS	F	Sig.
Employees' Perception of Organizational Support on Turnover						
Regression		1	.318	.318	.669	.418
Residual		41	19.458	.475		
Total		42	19.775			
Intercept	1.390					
Coefficient	-.149					
T Statistic	-.818					
Std. Error	.689					
R Squared	.016					
n	43					
Managers' Perception of Organizational Support on Turnover						
Regression		1	.599	.599	1.281	.264
Residual		41	19.176	.468		
Total		42	19.775			
Intercept	.387					
Coefficient	.150					
T Statistic	1.132					
Std. Error	.684					
R Squared	.030					
n	43					
All Participants Perceptions' of Organizational Support on Turnover						
Regression		1	.079	.079	.164	.688
Residual		41	19.697	.480		
Total		42	19.775			
Intercept	.616					
Coefficient	.084					
T Statistic	.405					
Std. Error	.693					
R Squared	.004					
n	43					

Employee scores regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed a relationship approaching statistical significance (p=.086) between these perceptions and sales growth at the store level. Regression results are described in Table 8. The regression equation for the relationship was found to be Y= -.208 + .054X, with a standard error of .110 and the R^2 was found to be .069.

Research Question 3b: *Do differences in managers' perceptions of managerial support have a statistically significant relationship with sales growth?*

Manager scores regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.240) between these perceptions and sales growth at the store level. Regression results are described in Table 8. The regression equation for the relationship was found to be Y= -.076 + .026X, with a standard error of .112 and the R^2 was found to be .033.

Research Question 3c: *Do differences in perceptions by store staff members (managers and employees combined) of managerial support have a statistically significant relationship with sales growth?*

Combined scores for managers and employees regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed a statistically significant relationship (p=.048) between these perceptions and sales growth at the store level. Regression results are described in Table 8. The regression equation for the relationship was found to be Y= -.261 + .071X, with a standard error of .108 and the R^2 was found to be .090.

Table 8 Regression Results Analyzing the Relationship of Perceived Managerial Support by Employees, Managers, and All Participants on Sales Growth

		df	SS	MS	F	Sig.
Employees' Perception of Managerial Support on Sales Growth						
	Regression	1	.037	.037	3.088	.086
	Residual	42	.505	.012		
	Total	43	.542			
	Intercept	-.208				
	Coefficient	.054				
	T Statistic	1.757				
	Std. Error	.110				
	R Squared	.069				
	N	44				
Managers' Perception of Managerial Support on Sales Growth						
	Regression	1	.018	.018	1.422	.240
	Residual	42	.525	.013		
	Total	43	.542			
	Intercept	-.076				
	Coefficient	.026				
	T Statistic	1.192				
	Std. Error	.112				
	R Squared	.033				
	N	44				
All Participants' Perceptions of Managerial Support on Sales Growth						
	Regression	1	.049	.049	4.168	.048
	Residual	42	.493	.012		
	Total	43	.542			
	Intercept	-.261				
	Coefficient	.071				
	T Statistic	2.042				
	Std. Error	.108				
	R Squared	.090				
	N	44				

Research Question 3d: *Do differences in employees' perceptions of managerial support have a statistically significant relationship with gross profit?*

Employee scores regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.675) between these perceptions and gross profit growth at the store level. Regression results are described in Table 9. The regression equation for the relationship was found to be Y= -.023 + .014X, with a standard error of .121 and the R^2 was found to be .004.

Research Question 3e: *Do differences in managers' perceptions of managerial support have a statistically significant relationship with gross profit?*

Manager scores regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.466) between these perceptions and gross profit growth at the store level. Regression results are described in Table 9. The regression equation for the relationship was found to be Y= -.026 + .017X, with a standard error of .121 and the R^2 was found to be .013.

Research Question 3f: *Do differences in perceptions by store staff members (managers and employees combined) of managerial support have a statistically significant relationship with gross profit?*

Combined scores for managers and employees regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.395) between these perceptions and gross profit growth at the store level. Regression results are described in Table 9. The regression

Table 9 Regression Results Analyzing the Relationship of Perceived Managerial Support by Employees, Managers, and All Participants on Gross Profit Growth

		df	SS	MS	F	Sig.
Employees' Perception of Managerial Support on Gross Profit Growth						
Regression		1	.003	.003	.178	.675
Residual		42	.617	.015		
Total		43	.620			
Intercept	-.023					
Coefficient	.014					
T Statistic	.422					
Std. Error	.121					
R Squared	.004					
N	44					
Managers' Perception of Managerial Support on Gross Profit Growth						
Regression		1	.008	.008	.542	.466
Residual		42	.612	.015		
Total		43	.620			
Intercept	-.026					
Coefficient	.017					
T Statistic	.736					
Std. Error	.121					
R Squared	.013					
N	44					
All Participants' Perceptions of Managerial Support on Gross Profit Growth						
Regression		1	.011	.011	.739	.395
Residual		42	.609	.015		
Total		43	.620			
Intercept	-.094					
Coefficient	.033					
T Statistic	.860					
Std. Error	.120					
R Squared	.017					
N	44					

equation for the relationship was found to be Y= -.094 + .033X, with a standard error of .120 and the R^2 was found to be .017.

Research Question 3g: *Do differences in employees' perceptions of managerial support have a statistically significant relationship with turnover?*

Employee scores regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.749) between these perceptions and turnover rate at the store level. Regression results are described in Table 10. The regression equation for the relationship was found to be Y= .632 + .064X, with a standard error of .694 and the R^2 was found to be .003.

Research Question 3h: *Do differences in managers' perceptions of managerial support have a statistically significant relationship with employee turnover?*

Manager scores regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.534) between these perceptions and turnover rates at the store level. Regression results are described in Table 10. The regression equation for the relationship was found to be Y= 1.206 + -.083X, with a standard error of .691 and the R^2 was found to be .009.

Research Question 3i: *Do differences in perceptions by store staff members (managers and employees combined) of managerial support have a statistically significant relationship with employee turnover?*

Combined scores for managers and employees regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.733) between these perceptions and turnover rates

Table 10 Regression Results Analyzing the Relationship of Perceived Managerial Support by Employees, Managers, and All Participants on Turnover

		df	SS	MS	F	Sig.
Employees' Perception of Managerial Support on Turnover						
Regression		1	.050	.050	.104	.749
Residual		41	19.725	.481		
Total		42	19.775			
Intercept	.632					
Coefficient	.064					
T Statistic	.322					
Std. Error	.694					
R Squared	.003					
n	43					
Managers' Perception of Managerial Support on Turnover						
Regression		1	.188	.188	.394	.534
Residual		41	19.587	.478		
Total		42	19.775			
Intercept	1.206					
Coefficient	-.083					
T Statistic	-.628					
Std. Error	.691					
R Squared	.009					
n	43					
All Participants' Perceptions of Managerial Support on Turnover						
Regression		1	.057	.057	.118	.733
Residual		41	19.718	.481		
Total		42	19.775			
Intercept	1.199					
Coefficient	-.077					
T Statistic	-.344					
Std. Error	.693					
R Squared	.003					
n	43					

at the store level. Regression results are described in Table 10. The regression equation for the relationship was found to be Y= 1.199 + -.077X, with a standard error of .693 and the R^2 was found to be .003.

Research Question 3j: *What mediating role do employee perceptions of managerial support provide to job support perceptions for employees?*

Due to the significant findings for managerial support and the previously cited research (Buckingham & Coffman, 1999) on the importance of managerial support as a mediating factor for employees in their understanding and perceptions of their work, a follow-up bi-variate regression was performed between managerial support and job support to determine what influence managerial support had upon employee perceptions of job support. Results of the test appear in Table 11. A statistically significant relationship (p = .000) was found between employees' perceptions of managerial support and their perceptions of job support. The regression equation for the relationship was found to be Y = .414 + .829X, with a standard error of .111 and the R^2 was found to be .570.

Table 11 Regression Results Analyzing the Impact of Employees' Perceptions of Managerial Support on Employees' Perceptions of Job Support

			df	SS	MS	F	Sig.
Regression			1	8.637	8.637	55.609	.000
Residual			42	6.524	.155		
Total			43	15.161			
Intercept	.414	R Squared			.570		
Coefficient	.829	N			44		
Standard Error	.111						

Research Question 4

What positive relationships exist between the workplace transfer climate factor of peer support and the attainment of the business goals and objectives of the firm?

To answer this overarching question, the research question was broken down into the following sub-questions:

Research Question 4a: *Do differences in employees' perceptions of peer support have a statistically significant relationship with sales growth?*

Employee scores regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.162) between these perceptions and sales growth at the store level. Regression results are described in Table 12. The regression equation for the relationship was found to be Y= -.162 + .045X, with a standard error of .111 and the R^2 was found to be .046.

Research Question 4b: *Do differences in managers' perceptions of peer support have a statistically significant relationship with sales growth?*

Manager scores regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.467) between these perceptions and sales growth at the store level. Regression results are described in Table 12. The regression equation for the relationship was found to be Y= .104 + -.021X, with a standard error of .113 and the R^2 was found to be .013.

Table 12 Regression Results Analyzing the Relationship of Perceived Peer Support by Employees, Managers, and All Participants on Sales Growth

		df	SS	MS	F	Sig.
Employees' Perception of Peer Support on Sales Growth						
Regression		1	.025	.025	2.023	.162
Residual		42	.517	.012		
Total		43	.542			
Intercept	-.162					
Coefficient	.045					
T Statistic	1.422					
Std. Error	.111					
R Squared	.046					
n	44					
Managers' Perception of Peer Support on Sales Growth						
Regression		1	.007	.007	.538	.467
Residual		42	.535	.013		
Total		43	.542			
Intercept	.104					
Coefficient	-.021					
T Statistic	-.734					
Std. Error	.113					
R Squared	.013					
n	44					
All Participants' Perceptions of Peer Support on Sales Growth						
Regression		1	.002	.002	.122	.728
Residual		42	.541	.013		
Total		43	.542			
Intercept	-.036					
Coefficient	.014					
T Statistic	.039					
Std. Error	.113					
R Squared	.003					
n	44					

Research Question 4c: *Do differences in perceptions by store staff members (managers and employees combined) of peer support have a statistically significant relationship with sales growth?*

Combined scores for managers and employees regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.728) between these perceptions and sales growth at the store level. Regression results are described in Table 12. The regression equation for the relationship was found to be Y= -.036 + .014X, with a standard error of .113 and the R^2 was found to be .003.

Research Question 4d: *Do differences in employees' perceptions of peer support have a statistically significant relationship with gross profit?*

Employee scores regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.555) between these perceptions and gross profit growth at the store level. Regression results are described in Table 13. The regression equation for the relationship was found to be Y= -.045 + .021X, with a standard error of .121 and the R^2 was found to be .008.

