Leadership Development Programs and Participant Behavioral Change

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LEADERSHIP DEVELOPMENT PROGRAMS AND PARTICIPANT BEHAVIORAL CHANGE

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Abstract: The goal of any leadership development program is to produce more effective leaders. Leadership development training programs are successful only to the extent that participants change their behavior. How much of that success is dependent on the styles of leadership, the participating individual, or the design of the training program? This paper describes the relationship between leadership development programs and participant behavioral change. Relevant empirical research for training transfer, individual behavioral change, and program return on investment is integrated into the paper.

Leadership development training programs (LDP) are a popular trend in companies today and are also an expensive investment. For instance, it is estimated that fifty-one billion dollars is spent on training annually with more than fourteen billion of those dollars specifically allocated to leadership development (Dolezalek, 2005). According to The American Society for Training & Development, sixty percent of Fortune 500 companies surveyed listed leadership development as a high priority (Allen & Hartman, 2008). The ever-changing nature of today’s workplace highlights the need for effective leadership. “Leaders have to structure activities that enhance productivity at a time when jobs are becoming increasingly complex and both national and international competition are becoming more intense. All of this makes training for leadership and people skills even more important” (Goldstein & Ford, 2002:305).

If leadership training programs are a trend likely to continue to increase in today’s workplace, what exactly are these programs accomplishing? How can companies choose the right leadership training program and measure a return on investment? Does training result in better leadership? Research indicates that many organizations do not collect the information to determine the usefulness of their own instructional programs (Goldstein & Ford, 2002). This paper aims to demonstrate that leadership training is successful only to the extent that participants change their behavior. It is important to note that the structure of the training program is an integral part of behavior modification.

Often Imitated, Never Duplicated

Companies often hire consultants or use leadership programs that produced successful results for other firms. Generic leadership training programs very often do not translate across different industries or even different firms within the same industry. Even when it appears that the leadership-training program selected is designed to produce the leadership behavior the company desires, behavioral change of participants remains unanalyzed.

Why aren’t these programs delivering results? Scholl and Brownell (1983) identify four potential reasons why many of these programs fail to deliver expected results: 1) ambiguous goals; 2) incomplete program development and design; 3) inattention to models of behavioral change; and 4) emphasis on the inappropriate unit of analysis. This paper focuses on Scholl and Brownell’s second and third reasons for why leadership development programs fail to deliver results.

RESEARCH QUESTION

Leadership development training programs are successful only to the extent that participants change their behavior. How much of that success is dependent on the styles of leadership, the participating individual, or the design of the training program?

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In most cases, the fundamental purpose of leadership development to facilitate change in the participants’ leadership style. That means that leadership development is a behavioral change process. The development of the training program is the most critical piece of the puzzle. Prior to implementation, the company has to identify the origin of the need for leadership development. A few potential reasons a company may need training in leadership development are if the company has identified a lack of leadership from its current employees, a desire to further the leadership capabilities of those already in leadership roles, or the company strives to stay competitive with similar organizations offering leadership development. Identifying why a leadership development program is necessary will allow a company to better develop a more successful program.

This paper will address the question: Do leadership development programs actually change the leadership behaviors exhibited by the participants of these programs? What features or aspects of leadership developments contribute to the likelihood of behavioral change?

INDIVIDUAL FACTORS AND TRAINING TRANSFER: MODEL AND THEORY

There are numerous leadership theories in both popular mainstream and academic literature yet leadership development is the least explored topic within the field of leadership research and theory (Avolio B 2007). Leadership ability is in part, an inane ability of an individual and the specifics can be difficult to expressly define. In developing any type of training program, transfer is key. Training transfer includes the intellectual ability, self-efficacy regarding the training task, motivation level, as well as the job/career variables and personality traits that largely affect trainee motivation (Burke & Hutchins, 2007). There are many leadership theories that propose a relationship between leadership style or behaviors and leadership effectiveness; however, there is little research on the process of changing a manager’s behavior or style. A development program that simply teaches the theories and required the participants to decide when and how to change leadership style has little chance of success.

Motivation

Motivation to learn is widely recognized as playing an important role to the ultimate success of training and development activities (Baldwin & Ford, 1988; Harris & Cole, 2007). “Generally, motivation to learn is conceptualized as exerting its influence through a participant’s decision-making process regarding the direction, focus, and level of their effort to participate in the developmental activity” (Harris & Cole, 2007: 775). More confident and intrinsically motivated employees tend to be higher performers as they expend more effort in their jobs (Avolio, Avey, & Quisen, 2010). Similarly, a meta-analysis conducted by Colquitt, LePine and Noe (2000) examining the effectiveness of training programs, reported that the level of motivation to participate in training was shown to be a significant predictor of the transfer of knowledge and increased performance beyond general intelligence. High performers often have higher motivation; this leads to more positive training effectiveness. Therefore, it is likely to predict that motivated performers produce better results as a consequence of leadership training (Avolio et al., 2010).

In theoretical conceptualizations of the training process (Goldstein & Ford, 2002; Harris & Cole, 2007), trainee learning motivation and ability, along with situational variables, are treated as predictors of trainee reactions and learning to the training. Predictions of learning transfer and performance are made. Research generally supports this theoretical framework (Harris & Cole, 2007).

Cognitive Ability

Generally, it is understood that cognitive ability is the best predictor of performance. Support has long existed for the influence of general mental ability in training and learning situations (Baldwin & Ford, 1988; Burke & Hutchins, 2007). Following this logic, it would be
more likely that high performing individuals, participating in leadership development programs, will likely transfer the trained knowledge into their jobs at a faster rate, leading to a greater return on investment for the company.

**Personality**

Trainees with high positive affectivity have higher motivations to improve their work performance through learning (Burke & Hutchins, 2007). Although the findings are limited, Herold, Davis, Fedor, & Parsons (2002), reported that high levels of openness to experience allows trainees to better capitalize on earlier learning successes and to acquire necessary skills faster. Trainees who are highly sociable (extraverted) also exhibit higher training performance across multiple occupational categories (Burke & Hutchins, 2007). Conscientiousness has been shown to positively influence training proficiency as well as trainees' confidence in their ability to learn (Colquitt et al., 2000; Burke & Hutchins, 2007). “Conscientiousness has been shown to positively impact training proficiency as well as trainees’ confidence in their ability to learn” (Burke & Hutchins, 2007: 269).

