A QUANTITATIVE STUDY ON EXECUTIVE COACHING
FROM A LEARNING TRANSFER PERSPECTIVE

by

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ABSTRACT

The purpose of this quantitative study employing an ex post facto, quantitative design was to research two forms of development, namely executive coaching and traditional methods of training, in relation to the level of learning transfer achieved through each method. One research question guided this study: To what extent are there differences in learning transfer between executives who have experienced executive coaching and executives who have experienced traditional methods of training? A random sample of participants in leadership positions and members of the American Society of Training and Development (ASTD) completed the Learning Transfer System Inventory (LTSI). After taking demographics into account, the data obtained were analyzed to see whether there were any differences between coaching and traditional methods of training. Findings showed that there was a substantial perceived transfer of learning in both groups. This study has an impact on the value of executive coaching for executives and managers.
DEDICATION

I dedicate this study to my husband and the purest love I will ever know, Larry Sheridan Potter, diagnosed on January 30, 2003 with Alzheimer’s. Larry was a professor of business for 15 years at the University of Maine in Presque Isle, Maine. Prior to holding a faculty position, Larry was a major in the United States Air Force retiring in 1985 after 21 years of service to his country.
ACKNOWLEDGMENTS

Without the devoted team members at the University of Phoenix none of my efforts would have come to a productive and positive conclusion. Thank you Dr. Marcus Stratman, Dr. Michael Hitson, and Dr. Birbitwa Gaid. Together, we spent many hours assisting one another with class projects, attending numerous internships in Phoenix, and taking time to keep in touch with one another by phone, email, and visits. I am also grateful to all the excellent teachers and cohorts in my Doctorate of Management in Organizational Leadership (DMOL) program. Most of all, I am grateful to my committee chair, Dr. Stephen Tvorik, a respectful and knowledgeable advisor. First, he challenged me, and then he quietly encouraged me. His mentoring style inspired me to go on in spite of many academic and personal difficulties.

I would like to recognize the support of my dissertation committee: Dr. Frank Salamone and Dr. Michael Raphael for giving their time, effort, support, and encouragement in so many ways. I want to mention my first academic advisor who had such confidence in my ability to do the work and complete my degree, Eric Peterson, Senior Enrollment Counselor, School of Advanced Studies, University of Phoenix. He regularly kept contact by phone and email which made this journey much less lonely.

I have to express my deep gratitude to Dr. Nicole Geslin and Desray J. Britz (CEO) at Language Online (www.languageonline.us) who relentlessly guided with the editing of this dissertation. A special mention and thanks to Dr. Martin Barugel at Minimax Consulting (www.minimaxconsulting.com) for his statistical consulting specialty.
A particular thank you to Professors Robert Murray and Malcolm Coulter at the University of Maine in Presque Isle, Maine as this doctoral journey would not have happened had they not taken the time to guide and support me in the first months of my exploration into a doctorate degree. I am grateful to my older sister, Lise Lord, and her husband, Jean Cantin, for always being there for me. I want to acknowledge my younger sister, Michelle, and my brothers: Clément, Charles and Philippe. I especially want to acknowledge my son, Tyne, and his wife, Shyanne, along with my three grandsons: Tanyn, Quinn and Leo.

Finally, in memory of the following special people in my life who left this earth while I was completing this doctorate: my “cousin and confidante”, Jean Aho (Mental Health Counselor) of Old Town, Maine; my “best friend”, Kate W. Rollins of Wilton, Maine; a close “associate and mon amie”, S. Seich (Author of 3 Sides of You and the ANSIR® profiler) of Toronto, Ontario, Canada; my dear father-in-law, Maurice “Buck” Potter of Everett, Washington.
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CHAPTER 1: INTRODUCTION

The main role of leadership is to improve the performance of the organization as a system (Deming, 1986). One central strategic issue for organizations is leadership development and there is evidence suggesting that organizations have not been able to properly structure leadership development processes (Leskiw & Singh, 2007). Trillions of dollars have been spent in the United States and around the world, and billions continue to be spent yearly on executive coaching, without any data or research demonstrating transfer of learning (Bunch, 2007; Holton, Bates, & Ruona, 2000; Ladyshewsky, 2007). Up to 50% of executives do not fulfill their role expectations as leaders: demotion or termination of employment is often the end result (Kilburg, 2000), which suggests that executive decision making is less than adequate, and there is a need for self-development at the executive level (Jones, Rafferty, & Griffin, 2006). The modern world of work sets up leaders to fail, and researchers have identified several reasons for failure, from poor decision-making skills to the psychology of followership (Van Vugt, Hogan, & Kaiser, 2008). A misperception in training may be the belief that because individuals understand the material presented, they will automatically apply the new knowledge at work (Goldsmith, 2006).