Research Question 4e: *Do differences in managers' perceptions of peer support have a statistically significant relationship with gross profit?*

Manager scores regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.222) between these perceptions and gross profit growth at the store level. Regression

Table 13 Regression Results Analyzing the Relationship of Perceived Peer Support by Employees, Managers, and All Participants on Gross Profit Growth

		df	SS	MS	F	Sig.
Employees' Perception of Peer Support on Gross Profit Growth						
Regression		1	.005	.005	.354	.555
Residual		42	.615	.015		
Total		43	.620			
Intercept	-.045					
Coefficient	.021					
T Statistic	.595					
Std. Error	.121					
R Squared	.008					
n	44					
Managers' Perception of Peer Support on Gross Profit Growth						
Regression		1	.022	.022	1.534	.222
Residual		42	.598	.014		
Total		43	.620			
Intercept	.190					
Coefficient	-.038					
T Statistic	-1.238					
Std. Error	.119					
R Squared	.035					
n	44					
All Participants' Perceptions of Peer Support on Gross Profit Growth						
Regression		1	.003	.003	.207	.651
Residual		42	.617	.015		
Total		43	.620			
Intercept	.113					
Coefficient	-.019					
T Statistic	-.455					
Std. Error	.121					
R Squared	.005					
n	44					

results are described in Table 13. The regression equation for the relationship was found to be Y= .190 + -.038X, with a standard error of .119 and the R^2 was found to be .035.

Research Question 4f: *Do differences in perceptions by store staff members (managers and employees combined) of peer support have a statistically significant relationship with gross profit?*

Combined scores for managers and employees regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.651) between these perceptions and gross profit growth at the store level. Regression results are described in Table 13. The regression equation for the relationship was found to be Y= .113 + -.019X, with a standard error of .121 and the R^2 was found to be .005.

Research Question 4g: *Do differences in employees' perceptions of peer support have a statistically significant relationship with turnover?*

Employee scores regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.804) between these perceptions and turnover rate at the store level. Regression results are described in Table 14. The regression equation for the relationship was found to be Y= 1.098 + -.051X, with a standard error of .694 and the R^2 was found to be .002.

Research Question 4h: *Do differences in managers' perceptions of peer support have a statistically significant relationship with employee turnover?*

Manager scores regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship

Table 14 Regression Results Analyzing the Relationship of Perceived Peer Support by Employees, Managers, and All Participants on Turnover

		df	SS	MS	F	Sig.
Employees' Perception of Peer Support on Turnover						
Regression		1	.030	.030	.062	.804
Residual		41	19.745	.482		
Total		42	19.775			
Intercept	1.098					
Coefficient	-.051					
T Statistic	-.249					
Std. Error	.694					
R Squared	.002					
n	43					
Managers' Perception of Peer Support on Turnover						
Regression		1	.391	.391	.828	.368
Residual		41	19.384	.473		
Total		42	19.775			
Intercept	.248					
Coefficient	.163					
T Statistic	.910					
Std. Error	.688					
R Squared	.020					
n	43					
All Participants' Perceptions of Peer Support on Turnover						
Regression		1	.102	.102	.213	.647
Residual		41	19.673	.480		
Total		42	19.775			
Intercept	.450					
Coefficient	.113					
T Statistic	.461					
Std. Error	.693					
R Squared	.005					
n	43					

(p=.368) between these perceptions and turnover rates at the store level. Regression results are described in Table 14. The regression equation for the relationship was found to be Y= .248 + .163X, with a standard error of .688 and the R^2 was found to be .020.

Research Question 4i: *Do differences in perceptions by store staff members (managers and employees combined) of peer support have a statistically significant relationship with employee turnover?*

Combined scores for managers and employees regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.647) between these perceptions and turnover rates at the store level. Regression results are described in Table 14. The regression equation for the relationship was found to be Y= .450 + .113X, with a standard error of .693 and the R^2 was found to be .005.

Research Question 5

Do differences in store personnel perceptions of the Tracey (1998) construct of workplace transfer climate have a statistically significant positive relationship with the business goals and objectives of the firm?

The three-dimensional construct of workplace transfer climate, including job support, organizational support, and managerial support, was initially developed by Tracey (1998). In this study, prior to performing analysis on this three-dimensional construct of workplace transfer climate, the three factors were correlated using Pearson's correlation, the results of which appear in Table 15, to determine if sufficient support existed to

Table 15 Correlation Matrix for Workplace Transfer Climate Factors

Variable	Managerial Support	Organizational Support	Job Support
Managerial Support			
Pearson Correlation	----		
Sig. (two tailed)			
N	43		
Organizational Support			
Pearson Correlation	.707	----	
Sig. (two tailed)	.000		
N	43	43	
Job Support			
Pearson Correlation	.690	.667	----
Sig. (two tailed)	.000	.000	
N	43	43	43
Peer Support			
Pearson Correlation	.505	.480	.492
Sig. (two tailed)	.000	.001	.001
N	43	43	43

combine these factors in a single construct. Since the inter-item correlations among the factors were each statistically significant, Tracey's (1998) single construct of workplace transfer climate, including job support, organizational support, and managerial support, was used in the analysis for this research question.

To answer this overarching research question then, the question was broken down into the following sub-questions:

Research Question 5a: *Do differences in employees' perceptions of Tracey's (1998) workplace transfer climate have a statistically significant relationship with sales?*

Employee scores regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed a statistically significant relationship (p=.030) between these perceptions and sales growth at the store level. Regression results are described in Table 16. The regression equation for the relationship was found to be Y= -.259 + .071X, with a standard error of .107 and the R^2 was found to be .107.

Research Question 5b: *Do differences in managers' perceptions of Tracey's (1998) workplace transfer climate have a statistically significant relationship with sales?*

Manager scores regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.329) between these perceptions and sales growth at the store level. Regression results are described in Table 16. The regression equation for the relationship was found to be Y= -.082 + .028X, with a standard error of .112 and the R^2 was found to be .023.

Table 16 Regression Results Analyzing the Relationship of Perceptions of Tracey's (1998) Workplace Transfer Climate by Employees, Managers, and All Participants on Sales Growth

		Df	SS	MS	F	Sig.
Employees' Perception of Tracey (1998) Workplace Transfer Climate on Sales Growth						
Regression		1	.058	.058	5.040	.030
Residual		42	.484	.012		
Total		43	.542			
Intercept	-.249					
Coefficient	.071					
T Statistic	2.245					
Std. Error	.107					
R Squared	.107					
n	44					
Managers' Perception of Tracey (1998) Workplace Transfer Climate on Sales Growth						
Regression		1	.012	.012	.973	.329
Residual		42	.530	.013		
Total		43	.542			
Intercept	-.082					
Coefficient	.028					
T Statistic	.987					
Std. Error	.112					
R Squared	.023					
n	44					
All Participants' Perceptions of Tracey (1998) Workplace Transfer Climate on Sales Growth						
Regression		1	.054	.054	4.661	.037
Residual		42	.488	.012		
Total		43	.542			
Intercept	-.299					
Coefficient	.086					
T Statistic	2.159					
Std. Error	.108					
R Squared	.100					
n	44					

Research Question 5c: *Do differences in perceptions by store staff members (managers and employees combined) of Tracey's (1998) workplace transfer climate have a statistically significant relationship with sales?*

Combined scores for managers and employees regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed a statistically significant relationship (p=.037) between these perceptions and sales growth at the store level. Regression results are described in Table 16. The regression equation for the relationship was found to be Y= -.299 + .086X, with a standard error of .108 and the R^2 was found to be .100.

Research Question 5d: *Do differences in employees' perceptions of Tracey's (1998) workplace transfer climate have a statistically significant relationship gross profit?*

Employee scores regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.335) between these perceptions and gross profit growth at the store level. Regression results are described in Table 17. The regression equation for the relationship was found to be Y= -.093 + .034X, with a standard error of .120 and the R^2 was found to be .022.

Research Question 5e: *Do differences in managers' perceptions of Tracey's (1998) workplace transfer climate have a statistically significant relationship with gross profit?*

Manager scores regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.566) between these perceptions and gross profit growth at the

Table 17 Regression Results Analyzing the Relationship of Perceptions of Tracey's (1998) Workplace Transfer Climate by Employees, Managers, and All Participants on Gross Profit Growth

		df	SS	MS	F	Sig.
Employees' Perception of Tracey (1998) Workplace Transfer Climate on Gross Profit						
Regression		1	.014	.014	.951	.335
Residual		42	.606	.014		
Total		43	.620			
Intercept	-.093					
Coefficient	.034					
T Statistic	.975					
Std. Error	.120					
R Squared	.022					
n	44					
Managers' Perception of Tracey (1998) Workplace Transfer Climate on Gross Profit						
Regression		1	.005	.005	.335	.566
Residual		42	.615	.015		
Total		43	.620			
Intercept	-.027					
Coefficient	.017					
T Statistic	.579					
Std. Error	.121					
R Squared	.008					
n	44					
All Participants' Perceptions of Tracey (1998) Workplace Transfer Climate on Gross Profit						
Regression		1	.016	.016	1.087	.303
Residual		42	.604	.014		
Total		43	.620			
Intercept	-.133					
Coefficient	.046					
T Statistic	1.043					
Std. Error	.120					
R Squared	.025					
n	44					

store level. Regression results are described in Table 17. The regression equation for the relationship was found to be Y= -.027 + .017X, with a standard error of .121 and the R^2 was found to be .008.

Research Question 5f: *Do differences in perceptions by store staff members (managers and employees combined) of Tracey's (1998) workplace transfer climate have a statistically significant relationship with gross profit?*

Combined scores for managers and employees regarding their perceptions of the Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.303) between these perceptions and gross profit growth at the store level. Regression results are described in Table 17. The regression equation for the relationship was found to be Y= -.133 + .046X, with a standard error of .120 and the R^2 was found to be .025.

Research Question 5g: *Do differences in employees' perceptions of Tracey's (1998) workplace transfer climate have a statistically significant relationship with turnover?*

Employee scores regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.642) between these perceptions and turnover rate at the store level. Regression results are described in Table 18. The regression equation for the relationship was found to be Y= 1.258 + -.096X, with a standard error of .693 and the R^2 was found to be .005.

Research Question 5h: *Do differences in managers' perceptions of Tracey's (1998) workplace transfer climate have a statistically significant relationship with employee turnover?*

Manager scores regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.607) between these perceptions and turnover rates at the store level. Regression results are described in Table 18. The regression equation for the relationship was found to be Y= .570 + .090X, standard error of .692 and the R^2 of .007.

Research Question 5i: *Do differences in perceptions by store staff members (managers and employees combined) of Tracey's (1998) workplace transfer climate have a statistically significant relationship with employee turnover?*

Combined scores for managers and employees regarding their perceptions of Tracey's (1998) workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.931) between these perceptions and turnover rates at the store level. Regression results are described in Table 18. The regression equation for the relationship was Y= .814 + .022X, with a standard error of .694 and the R^2 was found to be .000.

