

A Model Hypothesizing the Effect of Leadership Style on the Transfer of Training

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Abstract

The purpose of this paper was to undertake a comprehensive review of Kirkpatrick's four-level evaluation model. Included was a brief discussion on the additions that have been suggested by critics attempting to make it more responsive to training practitioners' needs as well as researchers' inquiries. Also included is a contrast of Kirkpatrick's model with the expanded model offered by Holton (1996) and a discussion of several key areas of agreement with his model as well as areas of concerns with Holton's criticism of Kirkpatrick's four-level model. This article also discussed the relationship of two key factors, not widely examined in the transfer of training literature that could impact the transfer of training to the workplace, namely trainee attributes and the supervisory role in training transfer as affected specifically by a manager's degree of transformational leadership. A model depicting the balance between these two factors on training transfer was presented in an attempt to assist training professionals seeking to further understand the effects of this interaction on training transfer. Several recommendations were suggested to help training practitioners. Finally several recommendations were given for future studies.

Introduction

The transfer of training and the subsequent evaluation of training transfer have become an increasing concern for human resource development (HRD) professionals. Organizations are becoming more sensitive to the costs incurred by training, and are attempting to focus greater attention on ways of enhancing job performance resulting from training interventions. In his book *Transfer of Learning*, Haskell (2001), estimated that American companies spend over four billion dollars annually on training hardware, materials, seminars, conferences, and consultants. As sizable as this figure may be, it doesn't include expenditures associated with in-house staff and equipment which, when considered altogether raises this estimate of total annual expenditures for training in the United States to approximately \$70 billion. Unfortunately, the most commonly cited estimates suggest that only 10% of learning, transfers into job performance. As one author noted, a substantial part of organizations' investment in human resource development is wasted due to poor learning transfer (Holton & Baldwin, 2003). At the same time that American organizations are becoming more critical of training costs, there has never been a more important time for these same organizations to capitalize on the rapid advancements in technology characterized by the transition from the industrial age to the information age. Nowhere has this proliferation of technology taken place at a faster pace than within the field of agriculture. The introduction of genetically derived seed traits for insect and weed control as well as technology enabling the delivery of more crop inputs directly on the seed have taxed producers' ability to make informed purchase decisions for their farming operations. The rapid introduction of these same technologies have also taxed technical professionals tasked with advising producers on such decisions making the understanding of training transfer today more important than ever.

Broad and Newstrom (1992) defined the transfer of training as the effective and continuing application, by trainees to their job, of the knowledge and skills gained in training, both on and off the job. Simply stated, transfer of training asks, to what degree was learning from a program applied to the workplace? Traditionally, the Kirkpatrick Four-level evaluation model has been used as a guideline by human resource professionals to answer this question (Kirkpatrick, 1976). However, in recent years this model has come under intense scrutiny because of its perceived limitations as a hierarchical model. There has been an increasing criticism to move away from or at least beyond Kirkpatrick's basic four-level model for identifying and targeting training-specific evaluation effects by reaction, learning, behavior, and results (Kirkpatrick, 1979). In addition, there are a number of factors that can influence transfer of training to the work

environment: trainee characteristics, training design, and the work environment itself (Noe, 1999). Training design included characteristics of the learning environment, such as the materials, opportunities to practice, providing feedback, development of learning objectives, and program organization (Colletti-Mangan, 2003). Work environment included factors on the job that can influence the application of learned skills, such as manager support, peer support, proper technology, and the opportunity to utilize new skills (Noe, 1999). Finally, trainee characteristics referred to the ability and motivation that affect learning. These factors can make it difficult to interpret transfer of training evaluation results.

Purpose and Objectives

No paper on factors affecting training transfer would be complete without a basic review of Kirkpatrick's four-level evaluation model. Included will be a brief discussion on the additions that have been suggested by critics attempting to make it more responsive to training practitioners' needs as well as research inquiries. In addition, this paper will include a contrast of Kirkpatrick's model with the expanded model offered by Holton (1996) and a discussion on several of the key areas of agreement with his model as well as areas of concerns with Holton's criticism of Kirkpatrick's four-level model. Also this paper will discuss the relationship of two key factors, not widely examined in the transfer of training literature that could impact the transfer of training to the workplace, namely trainee attributes and the supervisory role in training transfer as affected specifically by a manager's leadership characteristics. Finally, a model depicting the balance between these two factors on training transfer will be presented in an attempt to assist training professionals seeking to further understand the effect of this interaction on training transfer.

