

THE IMPACT OF TRAINING ON THE FREQUENCY OF INTERNAL PROMOTION
OF EMPLOYEES AND MANAGERS

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In this study, the relationship between formal training opportunities and internal promotions in organizations was examined in order to support the value of organizations investing in employees through training opportunities, as training is often seen as an expense to be cut in difficult times. Differences between general and specific training topics on the impact of frequency of promotion in an organization were addressed, as well as assessing differences between employees and managers. Training allows for a more capable workforce and pool of employees to pull from when an organization needs to hire. Hiring from within can save time, money, and allow for a proven person-organization fit that hiring from the external workforce cannot provide. The archival data used in the study were from the National Organizations Survey, 1996-1997 which included organizations of all sizes and forms.

The analyses produced mixed support for the hypotheses. Significant relationships were found between hours of formal training and frequency of promotions of employees, and between importance of training in promotions and frequency of promotions for managers. Multiple regressions revealed that the hypothesis predicting that increased hours of training focused on general skills

would positively contribute to promotion rates was not supported for either employees or managers.

Exploratory analyses were also conducted to further investigate training and promotion practices. Significant contributions to hours and importance of training in promotion were discovered for certain types of skills training for both the employee and manager groups. Comparison between the employee and manager groups across variables found significant differences in certain skill type training. Practical implications of the findings and future study considerations are discussed.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	iii
LIST OF TABLES.....	v
Chapter	
I. INTRODUCTION.....	1
Training	
Hiring from Within	
Linking Training to Promotion	
Proposed Study	
II. METHODS.....	29
Sample	
Variables	
Analysis	
III. RESULTS.....	34
Full Tested Hypotheses	
Exploratory Analyses	
IV. DISCUSSION.....	50
Results	
Strengths and Limitations	
Future Research	
Practical Implications	
Conclusions	
REFERENCES.....	66

LIST OF TABLES

Table	Page
1. <i>Frequencies for Demographic Data</i>	36
2. <i>Mean and Standard Deviation (SD) for Variables</i>	38
3. <i>Correlations of the Independent and Dependent Variables – Employees</i> ...	39
4. <i>Correlations of the Independent and Dependent Variables – Managers</i>	39
5. <i>Hierarchical Regression Results for Frequency of Promotion – Employee</i> ..	40
6. <i>Hierarchical Regression Results for Frequency of Promotion – Managers</i> ..	41
7. <i>Correlations of Training Types for Employee Group</i>	43
8. <i>Correlations of Training Types for Manager Group</i>	44
9. <i>Contribution to Total Training Hours by Training Types – Employees</i>	45
10. <i>Contribution to Total Training Hours by Training Types – Managers</i>	45
11. <i>Contribution to Importance of Training by Training Types – Employees</i>	46
12. <i>Contribution to Importance of Training by Training Types – Managers</i>	47
13. <i>Paired Samples Test for Employee Group to Manager Group</i>	48

CHAPTER I

INTRODUCTION

Whether organizations are weathering an economic downturn, cutting costs and employees, or in the midst of a time of growth and prosperity with an extremely tight labor market, a major component of success is having the best people in the best places. To create the best workforce it takes employees with the right knowledge, skills, and abilities, yet training to expand skills is not always provided by employers (Nixon, 2005). Once employees have the knowledge, skills, and abilities, an organization also needs to get the right people in the right positions through effective hiring and career development of employees. Training is vital to organization success as it keeps organizations competitive and provides a multitude of benefits.

Internal promotion is also essential to every organization. Unfortunately there is not consensus on the best predictors of performance in future job positions. Many believe current job performance is the key (Greenhaus, Parasuraman, & Wormley, 1990; London & Stumpf, 1983; Van Scotter et al., 2000; Wayne, Liden, Graf, & Ferris, 1997), while others contradict those findings and continue to search for the best predictors of success (Conger & Fulmer 2003; Sessa 2001). The numerous benefits of hiring from within are also discussed. This study explores these organizational practices and the potential link between the two in how they can add value and support each other.

Training

Return on investment is the key phrase that organizations are interested in when they budget the billions of dollars spent on training each year. The American Society for Training and Development (ASTD) recently conducted their annual industry report which showed that organizations spend over \$126 billion each year on training and development of employees (Aguinis & Kraiger, 2009; Paradise, 2007). The average direct expenditure per employee among all respondents rose to \$1040 as reported in the 2006 State of the Industry Report from ASTD (2007). With so much money, there has been a vast amount of research conducted to pinpoint the effects of training (Bartel, 2000), though most studies focus on the individual level effects and rather few empirical studies address the organization level impact (Aguinis & Kraiger, 2009; Bartel, 1994; Tharenou, Saks, & Moore, 2007).

Organizations easily make the assumption that training is a cost and does not truly generate revenue. Often this is the issue because it is more difficult to make a direct connection to the bottom line. Links are often indirect and filled with intangible benefits making them difficult to quantify for the bottom line. This leads the training department to be among the first items to be cut when hard times affect the organization's bottom line (Dela Cruz, 2004). Training departments are constantly asked to prove why continued investments are worthwhile given the expenses involved (Davidove & Schroeder, 1992). The more studies that make the link from training to organizational level impact the

easier it will be for organizations to continue to invest in employee training.

Recently more research has been conducted in order to measure the effect of training provided by employers using organizational level data (Barrett & O'Connell, 2001; Bartel, 1994; Black & Lynch, 1996; Holzer, 1993).

With a global economy, organizations have to compete on a much larger scale, and it requires even more to succeed at that level. Striving for best in class status in regards to the knowledge, skills, and abilities of employees is no longer an option, but rather an imperative. Training activities have been shown to impact the gap between current knowledge and the knowledge needed to reach best-in-class status in a positive manner for both individuals and teams (Aguinis & Kraiger, 2009). But even with such evidence making its way to the business leaders, there is still disconnect between training and a return to the organization. In a 2004 survey, 51% of all respondents reported their employers do not provide training to increase their skills (IOMA, 2004). In a different survey only 32% of employees reported receiving training from their employers to enhance job performance (Nixon, 2005).

Some companies at the top are aware that there is a strong need for learning to be a core component and shaping themselves as “learning organizations.” Previously, “when manual skills were predominant, learning was mostly a one-time event, occurring during the first weeks and months of one’s job. Today, with cerebral skills predominant, learning must be continuous,” (Martel, 2003, p 39). A few state governments have seen the value in training

and offered incentives to businesses that choose to advance employee skills. For example, Missouri statutes allow tax credits for organizations to help cover the expenses accumulated for the training of their employees (Nixon, 2005).

Effects of training on performance. Before a discussion on the impact and benefits of training, a definition of the concept is needed. In this literature, the word training is often used interchangeably with words like learning and development, with one definition even including those umbrella terms such as “training is a systematic approach to learning and development to improve individual, team, and organizational effectiveness” (Aguinis & Kraiger, 2009, p. 452). This makes study of the concept difficult. For the purpose of this literature review and following study, the word training is defined as “planned activities on the part of the organization targeted towards increasing the job knowledge and skills or to modify the attitudes and behaviors of employees in ways consistent with the goals of the organization and the requirements of the job,” (Noe, 2002, p. 153).

Research has shown that there are numerous benefits of training on organizations. Training has been identified as resulting in a competitive advantage in the business world and should not be an afterthought (Bartlett, 2001; Schuler & MacMillan, 1984). The relationships with organizational performance and productivity provide the most compelling claim to support the costs (Boselie & Dietz, 2003; Scott & Meyer, 1991). A meta-analysis, from 1152 effect sizes in 165 sources, found training affects organizational performance.

Specifically effectiveness and productivity were positively impacted, through outcomes that relate directly to performance, such as cost reduction and improved quality and production, or indirectly, as in decreased employee turnover and improved reputation of the organization (Aguinis & Kraiger, 2009). It is important to take into account the fact that meta-analytic reviews produce results that are more reliable and should be considered more important than individual studies (Aguinis et al., 2008). Compared against no-training or pre-training states, results showed training had a positive effect overall on behaviors related to the job or performance (Aguinis & Kraiger, 2009). This shows that training is positively related to an organization's effectiveness and profitability (Aguinis & Kraiger, 2009; Arthur, Bennett, Edens, & Bell, 2003). "Training is a necessary component in US companies' efforts to improve quality, meet the challenges of global competition, use new technologies in producing products and services, and capitalize on the strength of a diverse workforce" (Noe et al., 2002, p. 153).

And not only has training shown to improve organizational performance, but the lack of it has been considered a barrier to performance. A study of 60 high-performance manufacturing organizations with 150 to 3000 employees identified barriers to workforce productivity. The number one barrier was pay, not surprisingly, but the second was lack of workforce training and ongoing development (Longenecker, Dwyer, & Stansfield, 1998).