Research Question 6

Do differences in store personnel perceptions of the hypothesized single construct of workplace transfer climate have a statistically significant positive relationship with the business goals and objectives of the firm?

Table 18 Regression Results Analyzing the Relationship of Perceptions of Tracey's (1998) Workplace Transfer Climate by Employees, Managers, and All Participants on Employee Turnover

		df	SS	MS	F	Sig.
Employees' Perception of Tracey (1998) Workplace Transfer Climate on Turnover						
Regression		1	.106	.106	.220	.642
Residual		41	19.670	.480		
Total		42	19.775			
Intercept	1.258					
Coefficient	-.096					
T Statistic	-.469					
Std. Error	.693					
R Squared	.005					
n	43					
Managers' Perception of Tracey (1998) Workplace Transfer Climate on Turnover						
Regression		1	.129	.129	.269	.607
Residual		41	19.646	.479		
Total		42	19.775			
Intercept	.570					
Coefficient	.090					
T Statistic	.518					
Std. Error	.692					
R Squared	.007					
n	43					
All Participants' Perceptions of Tracey (1998) Workplace Transfer Climate on Turnover						
Regression		1	.004	.004	.008	.931
Residual		41	19.771	.482		
Total		42	19.775			
Intercept	.814					
Coefficient	.022					
T Statistic	.088					
Std. Error	.694					
R Squared	.000					
n	43					

The construct of workplace transfer climate, including job support, organizational support, and managerial support was initially studied by Tracey (1998) and is considered in Research Question 5 of this study. For purposes of Research Question 6, however, a hypothesized construct of workplace transfer climate was considered, which included both the three factors in Tracey (1998) and the additional factor of peer support.

Prior to performing analysis on the hypothesized construct of workplace transfer climate, the four factors were correlated using Pearson's correlation to determine if sufficient support existed to combine these factors in a single construct. The results of the correlation appear in Table 19. Since the inter-item correlations among the factors were each statistically significant, a single construct of hypothesized workplace transfer climate was considered for this research question.

To answer this overarching question then, the research question was broken down into the following sub-questions:

Research Question 6a: *Do differences in employees' perceptions of hypothesized workplace transfer climate have a statistically significant relationship with sales?*

Employee scores regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed a statistically significant relationship (p=.037) between these perceptions and sales growth at the store level. Regression results are described in Table 20. The regression equation for the relationship was Y= -.254 + .071X, standard error of .108 and the R^2 was .099.

Research Question 6b: *Do differences in managers' perceptions of hypothesized workplace transfer climate have a statistically significant relationship with sales growth?*

Table 19 Correlation Matrix for Workplace Transfer Climate Factors

Variable	Managerial Support	Organizational Support	Job Support	Peer Support
Managerial Support				
Pearson Correlation	----			
Sig. (two tailed)				
N	43			
Organizational Support				
Pearson Correlation	.707	----		
Sig. (two tailed)	.000			
N	43	43		
Job Support				
Pearson Correlation	.690	.667	----	
Sig. (two tailed)	.000	.000		
N	43	43	43	
Peer Support				
Pearson Correlation	.505	.480	.492	----
Sig. (two tailed)	.000	.001	.001	
N	43	43	43	43

Manager scores regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.521) between these perceptions and sales growth at the store level. Regression results are described in Table 20. The regression equation for the relationship was Y= -.057 + .020X, standard error of .113, and the R^2 was .010.

Research Question 6c: *Do differences in perceptions by store staff members (managers and employees combined) of hypothesized workplace transfer climate have a statistically significant relationship with sales?*

Combined scores for managers and employees regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed a relationship approaching statistical significance (p=.072) between these perceptions and sales growth at the store level. Regression results are described in Table 20. The regression equation for the relationship was found to be Y= -.284 + .080X, with a standard error of .109 and the R^2 was found to be .075.

Research Question 6d: *Do differences in employees' perceptions of hypothesized workplace transfer climate have a statistically significant relationship with gross profit?*

Employee scores regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.359) between these perceptions and gross profit growth at the store level. Regression results are described in Table 21. The regression equation for the relationship was found to be Y= -.094 + .034X, with a standard error of .120 and the R^2 was found to be .020.

Table 20 Regression Results Analyzing the Relationship of Perceived Hypothesized Workplace Transfer Climate Including Peer Support by Employees, Managers, and All Participants on Sales Growth

		df	SS	MS	F	Sig.
Employees' Perception of Hypothesized Workplace Transfer Climate on Sales Growth						
Regression		1	.054	.054	4.621	.037
Residual		42	.489	.012		
Total		43	.542			
Intercept	-.254					
Coefficient	.071					
T Statistic	2.150					
Std. Error	.108					
R Squared	.099					
n	44					
Managers' Perception of Hypothesized Workplace Transfer Climate on Sales Growth						
Regression		1	.005	.005	.418	.521
Residual		42	.537	.013		
Total		43	.542			
Intercept	-.057					
Coefficient	.020					
T Statistic	.647					
Std. Error	.113					
R Squared	.010					
n	44					
All Participants' Perceptions of Hypothesized Workplace Transfer Climate on Sales Growth						
Regression		1	.041	.041	3.406	.072
Residual		42	.502	.012		
Total		43	.542			
Intercept	-.284					
Coefficient	.080					
T Statistic	1.845					
Std. Error	.109					
R Squared	.075					
n	44					

Research Question 6e: *Do differences in managers' perceptions of hypothesized workplace transfer climate have a statistically significant relationship with gross profit?*

Manager scores regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.859) between these perceptions and gross profit growth at the store level. Regression results are described in Table 21. The regression equation for the relationship was found to be Y= .014 + .006X, with a standard error of .121 and the R^2 was found to be .001.

Research Question 6f: *Do differences in perceptions by store staff members (managers and employees combined) of hypothesized workplace transfer climate have a statistically significant relationship with gross profit?*

Combined scores for managers and employees regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.473) between these perceptions and gross profit growth at the store level. Regression results are described in Table 21. The regression equation for the relationship was found to be Y= -.094 + .035X, with a standard error of .121 and the R^2 was found to be .012.

Research Question 6g: *Do differences in employees' perceptions of hypothesized workplace transfer climate have a statistically significant relationship with turnover?*

Employee scores regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.665) between these perceptions and turnover

Table 21 Regression Results Analyzing the Relationship of Perceived Hypothesized Workplace Transfer Climate Including Peer Support by Employees, Managers, and All Participants on Gross Profit Growth

		df	SS	MS	F	Sig.
Employees' Perception of Hypothesized Workplace Transfer Climate on Gross Profit						
Regression		1	.012	.012	.859	.359
Residual		42	.607	.014		
Total		43	.620			
Intercept	-.094					
Coefficient	.034					
T Statistic	.927					
Std. Error	.120					
R Squared	.020					
n	44					
Managers' Perception of Hypothesized Workplace Transfer Climate on Gross Profit						
Regression		1	.000	.000	.032	.859
Residual		42	.619	.015		
Total		43	.620			
Intercept	.014					
Coefficient	.006					
T Statistic	.179					
Std. Error	.121					
R Squared	.001					
n	44					
All Participants' Perceptions of Hypothesized Workplace Transfer Climate on Gross Profit						
Regression		1	.008	.008	.524	.473
Residual		42	.612	.015		
Total		43	.620			
Intercept	-.094					
Coefficient	.035					
T Statistic	.724					
Std. Error	.121					
R Squared	.012					
n	44					

rate at the store level. Regression results are described in Table 22. The regression equation for the relationship was found to be Y= 1.255 + -.094X, with a standard error of .693 and the R^2 was found to be .005.

Research Question 6h: *Do differences in managers' perceptions of hypothesized workplace transfer climate have a statistically significant relationship with employee turnover?*

Manager scores regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.510) between these perceptions and turnover rates at the store level. Regression results are described in Table 22. The regression equation for the relationship was found to be Y= .419 + .128X, with a standard error of .691 and the R^2 was found to be .011.

Research Question 6i: *Do differences in perceptions by store staff members (managers and employees combined) of hypothesized workplace transfer climate have a statistically significant relationship with employee turnover?*

Combined scores for managers and employees regarding their perceptions of the hypothesized workplace transfer climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.849) between these perceptions and turnover rates at the store level. Regression results are described in Table 22. The regression equation for the relationship was found to be Y= .698 + .053X, with a standard error of .694 and the R^2 was found to be .001.

Table 22 Regression Results Analyzing the Relationship of Perceived Hypothesized Workplace Transfer Climate Including Peer Support by Employees, Managers, and All Participants on Employee Turnover

		df	SS	MS	F	Sig.
Employees' Perception of Hypothesized Workplace Transfer Climate on Turnover						
Regression		1	.091	.091	.190	.665
Residual		41	19.684	.480		
Total		42	19.775			
Intercept	1.255					
Coefficient	-.094					
T Statistic	-.436					
Std. Error	.693					
R Squared	.005					
n	43					
Managers' Perception of Hypothesized Workplace Transfer Climate on Turnover						
Regression		1	.211	.211	.441	.510
Residual		41	19.565	.477		
Total		42	19.775			
Intercept	.419					
Coefficient	.128					
T Statistic	.664					
Std. Error	.691					
R Squared	.011					
n	43					
All Participants' Perceptions of Hypothesized Workplace Transfer Climate on Turnover						
Regression		1	.018	.018	.036	.849
Residual		41	19.758	.482		
Total		42	19.775			
Intercept	.698					
Coefficient	.053					
T Statistic	.191					
Std. Error	.694					
R Squared	.001					
n	43					

Research Question 7

Do differences in managers' perceptions of workplace transfer climate factors have a statistically significant positive relationship with the promotion activity of those managers?

On the managerial survey, managers were asked to self-report the number of employees for which the manager had assisted or coached in their development toward promotions to assistant manager or store manager in the organization. This research question was considered at both the individual factor level (7a – 7d) for each of the studied workplace transfer climate factors, and against the three-dimensional construct of Tracey's (1998) workplace transfer climate (7e), and finally at the four-dimensional construct level of hypothesized workplace transfer climate (7f).

To answer this overarching question then, the research question was broken down into the following sub-questions:

Research Question 7a: *Do differences in managers' perceptions of managerial support have a statistically significant relationship with the promotion activity of those managers?*

Manager scores regarding their perceptions of managerial support were tabulated at the store level and a regression analysis revealed no statistically significant relationship ($p=.455$) between these perceptions and the promotion activity of those managers. Regression results are described in Table 23. The regression equation for the relationship was $Y= 3.548 + .118X$, with a standard error of .810 and the R^2 was found to be .014.