Background

The Kirkpatrick training evaluation model, acknowledged by many practitioners as the industry standard for over 40 years, featured four levels for targeting training evaluation. These levels include: reaction, the simplest level that deals with a trainee's feelings toward the training; learning, defined as the principles, facts and techniques that were understood and absorbed by the participants; behavior change or transfer of learning and the most complex level termed results, defined as the ultimate outcome of the performance intervention; namely, organizational impact (Kirkpatrick, 1979 p.82).

The strength of Kirkpatrick's model is its simplicity, although a criticism often raised is the infrequency of evaluation efforts that actually measure outcomes at

the third and fourth levels (Watkins, Leigh, Foshay & Kaufman, 1998). These authors suggested two primary reasons for this infrequency of use: the lack of skill, knowledge or motivation of performance improvement specialists; and the fact that measurement at these higher levels lack, what they call, responsiveness to the questions posed by today's managers. It is this latter obstacle that ultimately led to the expansion of Kirkpatrick's Four-level model to include estimates of financial returns. Phillips (1996) proposed adding a fifth level to Kirkpatrick's model. This proposed fifth-level converted results to monetary values and compared them with the cost of the program.

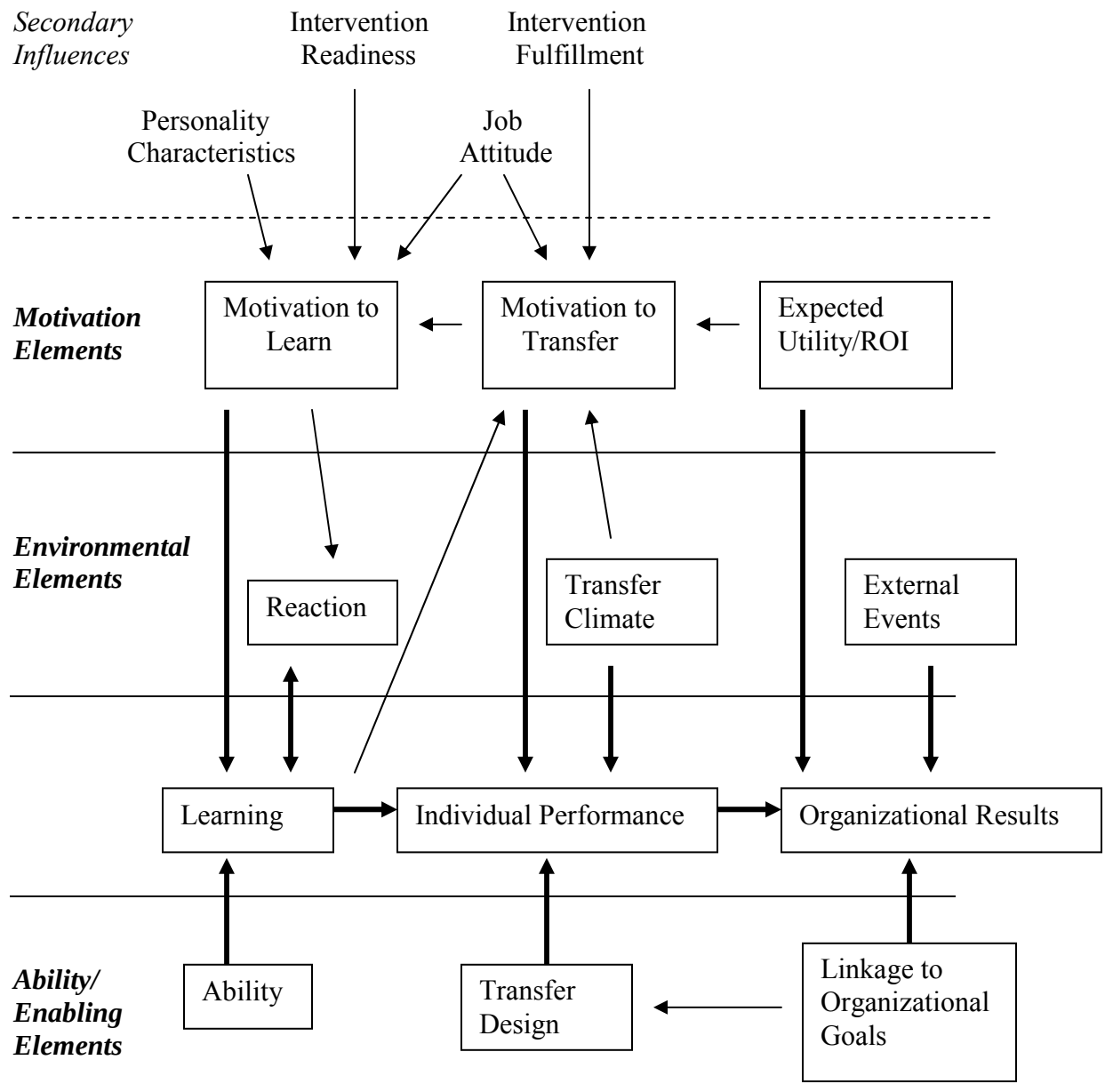
This new level was termed return-on-investment or ROI. Return-on-investment measured whether the monetary value of the results exceeded the cost of the training (Phillips, 1996). While return-on-investment (ROI) measures of training served to expand the usefulness of Kirkpatrick's Four-level model, it was largely a measure only important to an organization's management, internally. Kaufman and Keller (1994) warned that these training models encouraged many evaluation specialists to focus too narrowly on evaluating only training and not take into account estimates of use on the job, organizational performance and most importantly the worth of the organization's deliverables. They suggested an expanded framework to ensure that deliverables were worthy both inside and outside of the organization (Kaufman & Keller, 1994). Kaufman, Keller and Watkins (1995) suggested that Kirkpatrick's Four-level evaluation framework is missing, what they called mega-level evaluation. They recommended adding a fifth level that they termed client and societal consequences and payoffs. Unfortunately, these additions offered more useful tools to management for assessing the organizational success of an intervention but they didn't strengthen the model as a diagnostic tool for training practitioners interested in improving transfer of training to the workplace.