Along with increased organizational performance, outcomes of training have been documented to lead to improvement in job performance and other development, such as attainment of new skills that are positive precursors to job performance (Hill & Lent 2006; Kraiger, 2002; Satterfield & Hughes, 2007). Numerous studies have shown a significant relationship between providing training to employees and increased productivity (Aguinis & Kraiger, 2009; Black & Lynch, 2001; Einarsson & Marquis, 1999; Garcia, Arkes, & Trost, 2001). For example, Bartel's study (1994) showed that after implementing new training programs the organization experienced significant increase in productivity of 18.86%, controlling for the Hawthorne effect. The Hawthorne effect refers to behaviors resulting solely from knowledge of being observed or participation in a study (Merrett, 2006).

There are several types of evidence showing associations between training and performance, both directly and indirectly. One study showed direct improvement in objective and subjective performance measures that continued over a 12-month period (Aguinis & Kraiger, 2009). Results from a study including 78 Spanish firms conducted by Ubeda (2005) suggested training programs focused on human capital development were directly related to employee, customer, and owner/shareholder satisfaction as well as increased sales per employee. A study by Guerrero and Barraud-Didier (2004) surveying 1530 human resource directors employed by large organizations was able to link directly to the bottom line reviewing training practices against financial

information for their companies. Results from the study showed that 4.6% of the variance in financial performance was explained by training.

As the business of the United States moves from manufacturing products to providing service, training becomes a particularly vital element for success. If a business demands technical expertise and high-performance from its employees to match the expectations of the clients, then training becomes a necessity (Padjen, 1997). Several studies have assessed the increased wages and hours worked for improved performance and return on training investment (Einarsson & Marquic, 1999; Lengermann, 1996; Osterman, 1995). Although it could be a reward for tenure, in the absence of actual productivity data, raises in pay over time can represent growth and good performance from the employee. Significant, positive effects on both wages (Xu, 2005) and hours worked have been found when employees received company training. The Lengermann study (1996) concluded that the payoff was about an 8% increase in wages if the training was provided inside the organization and approximately 10% increase if the training was provided outside of the organization. Booth (1989) found that increases for women specifically reach 18.1%. A component of the research in Lengermann's study (1996) to take note of was that only a minority of respondents, 22%, actually received the valuable training. This further supports the point that an organization receives such an impact from training yet it was only provided to a small population. For the company to profit after investing in training and paying higher wages, the increase in productivity would need to

surpass the cost of the combination of the two. Studies have supported this by showing the productivity effects of training significantly outweigh costs of the higher wages. Actually, the impact of training on improved productivity proved several times larger than its effect on wages (Baron, Berger & Black, 1993; Bishop, 1991). On-site training increases productivity and in the first three months has a positive and significant effect on wage growth.

The improvement in job performance stems from training's ability to directly impact skill building. Aguinis and Kraiger (2009) argued that training may bring about changes in employee skills through "a change in trainees' knowledge structures or mental models. Specifically, mentally rehearsing tasks allowed trainees to increase declarative knowledge and task performance, each measured 10 days after the training was completed," (p. 454). The study produced the largest individual and team effects for declarative knowledge (the what) and procedural knowledge (the how) resulting from comparisons of the training and no training or pretest groups. For example, trained teams, compared to untrained teams, had superior planning and task coordination, collaborative problem solving, and communication. Results also showed individuals demonstrated higher self-efficacy.

Another extremely valuable benefit of training is committed employees. "A focus on training and other skill-building opportunities as well as increased employee-management communication can help secure employee satisfaction and commitment in advance of competitive offers," (IOMA's Report on Managing

T&D, 2004, p. 4). Several studies have found that participation in training is significantly and positively related to commitment (Bartlett, 2001; Becker, 1975; Garcia et al., 2001; Gartner & Nollen, 1989; Grossberg, 2000; Lang, 1992; Meyer & Smith, 2000; Pinks, 1992; Saks, 1995; Tannenbaum, Mathieu, Slals, & Cannon-Bowers, 1991). Meyer and Allen (1997) argue a “committed employee is one who will stay with the organization through thick and thin, attends work regularly, puts in a full day (and maybe more), protects company assets, and who shares company goals,” (p. 3). Meyer and Smith (2000) found commitment of employees was related to both the actual and perceived human resource management practices, such as training and internal promotion.

Investing in employees. Whether in a recession with the possibility of the best talent leaving to work at other organizations, or in a tight labor market where it becomes increasingly difficult to find individuals possessing the necessary skills to perform the jobs, it is becoming more important to invest in human capital. Human capital is commonly defined as the combination of knowledge, skills, and attitudes important to job performance within a workforce at an organization (Becker, 1975). Employees which are committed and high-performing drive and sustain successful organizations. Training leads to employees’ ability to gain commitment and identify career goals, subsequently reach those career goals, and ultimately create opportunity to follow new career paths (Al-Emadi & Marquardt, 2007). “Companies that see little reason for investing time and money toward employee development do not understand that good people

practices produce good business results,” and it is top companies that recognize this relationship and use it as a tool to increase their bottom line not subtract from it (Martel, 2003, p. 27).

When companies invest in their employees, they get more in return as studied by Lambooj, Flache, Sanders, and Siegers (2007). This study examined the mutual-investment model, which applies the social-exchange theory to the business world. The theory suggests employers will see more effort on the part of employees when they show a deeper investment in the relationship. The employee may then offer to take on additional responsibilities not officially part of their job duties. This is often referred to as organizational citizenship behavior (OCB). A common definition of OCB is behavior that is outside of the job role held by the employee and not directly recognized or rewarded by the organization but that benefits the effectiveness of the organization in a general manner. Examples of such behavior includes; working overtime, helping coworkers with work, and performing other tasks outside the scope of their job (Chen & Chiu, 2009).

A focus on career development can show employees that their employer cares about the employee’s well-being (Tsui et al., 1997). Offering the training communicates from the organization that management is willing to make this investment in the employees and expects then for the employees to come through on their part of the deal and step up productivity. An organization can invest in employees in multiple ways. When an organization chooses to invest in

the employee through training, the employer bears the expenses on the assumption that the employee will become higher-performing. In addition, the employee undertakes the task of acquiring the additional knowledge to benefit the organization because he/she believes it will be in his/her best interest for future compensations, and both parties would benefit from the employee moving into a higher position (Lambooi, et al. 2007).

As any investment is more valuable when it is focused, some researchers have narrowed down studies into the differences of certain types of training. “Gary Becker laid the foundation for the study of human capital acquisition when he distinguished between ‘general human capital’ and ‘specific human capital,’” (Wentland, 2003, p. 3). General human capital consists of many skills, has several uses, and can be taken from organization to organization without loss. In contrast, specific human capital is specific to the skills needed for that organization alone (Lowenstein & Spletzer, 1999). Becker (1975) determined that organization investment in specific human capital reduces the likelihood of employee turnover.

The same idea is maintained when referring to training (Becker, 1962, Lowenstein & Spletzer, 1999). Though Lynch (1991) shows that employees receiving specific training are less likely to leave their current employer and employees receiving general skills training are more likely to leave their current employer, the research by Lowenstein & Spletzer (1999) does not support this. The study compares general versus specific training and job mobility, whether

the individuals continue in the same job or change over to a different job the next year. The finding was that general training does not lead to increased likelihood that employees will leave the organization. It does on the other hand support that specific training has a negative effect on worker mobility.

Employee Retention. Of more than 1,443 chief executive officers nationwide, 34% consider hiring, training, and retaining employees to be their biggest challenge (Williams, 1997). Companies want to identify the quality employees and offer them support to help them grow and advance (Tampone, 2005). Training is an investment, and investments do not always pay off immediately. Value invested in human capital increases over time, so companies want to retain their employees.

Losing employees reduces organizational effectiveness and increases expenses as intellectual capital is lost and new individuals have to be trained to take over the positions (Hillmer, 2004). These costs include recruitment, training, lost productivity, lost sales, and new hire procedures. Calculations of such numbers can easily reach 150% of the person's salary, and if the calculations are for a managerial or sales position then the percentage can reach to 200-250% (Bliss, 2001). The impact of turnover on a business can be quite costly in a number of different ways (Karsan, 2007). Loss of efficiency is a concern due to costs of such as the overtime of other employees needed to cover the employee who leaves. Lost productivity from tasks covering employees may have to put to the side and shift focus to cover the opening. Additionally, it can include the cost

of potentially hiring help to assist the business to make up the productivity loss due to the individual leaving. Thus employee turnover expenses can be quite high.

Productivity decreases as a new employee is brought in and trained. When the organization's productive capacity is held in human capital the problems associated with turnover can be extremely difficult. Industries that are service oriented may experience client dissatisfaction due to loss of trust and deterioration of rapport (Mor Barak, Nissly, & Levin, 2001). One study showed that as voluntary turnover increased, workforce performance decreased, although they did find the relationship was actually curvilinear. The relationship between voluntary turnover and employee performance is sharply negative initially, but it is lessened as turnover rises (Shaw, Gupta, & Delery, 2005). A curvilinear relationship may mean that after a certain point where turnover is high and the organization has lost a large amount of its human capital that continued loss will not have much more of an impact. All of these factors related to turnover can affect the success of the organization. McKenna (2004) argues that companies which do not employ a strong retention strategy will struggle to maintain talent and eventually end up with a second-rate workforce at best.