Research Question 7b: *Do differences in managers' perceptions of job support have a statistically significant relationship with the promotion activity of those managers?*

Manager scores regarding their perceptions of job support were tabulated at the store level and a regression analysis revealed a statistically significant relationship (p=.020) between these perceptions and the promotion activity of those managers. Regression results are described in Table 23. The regression equation for the relationship was found to be Y= 3.420 + .252X, with a standard error of .539 and the R^2 was found to be .124.

Research Question 7c: *Do differences in managers' perceptions of organizational support have a statistically significant relationship with the promotion activity of those managers?*

Manager scores regarding their perceptions of organizational support were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.255) between these perceptions and the promotion activity of those managers. Regression results are described in Table 23. The regression equation for the relationship was found to be Y= 3.157 + .178X, with a standard error of .796 and the R^2 was found to be .031.

Research Question 7d: *Do differences in managers' perceptions of peer support have a statistically significant relationship with the promotion activity of those managers?*

Manager scores regarding their perceptions of peer support were tabulated at the store level and a regression analysis revealed a statistically significant relationship

Table 23 Regression Results Analyzing the Relationship of Managers' Perceptions of Workplace Climate Factors and the Promotion Activity of Those Managers

	df	SS	MS	F	Sig.
Managerial Support and Promotion Activity					
Regression	1	.372	.372	.568	.455
Residual	41	26.873	.655		
Total	42	27.245			
Intercept 3.548	R Squared		.014		
Coefficient .118	n		43		
Standard Error .810					
Job Support and Promotion Activity					
Regression	1	1.692	1.692	5.826	.020
Residual	41	11.907	.290		
Total	42	13.599			
Intercept 3.420	R Squared		.124		
Coefficient .252	n		43		
Standard Error .539					
Organizational Support and Promotion Activity					
Regression	1	.843	.843	1.330	.255
Residual	41	25.969	.633		
Total	42	26.812			
Intercept 3.157	R Squared		.031		
Coefficient .178	n		43		
Standard Error .796					
Peer Support and Promotion Activity					
Regression	1	1.603	1.603	5.023	.030
Residual	41	13.084	.319		
Total	42	14.687			
Intercept 3.618	R Squared		.109		
Coefficient .245	n		43		
Standard Error .565					

(p=.030) between these perceptions and the promotion activity of those managers. Regression results are described in Table 23. The regression equation for the relationship was found to be Y= 3.618 + .245X, with a standard error of .565 and the R^2 was found to be .109.

Research Question 7e: *Do differences in managers' perceptions of Tracey's (1998) workplace transfer climate have a statistically significant relationship with the promotion activity of those managers?*

Manager scores regarding their perceptions of Tracey's (1998) Workplace Transfer Climate were tabulated at the store level and a regression analysis revealed no statistically significant relationship (p=.127) between these perceptions and the promotion activity of those managers. Regression results are described in Table 24. The regression equation for the relationship was found to be Y= 3.375 + .183X, with a standard error of .606 and the R^2 was found to be .056.

Research Question 7f: *Do differences in managers' perceptions of the hypothesized workplace transfer climate have a statistically significant relationship with the promotion activity of those managers?*

Manager scores regarding their perceptions of the Hypothesized Workplace Transfer Climate were tabulated at the store level and a regression analysis revealed a relationship approaching statistical significance (p=.062) between these perceptions and the promotion activity of those managers. Regression results are described in Table 24. The regression equation for the relationship was found to be Y= 3.434 + .199X, with a standard error of .535 and the R^2 was found to be .083.

Table 24 Regression Results Analyzing the Relationship of Managers' Perceptions of Workplace Transfer Climate Models and Promotion Activity of Those Managers

			df	SS	MS	F	Sig.
Tracey (1998) Workplace Transfer Climate and Promotion Activity							
	Regression		1	.889	.889	2.420	.127
	Residual		41	15.064	.367		
	Total		42	15.953			
	Intercept	3.375	R Squared		.056		
	Coefficient	.183	n		43		
	Standard Error	.606					
Hypothesized Workplace Transfer Climate and Promotion Activity							
	Regression		1	1.057	1.057	3.696	.062
	Residual		41	11.721	.286		
	Total		42	12.778			
	Intercept	3.434	R Squared		.083		
	Coefficient	.199	n		43		
	Standard Error	.535					

Research Question 8

What similarities and differences exist in the perceptions of managers and employees regarding the various factors of workplace transfer climate, namely managerial support, job support, organizational support, and peer support?

The summary index for the four workplace transfer climate variables and the two workplace transfer climate constructs in Table 25 reflects the differing perceptions of managers and employees for those items, based on t-test analysis of the employee and manager survey responses. In performing these tests, the Welch-Satterthwaite solution (Howell, 2002), was employed to control for possible heterogeneity of variance and to approximate the exact sampling distribution of t'. No significant differences were found between the perceptions of managers and employees regarding job support, organizational support, or either of the two workplace transfer climate constructs. However, a statistically significant difference in managers' (M = 3.176, SD = .796) and employees' (M = 4.177, SD = .779) perceptions regarding managerial support (p = .003) was observed. In addition, managers' (M = 3.981, SD = .588) and employees' (M = 3.555, SD = .739) perceptions of peer support were also found to be statistically significant in their difference (p = .000).

Table 25 T Test Results Comparing the Perceptions of Managers and Store Employees Regarding Managerial Support, Job Support, Organizational Support, Peer Support, Tracey's (1998) Workplace Transfer Climate Model and the Hypothesized Workplace Transfer Climate Model

Variable by Group	n	M	SD	t'	Sig.. (2-tailed)
Managerial Support					
Managers	44	3.176	.796	2.989	.003
Store Employees	149	4.177	.779		
Job Support					
Managers	44	3.780	.563	.574	.567
Store Employees	149	3.878	1.093		
Organizational Support					
Managers	44	3.400	.795	-1.043	.298
Store Employees	149	3.246	.879		
Peer Support					
Managers	44	3.981	.588	3.978	.000
Store Employees	149	3.555	.739		
Tracey's (1998) WTC Model					
Managers	44	3.632	.613	.905	.367
Store Employees	149	3.749	.789		
Hypothesized WTC Model					
Managers	44	3.719	.545	.183	.855
Store Employees	149	3.700	.726		

CHAPTER 5.

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

The primary intent of this study was to examine the work environment factors that have been previously shown to support training transfer and to determine if these work environment factors are related to the attainment of macro-level business goals and objectives. With this primary purpose, this study aimed to fill a critical gap in the field of HRD research to extend the line of sight in training transfer research and move the field from the training classroom to the boardroom. Unfortunately, most training transfer research in the field has been limited in scope and has focused on providing better learning for trainees, without making the critical link between better training and improved organizational results. The purpose of this chapter is three-fold: to discuss the research findings and conclusions, to provide recommendations for practice in the HRD field, and to provide recommendations for future research.

Overview of Study Conclusions

Overall, the findings of the study provide an encouraging starting point for HRD researchers and practitioners who seek to use training and training transfer to have a positive impact on organizational success. Specifically, positive relationships in the study include:

- Job support did have a significant positive relationship with sales growth
- Job support did have a significant positive relationship with promotion activity for managers

- Managerial support did have a significant positive relationship with sales growth
- Managerial perceptions of peer support were positively related to promotion activity of those managers
- Employees' perceptions of managerial support were a mediating influence on employees' perceptions of job support
- Both single construct models (Tracey, 1998 & hypothesized) of workplace transfer climate had a positive relationship with sales growth
- Managers and employees had similar perceptions of organizational support and job support, but did not share similar perceptions of peer support and managerial support

Summary of Findings and Conclusions Related to Research Question 1

What positive relationships exist between the workplace transfer climate factor of job support and the attainment of the business goals and objectives of the firm?

Analysis of the data shows that the job support dimension of workplace transfer climate is positively related to the growth of sales for the organization. At both the employee and the combined store level, the job support dimension of workplace transfer climate showed a statistically significant relationship with sales growth, while for managers, this relationship was not shown to be significantly related. In fact, across the study as a whole, the sales growth dimension of organizational performance was the most regularly and significantly impacted variable. While a comprehensive discussion of the sales growth dimension appears later in the chapter under the general findings and

implications section, it is clear that the job support dimension of workplace transfer climate does support sales growth at the store level. Given the intense focus on top-line growth in revenue by much of senior management across companies and industries, this finding should be well received and well communicated by HRD practitioners, particularly those with passion in the area of job design. For if efforts in improving job design can be shown not only to increase training effectiveness (Tracey, 1998), but also can be shown to positively relate to sales (as this study indicates), then organizational support for and willingness to invest in job design will certainly increase.

When job support was considered in relation to the gross profit growth dimension of organizational performance, no significant relationship was observed. Throughout this study, in fact, no significant relationships were found between gross profit growth and any of the workplace transfer climate dimensions. While this finding is at one level troubling, it is nonetheless an advancement in the understanding of what connections exist, or do not exist, between the focus of the HRD community on training transfer issues and the focus of senior management on the business goals and objectives of the firm. While a more complete analysis of the gross profit growth dimension can be found in the section of this chapter discussing general study findings and implications, it is clear that in this study, the job support dimension showed no relationship to gross profit growth.

A particularly surprising, and some may initially say "disappointing" finding of this research question was the lack of a significant relationship between the job support dimension of workplace transfer climate and employee turnover. While this result may seem counter-intuitive, it must be remembered that job support for training transfer is a

separate and distinct construct from the interpersonal dimensions of both job involvement (Blau & Boal, 1987) and job satisfaction (Mobley, 1977), which have both previously been shown to have a significant relationship with both turnover intention and job turnover. Job support as conceptualized in this study, while a potentially supportive element of both job involvement and job satisfaction, is in fact a specialized construct relating to the nature of work assignments and the design of job tasks as these assignments and job task design factors relate to the specific issue of training transfer effectiveness. Thus, this finding of no significance between the workplace transfer climate dimension of job support and employee turnover is, in fact, not at all disappointing. Rather, this finding serves to further differentiate the workplace transfer climate dimension of job support and thus, furthers the depth of insight and provides significant assistance to both the field of turnover research and the field of training transfer research.

Summary of Findings and Conclusions Related to Research Question 2

What positive relationships exist between the workplace transfer climate factor of organizational support and the attainment of the business goals and objectives of the firm?

Analysis of the data relating to organizational support shows that for both employees and for managers, the workplace transfer climate dimension of organizational support had no statistically significant relationship with sales growth, gross profit growth, or with employee turnover. Results for organizational support, when perceptions of both employees and managers together were considered, also indicated no statistically significant relationship between organizational support and the business goals and objectives of the firm.