An additional reason suggested for the infrequency of use of Kirkpatrick's model at the higher levels was ability to understand and control the intervening variables that might affect the results. Nowhere has this criticism been expressed stronger than in Holton's (1996) article, where he stated that, research is needed to develop a fully specified and researchable evaluation model to replace the Kirkpatrick model, which he considered flawed. In fact, Kirkpatrick himself pointed out this flaw when he stated that there are so many complicating factors, it is extremely difficult, if not impossible, to evaluate certain kinds of programs in terms of results (Kirkpatrick, 1979, p.89).

Holton (1996) suggested that Kirkpatrick's four-level model was flawed because he considered it to be only a taxonomy, a classification scheme, that lacked

simple causal relationships between levels and did not fully identify all constructs underlying the phenomenon of interest. He claimed that this made validation of the model impossible. In fact, other researchers also failed to demonstrate the implied causal relationship between levels of Kirkpatrick's model (Alliger & Janak, 1985). Furthermore, of those that did report on four-level evaluations with correlations, they found the correlations varied widely, casting doubt on assumptions of linear causal relationships (Holton, 1996). The fact that there was no attempt to measure any intervening variables was pointed to as the likely reason for the wide variation in the correlations reported and was the primary justification given by Holton for establishing his own integrative evaluation model (please see Figure 1) that accounts for the impact of primary and secondary intervening variables.

Figure 1. Holton's HRD Evaluation Research and Measurement Model (Holton, 1996)



Holton (1996) suggested that trainee reactions are not linearly related to learning but instead may act as a moderator or mediator of learning and therefore should not be considered a primary outcome of training. Holton (1996) also suggested that the most glaring shortcoming of the four-level evaluation model was when it

was used as a diagnostic tool; that is, when the intended performance change did not occur or when positive results were not found. In these cases, the only conclusion possible using the constraints of Kirkpatrick's four-level model is that something is wrong with the training program. Holton stated that, through the use of statistical analysis to control for the effects of the intervening variables it might be possible to show an effective program design even when overall scores show poor outcomes. Unfortunately, this possibility does not offer practitioners a simple or very useful tool that could take into account these intervening variables during the training development as well as evaluation design process. On the other hand, there was agreement that there is a complex system of influences on training outcomes that must be identified, understood and taken into account by practitioners and researchers alike if training interventions are to be accurately evaluated.