In order to produce the best returns, an organization should remain consistent in their investment and align other practices to support it. If an organization spends a large amount of money on developing and providing training, yet has a high percentage of turnover, then the investment does not

have the opportunity to show the returns and is not really worth it. Baron and Kreps (1999) contemplated why consistency of HR practices is desirable. It is important to make the connection that an organization that invests in its employees through increased training should also value other practices that support and align with it, such as those intended to reduce employee turnover. Several years may pass for the benefit of the training to accrue within its workers, therefore practices that reward longer tenure in the organization become more important. They used the example of Hewlett -Packard:

In an industry characterized by intense competition for technical and marketing talent, H-P's system of promotion from within, the expectations of long-term employment, and the intensive training and professional development provided, have historically reinforced the basic message that workers at H-P can have a gratifying career there. Those practices also help the firm ensure that employees internalize and embody the company's values. (p. 38)

It is this full alignment of training, promotion, and other practices that support the investment made and allow the organization to reap the rewards of highly-skilled and committed employees.

As previously discussed billions of dollars are spent on training annually and yet it is consistently a top choice for reduction when cost cutting is needed at an organization. Tangible and intangible benefits spanning increased organizational performance to improved employee recruitment have been linked

to training. It is important for organizations to see and value this connection to avoid future cutbacks of training and development.

Promotion from Within

Training reduces turnover (Garcia et al., 2001), but it is not just about holding on to employees. Promotion of employees is also vital for organization success. Managing talent so they grow into quality candidates for higher level positions as well as retaining them is a difficult task.

Organizations need employees to progress to higher positions and develop their careers so they can get the return on their investment and benefit from the knowledge capital gathered over the years. In 2004, employees who intended to leave their place of employment in the next five years were surveyed to gather the top reasons reported that would contribute to keeping these employees from leaving the organization (IOMA's Report on Managing T&D, 2004). The top of the list is an increase in pay, not unexpected as an incentive for their employees. What is more telling are the second, third, and fourth responses, which speak directly to training and development departments with the factors being advancement opportunities, a different boss or management team, and improved or additional training, respectively. Organizations that are able to retain employees create growth. This allows an organization to reach the best-in-class status because "the identification of high-potential employees is a crucial step for building and developing a large talent pool that enables organizations to effectively adapt and respond to changes in the environment"

(De Pater et al. 2009, p. 297). Numerous reasons exist for organizations to promote from their own talent pool. When seeking future talent, companies should turn toward their current pool of employees before pulling in talent from anywhere else, which benefits the organization and the individual as well.

Effects of promotion on costs. There are many tangible benefits to promoting employees from within the organization. Consider the costs of recruitment and new hire training to get the employee onboard and ready to perform the job functions. Bringing employees in from outside the organization is associated with potential costs of search firms and loss of productivity while new employees work through the learning curve to perform the new job responsibilities (Chan, 1996; Hein & Alonzo, 1998). Earlier, the costs of turnover were noted, but to take that a step further, the average cost of hiring the wrong person for the job far exceeds it at up to six times the base salary for an individual contributor. Estimates can reach 15 times the base salary for a manager position, and jump to as much as 27 times the base salary for an executive (Smart, 2008). This is up to 1000% more than the figures reported earlier for pure turnover costs.

Internal employees have already established this alignment with the organization reducing the chance of poor fit and a barrier to productivity. It is easier for an employer to observe the abilities of an internal candidate versus those external to the organization. One concern is that the outside talent considered may only be marginally better than the internal options (Chan, 1996).

Organizations that hire from their own talent pool stave off the potential risk of bringing in an employee from a different company, who might be a poor person-organization fit. The organization “may have current employees who know the company well and are also well known to the company,” (Martel, 2003, p. 34). When hiring externally the organization has to hope that the person hired made the determination upfront of whether or not they would fit in with the company, its culture, its policies and procedures, and its employees.

Two individuals with the same skills and abilities may have completely different impact on responses to the organization doing better or worse depending on how they match up to the norms of the company (Baron & Kreps, 1999). Avoiding this situation can also help keep the costs of turnover to a minimum as promotions play an essential part in mediating the turnover process (Price & Mueller, 1986). Carson, Carson, Griffeth, and Steel (1994) conducted a meta-analysis including 21 published studies spanning four decades. They found a strong significant negative relationship between actual promotion and actual turnover. But if the employee stays with the company but does not feel that he/she is fully aligned with the organization then he/she may show to be an under producer.

Several intangible benefits are also associated with hiring from within. Organizational commitment is not only a benefit of training but also a benefit of promotion (Carson et al., 1994; Gartner & Nollen, 1989; Meyer & Smith, 2000; Robertson, Iles, Gratton, & Sharpley, 1991; Schwarzwald, 1992; Schwarzwald,

Koslowsky, & Shalit, 1992). “Promotions also provide direct economic and psychological reinforcement for employees who are promoted,” (Sheridan, Slocum, & Buda, 1997, p. 374), and internal hiring has been shown to motivate employees to work harder to get the promotion (Chan, 1996; DeVaro 2006). Studies found the decision to promote an employee had a significant effect on the feelings of commitment (Schwarzwald, 1992). For those organizations hiring, promotions can act as a recruitment tool for employees who desire a long-term career path from the organization (HR World, 2008). In a survey conducted by the Society for Human Resources Management of HR groups in organizations, a lack of potential career development within the organization was cited by 85% as the largest threat to employee retention (Hein & Alonzo, 1998). The downside is those employees who are not promoted tend to withdraw from the organization, feel less connected with organization goals, and have stronger intentions to leave the organization (Carson et al., 1994, Goldner, 1970).

Career development. Companies benefit from promoting more of their employees as opposed to hiring externally, but as previously noted, employees benefit as well. They want to stay and develop their career with one company. It is true that pay and benefits are important to employees, but it is training and development opportunities are what keep people engaged. Research has shown that career development practices were some of the best predictors of organizational commitment (Meyer & Smith, 2000). Other research supports this idea that commitment from employees comes from perceptions that the

organization's practices of internal promotion, and training and development support a career-oriented vision (Gaertner & Nollen, 1989). Seven out of ten young adults, ages 15 to 31, consider it better to stay with one organization over their career, yet approximately one-third believe they will not remain at their current job for more than one year, and half expect to leave within two years (Miller, 1997).

Although money was the number one stated factor that would influence an employee to stay with an organization which he/she was intending to leave, according to IOMA's Report on Managing T&D (2004), it is not as attractive as an incentive when companies work to recruit new talent. Potential employees would rather hear about the organizations' intentions for career development than about a cash bonus. Employees want to know that the organization plans to develop their skills, whether general or specific, so they can advance in and out of this organization (Hein & Alonzo, 1998). "Companies that fail to offer such development opportunities as training, mentoring, and a clear career path just may see their best talent walk out the door," as discovered in a survey by the Society for Human Resources Management (p. 172). Top companies employing these practices discover success. One such organization in the study provides mentoring and training programs to further the career development opportunities of its 71,000 employees. This allows the company to increase the percentage of positions it fills internally from 20 to 70%.

Important to organization success and to individual success, internal promotions are a vital human resource management practice. Clear cost savings on the bottom line as well as increased organizational commitment from employees are among the many benefits it brings. The key to accomplishing it is having the talent to fill those opening when needed.

Linking Training to Promotion

Even with the numerous benefits of training any link that bolsters its value to the organization is critical to its continued implementation. Promotion, as shown previously, is a strong need for any organization needing a competitive edge. To be able to connect the two practices would be an enormous step for the training and development industry.

Although the more training an organization's employees have, the better the internal talent pool from which to promote, during the past two years research has shown the rate of employee training in organizations has progressively declined (Nixon 2005). Bahree and Gold (2005) state "a lot of skilled people have either been laid off, or have retired from the industry in the last 18 years...recruiting and training their replacements takes time and requires global approach," (p. 1). A survey conducted found that employers believe 85% of employees are not strong candidates for promotion (Sheridan, Slocum, & Buda, 1997). Even if organizations wanted to hire internally they do not have the talent. Perhaps the world is full of poor performers, but it is also important to note that 51% of all respondents reported their employers did not provide any training to

improve their skills (IOMA's Report on Managing T&D, 2004). Research indicates that on-the-job training can positively affect upward mobility, meaning employees who are included in on-the-job training programs are promoted faster than those that do not have similar training opportunities (Markham, Harlan, & Hackett, 1987; Sheridan et al., 1997).

Predictors of promotion. Knowing what can boost promotability allows an organization to focus resources and increase success. Promotability has been described as “the favorability of an employee’s advancement prospects” (Greenhaus et al., 1990, p. 69) and reflects the employees anticipated performance in a higher level position (London & Stumpf, 1983). Currently, employers look at performance in a particular job to predict success in the open position. Studies of an employee’s present job performance as a predictor of future performance have had mixed results. Some research supports job performance and work experience as important indicators of positive evaluations of promotability (London & Stumpf, 1983; Greenhaus et al., 1990; Van Scotter et al., 2000; Wayne, Liden, Graf, & Ferris, 1997). Yet there is also a line of research that shows an employee’s performance in his/her current job is not a reliable predictor of future performance in a higher level job function (Conger & Fulmer 2003; Sessa 2001).