The conceptualization of organizational support for training transfer consists of the following items:

Item 3. There are numerous professional development opportunities

Item 13. There are rewards and incentives for acquiring and using new knowledge and skills on the job

Item 15. My store dedicates significant resources to training and development

Item 17. Employees are provided with the resources necessary to acquire and use new knowledge and skills

Item 19. Continuous learning is supported by the company

This conceptualization makes clear the important distinction between organizational support as a *workplace climate factor* and another commonly studied organizational level factor, that of organizational support as a more generic concept. Typical constructs for generalized organizational support concern interpersonal connections of employees with the vision, mission, and overarching values of the firm, rather than the more specific training and development characteristics of workplace climate level organizational support.

Generalized organizational support or organizational commitment has been shown in previous research to have a positive impact on both job performance and on the business goals and objectives of a firm (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhodes, 2002), including the reduction of employee turnover (Lance, 1991). In addition, workplace transfer climate level organizational support has been shown to positively impact transfer of training and training participants self-efficacy by Tracey, Hinkin, Tannenbaum, & Mathieu (2001). However, in this study the hypothesized relationship between workplace

transfer climate level organizational support and the business goals and objectives of the firm was not established. Nonetheless, this finding of no significant relationship has implications for both the more generalized research on organizational support (How does an organization demonstrate the importance of training and development as a part of the mission, vision, and values of the organization?) and for the research dedicated more specifically to transfer of training (What alternative justifications can be made for organizations to support training and development investments?).

An additional unique aspect of this study should be noted in relation to organizational support; namely, that this study was conducted in a closely-held, family-managed chain of stores. In reviewing internal company documents and meetings, it was clear that the store staff has the feeling of family and are very familiar to upper-level executives on a deeper, more personal level at this firm than would be expected at a larger, publicly-traded, hierarchical firm. Thus, this feature of the organizational structure and climate may have created differences in the perceptions of organizational support in this study.

Finally, it must be noted that this study was conducted in a single organization. Thus, organizational support was a homogeneous construct across the study, since all employees and managers were referencing the same organization. If this study had been conducted with two different organizations, it is possible that organizational support would have shown more significant results than were found in this study.

Summary of Findings and Conclusions Related to Research Question 3

What positive relationships exist between the workplace transfer climate factor of managerial support and the attainment of the firm's business goals and objectives?

In a landmark study by the Gallup Organization on the importance of managerial competency, Buckingham & Coffman (1999) found that managerial support was a critical element in the attainment of business goals and objectives. So strong was the influence of the manager, in fact, that employees' perceptions about the overall organization were mediated through their perceptions of the store manager (p. 38). Managerial support, in a variety of forms, has been shown to be a key driver of business performance and is the impetus behind much of the contemporary fascination with leadership in the popular business literature.

It comes as no surprise then that the analysis of managerial support as a dimension of workplace transfer climate indicates a positive relationship towards sales growth, approaching significance for employees alone and clearly statistically significant for the combined perceptions of managers and employees. Through recognition, reward, encouragement, and allowance for making learning mistakes, managers provide key signals to employees about the importance of innovative thinking, the openness of the firm to learning by doing, and the level of training and development focus which not only increase training transfer (Tracey, 1998), but also can now be shown to provide support for revenue growth at the store level. Given the importance that sales growth plays in the definition of success for senior management in most organizations, this finding has

practical significance for HRD professionals as they attempt to widen their organizational spheres of influence.

Even stronger results regarding the importance and influence of managerial support were found by digging deeper into the data. By performing a follow-up regression between managerial support and job support, it was determined that a significant percentage ($p=.000$, $R^2=.570$) of employee perceptions regarding job support could be attributed to their perceptions of managerial support. Since job roles, tasks, and descriptions in the cooperating organization are similar across stores, this finding indicates that employee perceptions of the amount of job support provided by those jobs is dependent upon their perceptions of the amount of managerial support they receive. This result is of great importance and has significant implications for the understanding of how important managerial leadership is to the ultimate success of organizations. This finding confirms similar results found by Buckingham & Coffman (1999) regarding the mediating effect of managerial influence on how employees view key organizational factors.

In a similar way to the preceding analysis of job support, this study did not show a significant relationship between managerial support and the variation in gross profit growth at the store level. Since none of the workplace transfer climate factors, and indeed not even the overall model itself, showed support for variation in gross profit growth across the entire study, the entire line of inquiry about workplace transfer climate and gross profit growth is covered in the following general discussion on the study results.

Employee turnover was also not impacted by the workplace transfer climate dimension of managerial support. Given much of the literature on employee turnover and

the importance of both managerial trust as a predictive element of job satisfaction (Lagace, 1991) and supervisory support as an indicator of turnover intention (Hemingway & Smith, 1999), it was anticipated that the workplace transfer climate dimension of managerial support would show a significant relationship to employee turnover in this study. However, similar to the previous discussion of organizational support, it must be remembered that managerial support as it relates to workplace transfer climate is a very narrowly defined and specific type of managerial support that simply did not support employee turnover results in this study.

Summary of Findings and Conclusions Related to Research Question 4

What positive relationships exist between the workplace transfer climate factor of peer support and the attainment of the business goals and objectives of the firm?

The concept of peer support has been studied many times in the area of training transfer and has been shown to be a key component of the social context needed for positive training transfer (Huczynski & Lewis, 1980 and Rouiller & Goldstein, 1993). In addition, peer support has been shown to positively impact two key factors in training transfer research: intention to transfer (Holton, Bates, & Rouna, 2000) and pre-training motivation (Facteau, Dobbins, Russell, Ladd, & Kudish, 1995). Finally, the importance of social context factors, including peer support, has been prevalent in the research connecting organizational climate with performance (Buckingham & Coffman, 1999; Rucci, Kirn, & Quinn, 1998).

On the basis of these compelling themes in the research, this study included peer support as an independent variable to determine if differences in peer support at the store level would have a positive relationship with the business goals and objectives of the firm.

In the analysis of the data regarding the research question of peer support, it is clearly evident that no statistically significant relationships exist between peer support, as conceptualized in this study, and the considered measurements for attainment of business goals and objectives in these stores. For each of the measures, sales growth, gross profit growth, and employee turnover, no relationship was found to link the impact of peer support to these items.

One possible explanation for the lack of finding for peer support is that the influence of the wider work group environment, as conceptualized in this study, is only a tertiary supportive mechanism toward the attainment of these goals. Further, in other studies related to the impact of climate factors both on transfer (Tracey, Tannenbaum, & Kavanagh, 1995), and on turnover (Lance, 1991), researchers did not find direct relationships for peer support, but rather found significant relationships present for the overall models, which included peer support. Thus, the expectation that peer support alone, in isolation, would have shown results in this study, may have been optimistic.

Summary of Findings and Conclusions Related to Research Question 5

Do differences in store personnel perceptions of the Tracey (1998) construct of workplace transfer climate have a statistically significant positive relationship with the business goals and objectives of the firm?

It is in this fifth research question, and again in the sixth that this study moves beyond considering workplace transfer climate factors individually to the consideration of workplace transfer climate as a *single construct.* Support for this type of macro-level consideration of climate as a single entity is strong in the literature. Schneider (1973) describes climate as the practices and procedures used in the organization to signal to employees what things are important. He claims that climates can be viewed at both the organizational level or at the work group level, that climate overall is dimensional, and that various climates can co-exist simultaneously within an organization or a work group; i.e. climate for innovation, climate for safety, or a climate for customer focus. Over the past 20 years, research in the area of training transfer has increasingly focused on organizational climate as an important factor in the training transfer equation. In addition, many of these studies have collapsed the variables related to transfer climate into a single construct (Huczynski & Lewis, 1980; Rouiller & Goldstein, 1993; Tracey, Tannenbaum, & Kavanagh 1995; and Tracey, Hinkin, Tannenbaum, & Mathieu, 2001). Thus, support is indeed provided for the consideration of workplace transfer climate as a single construct.

In this research question, a three-dimensional construct of workplace transfer climate was used which had been previously shown by Tracey (1998) to be supportive of transfer of training. The use of this construct was intentional and strategic in this study. In

reviewing the literature, this construct, while similar to other researched models of workplace climate (Ford, Quiñones, Sego, & Sorra, 1992; Bates, Holton, & Seyler, 1997), not only included the most relevant aspects of workplace climate related to training transfer, but also had been conclusively and repeatedly shown to impact training transfer activity and effectiveness in the workplace (Tracey, Tannenbaum, & Kavanagh, 1995; Tracey, 1998; Tracey, Hinkin, Tannenbaum, & Mathieu, 2001). Therefore, as a proven measure for workplace transfer climate, Tracey's (1998) construct provided a credible model to study the impact of such a climate on the attainment of business goals and objectives of an organization.

While Tracey's (1998) workplace transfer climate did not show any significant relationships for either gross profit growth or for employee turnover, statistically significant findings were found for the variable of sales growth. Since neither gross profit growth nor employee turnover were impacted positively in any of the analysis of the study, a more detailed discussion of those findings is included in the General Discussion and Implications section of this chapter.

Similar to both the earlier findings for job support alone and the earlier findings for managerial support alone, the Tracey (1998) workplace transfer climate results found a positive relationship between climate as a whole and sales growth in this study. Indeed, when considered either at the employee level alone or at the combined level for both managers and employees, sales growth was shown to be positively impacted by Tracey's (1998) workplace transfer climate.

While the lack of significant findings for gross profit growth and employee turnover are certainly disconcerting for HRD practitioners, the significant findings for sales growth do provide a positive platform to open both the ears of organizational decision makers and the purse strings of the organization toward the support of workplace transfer climate.

Finally, it is worth noting that the Tracey (1998) model did not support sales growth when considered purely from the managers' perceptions in this study. It is likely that the significant differences between manager and employee perceptions of managerial support detailed in Research Question 8 are severe enough to create fundamentally different results when these two perception scores are compared to overall sales growth at the store level.

Summary of Findings and Conclusions Related to Research Question 6

Do differences in store personnel perceptions of the hypothesized single construct of workplace transfer climate have a statistically significant positive relationship with the business goals and objectives of the firm?

In this research question, consideration was given to the concept of workplace transfer climate as a four-dimensional construct, differentiated from Tracey's (1998) three-dimensional workplace transfer climate model. As a previously untested construct, it was given the name hypothesized workplace transfer climate in this study to distinguish it from Tracey's (1998) construct. As delineated in the Summary of Findings and Conclusions Related to Research Question 5, support is present in the literature for considering

workplace transfer climate as a single construct, rather than consideration merely at the factor or dimension level.

The decision to study workplace transfer climate as a single construct with the addition of peer support was made in an attempt to more completely "fill-out" the concept of workplace transfer climate. The concept of peer support has growing support generally in the study of workplace learning (Duguay & Korbut, 2002) and finds heavy support in the area of adult learning theory, i.e. Imel (1999) and Woodd (1997). Quiñones, Sego, Ford, & Smith (1995) found significance for the inclusion of workgroup support in their "opportunity to use" transfer study and, as noted earlier, peer support has been shown to be a key component of the social context needed for positive training transfer (Huczynski & Lewis, 1980; Rouiller & Goldstein, 1993). In addition, peer support has been shown to positively impact two key factors in training transfer research, both intention to transfer (Holton, Bates, & Rouna, 2000) and pre-training motivation (Facteau, Dobbins, Russell, Ladd, & Kudish, 1995).