Holton's model attempted to define this complex system of influencers on training outcomes and differs from Kirkpatrick's four-level model in three basic ways. First, there was no reaction level identified as a primary outcome. Second, the term individual performance replaced behavior. Individual performance was considered a broader construct, and a more appropriate descriptor of human resource development objectives. Most noteworthy though, was the inclusion of primary and secondary influences on each outcome level. The primary influences used by Holton were derived from an earlier study that suggested, a participant's behavior in training was a function of three factors. They included: ability, motivation and environmental influences (Noe, 1986). Holten (1996) contended that all three outcomes described in his model were functions of these three "primary" influences. He also described an extended list of moderating or mediating primary influences for each outcome. For learning outcomes these moderating or mediating primary influences included: trainee reaction, motivation to learn and ability to learn or cognitive ability. For individual performance outcomes synonymous with transfer, these moderating or mediating primary influences included: motivation to transfer, transfer conditions within the organization, and transfer design, defined as the learning by trainees pertaining to how new knowledge will be applied to the job. For organizational results outcomes, these moderating or mediating primary influences included: links to organizational goals, expected utility or payoff, and external events which were defined as those factors completely outside of the realm of training. These moderating or mediating primary influences could be broadly classified as being primarily the responsibility of either the individual trainee, the trainer, defined as the training developer, facilitator or evaluator, the management, and external forces. For example, ability would be highly dependent on the trainee; where as, trainee reaction and transfer design would seem the primary responsibility of the

training developer and transfer conditions. Motivation to learn and transfer, expected utility or payoff and linkage to organizational goals would seem to be a management responsibility. Also described was a list of secondary influences on the motivation to learn and motivation to transfer. They included: personality characteristics, intervention readiness, job attitudes, and intervention fulfillment.

While incorporating all of Holton's intervening variables into his version of the basic four-level model would offer researchers further areas of study to help understand the dynamics of learning transfer to the job and to the organization, there was a concern that it might complicate the evaluation process to the point where practitioners neither have the money nor the time to conduct these expansive evaluations. As a result, it too may suffer from an infrequency of use. Holton (1996) recommended that eventually a simpler model could be developed.

A simpler, more useful approach might be, to develop a model that outlined the effect of the relationship between key trainee characteristics and the supervisor's leadership characteristics on training transfer. This model should extend the discussion beyond the lists of supervisory strategies and tactics outlined in the literature (Schwab-O'Neil, 1997; Broad & Newstrom, 1992; Campbell & Cheek, 1989). Finally, the successful model should offer useful guidance to practitioners developing and evaluating training interventions as well as be able to withstand empirical inquiries that aim to test the causal relationships between these characteristics and the transfer of training to the workplace.

Trainee Characteristics

Trainees are the learners, usually employees, whose training, education, and development are sponsored by the organization to improve organizational functioning and productivity (Broad & Newstrom, 1992; Cromwell, 2000). There were a number of factors identified in the literature that influenced a trainee's transfer of training to the work environment. They included: trainee characteristics, training design, and the work environment itself (Noe, 1999). Training design included such characteristics of the learning environment as, materials, opportunities to practice, providing feedback, development of learning objectives, and program organization (Colletti-Mangan, 2003). McMullen (1999) supported the need to go beyond these design elements when she stated that the successful transfer of skills to the workplace requires a set of conditions that extend beyond the ability of the instructor to control within the classroom. The work environment included factors on the job that influence the application of learned skills and included such things as manager support, peer support, proper technology, and the opportunity to utilize new skills (Noe, 1999). Although each

of these factors can influence learning transfer, it was the opinion of this author that the influence of manager support, namely, the degree of a manager's leadership style on learning transfer is the primary factor moderating the other three and will be discussed in the following section.

Trainee characteristics referred to the ability and motivation that affect learning (Noe, 1999). An understanding of these characteristics could be important in helping to build support for the potential link of a manager's degree of transformational leadership style to learning transfer. As one author suggested, if trainees lack the basic skills needed to master learned capabilities, are not motivated to learn, and do not believe they can master learned capabilities, it is doubtful that transfer will occur (Holt & Tallman, 2002). The role of trainee characteristics on the successful transfer of learning is not new, in fact, it is well established in the literature and many recent models on the learning transfer process include learner characteristics as important antecedents of transfer (Baldwin & Ford, 1988; Colquitt, LePine, & Noe, 2000; Mathieu & Martineau, 1997). These factors could act as important intervening variables that could affect the interpretation of evaluation results related to learning transfer; however, neither the identification of the individual characteristics most conducive to transfer nor the creation of pre-training conditions to help induce such dispositions have generally been actively managed (Naquin & Baldwin, 2003).