Researchers have also studied employees’ work experience as a predictor of promotability, but usually measured work experience by looking at the tenure of an employee in a specific job (Harris, Kacmar & Carlson, 2006; London &

Stumpf, 1983; McDaniel, Schmidt, & Hunter, 1988a). Others have calculated experience as the number of times the employee completed the task (Lance, Hedge, & Alley, 1989; Vance, Coovert, MacCallum, & Hedge, 1989). Work experience is attractive as a measure of an individual's promotability because it can be seen as an indication of knowledge, skills, and expertise (Becker, 1975). Something to consider is that the new job may require different knowledge, skills, and abilities and making work experience less important as a predictor. Also, findings have been inconsistent in the relationship between job tenure and promotability with studies showing positive relationships (Turnage & Muchinsky, 1984), negative relationships (Harris et al., 2006; Wayne et al., 1999), or no relationship (Cox & Nkomo, 1992). And the positive impact of job tenure on learning, development, and productivity may decrease over time; as job tenure increases, its value as a substitute for experience, knowledge, and perhaps productivity may weaken (Cox & Nkomo, 1992). What this research does not consider is the qualitative aspects of work experience that are important such as development of expertise and broader skills which could be a reason for the inconsistent findings (Harris et al., 2006; Hofmann, Jacobs, & Gerras, 1992; Waldman & Avolio, 1993). Two different employees can have the same job and tenure, yet could have encountered very different challenges along their careers developing different type skills from unique experiences (Ford Quinones, Seago, & Sorra, 1992).

The idea that work experience is a predictor of promotability led to detailed research to address the actual content of individuals' work experience as a predictor of promotability. "Experience should reflect the challenges and interactions that accrue above and beyond what is acquired through simple continued practice," (Tesluk & Jacobs, 1998, p. 325). Some employees may have opportunities to develop new skills and knowledge through training or important work relationships. DePater et al (2009) found the amount of time an employee spent on challenging tasks was significantly related to promotability. "New jobs often require different types of knowledge, skills, and capacities that employees do not yet possess and may not be able to develop. Successful performance on challenging tasks, therefore, may be more relevant for evaluating individuals' promotability than successful performance on routine tasks," (De Pater, Van Vianen, Bechtoldt, & Klehe, 2009, p. 301). Performing challenging tasks can be conceived of as a signal indicating employees' levels of ability (Humphrey, 1985), willingness to exert effort (Van Scotter et al., 2000), and possibly their ambition for reaching higher level positions.

Challenging tasks, or job experiences, refer to activities in an employee's work for which current procedures and routines are insufficient and require the employee to develop new ways of dealing with the situation. Whether or not there is success in the new situation is not important for the individual's development (Davies & Easterby-Smith, 1984). The idea is that challenging tasks increase promotability. If employees perform challenging tasks rather than

nonchallenging tasks, then their potential to perform in a higher job level can be better predicted, because these tasks are more closely aligned with those required in the higher position (Davies & Easterby-Smith, 1984; London, 2002; McCauley et al., 1994). These tasks provide employees with opportunities to learn what everyday tasks do not offer (McCauley, Ruderman, Ohlott, & Morrow, 1994) possibly resulting in development of new knowledge, skills, and abilities (McCall, Lombardo, & Morrison, 1988). The challenging task concept has taken increased focus in research on managerial positions (Bray & Howard, 1983; McCall, Lombardo, & Morrison, 1988; McCauley, 1986; McCauley et al., 1994; Morrison & Brantner, 1992). Studies on the development of managers have identified that learning and development occurs when individuals experience new assignments, task related job demands, and obstacles (McCall et al, 1988; McCauley et al., 1994; McCauley, Cavanaugh, & Noe, 1996).

Training, as defined earlier, can create those challenging tasks and provide developmental experiences promoting growth in those who participate (Conger & Fulmer, 2003). This provides developmental experience affording employees with opportunity to practice learned skills and behaviors in real world situations (Feldman, 1988; McCall et al., 1988; McCauley, 1986; McCauley et al., 1994; Morrison & Hock, 1986). Research specifically in manager training has returned results showing that job experiences lead to the development of senior managers over classroom training programs (Davies & Easterby-Smith, 1984; McCall, Lombardo, & Morrison & Hock, 1986; Morrison, 1988; Lowy, Kelleher, &

Finestone, 1986; Wick, 1989). It may be noted that in a study addressing if formal training of managers ever gets utilized, of the managers interviewed “not one mentioned having developed as a result of a training experience, although a sizeable number were able to point to things that they had learned from training,” (Davies & Easterby-Smith, 1984, p. 172). This solidifies why it is important to bring the value of training back to the forefront by researching the relationship between training and promotions. This study is going to focus on these two strong factors examining the effects training variables have on promotion rates.

Current Study

This study was designed to evaluate data at the organizational level. It is often difficult to gather organizational level data given the scope and scale required for a reliable study, due to the size of organizations, the difficulty gaining permission, and time required to gather the metrics. Consequently, this study utilized archival data. This set of data was obtained from the Inter-university Consortium for Political and Social Research. The larger study, the National Organizations Survey (NOS), was conducted in 1996-1997 (Kalleberg, Knoke, & Marsden, 2001). Although the survey gathered a great deal of data on the training and hiring practices of organizations, the current study used a subset of their data. Organizations that provided training to their employees constitute the sample for this study.

Given this review, there are still unresolved issues on the impact of formal training for employees to the organizations. This study addressed several of those issues through three hypotheses and two exploratory analyses.

If tasks or situations that cause an individuals within an organization to grow and develop new knowledge, skills, and abilities can lead to promotability then training could be a contributor to such novel activities. With that in mind the first step in this research was to establish this relationship between training and promotion. The first hypothesis examined how the amount of formal training affects promotion rates for both employee types at the organization.

Hypothesis 1. Hours of formal training opportunities provided by organizations will contribute to the frequency of internal promotion of employees and managers.

To further develop the relationship between formal training opportunities and promotions the study analyzed the relationship from another perspective. If an organization views training as an important component of internal promotions, then this would contribute to higher frequencies of promotions for employees and managers.

Hypothesis 2. Hours of formal training provided for employees and managers in the organization will contribute to the importance placed on training in filling job openings internally.

And finally, as past research focuses on specific skill training as being more valuable to an organization, the purpose of this hypothesis was to show

that general skills are just as rewarding to the organization and worth the investment. General skills are broader and transferable to other organizations, and therefore should be transferable to high-level positions within the organization. If the results supported this then it would improve the talent pool supporting more internal promotions for both employees and managers.

Hypothesis 3. Hours of formal training opportunities provided by organizations that focus on general skills contribute positively to the frequency of internal promotion of employees and managers.

Additional exploratory analyses allowed for examination of the significance of different types of skill training. The question is whether or not certain types of skill training are more important to the organization than other types. Some types of skill training may be more valuable in terms of hours of training provided of each by the organization, or more valuable in terms of their importance of the training in the promotion. These two relationships were inspected for both groups of employee types.

Exploratory Analysis 1. Are some types of training considered more useful to organizations than other types of training?

Being that there are many differences between employees and managers in an organization, their responsibilities, their importance, their value in salaries, this study examined the two groups across all of the study

variables to determine if there are any significant differences when it comes to the training or hiring practices.

Exploratory Analysis 2. Are there differences between employees and managers for the study variables including: formal training hours provided, importance placed on training, types of training, and frequency of promotion.

CHAPTER II

METHODS

Sample

The National Organizations Survey (NOS) study attempted to collect information from 1,835 organizations located in the United States. The organizations were selected through random sampling of 15 million organizations in Dun and Bradstreet's Information Services data file. The sample allowed for organizations of all types, sizes, and ages. The goal of the NOS study was to capture information to explain "two basic human resource practices: how employers interact with other organizations to obtain and train new workers" (Kalleberg, Knoke, & Marsden, 2001, p 7). The topics included in the data range from internal labor markets, high performance work organizations, job training and issues, as well as demographic data on organization characteristics and external environments. The researchers' intent was to gather this wide range of data across such a representative sample of organizations in order to offer a source for research to explore hypotheses with a high level of generalizability (Kalleberg et al., 2001).

Data collection took place over one year. The organizations were contacted for interviews from 1 to 111 times attempting to collect complete information. A median of 9 contact attempts was required in order to collect complete information. Of the interview attempts, 56% of the organizations

participated by telephone. Questionnaires were mailed to 44% of the establishments to finalize data collection. The questions posed in the telephone interview and on the mail survey were the same. Six organizations completed both telephone and mail surveys; the six mail surveys were deleted from the data set. Data were collected from 54.6% of the organizations contacted. Of these remaining 1002 organizations, 560 had conducted formal job training for employees and 295 did so for managers in the previous two years (Kalleberg et al, 2001).