**Self-Efficacy**

Self-efficacy is the belief in one’s capability to perform a specific task. Goldstein and Ford (2002) explain how self-efficacy affects training negatively or positively. In a negative context, trainees can learn the content but self-efficacy perceptions could be so poor that trainees are actually prevented from using the learning. Trainees with higher levels of self-efficacy before training often perform better on assessments at the completion of training (Goldstein & Ford, 2002). Individuals with high self-efficacy are more likely to seek out opportunities to develop their skills. People with high self-efficacy may self-select into leadership development. Goldstein and Ford (2002) also found that individuals high in self-efficacy were more likely to be active in trying out trained tasks and attempting more difficult tasks on the job. There is also strong evidence that self-efficacy relates to greater learning performance.

**Need Theory**

The need for achievement motivation (nAch) is described as a behavioral tendency to strive for success. Goldstein and Ford (2002:125) explain, “it is assumed to operate when the environment signals that certain acts on the part of the individual will lead to need achievement. People capable of high achievement do not necessarily perform well unless their behavior is viewed as being instrumental for later success.” Therefore, participants in leadership development programs with high achievement motivation will learn the materials and use them on the job only if the training is seen as important for their career success.

**Transactional Leadership**

Dvir, Avolio, & Shamir (2002: 735) explain that “transactional leaders expert influence by setting goals, clarifying desired outcomes, providing feedback, and exchanging rewards for accomplishments”.

**Transformational Leadership**

Charismatic leaders (or leaders with idealized influence) are role models for their followers. According to Bass (1997) they are admired, respected, and trusted. Followers want to identify with them. Such leaders are self-confident, determined, persistent, highly competent, and willing to take risks. Charisma is idealized influence, that is, influence based on perception and behavior of the leader as charismatic or ‘bigger than life’ (Bass, 1997). Dvir et al., (2002:735) further explain that these leaders exert additional influence by broadening and elevating followers’ goals and providing them with the confidence to perform beyond typical expectations.

Bass’s (1997) six–factor model of transformational and transactional leadership (Refer to Table 1) helps to further define transformational and transactional leadership.
Table 1
Bass’s Six-Factor Model

<table>
<thead>
<tr>
<th>Leadership Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transformational Leadership</strong></td>
<td></td>
</tr>
<tr>
<td>Idealized Influence (Charisma) and Inspirational Motivation</td>
<td>The leader shares a vision and sense of mission with the followers. Radical, innovative solutions to critical problems are proposed for handling followers’ problems. The leader has the followers’ respect, faith, and trust. The followers want to identify with the leader. The leader shows determination and conviction. The leader increases the optimism and enthusiasm of followers. The leader communicated with fluency and confidence using simple language and appealing symbols and metaphors.</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>The leader encourages new ways of looking at old methods and problems. The leader emphasizes the use of intelligence and creativity. The leader provokes rethinking and reexamination of assumptions on which possibilities, capabilities, and strategies are based.</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>The leader gives personal attention to followers and makes each feel valued and important. The leader coaches and advises each follower for the followers’ personal development.</td>
</tr>
<tr>
<td><strong>Transactional Leadership</strong></td>
<td></td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>The leader gives followers a clear understanding of what needs to be done and/or what is expected of them, then arranges to exchange rewards in the form of praise, pay increases, bonuses, and commendations.</td>
</tr>
<tr>
<td>Management-by-Exception</td>
<td>When it is active, the leader monitors the followers’ performance and takes corrective action when mistakes or failures are detected. When it is passive, the leader intervenes only if standards are not met or if something goes wrong.</td>
</tr>
<tr>
<td>Laissez-Faire Leadership</td>
<td>Leadership is not attempted. There is abdication of responsibility, indecisiveness, reluctance to take a stand, lack of involvement, and absence of the leader when needed.</td>
</tr>
</tbody>
</table>

Source: Bass (1997:22)

Training Evaluation
Training is a method to increase the work performance of employees and maximize human capital. Training and organizational performance already interconnects, so employees have to successively learn new personal knowledge, obtain new skills, and continuously accept training in order to maintain maximum work performance. (Jen-Chia, Tseng-Chang, & Chen, 2012).

Baldwin and Ford (1988) describe three key training inputs that influence transfer of training: (1) trainee characteristics; (2) training design; and (3) work environment. Trainee characteristics are the skills, motivation, and personality factors of the trainee (Baldwin and Ford, 1988) (Ladyshewsky, 2007). Baldwin and Ford (1988) note that trainees with a high internal locus of control, a desire to participate in training, as well as a high need to achieve were more likely to apply learning to work.

How do organizations determine if the training program administered was successful? Kirkpatrick’s (1959, 1960) model of training evaluation is the most universally utilized. The four-level criteria include reaction, learning, behavior, and results. The reaction level evaluates the feelings and reactions of the trainees on the training itself. It covers the satisfaction of trainees on the courses, instructors, training materials, and teaching methods (Alliger & Janak, 1989; Lin,
Chen, & Chuang, 2011). This taxonomy of training criteria became very popular in business and academia because it addressed a need to understand training evaluation simply, yet systematically (Alliger, Tannenbaum, Bennet, Traver, & Shotland, 1997). Since the model emerged in 1959, researchers have worked to modify the model or create entirely different models of training evaluation. However, Kirkpatrick’s original taxonomy still remains the most popular model for training evaluation among practitioners and many researchers.