Holton's (1996) model moved beyond these trainee characteristics, important to learning, and attempted to define a more in-depth system of variables affecting training outcomes by including primary and secondary influences on each of three outcome levels. These outcome levels included: learning, individual performance (transfer), and organizational results. The primary influences used by Holton were derived from an earlier study that suggested, a participant's behavior in training is a function of ability, motivation, and environmental influences (Noe, 1986). Holton (1996) contended that all three outcomes described in his model are functions of these three primary influences. He also described a list of moderating or mediating primary influences for each outcome level. For the learning outcome he described trainee reaction, motivation to learn and ability to learn, as moderating or mediating primary influences. For individual performance, these moderating or mediating primary influences included: motivation to transfer, transfer conditions within the organization and transfer design. Organizational results included such moderating or mediating primary influences as link to the organizational goals, expected utility or payoff and external factors. While Holton (1996) suggested that a participant's behavior in training is a function of the three primary influences of ability, motivation, and environmental factors; ability, defined as cognitive ability, is identified only as a primary moderating or

mediating influence within the learning outcome and therefore will not be addressed as part of this paper. On the other hand, motivation, whether to learn, change individual performance (transfer) or affect organizational results, was identified as a common primary moderating or mediating influence throughout the model and therefore will be the focus of the remainder of the discussion on trainee characteristics.

O'Keefe (2000) suggested that, many training programs fail to achieve the desired results due to lack of trainee motivation to learn. Noe and Wilk (1993) concluded that the motivation to learn was the only attitudinal variable to have a consistent, significant, and positive influence on the different outcomes related to developmental activity. Noe (1986) hypothesized that four conditions must exist in order to promote high motivation to learn. Trainees must believe that supervisory assessment of their needs to attend training is realistic and accurate. Trainees should have confidence in their capability to master the training content, and that such mastery will be beneficial to their job and/or career. Finally, it should be perceived that the job environment provides the necessary resources and supportive relationships with peers and supervisors to accomplish tasks using the skills and knowledge acquired in training. These conditions also appear to be related to motivation to transfer. The trainee is frequently examined as the primary subject of motivational studies (Clark, Dobbins, & Ladd, 1993; Noe, 1986). Unfortunately, much of the research looks either to individual learner characteristics in order to understand the influences on transfer or seek to compile a list of strategies and tactics managers might use to improve transfer rather than seek to understand the link between both as influences affecting motivation to transfer.

In order to better understand this trainee characteristic and therefore help support a potential link to a manager's degree of transformational leadership style it was necessary to first define motivation (McGregor, 1960). Stein (1980) defined motivation as either the act or an instance of motivating; the state or condition of being motivated or simply something that motivates; where motivate means to provide with a motive or motives. Motive was defined as something that prompts a person to act in a certain way; the goal or object of ones actions. It was in this definition of motive that allowed a better understanding of motivation and helped broaden the understanding of this characteristic's effect on training transfer.

Baldwin and Ford (1988) identified self-efficacy as one individual motivating characteristic that affected the transfer process. Self-efficacy was defined as an individual's expectation or confidence that tasks could be successfully performed (Bandura, 1997). In turn, this confidence would have an impact on ones

motivation to transfer (Noe & Schmitt, 1986). How students felt about their capabilities in learning tasks dramatically affected their interest in knowledge transfer as well as learning itself (Pea, 1987). While self-efficacy has an impact on employee motivation to transfer learned behaviors to the work environment, it was not the only factor affecting motivation to transfer.