Variables

The variables chosen for this study were (a) type of employee, (b) frequency of promotion within the organization, (c) importance of training in promotions of current employees, (d) hours of formal training typically provided, and (e) general skills content of training. Response options of do not know, refused to answer, and not applicable were recorded. These were treated as missing data in the study. A variety of characteristics of the organizations in the sample were available. Those which helped clarify the sample were analyzed (i.e., nonprofit/profit, private/public, union/non-union, etc.).

Employee type. The employee type variable consisted of employees and managers. The employees were described as the largest group of individual contributors which are not managers or supervisors at the location who were directly involved in positions that make the product or in provide the service for the organization. For example, these might be customer service agents at a call

center, or sales representatives in a mortgage company, or front line assembly workers at a plant. Manager was defined as supervisory or managerial workers at the location. All items were asked separately for employees and for managers which allowed separate analyses to be conducted for these two groups as well as comparisons. This was done by having all items first asked for employees and then again for managers.

Promotion. The promotion frequency variable was assessed by asking how often the organization filled employee (management) vacancies with people already employed at the organization. The response options were (1) never, (2) rarely, (3) often, and (4) very often. The variable of importance of training as a factor in an employee's (manager's) opportunity for promotion was measured with a 4-point scale with response options of (1) not at all important, (2) slightly important, (3) moderately important, and (4) very important.

Hours of training. The training variable was assessed by first asking for the individual at the organization who could answer questions about training. This individual was then asked whether the organization provided any employee with formal job training in the past two years. If the answer provided was yes, then the individual was asked to provide the typical amount in hours of formal training provided during that time.

Type of training. The general content of training was assessed by asking to what extent are the skills provided also useful to other employers, for both employee and manager training. The response options were (1) not at all, (2) to

some extent, and (3) to a great extent. Additional items assessed the extent to which the formal training was used to teach (1) or provide skills or knowledge specific to the organization, (2) remedial skills in literacy, arithmetic, or English language, (3) communication or interpersonal skills, (4) team work skills, (5) computer skills, (6) safe use of equipment or tools, (7) diversity sensitivity, and (8) management skills. The same 3-point rating scale was used.

Analyses

Organizational characteristics describing the sample are listed in a table and consist of percentages. Means and standard deviations of all items are also shown in a table. All data were examined for outliers and upon discovery that organization was dropped from further analysis.

Data were analyzed separately by employee type to test the hypotheses. An analysis was run for the employee information and again for the manager information as all questions were answered separately for each group. In this study, the response scales were ordinal, but interval scales are recommended for multiple regression procedures. However, support has been shown for allowing this type of non-interval data to be acceptable (Lea, 1997). The gaps between the response rankings were assumed to be the same size (Garson, 2010).

For hypothesis testing, a multiple regression equation was calculated to answer all three hypotheses. For the organization, promotion from within will be partially explained by the number of hours of formal training provided in the last two years (H1), the importance of filling vacancies with current employees (H2),

and by the general skills variable indicating the skills targeted by training were relevant for any organization (H3). Contributions to the regression equation were considered significant at $\alpha < .05$.

Exploratory analyses. Exploratory regressions were run to further identify and explain the impact of type of training. The first exploratory regression included all 8 of the training types as the independent variables and the hours of formal training provided as the dependent variable. The training types were then included in the next step as the independent variables to explain the variance in frequency of promotion in the organization, the dependent variable.

Since the data were gathered from a representative of the organization who answered questions for both employee and manager training and hiring practices, Exploratory Analysis 2 was examined by using a paired samples t-test. All study variables for the organizations were examined comparing type of employment (employee or manager). The subsample used for this analysis consisted of organizations that reported training data for both groups.

CHAPTER III

RESULTS

Prior to analysis, data were examined to determine whether there were problems that should be addressed. For both the employee and manager groups, cases with missing data were identified and removed. Missing data was defined as user-missing data where the user's response to an item was blank or coded as refused to answer (RA), didn't know (DK), or not applicable (NA).

Consideration was given to imputation of the missing data, which constitutes leaving in the cases and using estimation methods to create multiple simulated values to fill in the missing data. Since almost half of the cases responded with not applicable for hours of training, imputing would potentially affect the results, as it is hypothetical data or best guess (Garson, 2008). The missing data were then removed listwise since the majority of the missing values were in frequency of promotion, the dependent variable, and the number of hours of training. Though listwise is usually recommended only for small amounts of missing data, pairwise deletes cases that are missing just within the particular analysis (Garson, 2008). For this study, all three hypotheses were combined into a simultaneous regression, so listwise deletion was used.

Final Sample

For the employee group, of the 560 cases that provided formal training to employees in the previous two years, 86 cases were removed for missing data

on the frequency of promotions. Another 341 were removed for missing values on the hours of training. Finally, 3 cases were removed for missing data on skills useful to other employers. Thus 430 cases were dropped from the sample, retaining only approximately 25% of the employee group at 130 cases. For the 295 manager group, 177 cases contained missing data and were removed using the same considerations. Frequency of promotion had 6 cases with missing values, 159 cases had missing values for hours of training, 1 case for skills useful to others employers, and 1 case for importance of training in promotion were also removed. After deletion of the cases, data on the remaining 118 organizations (approximately 40% of the original group) remained for the manager group.

The analysis was to be conducted on an employee sample of 560 cases and a manager sample of 295 cases. Once the data were analyzed for missing values the cases were reduced to 130 for employees and 118 for managers. With such a large reduction in cases, descriptive statistics were run on the original sample to compare against the subsample for potential bias.

As can be seen in Table 1, the subsample largely reflected characteristics in the original sample of organizations that had provided training in the preceding two years. For example, between the two samples organization size was within a 3% difference, profit/non profit was within 5%, union representation within 5%, and the type of work the organization does was within 2% difference. Given the

similarities in these findings, it appeared that the subsample may be representative of the larger sample.

The data in Table 1 also allow a general comparison between the employee and manager groups. Both groups were similar according to the organizations' characteristics. The percentage of nonprofit organizations was similar within 5%, union representation was within 5%, type of work the organization does within 3%, and also in organization size with the majority having fewer than 500 full time employees which was within 1% difference between groups.

Table 1

Frequencies for Demographic Data

Variable	<u>Original Sample</u>				<u>Subsample</u>			
	<u>Employee</u>		<u>Manager</u>		<u>Employee</u>		<u>Manager</u>	
	<i>n</i>	Percent	<i>n</i>	Percent	<i>n</i>	Percent	<i>n</i>	Percent
Profit Making								
For Profit	373	66.6%	199	67.5%	80	61.5%	77	65.3%
Non profit	187	33.4%	96	32.5%	50	38.5%	41	34.7%
Unionized								
Union	168	30.1%	96	32.7%	33	25.4%	36	30.5%
No Union	391	69.9%	198	67.3%	97	74.6%	81	68.6%

(table continues)

Table 1 (continued)

	<u>Original Sample</u>				<u>Subsample</u>			
	<u>Employee</u>		<u>Manager</u>		<u>Employee</u>		<u>Manager</u>	
	<i>n</i>	Percent	<i>n</i>	Percent	<i>n</i>	Percent	<i>n</i>	Percent
<hr/>								
Type of Work								
Manufacturing	75	13.4%	52	17.6%	18	13.8%	21	17.8%
Provide Service	330	58.9%	165	55.9%	75	57.7%	64	54.2%
Both	144	25.7%	76	25.8%	34	26.2%	32	27.1%
Neither	11	2.0%	2	0.7%	3	2.3%	1	0.8%
<hr/>								
Full Time Employees								
1-100	259	47.4%	107	37.1%	57	44.5%	44	37.3%
101-500	122	22.3%	69	24.0%	32	25.0%	29	24.6%
501-1000	47	8.6%	36	12.5%	11	8.6%	17	14.4%
1001-5000	92	16.9%	59	20.5%	22	17.2%	21	17.8%
Over 5000	26	7.8%	17	5.9%	6	4.7%	4	3.4%
<hr/>								

Frequencies, means, and standard deviations for each of the study's main variables were also calculated in order to better describe the sample. The table is split by the employee type to allow comparison across groups. The manager group has more hours of training and a slightly higher promotion rate, yet less importance was placed on the role of training in promotions. These data are presented in Table 2.

Table 2

Mean and Standard Deviation (SD) for Variables

Variable	<u>Employees</u>		<u>Managers</u>	
	Mean	SD	Mean	SD
Hours of Formal Training	35.49	47.27	40.49	56.50
Importance of Training in Promotion	3.25	.85	3.08	.89
Training Useful to Other Employers	2.45	.67	2.65	.55
Frequency of Promotion	2.80	.75	3.00	.91

Note. Employee Group $N = 130$, Manager Group $N = 118$

It was important to assess the relationships among the variables due to the potential for collinearity. The correlations are shown in Tables 3 and 4 for employees and managers, respectively. As shown in the tables, some correlations were statistically significant. However, as only low correlations were found, with a high of .24 in the employee group and of .15 for the manager group, the interrelationships would not pose a problem for data analysis.