The first level, reactions, addresses what participants liked and felt about the training. Reactions are the participants emotionally based opinions. These reactions are usually obtained by administering post-training questionnaires (Alliger et al., 1997). The reaction level also allows for an understanding of participants’ feelings toward the perceived utility of the training. Questions like “as the training of practical value?” and “To what degree will this training influence your ability later to perform your job?” will help determine the perceived utility value of the training for subsequent job performance (Alliger et al., 1997: 344). The training program participants must believe in the utility and value of leadership training. If the participants do not perceive utility/value, the level of transfer can be compromised. For maximal transfer, learners should perceive that the new knowledge and skills acquired would improve a relevant aspect of their work performance (Baldwin & Ford, 1988; Clark, Dobbins, & Ladd 1993).

In the second level, learning, results are typically derived from traditional tests of declarative knowledge. Most commonly, knowledge is assessed immediately after training (Alliger et al., 1997). Training needs are learning needs, but learning is not training. Chang et al. (2012) clarify that learning covers training. Training is one of many methods to facilitate learning. Alliger et al. (1997) propose an augmented framework of the four-level model. As displayed in Table 2, the augmented framework moves Kirkpatrick’s third level, behavior, into the learning level. Kirkpatrick used the term ‘behavior’ to refer to any behavioral changes that occur as a result of training. Due to this unclear distinction, the authors explain that simple indication of retained knowledge may not be applied on the job. Further, the on-the-job application, in most cases, exhibits training success (Alliger et al., 1997). In this augmented model, behavior/skill demonstration is assessed after training. Alliger et al. (1997) believe that Kirkpatrick’s ‘behavior’ level was intended to represent transfer of training to the job environment. The third level, transfer, is behavior that is retained and applied to the workplace (Alliger et al., 1997). Finally, the fourth level, results, represents criteria where the organizational impact is indexed. Alliger et al. (1997: 346) state various examples of results criteria including “productivity gains, customer satisfaction, cost-savings, employee morale (for manager training), and profitability”.

Table 2
Training Criteria Taxonomies

<table>
<thead>
<tr>
<th>Level</th>
<th>Kirkpatrick’s Four-Levels</th>
<th>Alliger et al., (1997): Augmented Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reactions</td>
<td>Reactions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Affective Reactions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Utility Judgment</td>
</tr>
<tr>
<td>2</td>
<td>Learning</td>
<td>Learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Immediate Knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Knowledge Retention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Behavior/Skill Demonstration</td>
</tr>
<tr>
<td>3</td>
<td>Behavior</td>
<td>Transfer</td>
</tr>
<tr>
<td>4</td>
<td>Results</td>
<td>Results</td>
</tr>
</tbody>
</table>

Source: Alliger et al., (1997: 343)

Often when training is evaluated, it focuses only on the reaction or level of learning, rather than behavioral change or organizational results (Truskie, 1982). While the likeability of the training program is certainly important, there is often no evaluative effort made to determine learning and behavior/skill transfer on the job. Organizations would like to skip straight to the results level, but it is important to understand the levels are all interrelated. Simply using a training program that participants like will not indicate if productivity and profitability will be positively affected.

Understandably, the individual behavioral change of participants is the ultimate goal of any training program. If the training program is constructed in a way to best evoke behavioral change in participants, then levels one and two of the model are accomplished. What if participant reaction to the training is negative? Is the negative reaction reflective of the training material or the individuals participating?

Prochaska’s Behavioral Change Model

The Transtheoretical Model of Behavioral Change, developed by Dr. James Prochaska and his colleagues at the University of Rhode Island Cancer Prevention Research Center, helps in understanding the stages of change an individual passes through. Prochaska’s research examines how people change their behavior both with and without psychotherapy. He emphasized the role of motivation to change. This transtheoretical model incorporates motivational, cognitive, social learning, and relapse prevention theories (Prochaska, 1982; Harris & Cole, 2007). Prochaska & DiClemente’s (1982) transtheoretical model of behavioral change identifies five stages of change: precontemplation; contemplation; preparation; action and maintenance.

FIGURE 2
The Transtheoretical Model of Behavioral Change
In the first stage, *precontemplation*, there is no intention to change behavior in the foreseeable future. Many individuals in this stage are unaware or under aware of their problems. If an individual is not seriously intending to change the problem behavior in the near future, typically within the next six months, he or she is classified as a precontemplator (Prochaska, DiClemente, & Norcross, 1992). In the second stage, *contemplation*, people are aware that a problem exists and are seriously thinking about overcoming it but have not yet made a commitment to take action. People can remain in this stage for years without taking significant action (Prochaska et al., 1992). In the third stage, *preparation*, intention and behavioral criteria are combined. Individuals in this stage are intending to take action in the next month and have unsuccessfully taken action in the past year (Prochaska et al., 1992). During the fourth stage, *action*, individuals modify their behavior, experiences, or environment in order to overcome their problems. Action involves more overt behavioral changes and requires considerable commitment of time and energy. Individuals are classified in the action stage if they have successfully altered the behavior for a period of one day to six months (Prochaska et al., 1992). In the fifth and final stage, *maintenance*, people work to prevent relapse and consolidate the gains attained during action. Maintenance is a continuation of change (Prochaska et al., 1992).

This behavioral change model has received an extraordinary amount of empirical evidence supporting its ability to predict behavioral change across a variety of problem behaviors (Harris & Cole, 2007).

**RESEARCH HYPOTHESES**

**Evaluation of Leadership Development Programs**

Companies go to great lengths to evaluate the efficiency and effectiveness of sales and production departments but rarely measure training results. Decisions about training are often made without the benefit of systematic evaluative efforts. Leadership development programs are generally perceived as too difficult to effectively evaluate. Due to a lack of evaluation, it is unclear if participants in leadership development programs are changing their behaviors post-training.

**Hypothesis 1.** Participants in leadership development programs do not significantly change their behavior to exhibit leadership ability post completion of training.

**Program Design**

Little attention has been devoted to studying why training programs are effective for some individuals and ineffective for others (Noe, 1986). Constructing a leadership development program that is specific to an organization allows for strategic ties to other human resource functions; overall business strategy, and can increase transfer of knowledge and skills resulting in participant behavior change.

**Hypothesis 2.** A well-designed and administered leadership development program can produce behavioral change in its participants.