The expectancy-valence theory of work motivation extends beyond self-efficacy, suggesting that individuals will be motivated if, in addition to believing they are capable of performing their work, they believe their efforts will result in certain outcomes, and that the payoff for achieving these outcomes will be worthwhile (Northouse, 2004; Vroom, 1964). In this context of motivation the connected importance of both a trainee's motivational characteristics and leadership principles on trainee motivation to transfer can be seen. As one author suggested, it is important to know what employees want but don't have, and offer those things as rewards for learning (Keller, 1987). These rewards can be both intrinsic and extrinsic. An extrinsically motivated individual is likely to seek a reward that is not related to the activity, while someone intrinsically motivated is likely to acquire a skill because it produces some internally positive consequence. While research supports that individuals who are motivated when they approach a learning situation clearly seem to have a higher likelihood of achieving positive outcomes than those with a lower level of motivation (Goldstein, 1993); the primary intended outcome of organizational learning initiatives is the improvement in work outcomes or productivity (Naquin & Baldwin, 2003). For this reason, Naquin and Holton (2002) incorporated both the motivation to learn and motivation to transfer into a construct called the Motivation to Improve Work Through Learning. The construct focused on an individual's motivational influences that lead to improved work outcomes from learning. These authors found that extroversion, positive affectivity (an individual's tendency to experience high levels of positive emotional states), and work commitment attitudes directly affected their motivational disposition. While motivation to improve work through learning offered researchers insight into an individual's characteristics that could help explain transfer readiness, even its developers admit, it was unlikely such selection criteria will gain widespread acceptance within organizations (Naquin & Baldwin, 2003). For this reason, they suggested a more widely applicable approach for interventions related to transfer-readiness would be to focus on establishing pre-training conditions that can influence it.

Role of Supervisor

The role of a trainee's supervisor in the successful transfer of learning was well established in the literature (Baldwin & Magjuka, 1991; McMullen, 1999). Clark,

Dobbins and Ladd (1993) suggested that supervisory support and organizational climate are critical factors that may influence the transfer process. Bates, Holton and Seyler (1996) defined supervisor support as the extent to which supervisors reinforced and supported the use of learning on the job. Short (1997) defined supervisory support more specifically as the degree to which the trainee's supervisor helped set performance goals, provided opportunities to use newly learned skills, and recognized and rewarded the use of skills on the job. Much of the literature that discussed the role of supervisory support on the transfer process centered around strategies and tactics that should be used by managers before, during and/or after the training intervention. In fact, a number of researchers have recommended steps that managers can take to enhance the transfer process. (Broad & Newstrom, 1992; Cambell & Cheek, 1989; O'Neil-Schwab, 1997; Tallman & Holt, 1987). The question remained, how effective were such recommendations at enhancing transfer. Broad (1982) asked human resource development (HRD) leaders to review a list of seventy-four actions management could take to support the transfer of training to the job. Leaders were asked to identify and rate the importance of each action they had actually observed in organizations. Broad (1982) reported that of the 74 listed actions, 71 (96%) were rated important while only 36 (49%) had actually been observed by most of the leaders and that the eight actions rated most important by HRD leaders showed the lowest levels of observation. Broad's (1982) findings revealed an important gap in the actions management could take to improve transfer of training. The identification of individual manager characteristics that were most conducive to learning transfer have not generally been reported in the transfer of training literature, prompting a suggestion for a better understanding of those manager characteristics that might enhance his or her supportive actions regarding transfer. The leadership approach of a manager could offer one possible explanation.

Several studies have reported the importance of managers' attributes on the transfer of training to the workplace. Gielen (1996) reported that the most important factors in the work environment contributing to transfer were derived from the relationship between the trainee and his or her supervisor. Clappitt and Downs (1993) reported that satisfaction with supervisory communication was perceived by employees to have an above-average effect on productivity. Brinkerhoff and Montesino (1995) reported significantly higher training usage and more positive perception of the forces that encourage transfer of training in the work environment among trainees who received support from their managers. This support took the form of pre-training expectation discussions and after training follow-up discussions. Cohen (1990) found that trainees with more supportive supervisors entered training with stronger beliefs that training would be useful. These findings pointed to the importance of understanding a manager's

characteristics that are associated with more supportive actions that could enhance the transfer of learning by a trainee. Understanding key leadership attributes that contribute to a sense of support perceived by the trainee toward their manager may offer a clue to this question.