Beyond the prevalence of peer support in the learning and transfer literature, the importance of social context factors, including peer support, has been gaining in popularity in the research connecting organizational climate with performance (Buckingham & Coffman, 1999; Rucci, Kirn, & Quinn, 1998). Finally, the importance of teamwork both in the popular business press (Katzenbach & Smith, 1999) and in performance research (Oakland & Oakland, 2001; Wisner & Feist, 2001) further supports the inclusion of peer support in this study.

Findings for hypothesized workplace transfer climate in this study were similar to those for the Tracey (1998) construct in that both models failed to show significant results for support of either gross profit growth or employee turnover. The hypothesized model also mirrored the results of the Tracey (1998) model with regard to sales growth.

These similar results, taken in conjunction with the specific lack of significance for all variables for peer support in Research Question 4, seem to indicate that the addition of peer support to the overall model did not increase the effectiveness of the model in showing support for the business goals and objectives of the firm. However, it is important to remember that this study was not considering the impact of peer support specifically on training transfer, but rather considered the impact of peer support for transfer on the achievement of the business goals and objectives of the firm. Thus, support is neither provided nor denied for the impact of peer support strictly on the question of whether or not such peer support positively impacts training transfer. Rather, all that can be said about peer transfer support from these results is that no relationship was found between the evidence of peer transfer support and the accomplishment of growing sales, growing profits, or reducing employee turnover.

It should be noted that this study was conducted in retail locations, many of which have relatively small staffing levels. Across all stores, the average full-time equivalent staffing in the stores was 5.98. Taking long store hours into account, it is likely that many stores are staffed by no more than four people at any given time. Thus, the perceptions regarding peer support in this study may be very different based on this unique small-store study. If this study had been conducted in a manufacturing environment, for example, or

even in a retail environment with much larger stores and higher staffing levels, results for peer support may have been very different.

Summary of Findings and Conclusions Related to Research Question 7

Do differences in managers' perceptions of workplace transfer climate factors have a statistically significant positive relationship with the promotion activity of those managers?

Finding and developing new management talent for organizations is rapidly becoming a key driver of success. The term "War for Talent," first coined by Michaels, Handfield-Jones, & Axelrod (2001), accurately describes the desperate, life-or-death pursuit of many organizations to find, retain, promote, and advance leaders for the growth of their organizations. Thus, it was appropriate in this study to consider the connection of workplace transfer climate factors to the promotion activity of the organization at the store level.

Consideration of the data for workplace transfer climate factors finds a significant relationship between promotion activity and two individuals factors, job support and peer support, and a relationship nearing significance for one construct level model, hypothesized workplace transfer climate. However, no relationship was found between promotion activity and either managerial support or organizational support in the study. Finally, the Tracey (1998) workplace transfer climate model did not show a significant relationship to promotion activity in this study. For all sub-questions within this research question, only managers' perceptions of workplace transfer climate were utilized.

It seems from these results that managers who perceive that their jobs and their co-workers *in the stores* are supportive of learning, growth, and development are more likely to pursue activities which lead to the promotion of subordinates in the organization. These findings seem to further suggest that promotion activity is not based upon organizational level support, nor upon the supervisory support that these managers receive from higher up in the company, but rather that the immediate store climate plays a more significant role in initiating promotion activity.

Due to the relatively poor showing of peer support throughout this study, this finding of significance between peer support and promotion activity should be of particular interest to HRD professionals. Additionally, the finding of near significance for the hypothesized model, which includes peer support, also has much to say regarding the significance of peer support in the promotion activity realm. It is quite possibly the function of mentoring, as a peer support element, that provides the link between peer support and promotion activity. Mentoring has been identified regularly as a key support component in both personal and professional development (DeVoe, 1999; Gilley & Boughton, 1996), career development (Kram & Isabella, 1985; Dansky, 1996), and promotion activity (Arai, Billot, & Lanfranchi, 2001). This study benefits the mentoring body of knowledge by adding the workplace transfer climate element of peer support to the known elements supportive of promotion activity and career advancement.

Summary of Findings and Conclusions Related to Research Question 8

What similarities and differences exist in the perceptions of managers and employees regarding the various factors of workplace transfer climate, namely managerial support, job support, organizational support, and peer support?

To get a more complete picture of the exact nature of workplace transfer climate, it is instructive to dig deeper into the general perceptions of the climate at a macro-level and uncover the differences in perceptions between managers and employees. In this study, one way this was accomplished was by running bi-variate regression tests for the workplace climate factors not only at the combined (employee and manager) level, but also by running bi-variate regression tests for managers' perception scores alone and for employees' perception scores alone in Research Questions 1-6. However, a secondary method to drive toward more precise understanding of the phenomenon was implemented in this research question by utilizing individual T-tests to determine if significant differences existed between managers' and employees' scores on the factors themselves.

No significant differences were observed between managers and employees on the dimension of job support. Given that this study was conducted in a chain of small retail paint and decorating stores, this finding does not come as a surprise. In such stores, managers are working supervisors; that is, they perform many of the same job tasks as store employees. Providing customer service, managing inventory, ringing up sales, taking phone orders from contractors, and the like are all tasks regularly performed by all store personnel. Had this study been performed in an environment with substantial task

differentiation between managerial level staff and front line employees, it could be that differences in perception on the dimension of job support might be more significant.

Additionally, no difference was observed in this study between managers' and employees' perceptions of organizational support. While this finding may seem a bit more unusual than the lack of documented differences in job support, it may be that very few store personnel, at either level, spend significant time interacting with corporate headquarters staff away from the immediate store location. Therefore, the experiences of both groups would tend to be similar with relation to organizational support. Again, while this finding of no significance holds in this study for this relatively flat organizational structure, it is anticipated that findings for organizational support might well be different in firms with more multi-level hierarchical structures. For in such multi-tiered organizations, one would expect to see managerial level personnel interacting with the broader organization in a fundamentally different manner than would frontline employees. However, given the geographic and interpersonal dispersion of both store level managers and store employees from the wider organization in this case, the finding appears to be consistent with expectations.

Further consideration of the factor level climate dimensions indicates that a significant difference was indicated for managerial support. Since the two groups in the study were likely visualizing two different and distinct people as they completed the survey, this finding is consistent with expectations. In the survey, the employees were asked to provide their perceptions of the managerial support they experienced from their supervisor, the store manager. In contrast, the store managers were directed to indicate

their perceptions of managerial support from their supervisor, in this case a regional or district manager. Not only is the statistical difference as expected in this study, but also the direction of the difference conforms to anticipated results. In the study, employees' scores for managerial support were shown to be statistically higher (M=4.177) than the managerial support scores given by the managers (M=3.176). Given that the employees interact both personally and daily with store managers while store managers rub shoulders much less frequently with their immediate supervisors, it seems likely that both intimacy and regularity of contact with a supervisor breeds positive perceptions of managerial support. This finding, when considered in conjunction with the findings of Research Question 3 on the impact of managerial support on sales growth and on the mediating effect of managerial support on employee perceptions of job support, should encourage organizations to focus on the interaction, both in terms of quality and frequency, between supervisors and the people they supervise. In addition, organizational investment and focus on the selection and development of managerial talent with the ability to connect with employees at a personal level seems prudent on the basis of these study findings.

The final single factor considered in this research question was peer support, which was found to be perceived differently by managers than by employees. While both groups were instructed to focus for this factor on their co-workers in the immediate store location, managers had a more favorable perception of the support than did employees. It may be that the sense of collegiality for a given workgroup is simply viewed differently on the basis of title, position, perceived power, areas of responsibility, and citizenship, rather than on the basis of an objective measurement of peer perception at the store level. An

alternative explanation for these results is that a cognitive dissonance was created for managers by attempting to have them see store employees as peers for purposes of the study. That is, in the effort to measure peer support at the store level, it simply was too great a stretch for managers to view their subordinates as true peers. Thus, managers' scores for peer support in the study may actually have been measuring an inherently different construct than the intended peer support climate factor.

Two additional single construct tests for managerial and employee perceptions also found no significant differences. In both collapsed factor climate tests, the Tracey (1998) climate finding and the hypothesized climate finding, employees and managers experienced the workplace climate in a statistically similar manner. In considering these results, it seems probable that both the task similarity and the relative macro-organizational distance experienced by both managers and employees create a similarity of perception for the workplace transfer climate as a whole. Additionally, analyses of both the simple raw scores and the statistical differences on the individual factors indicate that while employees perceived managerial support to be statistically higher than did managers, the managers' scores for perceived peer support were statistically higher than employees' scores. Thus, when collapsed into a single construct, either in the Tracey (1998) construct or in the hypothesized construct, these differences may have offset one another in the single construct analysis.

General Discussion and Implications

This study focused on four primary measurements to define the business goals and objectives of the firm; namely, sales growth, gross profit growth, employee turnover, and

promotion activity. These four drivers of organizational success were selected based on the researcher's experience in business, a review of relevant business literature, and the availability of measurements from the cooperating organization. One key component that was sought, but not readily available from the cooperating organization, was a performance measure of customer satisfaction.

While promotion activity was dealt with exclusively in Research Question 7, consideration of the other three measurements was interspersed throughout various research questions, and thus these three deserve specific discussion here, in light of the overall study findings.

Sales growth was the dependent variable to which workplace climate factors indicated the most frequent significant relationships in the study. Because many organizations and industry watchers (i.e. Fortune 500) rank businesses on the basis of sales volume, this variable is certainly important. In this study, both individual factors (managerial support and job support) and both collapsed models (Tracey, 1998 and hypothesized) showed significant support for sales growth. Since frontline sales personnel, including both general store employees and "working" managers, were the specific focus of this study, these results are certainly important, for both the cooperating company and for the HRD field.

Profitability is certainly an important variable in organizational life and thus was included in the study. While disappointing, the fact that no relationships were found between workplace climate factors and gross profit growth can be understood through a number of possible explanations. Perhaps the competitive nature of pricing across

different markets served by stores in the study created situations in which sales growth was observed, but not profit growth. Differing store or organization-level policies on discounting or competitive pricing for larger contractor sales may also make profit growth a substantially different variable type than could be expected to be influenced by workplace transfer climate. Finally, store employees of the type in this study may have more control of the customer service aspect of selling, which would relate to sales growth, than they may have over the processes of merchandising, purchasing, and pricing, which would relate to gross profit growth.