**Needs Assessment**

Performing a needs assessment identifies performance gap of the learners, confirms the current situation of learners, and helps to decide which resources and methods should be applied to the training to achieve goals (Martin, 2009). Without a needs assessment it will be difficult to assess which leadership strategies would best benefit the organization. Offering a generic leadership development program will provide an overview of what leadership is but will not produce results.

**Hypothesis 3:** Leadership development programs will not evoke significant behavioral change without a needs assessment.
ANALYSIS

Leadership Style

Dvir et al. (2002) conducted a longitudinal, randomized field experiment, testing the impact of transformational leadership, enhanced by training, on follower development and performance. Experimental group leaders received transformational leadership training, while the control group leaders received routine eclectic leadership training. The sample included 54 military leaders, their 90 direct followers, and 724 indirect followers. It was predicted that the leaders assigned to the experimental training would “enact” significantly more transformational leadership than the control group leaders. Trainee reactions, development, and performance were all assessed. The experimental workshop was built around four core themes of the transformational leadership theory: (1) transformational and transactional leadership are different lenses through which a leader can view relationships with its followers; (2) transformational leadership is enacted through a set of behaviors; (3) transformational leadership can create higher levels of development and performance among followers than can transactional leadership; and (4) followers of transformational leaders should be continuously developed to higher levels of motivation, morality, and empowerment. The eclectic leadership workshop related processes that occurred in the workshop to various concepts, such as goal setting, self-fulfilling prophecy, crisis intervention, contingency theory, trust building, personal example, and group cohesion.

Multivariate analyses of variance (MANOVA) and covariance (MANCOVA) were used to test whether the treatment affected development and performance. To estimate the differential effects on each development and performance variable, a one-way analysis of variance (ANOVA) was used for variables measured once after the treatment and repeated-measures ANOVA for variables measured twice. Results indicated the more positive impact of the transformational leaders on direct follower development and on in-direct follower performance confirms core causal propositions of transformational leadership theory. The findings were otherwise inconclusive. However, they do note, “transformational and charismatic leadership theories are still at early stages of specifying the developmental mediating processes between leader behaviors and performance” (Dvir et al., 2002: 742). They also conclude that transformational leadership, enhanced by training, can augment the development of human resources and their performance in a variety of ways (Dvir et al., 2002).

There is evidence that leadership training does work to enhance both the transactional and transformational leadership skills but it still remains difficult to pinpoint exactly. Dvir et al. (2002: 742) suggest, “Future research should add treatment conditions and focus on specific aspects of transformational leadership, as Kirkpatrick and Locke (1996) did in their laboratory experiment on visionary leadership.”

Trainee Readiness

If leadership training is successful only to the extent that participants change their behavior, how much of that success is dependent on the participating individual? Scholl (2003) explains a first level model of performance contains four determinants: effort/motivation; skills and abilities; role perception; and resources. This model may be useful to understand why learning, behavior change, and performance differ among training program participants (Noe, 1986).

Trainability is hypothesized to be a function of three factors: ability, motivation, and perceptions of the work environment [Trainability = \( f(\text{Ability}, \text{Motivation}, \text{Work Environment Perceptions}) \)] (Noe, 1986). In a training situation, motivation is the force that influences enthusiasm about the program.

Goldstein & Ford (2002: 110) warn “before trainees can benefit from any form of training; they must be ready to learn. That is, they must have the particular background experiences necessary for being successful in the training
program and they must be motivated to learn. There is reason to believe that individuals often perform poorly in training because they were ill-prepared to enter the program, did not think the program would be useful, or did not want to learn.”

To address the issue Goldstein & Ford (2002) presented of participants not wanting to learn, I would examine trainee readiness from a behavioral change standpoint. Beyond traditional motivation, willingness for personal change could improve the predictive powers of assessing training outcomes.

Using Prochaska’s (1982) transtheoretical model of behavioral change in a leadership development context could provide insight into poor performing trainees who do not want to learn. Learning motivation assumes an awareness of a need for change (Harris & Cole, 2007). The stages of change approach emphasize the importance a movement from precontemplation to contemplation. “It seems likely that potential participants in a management development activity would have differential degrees of awareness of the need for change and desires to participate in, such development. Furthermore, if participants’ stages of readiness were assessed reliably, more precise tailoring of developmental content and approaches to match the stage needs of participants would be facilitated” (Harris & Cole 2007:778).

Harris & Cole’s (2007) empirical research studied a group of over 70 supervisors/managers over a period of nine months as they participated in company-sponsored leadership development training. The study was conducted in a single large manufacturing company. The program was designed to be delivered in nine one-day modules over a nine-month period. Modules covered such topics as self-awareness, corporate strategy, finance, change management, communication, and quality control. All measures employed statements which respondents were asked to indicate the degree to which they agreed on a five-point Likert scale. The Stages of Change Scale (SOCS) was used. Armenakis’s (1993) six-item scale was used to assess change readiness (Harris & Cole, 2007). The change readiness concept is derived from the expectancy theory. Six items from VandeWalle’s learning orientation scale was used to assess learning orientation. Participants were asked to indicate their agreement with sixteen items from Eisenberger’s perceived organizational support scale to assess perceived organizational support. Commitment was measured with the affective commitment scale, used in research by Meyer and Allen. Scales were also used to assess participant view of their individual development needs as it relates to leadership development. The developmental module evaluations are scales developed to evaluate the content of the training modules (Harris & Cole, 2007). The controls for the study were three dispositional variables used in the analyses: positive and negative, emotionality, and self-deception. Results of this study provide initial evidence that Prochaska’s stages of change model has the potential for being reliably and validly assessed in a leadership development context (Harris & Cole, 2007).

Results indicated that greater precontemplation sentiments led to harsher evaluations of the training, whereas greater contemplation sentiments led to more favorable ones. This suggests that leadership development programs are often geared primarily to meet the needs of contemplators. If the content of the leadership development program assumes participants would value it, the lack of effort to convince participants that the content is important will negatively affect the individuals in precontemplation, thus, leading to perceptions of low utility and value.