Table 3

Correlations of the Independent and Dependent Variables – Employees

Variable	Hours	Importance	Skills
Hours of Training	-		
Importance of Training in Promotion	-.00	-	
Skills Useful to Other Employers	.24**	.16*	-
Frequency of Promotion	.22**	.07	.06

Note. $N = 130$, * $p < 0.05$, ** $p < 0.01$

Table 4

Correlations of the Independent and Dependent Variables – Managers

Variable	Hours	Importance	Skills
Hours of Training	-		
Importance of Training in Promotion	.15*	-	
Skills Useful to Other Employers	.09	-.08	-
Frequency of Promotion	.05	-.02	.12

Note. $N = 118$, * $p < 0.05$, ** $p < 0.01$

Full Tested Hypotheses

Multiple linear regression was the appropriate way to address the study hypotheses because it allowed the determination of a change in an outcome variable given the change of predictor variables, given at least one is a fixed

measure (Howell, 2002). Because hierarchical regression procedures include analysis of change and variables can be ordered as hypothesized, only one regression equation was needed for all hypotheses within each group. Tables 5 and 6 report the results for the employee and manager groups, respectively.

Hypothesis 1, stating that *hours of formal training opportunities were expected to contribute positively to the frequency of internal promotion*, produced mixed results. The regression results supported the hypothesis for the employees, but not for the managers. In the initial step of the equation for employees, hours of training was found to significantly and positively contribute to the frequency of promotion in the organizations. However, with such a small amount of variance accounted for, the contribution was not sufficiently strong to allow the overall equation to be significant.

Table 5

Hierarchical Regression Results for Frequency of Promotion – Employees

Variable	β	<i>b</i>	<i>R</i>	<i>p</i> <	$R^2 \Delta$	<i>p</i> Δ
Model <i>R</i> = .23, R^2 = 5.1%, ns						
Hours of Formal Training	.22*	.00	.22	.05	.05	.05
Importance of Training in Promotion	.07	.06	.23	ns	.00	ns
Trained General Skills	.00	.00	.23	ns	.00	ns

Note. *N* = 130, * *p* < 0.05

Table 6

Hierarchical Regression Results for Frequency of Promotion – Managers

Variable	beta	b	R	p <	R ² Δ	p Δ
Model R = .13, R ² = 1.7%, ns						
Hours of Formal Training	.04	.00	.05	ns	.00	ns
Importance of Training in Promotion	-.02	-.02	.06	ns	.00	ns
Trained General Skills	.12	.19	.13	ns	.01	ns

Note. N = 118

The regression equation also addressed Hypothesis 2. The second hypothesis predicted that *high importance placed on training for promotions within the organizations would contribute to the frequency of internal promotion*. When the importance item was added to the regression the hypothesis was not supported for either the employee group or the manager group.

Finally for H3, the regression equation addressed whether the final hypothesis predicted that *hours of formal training opportunities provided by organizations that focus on general skills would contribute positively to the frequency of internal promotion*. Again, neither the employee nor manager group results supported the hypothesis, therefore the overall equations were not significant.

Exploratory Analyses

Exploratory analyses were conducted to further understanding about the training of employees and managers within organizations. The contribution of

different types of training type on the hours of training and importance in promotions were analyzed. The differences between the employee and manager groups were also examined. The correlations for the training types are shown in Tables 7 and 8 for employees and managers, respectively.

The first exploratory analysis was a multiple regression equation conducted to determine if any of the skills training types were considered more useful to organizations than other types of training. The 8 types of skills training were entered separately into the regression as the independent variables with hours of training as the dependent variable. The different training types consisted of teaching skills such as those that were specific for the job, remedial, communication, team work, computer, equipment safety, diversity, and management. These results are shown in Tables 9 and 10 for employees and managers, respectively. For the employee group, the only training type that was found to be significant for hours provided was training that focused on skills specific to the job. For managers, none of the training types made a significant contribution to hours provided by the organization.

Table 7

Correlations of Training Types for Employee Group (N = 130).

Variable	1	2	3	4	5	6	7	8	9
1. Hours	-								
2. Importance	.00	-							
3. Specific Skills	.24**	.25**	-						
4. Remedial Skills	.19**	.03	.30**	-					
5. Communication Skills	.07	.24**	.26**	.41**	-				
6. Team Work Skills	.08	.27**	.22**	.21**	.59**	-			
7. Computer Skills	-.01	.21**	.10	.20**	.20*	.21**	-		
8. Safe Equipment Skills	.13	.05	.17*	.14*	.06	.12	-.07	-	
9. Diversity Skills	.02	.17*	.09	.31**	.41**	.32**	.14	.22**	-
10. Management Skills	-.02	.18*	.24**	.24**	.44**	.42**	.31**	.17*	.34**

Note. *p < .05, **p < .01

Table 8

Correlations of Training Types for Manager Group (N = 118).

Variable	1	2	3	4	5	6	7	8	9
1. Hours	-								
2. Importance	.15	-							
3. Specific Skills	.12	.19*	-						
4. Remedial Skills	.04	.14	.29**	-					
5. Communication Skills	.02	.09*	.24**	.19*	-				
6. Team Work Skills	.12	.24**	.30**	.17*	.72**	-			
7. Computer Skills	.19*	.21*	.29**	.04	-.07	.09	-		
8. Safe Equipment Skills	.24**	.11	.34**	.23**	.17*	.01*	.25**	-	
9. Diversity Skills	.10	.15	.29**	.34**	.37**	.41**	.10	.42**	-
10. Management Skills	.09	.37**	.10	.11	.56**	.61**	.08	.20*	.31**

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

Table 9

Contribution to Total Training Hours by Training Types – Employees

Variable	β	<i>b</i>	<i>R</i>	<i>p</i> <	$R^2 \Delta$	<i>p</i> Δ
Specific Skills	.20	16.12	.24	.05	.06	.05
Remedial Skills	.16	10.12	.27	ns	.02	.ns
Communication	-.02	-1.44	.27	ns	.00	ns
Team Work	.07	4.95	.28	ns	.00	ns
Computer	-.02	-1.22	.28	ns	.00	ns
Safe Equipment	.09	5.53	.29	ns	.00	ns
Diversity	-.04	-2.81	.29	ns	.00	ns
Management	-.12	-7.46	.31	ns	.01	ns

Note. *N* = 130

Table 10

Contribution to Total Training Hours by Training Types – Managers

Variable	β eta	<i>b</i>	<i>R</i>	<i>p</i> <	$R^2 \Delta$	<i>p</i> Δ
Specific Skills	.01	1.02	.12	ns	.02	ns
Remedial Skills	-.02	-1.61	.12	ns	.00	ns
Communication	-.10	-9.11	.12	ns	.00	ns
Team Work	.14	12.21	.18	ns	.02	ns

(table continues)

Table 10 (*continued*)

Variable	β	<i>b</i>	<i>R</i>	<i>p</i> <	<i>R</i> ² Δ	<i>p</i> Δ
Computer	.11	9.30	.22	ns	.02	ns
Safe Equipment	.21	15.16	.29	ns	.03	ns
Diversity	-.02	-1.58	.29	ns	.00	ns
Management	.02	1.50	.29	ns	.00	ns

Note. *N* = 118

Next, the 8 training types were again entered separately as independent variables. This time the purpose was to explain the importance placed on training for promotions, the dependent variable, in order to determine if certain training types were considered more critical than others. These results are shown in Tables 11 and 12 for employees and managers, respectively. For the employee group, again only the specific skills training made a significant and positive contribution. For the manager group of training types, only the training that focused on management skills was significant and positive.

Table 11.

Contribution to Importance of Training by Training Types – Employees

Variable	β	<i>b</i>	<i>R</i>	<i>p</i> <	<i>R</i> ² Δ	<i>p</i> Δ
Specific Skills	.22	.32	.25	.05	.06	.05
Remedial Skills	-.17	-.19	.26	ns	.00	ns

(*table continues*)

Table 11. (continued)

Variable	β	b	R	$p <$	$R^2 \Delta$	$p \Delta$
Communication	.11	.14	.33	ns	.05	ns
Team Work	.14	.19	.36	ns	.02	ns
Computer	.17	.18	.39	ns	.02	ns
Safe Equipment	.01	.01	.39	ns	.00	ns
Diversity	.10	.12	.40	ns	.01	ns
Management	-.02	-.03	.40	ns	.00	ns

Note. $N = 130$

Table 12

Contribution to Importance of Training by Training Types – Managers

Variable	β	b	R	$p <$	$R^2 \Delta$	$p \Delta$
Specific Skills	.11	.17	.19	ns	.04	ns
Remedial Skills	.09	.14	.21	ns	.01	ns
Communication	-.03	-.05	.25	ns	.02	ns
Team Work	-.01	-.01	.28	ns	.02	ns
Computer	.15	.20	.33	ns	.03	ns
Safe Equipment	-.05	-.06	.33	ns	.00	ns
Diversity	-.01	-.01	.33	ns	.00	ns
Management	.37	.58	.43	.01	.08	.01

Note. $N = 118$

Another interesting issue addressed through an exploratory analysis, was the degree to which training and promotion differed for employees and for managers. A series of paired sample *t*-tests were conducted to identify any differences. The results including correlations are shown in Table 13.