Executives, human resources departments, executive coaches, and organizations are struggling to determine, with some degree of certainty, the level of transfer of learning from executive coaching compared with traditional methods of training (Holton et al., 2000). The methods of delivery of leadership development are shifting from traditional methods of training to a more action-oriented learning (AL) approach such as executive coaching (Leswik & Singh, 2007). According to Yorks (2003), AL increases
the odds that a transfer of learning will occur since AL naturally promotes the application of learning through action. Baldwin and Ford (1988) defined transfer of learning as the degree to which individuals applied knowledge, skills, behaviors, and attitudes from their training to their jobs. Their quantitative study measured the transfer of learning resulting from executive coaching in comparison to other methods of executive development.

Organizations constantly face the challenge of obtaining the maximum out of limited training dollars while striving to increase the knowledge, skills, and abilities of their executives (Hoekstra, 2003). Hoekstra estimated that only 10% of training is transferred to the work environment. Baldwin and Ford (1988) also recognized an important and growing problem in the transfer of learning within organizations. For a positive transfer of learning to occur, the behavior changes need to be measurable over time. According to Kaplan-Leiserson (2005), only 55% of organizations use executive coaching to train their top executives to improve leadership skills and company performance in spite of evidence demonstrating a high return on investment (ROI). Parker-Wilkins (2006) outlined three processes for ROI and coaching as follows:

1. Senior leadership must understand the business value of coaching on their workforce.
2. Documented transfer of learning as it impacts leadership skills necessary.
3. Documented actions taken by staff as a result of coaching requests in order to calculate the value to the business.

In the same study, 58% of executives reported improved teamwork as a result of a coaching program. Giber, Carter, and Goldsmith (2000) recognized the role of action learning and coaching play in developing and sustaining a global leadership culture.
Chapter 1 introduces the background of the problem; the statement of the problem; the purpose of this ex post facto, quasi-experimental, quantitative study; the significance of the problem, in particular, the significance of the study of leadership in the business of training a workforce; the nature of the study; the research question and hypotheses; the theoretical framework; the definition of terms; assumptions, limitations, and delimitations as they apply to this current study; the conclusions; and summary of the chapter.

Background of the Problem

While billions of dollars are spent annually in organizations all over the world, minimal empirical evidence exists demonstrating the effectiveness of executive coaching as a method of augmenting management skills in leaders (Bunch, 2007; Holton et al., 2000; Kirwan & Birchall, 2006; Newsom, 2008; Noe, 2000). The current study focused specifically on the leadership skills and decision-making skills considered to be core management skills at all levels in an organization, and on the executives or managers who have experienced executive coaching (Lozar Glenn, 2006; McLester & McIntire, 2006; Milligan, 2004; Neupert, Baughn, & Lam Dao, 2005; Terrion, 2006).

The intent of the current study was to measure the transfer of learning that occurs in executive coaching compared to other forms of executive development such as professional workshops in leadership and decision-making skills. Given the lack of empirical evidence about the effectiveness of executive coaching to deliver executive skills such as decision-making skills, there is a constant and persistent question in the minds of researchers and practitioners about whether executive coaching is more effective than traditional methods of training (Budd, 2007; McDermott, Levenson, &
Newton, 2007; Pepe, 2007). Transfer of learning will continue to be rhetoric until more research is done in the field. Research has shown a real need to provide better training at a lower cost especially with the evolution of new technologies and world trade (Larouche, 2006).

Since the early 1990s, executive coaching has become an acceptable strategy for developing leadership and decision-making skills in executives with the intent of upgrading or improving their existing skills or for the retention of executives and managers (Kilburg, 2006). This strategy is especially important because executives have less time than before in history to prove themselves in a fast-paced, global, and environmentally challenging world (Chen, Holton, & Bates, 2005; Giber et al, 2000; Nocks, 2007). Concerns arise when organizational forms of training, such as traditional methods of training executives (Baker, Potter, Jones, & Mercer, 2005), become obsolete and less effective at equipping executives to respond rapidly to change and also less effective at retaining top executives (Leswik & Singh, 2007; Williams, 2001). Traditional methods of training, such as professional workshops and courses, are designed for executive development and are delivered in a generic form intended for a wide range of leadership applications while executive coaching is individually tailored (Jones, Rafferty, & Griffin, 2006). Executive coaching techniques support people in executive positions by maximizing a transfer of learning to the work environment (Jones et al., 2006).