How can precontemplators be moved to contemplators? Harris & Cole (2007: 778) suggest, “the key is raising awareness of a need for change and development. This implies that the first step of any leadership development effort should involve consciousness raising and diagnosis of the need for change through special workshops or other preparatory initiatives.”
Noe (1986) cites the influence of the work environment, particularly the climate of the organization concerning change and the extent to which supervisors or co-workers in the work setting provide reinforcement and feedback. A supportive work climate with an effective feedback process is more likely to result in the transfer of skills from the training environment to the work environment (Noe, 1986).

The organizational attitudes may also affect trainee readiness. If an employee perceives the organization values and cares about his/her well being they will emotionally identify with and have positive emotion towards the organization (Harris & Cole, 2007). This could include support for development activities. Employees with more positive views of their organization could be more predisposed to contemplation and embrace the leadership development program.

RECOMMENDED DESIGN FACTORS OF LEADERSHIP DEVELOPMENT PROGRAMS

Chang et al., (2012) describe the four stages of training: (1) training needs analysis, (2) training program design, (3) training program implementation, and (4) training result assessment. Generally, training practitioners focus on the training program design and implementation and often ignore the needs analysis and the training result evaluation. Chang et al., (2012) recommends that “a training practitioner should have not only the skills necessary in training, such as course design, learning theory, and teaching skills”, but they also need to address the following capabilities necessary, “capability for performance management and analysis for identifying training gaps, capability for reformation for confirming the new knowledge and skills that employees should possess in the future, and capability for strategy management for distinguishing relevant capabilities that employees should have when implementing strategies.”

Training design factors include both didactic and experiential focus of the program (Ladyshewsky, 2007). Work environment factors include supervisory and peer support as well as constraints and opportunities to perform learned behavior on the job (Baldwin and Ford, 1988; Ladyshewsky, 2007). Support of management in terms of needs assessment, objective setting, as well as training and evaluation were more likely to influence transfer of learning back to the job.

The goal of any training program is the transfer of training material. Cromwell and Kolb (2004) report that only ten to fifteen percent of employee training results in long-term transfer of learning to the workplace. Strategies to improve learning transfer back into the workplace are needed if companies are to capture a return on their training investment (Ladyshewsky, 2007). Pre-training, during-training and post-training activities should all positively relate to the transfer of training. Post-training interventions such as goal setting and feedback are important to increase motivation promoted transfer (Baldwin & Ford, 1988; Cromwell & Kolb, 2004; Ladyshewsky, 2007).

Needs Assessment

Typically, supervisors and training practitioners spend very little time analyzing training needs. It was found that training needs assessments are performed in only six percent (22 out of 397 studies) of training programs (Chang, Chiang, & Kun yi, 2012; Arthur, Bennett, Edens, & Bell, 2003; Burke & Hutchins, 2007). Needs assessments for leadership development programs are integral to the design. Collins & Holton (2004), explain “when needs analyses are not done, leadership development programs may incorporate leadership dimensions in the program design that are not appropriate for the organization.” There is a vast amount of conceptual support that exists for using needs assessment to ensure that the appropriate training needs are identified. However, there is a shortage of empirical support linking use of needs assessment to transfer outcomes (Burke & Hutchins, 2007).

Content and Design

When determining content and design, it is important to remember that overall workplace
training is a systematic approach to learning and development in order to improve individual, team or organizational effectiveness. Training is an intentional process; it is being conducted to meet a perceived need (Goldstein & Ford, 2002). Learning outcomes can include changes in the knowledge, skills, or attitudes of the participants. First, determining the training needs of the organization can assist the company or the trainer in choosing the best training approach. Will the program be aligned with other strategic career planning initiatives? Is the program directed at increasing promotion opportunities for current employees? Is the program offered as a ‘refresher course’ or a source of corrective action for low-performing managers? Is the existence of a leadership development program a method to attract potential employees to the organization? More than likely, it is a combination of many reasons. Without first determining the goals of the program it is unlikely that the training program selected will fully meet the needs of the organization.

Research indicates that trainees must see a close relationship between training content and work tasks to transfer skills to the work setting. This, again, reinforces the utility of the needs assessment in identifying appropriate training content (Burke & Hutchins, 2007). Burke and Hutchins (2007) identify key instructional strategies and methods that have been specifically linked to transfer. These include practice and feedback, active learning, behavioral modeling, error-based examples, and self-management strategies. Mentoring will also be discussed, as it is a concept often related to leadership development.

**Practice and Feedback.** Cognitive or mental rehearsal and behavioral practice strategies during training are positively correlated with transfer (Burke & Hutchins, 2007). This indicates that training programs should be designed to incorporate practice and feedback in order to enhance long-term maintenance of skills (Burke & Hutchins, 2007).

**Active learning.** Compared to passive instructional methods like lectures, active learning involves training or teaching course material through carefully constructed activities. “Active learning is thought to maintain the adult attention span, a likely precursor of transfer” (Burke & Hutchins, 2007: 276).

**Behavioral Modeling (BM).** BM is an approach based on Bandura’s (1977, 1991) social learning theory, which stresses the use of observing, modeling, and vicarious reinforcement as steps for modifying human behavior (Goldstein & Ford, 2002). Burke & Day (1986) found that behavioral role modeling is one of the most effective training methods. In a behavioral modeling meta-analysis of 117 studies by Taylor, Russ-Eft, and Chan (2005) that evaluated six training outcomes, behavioral modeling had greater effects on transfer when mixed models (both positive and negative) were used in interpersonal skills training programs. A mixed model means that both effective and ineffective behaviors are demonstrated for trainees to see both a ‘useful’ and a ‘poor’ way to execute trained skills (Burke & Hutchins, 2007).

**Error-Based Examples.** This strategy shares with trainees what could go wrong if they do not use the trained skills back on the job. This allows trainees to learn from the mistakes of others. Research indicates that detailed case studies report higher transfer performance as compared to trainees using error-free examples (Burke & Hutchins, 2007).