Employee turnover has been a favorite of many organizational researchers for many years. Knowledge about the costs of turnover to an organization in terms of recruitment, customer service, knowledge attrition, and selection, all make the study of employee turnover important. Since employee turnover has been linked to general organizational issues of commitment, managerial trust, and peer relationships, it was hoped and expected that the workplace transfer climate factors of this study would also show links to reducing turnover. However, no relationships were found in this study. Possible reasons for the lack of connection between transfer climate and turnover may include unemployment differences across market areas in the study, organizational policies and procedures including orientation, benefits, and compensation which are known to be more substantial drivers of employee turnover, or even the availability of career development services within the organization. In addition, since this firm is a closely-held, family-owned company, the interpersonal ties between employees, managers, and owners may create lower turnover, or at least different patterns of turnover behavior, than in other

publicly-traded, national firms. Finally, the geographic context of a large percentage of these stores (small town America) may also contribute to different findings for employee turnover than may be found in other contexts. However, it is clear that workplace transfer climate, as conceptualized in this study, is not a primary influence factor of employee turnover in this organization.

Training has been, and will continue to be, a valuable tool for managing many of the current and future challenges faced by organizations. In order to maximize the return on investment (ROI) of training, it is crucial to look beyond the training session itself and broaden the ROI question to include situational and interpersonal workplace climate factors and their relationship both to learning and to the broader business aims of the firm.

This study tested the organizational relevance of workplace transfer climate not in terms of its effectiveness in helping people learn, which has been the primary focus of the field's research to date, but rather in terms of how workplace transfer climate is effective in assisting the organization in carrying out its strategic business objectives. In doing so, this study serves the HRD profession in moving from a focus on the learner to a focus on the organization. Not only that, this study provides support for HRD practitioners to move from the training room to the boardroom, a transition long aspired to by many professionals in the field. Further, this study moves beyond the conventional learning and transfer questions of workplace climate as understood by professional trainers who speak training jargon and are fluent in educational lingo. This study offers possible links between positive workplace transfer climate and organization performance in terms understood by professional managers who speak the language of sales growth and

marketplace value and make the major strategic and resource allocation decisions for the firm behind the closed doors of the boardroom. While the need for additional research is certainly required, this study provides a foundational step toward the development of a more comprehensive understanding of training effectiveness and its link to attainment of the business goals and objectives of the firm. As such, it provides the outlines of a roadmap for HRD professionals to gain a proper place and take a proper seat at the decision-making table of organizational life.

While few in the HRD profession may find the results of this study astonishing, many in the field would do well to reference these findings as they seek to assist organizations in building great training events and to influence organizational investment in ancillary workplace climate factors known to support training transfer. As HRD practitioners seek to enhance their organizational credibility and garner organizational investment for training, this study provides the basis for a two-fold payback on such investments. While some senior management level decision makers would support investment in workplace transfer climate improvement efforts simply for the gains in training transfer shown by Tracey (1998) and others in the field, a substantially more compelling argument for such investment can be made by coupling those transfer gains with the gains in sales growth and promotion activity shown to exist in this study.

The findings of this study provide nascent connections between the field of training transfer and the field of value chain analysis. The sales growth results in this study appear to mirror, to some degree, the findings of value chain researchers into the relationships between employee, customer, and financial outcomes. Thus, this study provides an

opportunity for HRD professionals to find deeper and more fundamental links between those factors supporting training transfer and attainment of the business goals and objectives sought after by corporate senior management. Indeed, if further inquiry into this area can show that improvements in workplace transfer climate are both good for training--providing support for application of learning, and good for business--driving customer satisfaction, sales, and profits, then HRD professionals may be able to employ such research to enhance both learner outcomes and the credibility and influence of HRD within organizational life.

Recommendations for Practice

Based on the findings of this research study, the following recommendations are offered to HRD professionals:

- The findings of this study suggest that workplace transfer climate factors support the attainment of business goals and objectives of companies. Therefore, it is recommended that HRD professionals begin to focus on improving workplace transfer climate factors for the benefits of more effective training programs as well as for sales growth, increases in staff readiness to accept promotions, and other performance drivers important to business people outside of HRD.
- Given the significance of managerial support in this study, organizations should take steps to invest in management development programs, with both dollars and time, so that management support for training transfer in workgroups will be stimulated and increased. On the basis of the findings of this study, such effort should pay dividends to the organization in terms of future sales growth.

- Particularly in organizations in which leadership development and succession issues are critical for future growth, this study suggests that peer support can be helpful in building future leaders through promotion activity. Therefore, policies, procedures, and programs to increase the peer support interaction should be an area of focus for HRD professionals in such organizations.
- Throughout this study, job support was found to be an exceptionally important and significant variable, particularly for employees. While HRD has begun to focus over the past twenty years in the areas of job descriptions, job analysis, task significance, and competency mapping, this study provides support for increased focus in this area. Job support is a key driver of learning and growth for individuals as well as for organizations at a macro-level.
- HRD professionals must take their blinders off and focus less on the training room, the needs analysis, the participants' personality tests, and issues of learning in isolation from broader organizational realities. A new focus must emerge that is marketplace relevant and is laser-like in its precision of pointing to the customer-value and marketplace-value of training and training transfer, expressed in terms that senior management is familiar with, i.e. sales, profits, and market value. This study provides critical support for the re-framing of the question of how and why workplace climate factors that support training transfer are important in the success of the organization.
- HRD professionals must remember that much of organizational reality is mediated for employees through their interactions and perceptions of their immediate

managers. Thus, managerial malpractice (Gilley & Boughton, 1996), by way of poor leadership, cannot be tolerated for any length of time in a managerial role. Bad managers cannot be left in perpetual "rehab mode" for extended periods of time; the stakes are just too large. The lynchpin of company value is linking up employees who are eager to work and customers who are eager to buy through excellence at the managerial level. Focusing on the development of excellence in the managerial ranks is an enormous organizational improvement lever available to the HRD field.

Recommendations for Future Research

This study was an attempt to move the HRD inquiry field of training transfer away from asking only the questions of learner outcomes and to begin asking questions about organizational significance. As such, it took as a starting point the promising area of transfer research based on a wider organizational view of transfer, specifically workplace transfer climate. Attempts to link workplace transfer climate to the broader value-based business goals and objectives of the firm were promising in some areas and fell short in others. However, this study does not presume to have answered all the questions available to HRD in this area. Therefore, the following suggestions and implications for future research are offered to assist the field in becoming ever more relevant in day-to-day organizational life.

Further examination of the macro-level connections between workplace transfer climate and other employee loyalty and commitment measures would solidify the value chain links between transfer climate and organizational success. Does workplace transfer

climate support employee loyalty? Are employees high in transfer behavior more organizationally committed? What role does workplace transfer climate play in the Quality of Workplace measurement for the Employee Value Equation? Does investment in training make an organization a compelling place to work?

Given the importance of peer support in the literature, it would seem that studies to deepen knowledge of this variable would assist the field greatly. Of particular importance and relevance would be to have such studies conducted in large work group environments in which the social connections are many and varied. Is peer support more important in large work groups or in small teams? Is peer support more important in manual labor environments or in knowledge intensive operations? Can employees get peer support from supervisors? Do supervisors perceive peer support from subordinates, or only from horizontal peers on the organization chart? Does peer support differ in virtual organizations, or is geographic intimacy important for peer support?

Based on the promise provided in this study linking workplace transfer climate to sales growth, similar studies could be performed to analyze the impact of workplace transfer climate on a wider range of organizationally relevant performance measures. Does workplace transfer climate improve customer satisfaction? Does customer loyalty depend upon workplace climate constructs? What impact does workplace climate have on quality, number of defects, or continuous improvement? Is safety driven by factors of workplace transfer climate? Are workgroups with high peer or job support more innovative?

Within the transfer field, workplace climate is a promising line of inquiry; however, it is only one of many variables shown to support positive training outcomes.

Therefore, future research in other areas of transfer effectiveness to connect these areas with organizational performance measures could prove important for the field as well. Do employees with high pre-training motivation create value beyond simple training application? What connections are present between locus of control and leadership capabilities? What are the consequences at the organizational level of an employee setting goals for training application?

As the field of training transfer continues to mature, both longitudinal and experimental studies with large numbers of participants will be extremely helpful to determine more exactly both the drivers of training transfer and the consequences of training transfer. If several competing transfer techniques could be analyzed through experimentation, clearer cause and effect relationships would likely become evident.

As workplace transfer climate continues to become more important in the field, studies to determine if traditional transfer activities are more or less effective in certain climates will certainly become necessary. Is relapse prevention more effective in workgroups with high peer and managerial support? Is goal setting more important as a transfer strategy in workgroups with weak managerial support? Do differences in locus of control create different perceptions of job support or organizational support? What relationships exist between web-based transfer strategies and peer support? When organizations budget training days for all employees, are trainees more motivated to attend training?

Since job support appears to hold great promise in the area of workplace transfer climate, research should be conducted to determine what elements of the job create the

perception of job support for employees. Does task variety increase job support? Does task significance assist employees in perceiving job support? Do repetitive job tasks lower job support?

Finally, given the relationship of managerial support to effectiveness of training transfer, in terms of both its relationship with sales performance and its mediating effect on employees' perceptions of wider organizational realities, extensive research on managerial support would seem to be appropriate. Can geographically dispersed managers create managerial support? What personality types in managers are more conducive to strong managerial support? Do veteran managers have an advantage in establishing managerial support in a workgroup? Do leadership styles have an effect on managerial support? How can managerial support be built through technology?

APPENDIX A.

LETTERS OF COOPERATION AND PERMISSION

September 27, 2001

Company President
President & CEO
Company Name
Address
City, State Zip

Dear President,

I trust that this letter finds you well and that you and your family have experienced good times and blessings since we last talked.

With regard to our last conversation, it has taken me substantially longer than I had originally hoped to develop a research plan. In my move from a professor and part-time student to an executive and part-time student, I've been blessed but my time just simply slips away.

At any rate, I enclose a research and consulting proposal for your review. As you will recall, I'm at the dissertation phase of my Ph.D. at Iowa State and thus am interested in researching the impact of workplace climate on financial performance. Specifically, I'm focusing in on the slice of workplace climate relating to the support for training & learning and how a positive climate can build sales, profits, and employee satisfaction.

As such, your organization would provide me an ideal context to conduct the research. With multiple locations, the climate for training support could be measured at each location creating a great population comparison.

Once I determine the extent to which each store supports training, I would then compare store data on sales, profitability, and employee turnover to see if positive support for training creates higher sales, higher profits, and lower turnover. I believe that we will see positive results that you can use to manage your company in the future! This is exciting stuff!

Realizing that the attached proposal is a bit lengthy and "academic," I'd appreciate the opportunity to talk this through over lunch sometime soon. I'll call you in the next week to arrange it.