One of the most widely researched approaches to leadership since early 1980 is the transformational leadership approach (Northouse, 2004). Bryman (1992) described transformational leadership as a paradigm, that gives more attention to the charismatic and affective elements of leadership. Transformational leadership is aimed at changing or transforming individuals through a leader's concern with emotions, values, ethics, standards, and long-term goals. It included assessing a follower's motives, satisfying their needs, and treating them as full human beings. Burns (1978) defined transformational leadership as the process whereby an individual engages with others and creates a connection that raises the level of motivation in both the leader and the follower. He depicted this type of leader as attentive to the needs and motives of followers, and tried to help them reach their fullest potential. The transformational leadership approach is in stark contrast to transactional leadership approaches that comprise the majority of leadership models. Bass (1985) offered an expanded version of transformational leadership in which he described transactional and transformational leadership as a single continuum. This continuum is made up of seven factors that are divided into three parts: four transformational factors, two transactional factors, and one non-leadership/non-transactional factor. Transformational leaders have a strong set of internal values and ideals, and are effective at motivating followers to act in ways that support the greater good rather than their own self – interests (Kuhnert, 1994). The four transformational leadership factors included: idealized influence, whereby the leader acts as a strong role model for followers; inspirational motivation, whereby a leader communicates high expectations to followers in an attempt to inspire them through motivation to become committed to and a part of the shared vision of the organization; intellectual stimulation, whereby followers are encouraged to be creative and innovative as well as to challenge the beliefs of the organization, and finally, individualized consideration, whereby leaders provide a supportive climate in which they listen to the individual needs of followers (Bass, 1985, pp.174-177). The part of the continuum that represented the two transactional leadership factors included: contingent reward, whereby effort of followers was exchanged for specified rewards, and management by exception, whereby leaders used corrective criticism, negative feedback and negative reinforcement. The final part of the continuum consisted of the single non-leadership factor referred to as laissez-faire or absence of leadership. (Bass and Avolio, 1994). A case for the potential link of transformational leadership's influence on transfer could be drawn from the meta-analysis by Lowe, Kroeck,

and Sivasubramaniam (1996). These researchers found that individuals who exhibited transformational leadership were perceived to be more effective leaders with better work outcomes than were individuals who exhibited transactional leadership. Bennis and Nanus (1985) suggested transformational leaders also had a clear vision of the future state of their organization that was simple, understandable, beneficial, and energy creating. Transformational leaders created trust in their organizations, even during periods of uncertainty. They emphasized their strengths rather than dwelling on their weaknesses which in turn had a reciprocal impact on followers, creating feelings of confidence and high expectations. Finally, transformational leaders were committed to learning and relearning with a consistent emphasis on education. As the discussion is refocused on transfer it is clear that a perspective involving extrinsic factors that is mired in endless recommendations for supervisory support and action strategies was less preferable to one that stimulates ones intrinsic motivation to transfer. In no other place is this contrast more apparent than in the characteristics of a transformational leader. This could make a manager's leadership characteristics an important dimension in any model attempting to lend insight into the transfer of training process.

Proposed Model

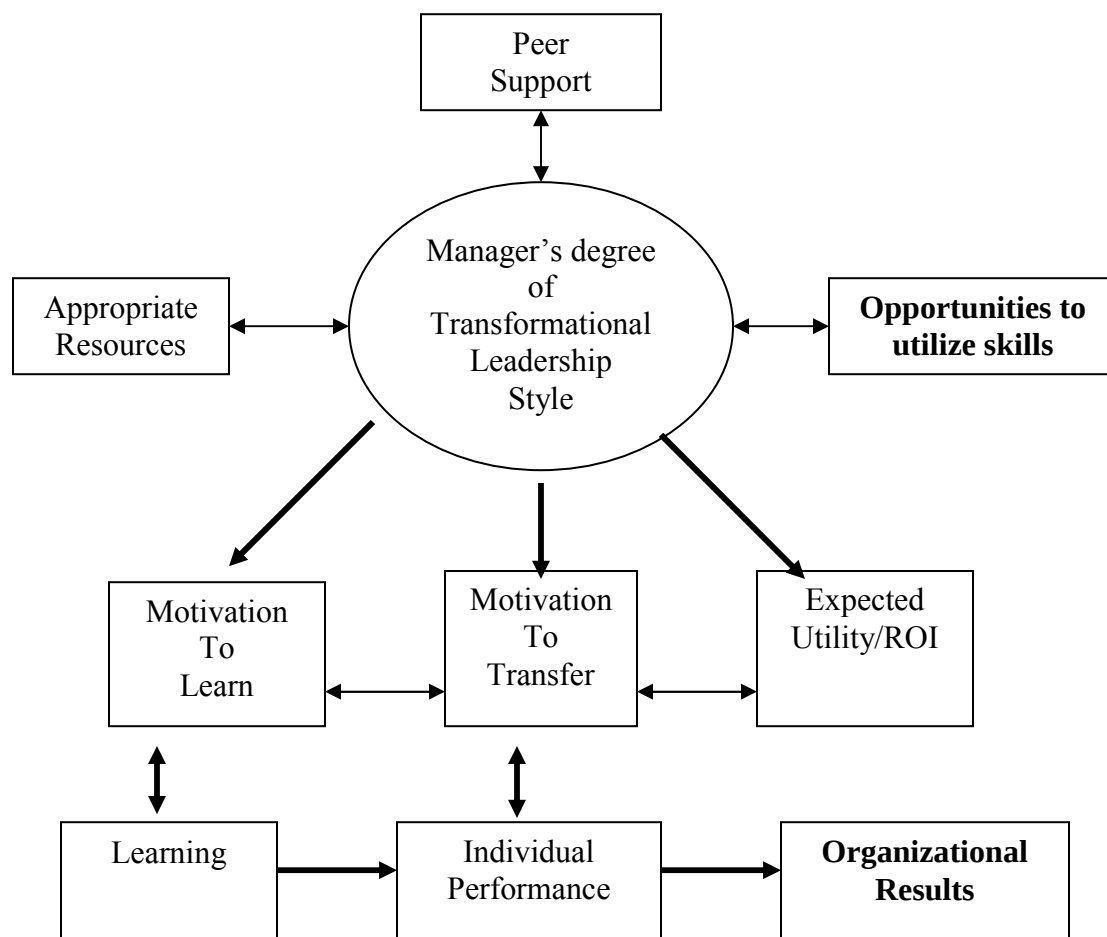
The proposed model (Figure 2) is a simplified version of an earlier model proposed by Holton (1996). The background used to develop this model was derived in part from an earlier study that suggested a number of factors can influence a trainee's transfer of training to the work environment. They included: trainee characteristics, training design, and the work environment itself (Noe, 1999). One component of the work environment, cited in the literature is the role of a trainee's supervisor in the successful transfer of training literature (McMullen 1999; Baldwin & Magjuka, 1991).