**Self-Management Strategies.** Burke and Hutchins (2007: 278) explain that self-management strategies “work to equip trainees with necessary skills to help them transfer successfully back to the workplace, such as the use of self-generated positive feedback. Having trainees set specific, but challenging goals, use action plans and engage in self-regulatory/management behaviors have found conceptual and empirical support for direct and indirect effects on trainee transfer.”

**Mentoring.** Individuals can gain enhanced leadership competencies from learning partners
(tutors) or mentors whose role is to work with less experienced leaders. The goal of the mentoring process is to enhance skills while avoiding costly trial-and-error approaches to learning (Baldwin & Ford, 1988). Mentors can provide insight and feedback to their mentees on how to improve performance. Goldstein and Ford (2002: 320) further explain, “Mentoring can be an effective method for enhancing learning and performance on the job. Research has found that mentoring relationships are related to career promotions and increased compensation for managers. Quality mentoring relations facilitate career advancement and job satisfaction of protégés.” It is important to note, however, that there is still little research done on the ways mentors aid and develop leadership competencies (Goldstein & Ford, 2002).

Ladyshewsky’s (2007) leadership development training design research study evaluates the impact of experiential learning, goal setting, peer coaching and reflective journaling as a combined strategy to influence leadership development. In this study, the subjects participated in a university based leadership development program over the course of two years. The participants consisted of middle level managers from a public sector agency. The participants self-selected into the program. The fifteen participants consisted of eleven men (seventy-three percent) and four women (twenty-seven percent). The males were, on average, older and in higher-level management positions compared to the women. Their backgrounds were mostly technical, planning, project management, and/or engineering focus. These four units of the program encompassed business strategy; human resource management; conflict and negotiation; communication and interpersonal skills; risk management; change management; leadership; planning; and resource management. Participants completed two units of the program per year (Ladyshewsky, 2007).

The Competing Values Framework (CVF) was used to assess leadership and management competencies. This instrument measures leadership and management competence across eight different competency sets, with each set having three sub-competencies totaling twenty-four different measures. Scores in the range of four to six indicate a good grasp of the competency. Scores below four suggest developmental need. Scores above a six suggest an over-reliance on that particular competency. The CVF is seen as valid and reliable and has been used in numerous studies to map organizational culture and leadership as well as management performance (Ladyshewsky, 2007).

Participants set development plans based on their learning and implemented them over eight weeks with the support of a peer coach. A pre, mid- and post- 360-degree assessment was undertaken to measure changes in leadership competency. Learning outcomes and coaching reports were also submitted and evaluated qualitatively.

There were initially fifteen participants, but after one year only eleven of the participants remained. During the final appraisal, only eight of the original fifteen actually completed at least three units (sixty percent). The results indicated the participants all scored within the 4 to 5.75 ranges, with incremental increases at the mid-point and final. The 360-review demonstrated a progressive increase in the CVF competency for all participants. Increased scores were also seen in the evaluations offered by the raters (Ladyshewsky, 2007). While the sample size of this study was small, it does suggest a positive outcome related to the investment in training.

Given the fact that participants self-selected into the program a lack of motivation on the part of the participants could explain the drop in attrition over the two-year study. Participants also selected their own raters and results could have been influenced through a positive rating bias. There was a clear suggestion that a commitment to the learning strategies (goal setting, reflective journaling, coaching, etc) increased benefits of the training (Ladyshewsky, 2007).
Participants and Program Material

The individuals selected for the LDP must feel that they will gain knowledge, skills, or abilities from participation in the training. If participants feel they are overqualified and already know how to be good leaders they will gain little from the training and come away with negative attitudes. Although over-qualification can be defined objectively, psychologists have almost exclusively studied over-qualification as a perceived construct (Johnson & Johnson, 1996). Perceived over-qualification refers to the degree to which individuals perceive themselves (or others) as possessing more than the required job qualifications (Fine, 2007).

Mental ability is one of the leading predictors of successful job performance. Both qualitative reviews and meta-analyses of leadership performance also cite intelligence as an important and predictive attribute of successful leadership (Bass, 1997; Fine 2007). Fine (2007: 62) further explains that “intelligence in successful leadership is also based on the many leadership performance domains that require high intellectual capacities such as problem solving, planning, communicating, decision making, and creative thinking.” Fine’s (2007: 66) research indicates that “individuals high in both the personality trait of openness to experience and general mental ability to be most likely to feel overqualified.” Many development and training programs strive to select individuals of the highest quality and intelligence (Fine, 2007), so the training program content must reflect the intelligence of the participants. Intellectually challenging and stimulating course curricula will help avoid dissatisfaction and boredom.

Evaluation

Training effectiveness usually is determined by assessing some combinations of the criteria in Kirkpatrick’s (1967) model of training outcomes. Noe (1986) explains that well-designed and administered training programs can produce positive reactions of trainees, learning, behavior change, and improvements in job-related outcomes. Goldstein and Ford (2002: 119) explain, “the degree to which the training program met trainees’ expectations and desires was positively related to the post-training commitment to the organization.”

When training is evaluated, the most commonly used approach is a form filled out by participants (Tannenbaum & Woods, 1992). Participant forms or forms filled out by participant’s supervisors are mainly anecdotal and reactionary which will fail to support the company’s HR and strategic plans effectively. Systematic collection of training-related data to support the HR planning process helps ensure that training is on target and is cost effective (Tannenbaum & Woods, 1992). According to Tannenbaum & Woods (1992), there are three important characteristics of an evaluation strategy: (1) the magnitude of the evaluation, (2) the research design employed, and (3) the training criteria collected. Collins & Holton (2004: 218) explain there is a belief among some researchers that “evaluative studies of leadership development are sparse because of the lack of an evaluation model that adequately measures the effect of the interventions on the performance of the organization.” Measuring leadership development training and organizational effectiveness is more difficult because it involves analysis at multiple levels of the organization (Collins & Holton, 2004). In Table 3, Tannenbaum and Woods list factors that can influence an organization’s evaluation strategy.
Table 3