Sincerely,

Erik Hoekstra
Director for People & Organizational Development

Consulting and Research Proposal

To: Cooperating Company
President & CEO

From: Erik Hoekstra
Harbor Group
1520 N Main
Sioux Center, IA 51250
Phone 712-722-1662
Cell 712-441-1914
Email erik.hoekstra@interstates.com

Date: September 26, 2001

Re: Request for research cooperation

Introduction

With the pace of commerce steadily increasing and the availability of talent steadily decreasing, corporations have a need to respond quickly to a changing marketplace while consistently hiring and developing new staff. These realities create pressures on the training function corporations and require that newly trained skills have the maximum amount of impact or transfer from the training environment to the workplace.

Historically, statistics are clear that less than 10 percent of the new learning gained during training actually "sticks" and translates into increased performance in its intended fashion. Several research projects have shown that to increase this percentage, companies should focus on the workplace climate, the receptivity to training, and support for using newly learned skills in the workplace. Companies that have a positive workplace-learning climate have shown significantly higher rates of learning, retention, and impact on their training investment.

To date, however, no research has been done to clearly study the impact of a positive learning climate on sales volume, employee satisfaction & turnover, productivity, and profitability. These themes are at the heart of the proposed research project.

Methodology

Using a survey instrument administered to all store level employees and managers, a workplace transfer climate score will be determined for each store. In addition, dimensional scores for the various factors of workplace transfer climate (job support, organizational support, managerial support, peer support) will be tabulated. Thus, the research will survey 85 retail locations of the cooperating company to determine the learning climate at each store. At least two employees from each store and the store manager must complete the survey to be included in the study.

Additionally, sales, financial, and operating data from each store will be compared with the store-level workplace transfer climate score to determine correlations, patterns, and trends. Relevant store data would ideally include sales (gross store sales, per employee, per square foot), employee satisfaction (turnover), and profitability (gross margin, net profit).

Confidentiality

All correlations between stores, employees, and sales, financial, and operating data will be done in an anonymous or blind fashion by assigning numbers to each store's information. All reporting of the research information will be anonymous and not mention the participating company in any way.

Benefits to The Cooperating Company

The information gathered from the research project will be made available to the company. All individual survey responses from employees will be anonymous; however, data at the store level from the survey will give the company insight into the climate and learning culture at each store.

Testing of the research hypothesis will minimally give the company insight into the climate and culture at each store. It is hypothesized that stores with positive learning climates and cultures will be shown to have higher sales, higher profits, and lower levels of employee turnover. If the various research hypotheses are proven, the company can then use this research to improve sales and profits through the enhancement of the learning climate and culture at the store level.

At the conclusion of the project, the researcher will make a presentation of findings to management at the request of the participating company.

Research Cost

Each store employee and manager will be required to spend approximately 5 minutes replying to a 22-item survey instrument on Workplace Climate.

Several meetings with the Director of Trade Sales and requisite administrative staff will be required.

Compilations of data from the accounting and human resource records of the stores will be required.

All other costs will be covered by the researcher.

Researcher Background

Erik Hoekstra is a Ph.D. student at Iowa State University in the Organizational Learning and Human Resource Development program. He presently holds the title of Director For People & Organizational Development at Harbor Group, a holding company for several firms in the construction and engineering industries. His previous positions include Chair of the Business Faculty at Dordt College, Chief Operating Officer of Eastern Floral, a retail floral and gift store chain, and Branch Manager for Vans, Inc., a wholesale floral distribution firm.

HARBOR GROUP

March 20, 2003

Dr. Bruce Tracey
Cornell University
Hotel School of Management
Ithaca, NY 14853
Fax: 607-254-2971

Dear Dr. Tracey:

I am currently working on my dissertation in the area of transfer of training. As part of my dissertation research I am developing an instrument to measure transfer of training in the workplace in relation to a supervisory skills training program. In my research for instruments, I discovered your workplace climate tool. Specific sections and questions in the instrument are relevant to my study. I am asking your permission to adapt your instrument to my research.

I would like your permission to adapt the following material:

Tracey, J.B., Hinkin, T.R., Tannenbaum, S.I., & Mathieu, J.E. (2001). The influence of individual characteristics and the work environment on varying levels of training outcomes. Human Resources Development Quarterly, 12, 5-24.

Tracey, J.B. (1998). A three-dimensional model of the transfer of training climate. Presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, Dallas, TX.

I am requesting your permission to include this material in my dissertation study outlined above and in future publications related to such study. Below is a release form for your convenience. Please sign and fax back to me at (712-722-8897). I appreciate your consideration and assistance in this manner.

Sincerely,

Erik Hoekstra
Doctoral Candidate

I grant permission requested on the terms stated in this letter.

Agreed to and accepted:

Name: _____ *Date:* 3/23/03
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APPENDIX B.

SURVEY INSTRUMENTS

Workplace Survey for Store Employees

Please respond to the following items based on your experience ***in the store that you work in now.*** Please indicate your agreement or disagreement with the following statements. Your information will be combined with others from your store and be used confidentially in a study of workplace climate and training program effectiveness.

		Strongly Agree	Mildly Agree	Neither Agree Nor Disagree	Mildly Disagree	Strongly Disagree
1.	Managers encourage independent and innovative thinking	5	4	3	2	1
2.	Jobs are designed to promote personal development	5	4	3	2	1
3.	There are numerous professional development opportunities	5	4	3	2	1
4.	My co-workers are interested in my development and improvement	5	4	3	2	1
5.	Managers promote learning from one's mistakes and successes	5	4	3	2	1
6.	Managers encourage employees to learn new ways of performing their jobs	5	4	3	2	1
7.	Work assignments include opportunities to learn new techniques and procedures for improving performance	5	4	3	2	1
8.	Our store team members support one another in learning and trying out new skills	5	4	3	2	1
9.	Managers give recognition and credit to employees who apply new skills in their work	5	4	3	2	1
10.	Jobs are flexible and provide opportunities to acquire and use new knowledge and skills	5	4	3	2	1
11.	Continuous learning is a central part of employees' work	5	4	3	2	1
12.	When I learn a new skill or am trying something new, I'm afraid to try it for fear of looking silly in front of my peers	5	4	3	2	1
13.	There are rewards and incentives for acquiring and using new knowledge and skills on the job	5	4	3	2	1
14.	Store managers place a high priority on training and development	5	4	3	2	1
15.	My store dedicates significant resources to training and development	5	4	3	2	1
16.	I consider my co-workers very focused on store continuous improvement and team member learning	5	4	3	2	1
17.	Employees are provided with resources necessary to acquire and use new knowledge and skills	5	4	3	2	1
18.	Jobs are designed so employees can explore and try out new ways of completing responsibilities	5	4	3	2	1
19.	Continuous learning is supported by the company	5	4	3	2	1
20.	The store employees work together as a team to train new or struggling employees	5	4	3	2	1
21	I work at this store	**Full-Time**			**Part-Time**	
22.	I have worked at this store for the following number of years:	**0-2**	**3-4**	**5-7**	**7-10**	**10+**

Thank you for participating in this important survey. Your responses will allow us to build a stronger company.
Please return the survey to Bob H. using the enclosed envelope.

Workplace Survey For Store Managers

Please respond to the following items based on your experience ***in the store that you work in now.*** Please indicate your agreement or disagreement with the following statements. Your information will be combined with others from your store and be used confidentially in a study of workplace climate and training program effectiveness.

		Strongly Agree	Mildly Agree	Neither Agree Nor Disagree	Mildly Disagree	Strongly Disagree
1.	My supervisor encourages independent and innovative thinking	5	4	3	2	1
2.	Jobs are designed to promote personal development	5	4	3	2	1
3.	There are numerous professional development opportunities	5	4	3	2	1
4.	My co-workers are interested in my development and improvement	5	4	3	2	1
5.	My supervisor promotes learning from one's mistakes and successes	5	4	3	2	1
6.	My supervisor encourages employees to learn new ways of performing their jobs	5	4	3	2	1
7.	Work assignments include opportunities to learn new techniques and procedures for improving performance	5	4	3	2	1
8.	Our store team members support one another in learning and trying out new skills	5	4	3	2	1
9.	My supervisor gives recognition and credit to employees who apply new skills in their work	5	4	3	2	1
10.	Jobs are flexible and provide opportunities to acquire and use new knowledge and skills	5	4	3	2	1
11.	Continuous learning is a central part of employees' work	5	4	3	2	1
12.	When I learn a new skill or am trying something new, I'm afraid to try it for fear of looking silly in front of my employees	5	4	3	2	1
13.	There are rewards and incentives for acquiring and using new knowledge and skills on the job	5	4	3	2	1
14.	Corporate store management places a high priority on training and development	5	4	3	2	1
15.	My store dedicates significant resources to training and development	5	4	3	2	1
16.	I consider my co-workers very focused on store continuous improvement and team member learning	5	4	3	2	1
17.	Employees are provided with resources necessary to acquire and use new knowledge and skills	5	4	3	2	1
18.	Jobs are designed so employees can explore and try out new ways of completing responsibilities	5	4	3	2	1
19.	Continuous learning is supported by the company	5	4	3	2	1
20.	The store employees work together as a team to train new or struggling employees	5	4	3	2	1
21.	In the past 5 years, how many people have you assisted or coached in their development toward an actual promotion to assistant manager or store manager?	0-1	2-3	3-4	4-5	5+
22.	I have worked for the company for the following number of years:	0-2	3-4	5-7	7-10	10+

Thank you for participating in this important survey. Your responses will allow us to build a stronger company. Please return the survey to Bob H. using the enclosed envelope.

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- Lisa—thanks for being a great big sister and for the inspiration you provide to me each day as you keep on pressing on.
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BIOGRAPHICAL SKETCH

Erik Hoekstra's personal mission statement is to glorify God and further God's redemptive plan and Kingdom by being a *growth steward* of resources (people, organizations, self, assets) that God has entrusted to his care. He works towards this mission in a variety of ways.

He was born September 20, 1967 in Grand Rapids, Michigan. He grew up in Chicago and studied history and philosophy at Trinity Christian College, where he earned a bachelors degree in 1985. With this degree he intended to join the ministry, but God had different ideas. Erik married Barb about this time and worked as a manager in a wholesale floral company before going on to get his M.B.A. in 1993 at the Rotterdam School of Management. From there, he led a retail floral company for a while until he went to teach management and marketing in Iowa at Dordt College. During this time he began a Ph.D. program at Iowa State University in a new department, Organizational Learning and Human Resource Development (OLHRD), a name crafted through compromise between the school of education and the school of business. Before getting his degree completed, he joined the Harbor Group, a management holding company for a bunch of exciting companies, as the Chief Development Officer. In that role, he assists people & organizations to reach their potential. He loves his work. Three boys, Arie, Karl, and Max, keep things hopping around the house. They are awesome.

He co-authored The Manager as Change Agent, (Perseus, 2002) and loves to think, research, and work in the areas of people development, corporate culture and performance, change management, leadership, and entrepreneurship.