Table 13

Paired Samples Test for Employee Group to Manager Group

Paired Samples	<u>Employee</u>		<u>Manager</u>		<u>Pair</u>		
	Mean	SD	Mean	SD	r	t	p <
Frequency of Promotion	2.89	.85	2.98	.98	.35**	-.73	ns
Hours	215.46	352.33	144.05	292.95	.29*	1.46	ns
Skills Useful to Others	2.49	.74	2.59	.59	.14	-.86	ns
Importance of Training	3.24	.85	3.19	.80	.28*	.13	ns
Specific Skills	2.51	.50	2.41	.56	.16	1.10	ns
Remedial Skills	1.52	.69	1.33	.60	.43**	2.19	.05
Communication Skills	2.25	.62	2.59	.59	.38**	-3.80	.00
Team Work Skills	2.43	.53	2.60	.58	.46**	-2.38	.05
Computer Skills	2.21	.72	2.22	.66	.48**	-.18	ns
Safe Equipment Skills	2.35	.72	2.03	.76	.39**	3.07	.01
Diversity Skills	2.24	.62	2.29	.61	.46**	-.60	ns
Management Skills	2.00	.74	2.68	.56	.19	-6.46	.00

Note. N = 63, **p* < .05, ***p* < .01

The sample was reduced to 63 cases for comparison where the representative of the organization reported data for both employee and manager groups within the organization. The paired samples t-tests found significant differences on five of the twelve types of training. No differences were found for the primary variables in the study (training hours and importance, and frequency of promotion). More training was reported for employees than managers in terms of remedial skills and equipment safety. In contrast, more communication, team work, and management skills training was reported for managers than for employees.

In this section, the results of the data analyses were presented. Though the sample was greatly reduced given missing values in the archival database, the subsample was diverse and similar to the larger sample in population. A significant relationship was found for the employee group in hours of training to frequency of promotion, but the same was not found for managers. The other main hypotheses were not supported. The exploratory analyses revealed multiple significant relationships between the training types and hours as well as importance of training in promotions. Finally, the employee and manager groups were compared and although there were no significant differences in regards to the main variables there were differences in the types of training provided. In the following section these results are discussed.

CHAPTER IV

DISCUSSION

The purpose of this study was to expand knowledge of training within organizations. With an inconsistent use of training across organizations and a difficulty in evaluating the true value it brings, it is vital to shed light on any and all contributions it makes. Only approximately half of organizations provide training to expand the skill set of employees (IOMA, 2004), and of those who do, most executives see it as an expense to reduce when needed (Dela Cruz, 2004). Specifically, this study was designed to address the relationships between training and internal promotions. In proper use, training and promotions separately can engender tangible and intangible benefits that affect the success of organizations and their employees. The data presented in this study make a contribution toward understanding the role of training at the organizational level.

The study had three main hypotheses. Hypothesis 1 predicted promotion from within would be partially explained by the number of hours of formal training provided in the last two years, which was weakly supported for employees but not for managers. Hypothesis 2 predicted promotions from within would be partially explained by the importance of training in promotions of current employees and managers, which was not supported for either group. And Hypothesis 3 predicted promotions from within would be partially explained by

the general skills variable indicating the skills targeted by training were relevant for any organization, which was not supported by the results for either group.

The exploratory analyses were run to further discover the impact of the training variables and the differences between training for the employee and manager groups. It seemed as if some of the 8 types of training would be considered more useful than other types. Training that provided skills specific to the job was associated with the number of training hours provided to employees. No associations were found for managers. The analysis also examined the importance placed on training in promotions to determine if certain training types were considered more important than others. For the employee group, specific skills training was significant, and for managers, management skills training was significant.

The final set of analyses investigated differences between employee and manager training and promotion rates. There were significant differences on five of the twelve types of training. More training was reported for employees in terms of remedial skills and safety than was given to managers. In contrast, more communication, team work, and management skills training was reported for managers than employees.

Study Hypotheses

It should be noted that after examination of the data, a restriction in range was observed. For the variables of importance of training in promotions, general skills training, and frequency of promotion, the standard deviations were less

than .85. This restriction could have caused the weak or lack of significance due to the small range of variance. Despite this issue the researcher decided to continue with the study.

The first hypothesis was posed to determine if there was a base relationship between the hours of formal training provided by an organization to its workforce and the frequency of internal promotions. This study provided support, though limited, for the hypothesis in the employee group. The results for employees aligned with findings in previous literature. Past research showed that training contributes to improvements in job performance and organizational performance (Agunis & Kraiger, 2009; Boselie & Dietz, 2003). which are also potential predictors of promotability (London & Stumpf, 1983; Greenhaus et al., 1990; Van Scotter et al., 2000; Wayne, Liden, Graf, & Ferris, 1997). Though limited, finding the association between training hours and internal promotion begins to develop a link from training to internal promotions. Training provides participants with new knowledge, skills, and abilities either specifically for the job or for professional and personal development. These tasks challenge employees with new experiences in order to grow, develop, and practice new skills in a safe training environment with feedback and coaching. As training has been shown to improve performance, and performance is a predictor of promotability, then one reason for the finding could be that knowledge, skills, and abilities learned in training improve the talent at the organization and allow for more internal promotions.

This support for Hypothesis 1 was only found for the employee group. Even though the managers had slightly more hours of formal training than employees, and had a higher frequency of promotion, the differences were not significant, and do not help explain finding the association in only the one group. A reason for this result could be that organizations which provide more hours to manager training may not be the organizations that have the higher levels of promotion, or vice versa. It was shown that the manager group had a lower average level of importance of training in promotions which aligns with the notion that even though the organizations are providing the hours of training it is not a key element of how they select candidates for promotion. Such a disconnect could stem from low quality training that does not meet objectives. Objectives in training are developed to identify the knowledge, skills, and abilities that the learners should attain in the course. If the training does not truly meet objectives, it could lead to a lack of desired performance improvement. Or perhaps the objectives developed and trained to do not map properly to job descriptions or hiring practices. Therefore the training works it just is not providing the right knowledge, skills, or abilities to improve promotability to higher level job functions.

The rationale for Hypothesis 2 was that an organization which identifies the importance of training as a factor in promoting its employees would then ensure that there were ample amounts provided to the talent and in turn have a higher frequency of promotion. However, no support was found for the

hypothesis for either group. Perhaps it is that only a small amount of well focused, quality training needed for growth is important in promotions, and training overall is not perceived as a key factor in promotions. The various training that takes place throughout an organization over two years could be expansive and much of it viewed as invaluable. And as previously discussed, training provided may not translate into skills needed for higher level positions and therefore not seen as important in, or leading to, promotions. Potentially the skills addressed in training were so specific for the employee's current job performance that they do not convert to other job functions or positions within the organization. This could result in training that is not targeting needed skills for higher job levels leaving unqualified candidates.

The third hypothesis was proposed to determine the contribution of general skills training to internal promotion frequency. As there has been debate in the literature around the effects of general versus specific skills training, the purpose was to determine whether training of general skills predicted the most variance in the analysis of promotions. The hypothesis was not supported for the employee group or the manager group. The fact that there was no support for this hypothesis was not completely unexpected as noted in the mixed results of past research. With studies that have shown general skills lead to employees leaving an organization (Lynch, 1991), and that specific skills negatively impact job mobility (Lowenstein & Spletzer, 1999), one could argue that promotion would be based on skills that transcend one type of job or department, and therefore

general skills would be more effective. But it seems that with the results of this study specific skills were equal in the relationship and so further research is needed to look closer at this inconsistency.

Exploratory Analyses

Exploratory analyses were conducted to get a better perspective on the impact of the different training types provided by the organizations. The types of training studied focused on skills that were specific to a particular job, remedial, communication, team work, computer, equipment safety, diversity, or management based. The following discussion merely speculates as to the potential drivers behind the results.

The first analysis explored the extent to which each of the 8 types of training was given more hours across organizations. For the employee group, the only type of training found to significantly contribute to the number of hours trained by the organization was on job specific skills. This could possibly suggest that for employees a primary focus of training is on skills vital to the employee's current position and performance. The reason for this could be due to decision makers in the organization perceiving a lesser need to provide professional development training to non-managers. It could also be linked to return on investment, with specific skills more closely in relation to monetary returns. Improving skills specific to a job function improves performance which is easy to connect to the bottom line. General skills are transferable to jobs at other organizations. Consequently, such skills may not have a direct link with improved

performance or revenue, and, therefore, could be seen as more of an “extra,” a nice benefit for the employee, not something necessarily for job performance. One last thought is that the lack of the general skills training is related to the fear that if the organization provides these skills to the bulk of the workforce it would increase turnover. As previously discussed, general skills are those which are useful to more than one organization and as employees gain them they would become increasingly marketable to other companies.

The same analysis was run for the manager group and none of the training types returned significant relationships to hours of formal training. This was very interesting to uncover that the hours were more evenly spread across the different skill areas trained not elevating one or two as more important. Perhaps organizations see the management staff as being more valuable and work to ensure they get not only specific skills training and management skills training, but also training that develops them personally and professionally across the board.