Tannenbaum & Woods Factors That Can Influence Evaluation Strategy

<table>
<thead>
<tr>
<th>Factor</th>
<th>Sample Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Potential</td>
<td>“Is it possible to change or drop the course?”</td>
</tr>
<tr>
<td>Importance/Criticality</td>
<td>“What are the implications of erroneous conclusions?”</td>
</tr>
<tr>
<td>Scale</td>
<td>“How large is the training program? How many trainees will participate?”</td>
</tr>
<tr>
<td>Purpose and Nature of the</td>
<td>“What are the purpose(s) and objective(s) of the training?”</td>
</tr>
<tr>
<td>Training</td>
<td></td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>“Do decision makers usually include numerical “evidence” in their presentations?”</td>
</tr>
<tr>
<td>Expertise</td>
<td>“Do we have the capabilities to design and analyze a complex evaluation study?”</td>
</tr>
<tr>
<td>Cost</td>
<td>“How much of an investment are we making in the training program?”</td>
</tr>
<tr>
<td>Timeframe</td>
<td>“When do we need the information?”</td>
</tr>
</tbody>
</table>

Source: Tannenbaum & Woods (1992)

Keeping these factors in mind, there are different options for training evaluation strategies. One strategy is no evaluation strategy, where the training is given but there is no effort made to collect information about whether the training was effective (Tannenbaum & Woods, 1992). The reaction-only strategy, most used in training evaluations asks participants post training if they enjoyed it, if they thought it was useful, was the instructor effective...there is not attempt to determine if trainees learned anything (Tannenbaum & Woods, 1992). There is research that shows that trainee reactions may not be related to behavior change (Tannenbaum & Woods, 1992). If an organization is evaluating the effectiveness of a training program, it may be more important to evaluate participant learning and behavior change to determine if the program is worth what it costs. A basic evaluation strategy is similar to a reaction-only strategy but can yield more compelling results. This strategy employs a well-designed post-training assessment of knowledge or performance. An intermediate evaluation strategy employs some quasi-experimental research designs to assess the effectiveness of training. The intermediate evaluation efforts can vary in complexity, “those that use multiple criteria, collect information from many trainees, and use more sophisticated designs and analyses will allow for greater confidence in the results” (Tannenbaum & Woods, 1992: 69). In an advanced evaluation strategy experimental research designs are employed. This type of research is recommended for the ability to imply causality (Tannenbaum & Woods, 1992). This type of strategy can be difficult to utilize because the employees in the control group cannot communicate with other employees. Organizations usually do not send employees to trainings at random, so a true control group is difficult to establish.

An organization should choose the most appropriate evaluation strategy by revisiting the factors listed in Table 3. Generally, organizations use either no evaluation strategy or a reaction-only strategy so evaluating anything beyond those strategies will indicate if participants are learning anything from the training. If the goal of any training program is behavioral change of participants post training, some evaluation must take place to determine if the trainees are learning the program material, changing their behavior, and increasing performance on the job.

THE DOLLARS AND SENSE OF LEADERSHIP DEVELOPMENT

Return on Investment (ROI)

Assessing return on investment for leadership development is similar to assessing human capital
investments. Research indicates that very few companies evaluate their leadership development programs for training effectiveness and even fewer attempt any assessing of return on investment. When estimating any return on investment; the more accurate one’s assumptions and data are, the more accurate the estimate. There is a perception that estimating ROI on leadership development is too complex or unreliable (Avolio et al., 2010). As our country continues to shift away from manufacturing industries, service industries are steadily rising. Increased future effort must be made in estimating return on investment of human capital. Avolio et al. (2010: 642) recommend that any company investing in leadership development is able to answer the following question: “what has been the effect size of your intervention based on validation evidence collected thus far? Placing pressure on providers to offer such evidence will in our view enhance both the practice and science of leadership development.” The following two related empirical studies suggest methods to better capture ROI in training programs.

Avolio, Reichard, Hannah, Walumbwa, & Chan (2009:766) conducted a meta-analytic study to address a common question in leadership research: ‘do leadership interventions or leadership development initiatives make a difference, and, if so, by what models or methods and with which outcomes?’ This study broke away from the prior-meta analyses focus on the relationship between a limited subset of independent and dependent variables. Avolio et al. (2009) examined how the causal impact of leadership varied across the most commonly researched theoretical frameworks and how effects for each theory category differed by comparing three types of outcomes that commonly appear in the literature: affective, behavioral, and cognitive outcomes.

The experimental and quasi-experimental leadership research was based on 140 independent effect sizes and 13,656 unique participants. The types of organizations studied included for-profit, not-for-profit and military settings. The leaders were coded at one of three levels. The first level was shift supervisor, the second represented middle to more senior level positions, and the third represented top management like CEOs or Presidents (Avolio et al. 2009). The study quality was coded and split into high versus low quality. Some examples of high quality criteria included published study, controlled lab study, actual leaders as participants vs. role play, control group, random selection, random assignments to conditions, experimenter blind to hypotheses, and participants blind to hypotheses. Studies typically coded as low quality were quasi-experimental designs, lacking in terms of randomization of participants, control groups and so forth (Avolio et al. 2009). Active study interventions where the experimenter was attempting to change the leadership style was separated from passive study interventions where the leader already exhibited different types of leadership styles participated in a research project (Avolio et al. 2009).

The findings indicate that by knowing the ‘average’ effect sizes and their ranges, as well as the cost of investment allows for the possibility to calculate a return on development investment (RODI) for future leadership training programs (Avolio et al. 2009). RODI was calculated by using a range of effect sizes from the meta-analysis, coupled with some standard human resource cost accounting methods to estimate possible return. The study examined developing a cost structure for estimating RODI, time in participant salary, lost production time, technology needed, mid versus senior leaders, and calculations for overall return.

Avolio et al. (2009: 779) found “the results indicated slightly stronger effects for leadership interventions that were not training oriented versus those that were developmental. This finding may reflect, in part, that greater levels of intrapersonal change are required in developmental studies and/or behavioral adaptations more common in non-developmental studies”. There also were no significant differentials between newer and traditional leadership interventions. Transformational
leadership had a larger impact on followers’ feelings and thinking, while traditional approaches had a greater impact on more proximal target behaviors (Avolio et al. 2009). Avolio et al. (2009: 783) “indicate the data shows that leadership interventions do have an impact on a variety of outcomes”. Yet, leadership interventions appear to differ in terms of their impact based on the theoretical focus of the leadership model. Leadership theories that have focused more on behavioral change may, indeed, have a greater impact on behavior versus theories focusing on emotional or cognitive change.