Figure 2 shows the proposed model including the hypothesized relationship between a key work environment influence, manager support, described as a manager's degree of transformational leadership style and the key trainee motivational characteristics that include: motivation to learn, motivation to transfer, and expected utility on the three training outcome levels of learning, individual performance, and organizational results, described in a previous model (Holton, 1996). These relationships are indicated using bold arrows to indicate primary relationships or lighter arrows indicating secondary relationships.

The manager's degree of transformational leadership style is depicted as the primary influence on trainee motivational characteristics and is suggested as the

key component of the work environment also having secondary influence on other work environment components such as peer support, proper technology and the opportunity to utilize new skills. In addition it is suggested that this leadership component might be used to replace secondary influences such as personality characteristics, intervention readiness, job attitude and intervention fulfillment described as part of Holton's (1996) model. These secondary influences could be more appropriately used as indicators for the purpose of measuring the effect of the primary influences on the three levels of training outcomes.

Figure 2. Manager Impact on Trainee Motivational Characteristics Evaluation Model.



Holton's model included the additional primary moderating or mediating influences of ability, reaction to learning, transfer design, linkage to the organization, and external factors. These primary influences on the three outcome levels of learning, individual performance, and organizational results, were important to the development of his fully specified and researchable HRD evaluation model. They have been excluded in an attempt to develop a simpler model designed to be more useful to training practitioners seeking to better understand and manage pre-training conditions prior to initiating a training intervention.

Conclusions

This simpler model offers guidance to practitioners developing and evaluating training interventions by extending the discussion beyond the traditional lists of supervisory strategies and tactics outlined in the literature (Schwab-O'Neil, 1997; Broad & Newstrom, 1992; Campbell & Cheek, 1989); and focuses on the link between key trainee motivational characteristics and the degree of a manager's transformational leadership on training transfer. It also offers researchers a model that can be studied to test the causal relationships between trainee motivational characteristics and a manager's degree of transformational leadership on the transfer of training to the workplace. The importance of establishing the effect of this hypothesized link between a manager's degree of transformational leadership and motivational characteristics of a trainee on transfer to the workplace could be an important first step in actively managing a more positive set of pre-training conditions within the organization.

Recommendations for Further Study

Recommendations for future studies are as follows:

1. Test the hypothesis that a manager's degree of transformational leadership is correlated to a trainee's motivation to learn and motivation to transfer training to the workplace.
2. Test the hypothesis that the degree of a manager's transformational leadership is correlated with other aspects of the work environment, such as peer support, and the opportunity to utilize new skills in the workplace.
3. Identify or develop an instrument to easily diagnose potential leadership concerns before a training intervention is initiated.

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Biography

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