The second part of the exploratory analysis entered the 8 training types into another regression against importance of training in promotions. For the employee group, there was only one training type that was significant and again it was the specific skills training. This was an interesting finding because it showed an alignment for the organizations. Specifically, the training that was provided significantly more to employees was to teach the same skills that were valued highest in importance of training in promotion. This finding leads to the

idea that the organizations promote based on the performance of these specific skills in the current job instead of skills for success across positions.

For the manager group, there was also only one significant type of training, that which focused on management skills. Since management skills training showed to positively contribute to the importance of training in promotion, the speculation could be made that perhaps the management skills taught were ones that create the biggest return on investment to the organization for the training costs. And possibly promotions are based on the attainment of these skills.

The last exploratory analysis performed investigated differences in the results for the employee and manager groups. The t-tests failed to reveal differences on training hours provided, usefulness of skills to other employers, importance of training in promotion, and frequency of promotions. This lack of difference was somewhat surprising. Given that Hypothesis 1 showed mixed results for the groups and the differences among contribution of the different training types it was considered likely that these two groups would show differences across the study's main variables. The results may be partially attributed to the reduced sample size necessary when comparing training for both groups. This reduced the sample size down to 63 cases. Such a reduction could be why the differences failed to show significant and should be taken into consideration.

On the other hand, there were differences for five types of skills training. The employee group was provided with more remedial skills training, and more safe equipment skills training than the manager group. The managers in comparison were provided with training significantly more focused in communication skills, team work skills, and management skills. The results of the t-tests showed that employees' training focuses more on specific skills needed for improved performance of current job functions. The employees received more specific and remedial skills training than did the managers. Computer skills and diversity skills training showed no significant differences between the groups, which follows logic in that those are needed skills for job performance requirements for both employees and managers. The remaining skill types trained, communication, team work, and management skills were provided significantly more for managers of the organizations. These could be viewed as general skills that transcend one particular job or organization, but it could be possible that these are specific skills needed for sufficient performance of the job of manager.

Strengths and Limitations

As with any study there are strengths and limitations. These should be explored in order to further understand the implications of the results and future directions of research. This study had its own set of each which are discussed here.

Use of the National Organization Survey (1996-1997) archival data was a strength. Use of these archival data was a strength because they are real world data from functioning organizations. The sample was large, diverse in size, business type, and location, which might have been outside the reach of data collection capabilities for a typical dissertation. There were also multiple data points regarding training and hiring practices broken town by employee type, which allowed the study to focus in on the desired information needed for the hypotheses.

In contrast, limitations of this study include the use of archival data, a largely reduced subsample, and the use of self-report measures. First, the use of archival data has disadvantages: 1) the data collected was varied and valuable, but this study had to rely on what the original researchers intentions were and did not have control over how data was collected, or over what measures and variables were included, 2) important data may be missing from the records, and 3) the previous research may be unreliable.

Before the data analyses were conducted, the data were reviewed for missing values. Close to 75% of the cases for employees and 50% of the cases for managers were missing values mostly in the hours of training provided variable, with additional cases having missing values in the other main variables. For this study the cases were removed completely. Therefore, the number of viable cases remaining greatly reduced the sample for both groups. Given the requirements of the analyses and the potential issues with pairwise deletion and

imputation of the missing values, listwise deletion was the most viable option. Upon further review, the remaining cases were compared to the original sample and were extremely similar, with differences in characteristics of less than 5%. However, it should also be noted that deletion of the cases can introduce bias and considerably reduce the statistical power of the study (Garson, 2008).

When considering the generalizability of the findings, several potential limitations should be noted. The study relied upon representatives of the organization to report data on items, as they perceived it, through survey questionnaires and phone interviews to assess the impact of training on promotion of employees to higher level positions. Though there is considerable data showing that these measures can be accurate (Spector, 1992), reliance on perceived data for the measurement of both dependent and independent variables raises concern. The concern focuses on the validity for a variety of reasons, including response bias, method variance and common method bias, and the psychometric properties of questionnaire scales. The response bias in perception report methodologies refers to the point that subjects tend to report what they think the researcher wants to see, or provide responses that make their own abilities, knowledge, or opinions appear better than reality (Cook & Campbell, 1979). Though the individuals who responded were doing so for the organization and therefore may be more honest than if reporting about themselves, individuals identify with and define themselves by the organization in which they belong so the same complications may be seen (Mael & Ashforth,

1992). Another concern is whether the representative of the organization completing the survey was able to accurately recall the training practices over the last two years, as relying only on the memory makes this data questionable. The study also relied on a single item to assess each variable and given the fact that these were perceived reports this could have contributed to the lack of significance in the findings.

Finally, the study focused on the training and promotion variables at a general level inside organizations. It could be that the relationship between training and promotions is present to a greater degree in connection to specific individuals. Using the organizational level of analysis limits the interpretation of the findings. To avoid this employees and managers would have to have been the case level instead of the organizations.

Future Research

The findings in this study further the discussion on training and internal promotion practices. Organizations constantly struggle with determining return on investment of each of these and even the smallest contributions to understand the links is important. But if training is going to be seen for the true value it brings, then more still needs to be researched and explored on these topics to determine the full implications of this relationship and others with training.

For those researchers who continue to study these variables, a few thoughts. Self-report data are a great resource for gathering vast amounts of information with fewer resources used, but future research using this should be

followed up by, or combined with, more rigorous methods of data collection such as observations and review of actual reports and records. This would allow for strengthened results and conclusions to be drawn from the data.

Based on the results of this study, a number of issues could be addressed in future research. First, it seems logical that the next step would be to test a model that includes the other major predictors in selection for promotion within an organization. This would allow a perspective on how training impacts the model when combined with variables such as current performance, tenure at the company, etc., and discover how it truly compares against those predictors.

As training might not be a significant predictor in the promotion of an employee to a higher level position, what about to the promoted employee's success in the job? In the future it would be beneficial for organizational research to study which factors account for the largest amount of variance in the success of employees promoted to jobs within the company. Questions to address include; which predictors are the most significant? How do the different types of training impact that success?

Also, as identified in the limitations of the study, the research presented in this study was focused at the organization level instead of at the individual employee or manager level. Though looking at organization level data is valuable for many reasons, it would definitely benefit companies to see research findings from studies focused on the individual and allow for more interpretation of the findings than seen at the organizational level. Drilling down to the

individual level to follow more closely the impact of training on the employee their success and their escalation through a career path at the organization could shed insight on factors not yet studied.

Lastly, there are a multitude of factors that impact the success and learning transfer for a training event. It is about more than just the time employees spend in training, but also about the quality of it. Additional factors associated to training should be explored in the relationship to internal promotion. Factors that could be important include those such as delivery type (classroom led, virtual classroom, blended learning, case study), level of application of skills (knowledge transfer, etc), and types of activities used (real world, role plays, case studies). Assessing the level of challenge of the tasks in the training and then following those individuals to review promoted versus not promoted may provide a deeper level of insight and a stronger causal link back to training.

Practical Implications

Though the findings presented in this study mostly do not support the hypotheses as predicted, organizations should not give up on training efforts. As future research will continue to be conducted on these topics, organizations should take a look at what they can do to support training efforts and receive improved return on investment. There is a relationship from training to promotions at least for employees and that should be taken into consideration. To make the most of this link, organizations should map competencies of the job to training objectives and also to hiring practices. This will support alignment and

drive strengthened training development and utilization for improved results. The findings from the study did not lend support to the idea that general skills training increases turnover of employees to other organizations or even promotions. Companies should take this information and feel comfortable in providing this type of training to develop its workforce personally and professionally. This way they can reap some of the rewards discussed in the literature review around improvements in areas such as organizational commitment, yet be less fearful of pushing employees out the door.

Conclusion

On the whole, most of the findings from the study did not support the main hypotheses. Employee training hours were in fact somewhat related to frequency of promotions, but not for managers. Importance of training in promotions was not contributory to frequency of promotions for either managers or employees. And general skills training did not significantly contribute to promotion for either group. But lack of, or divided support still sheds light on the subject. Employees and managers may require more training to maintain performance and move up in the organization than provided. And since there was no support that general skills training makes a difference to promotion frequency, then there is still more to be examined to end the debate on specific versus general skills in relation to job mobility.

On the other hand, the exploratory analyses in the study highlighted contributions for some types of skills training. It was determined which type of

skills training was more important in terms of hours provided, specific skills for the employee group, and shown to be more important in promotion than others, which were the specific skills again for the employee group and management skills for the managers. And even though management received significantly more training in general skills they did not have more internal promotions, so in another way refutes the study's Hypothesis 3 on general skills training.

In conclusion, the findings of the current study provide a look at organization training and internal hiring practices that have not previously been much of a focus in the literature. Most importantly, executives in organizations responsible for making decisions on training investments or reductions need to be fully aware of the value in training as well as in internal promotions and the benefits they each bring. Research will continue to examine the depth of the return on investment as well as the specifics that contribute most to its success.

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