Avolio, Avey, & Quisen (2010) performed a study to evaluate leadership development intervention effectiveness using a method developed by Cascio and Boudreau (2008). This methodology allows for leadership development intervention effectiveness over multiple points of time, rather than at a fixed start and end date. Avolio et al. (2010) used Cascio’s formula, which is similar to other ROI equations in that the expected financial cost of investment (in leadership development) is subtracted from the expected financial increase from that specific investment. This number (the overall increase or decrease) is then divided by the overall initial investment cost. The product is a rate of return or RODI. The data that is typically required to calculate the RODI include the number of people going through training; the costs of training; the expected effect of training and duration of that effect; as well as the estimated dollar value impact for those who have gone and not gone through the intervention (Avolio et al. 2010: 635). Avolio et al. (2010) explain the terms ‘manager’ and ‘leader’ were used interchangeably in this study; ‘leadership intervention’ is a developmental experience using some form of training, introspection, receiving feedback, and exercises to increase the effectiveness of how one leads. Avolio et al. (2010: 636) “a basic assumption guiding the estimation of RODI is being able to estimate the effect of one’s intervention. This is analogous to determining the statistical power for a study, in that one has to have an estimate of effect size to do so. The same logic can be used for estimating RODI.” The effectiveness of leadership development is likely to be multi-level, (Avolio et al. 2010) as leadership often involves more than one person and will affect both direct and indirect followers. Leadership cascades down an organization. Leadership interventions can occur in a matter of hours, weeks, or at various points accumulated across an individual’s life span. Using the findings from the aforementioned study (Avolio et al. 2009) a 1.5-day intervention and a 3-day intervention were calculated. The effect sizes based on averages across theoretical models (e.g., transformational, traditional leadership) based on the findings reported by Avolio et al. (2009).

Avolio et al. (2010) indicate that the results demonstrate a wide range of estimated effects and RODI for different types of leadership interventions. The ranges of RODI effects includes a negative to highly positive effect in terms of dollars returned to an organization for the respective interventions based on the assumptions used in this study. These results signal that, on average, one could expect a positive and substantial return on the effects of leadership interventions in terms of leadership effectiveness/performance.

Based on previous meta-analytical and utility procedures suggested by Cascio and Boudreau (2008), any organization can estimate the effect of a proposed leadership intervention before deciding on whether or not to invest in that leadership intervention (Avolio et al. 2010). The results of this study suggest that at least a moderate effect size is needed to get a positive return on development.

There were slightly stronger effects for leadership interventions that were developmental versus typical training programs. This indicates the individual nature of leadership development. Some success depends on the individual leader’s behavioral change. Overall, the findings indicate a positive return on investment in terms of leadership effectiveness and performance. The findings also suggest that at least a moderate effect size is needed to get a positive return on
investment. These studies indicate a company can estimate the dollar effect of leadership interventions and reinforce that these should be considered prior to investing substantial revenue in leadership interventions.

**DISCUSSION**

This paper explored questions regarding leadership development programs and participant behavioral change, specifically looking at the individuals participating and the training program design. The research in this paper was grounded in the following hypotheses:

H1. *Participants in leadership development programs do not significantly change their behavior to exhibit leadership ability post completion of training.*

H2. *A well-designed and administered leadership development program can produce behavioral change in its participants.*

H3: *Leadership development programs will not evoke significant behavioral change without a needs assessment.*

When I initially chose this topic, I was skeptical of leadership development programs and their ability to change the behavior of participants. The literary research proved my initial hypothesis partially unsupported, there is evidence that participants do change their behavior to exhibit leadership ability. Leadership is an inane quality, difficult to define and entirely individual in nature. The research does indicate behavioral change occurs, but it is evident this change stems entirely from training or in combination with other workplace experiences. The literary research does indicate that H2 is supported, when a training program is designed utilizing Kirkpatrick’s model of training evaluation and the trainer is aware of the trainee readiness levels. The studies available do not span a significant amount of years, the time it could take for a leader to fully develop. Due to the individual nature of leadership competencies, it is difficult to find empirical data that fully explains behavioral change post-training. The literature available on needs assessment leads us to believe that a current lack of empirical research leaves H3 unsupported.

When developing a leadership development program, support of and commitment to employee development must be gained in the initial development stages. Involving top management in the development of the program will allow for gained support and also offers the opportunity to utilize these individuals in the planning and instruction of the training. This will also provide an opportunity develop a mentor program. Many leadership development programs are absent of internal staff and management personnel. Truskie (1982: 68) warns, “Their absence raises questions among the attendees about the genuine organizational commitment to implementation of program content.”

The more motivated an individual is to fully participate in the leadership development program will lead to a higher level of performance. A well-designed and administered training program will increase the leadership skills and abilities of the participants. If the training program focuses training for a skill-set that is not applicable to the everyday job, it will not produce the desired effect. Participants in leadership development programs are often unaware of the expectations of performance once the training is completed. If participants are not sure how or where to apply these leadership skills, transfer may not happen and will not produce the desired results of the training. Finally, having the resources to maintain the leadership knowledge, behaviors, and skills (whether this is a refresher course, employee feedback, or some other measure of reinforcement) is integral to individual performance post-training program.

Research is still needed to determine a more specific causal relationship between leadership development programs and participant behavioral change. A thoughtful program design...
will increase participant learning but the organization must support the learning by allowing employees to transfer the acquired knowledge, skills, and abilities on the job. Due to the miniscule percentage of needs assessments done for any training program, research is still needed to better understand the increased effectiveness of training programs on participant behavioral change. Leadership development is the least explored topic in the field of leadership and theory (Avolio B., 2007). More research in this field is required to better understand the relationship between leadership development programs and participant behavioral change.

REFERENCES