Two factors, according to the Executive Coaching Forum Handbook (2004), characterize executive coaching:

1. A partnership amongst executive, coach, and organization.
2. The coaching agreement must link coaching goals with organizational objectives.

Over time, it is possible for an executive coaching engagement to deal with a variety of areas. According to the *Executive Coaching Forum Handbook* (2004), executive coaching may include one or more of the following specialties: personal and/or life coaching, career coaching, group coaching, performance coaching, newly assigned leader coaching, relationship coaching, high-potential and/or developmental coaching, coaching to provide feedback debriefing and development planning, targeted behavioral coaching, legacy coaching, succession coaching, presentation/communication skills coaching, and team coaching.

There are two categories of executive coaching: internal and external executive coaching. According to Tyler (2000) and the International Coach Federation (ICF), the use of an internal coach within an organization is preferred for managerial and supervisory positions, especially when there are financial constraints or a perception that an internal coach may be more efficient than other means with integration and system-level issues. Internal coaches hold positions as specialists within a human resources department of an organization and are considered employees of the organization. They have extensive experience which is applicable to specific operations and behavior inside the organization. Some of the difficulties in internal coaching involve a keen observation of organizational protocol when coaching other professionals. There are also accountability issues, especially with performance problems, which are normally reserved for lower-level positions within the organization. Finally, there is the confidentiality and information boundary matter. The human resources specialists’ daily
involvement in the organization and, potentially, multiple client contracts could create difficulties for the internal coach to maintain acceptable boundaries.

External coaches are professionals who are often self-employed or partner with other professional coaches to form a coaching business. External coaches are not employees of the organization but merely hired to work with individuals and teams of individuals on highly sensitive or confidential issues within organizations. These coaches have extensive and diverse experience in organizational behavior and business; therefore, they are able to provide a wide range of ideas and experience to their clients. When there is a concern about a possible conflict of interest, and confidentiality is primary, the external executive coach is preferable.

External executive coaching is usually based on a monthly coaching fee, a weekly electronic session, and training materials. Because a coaching session is often conducted online or by teleconference, especially with an external coach, the client does not have to leave work or home, travel any distance, or incur any other costs normally associated with traditional training. Furthermore, a well-trained and seasoned executive coach has the ability to laser coach in certain situations, resulting in a much shorter coaching session and thereby providing powerful coaching and reducing training time. Leonard (2002) claimed that a benefit of the laser coaching technique is the ability to reach the coaching goal faster. The main focus of executive coaching, whether internal or external to the organization, is the learning and the coaching relationship between the coach and the client (Bonfield, 2003).

The current study is grounded in theory. The empirical research and statistical evidence is intended to add to an understanding of the topic of executive coaching,
especially when executive coaching is compared with traditional methods of training in
the workplace. A holistic method of measuring the transfer of learning to determine
performance and effectiveness was applied (Holton et al., 2000). The method used
traditional measures and the analysis of learning transfer from a general perspective, thus
examining performance abilities in self-efficacy and transfer of these abilities into work
efforts, to name a few.

In the first decade of the 21st century, executive coaching has been rapidly moving
into management development and training (Gray, 2006). However, empirical research,
journal articles, and books have been limited regarding the profession of executive
coaching (Collins & Holton, 2004; Kilburg, 2000; Newsom, 2008; Noe, 2000; Olivero,
Bane, & Kopelman, 1997). Even more limited are theoretical principles and assessment
designs for measuring the effectiveness of executive coaching (Collins & Holton, 2004;
Holton, 2005; Kilburg, 2000). When assessment designs are found, they are subjective
and largely based on self-perception (Bell, 2005; Tan, Hall, & Boyce, 2003).

As mentioned previously, billions of dollars are spent annually by corporations
and businesses to train and coach their management teams; the issue is thus whether or
not these dollars are wisely invested, particularly when one considers the lack of
empirical evidence regarding the effectiveness of different methods of training (Bunch,
2007; Kirwan, 2005; Kirwan & Birchall, 2006; Larouche, 2006). Since most of the
empirical research on executive coaching has been done in the field of psychology, there
is a perception that executive coaching may be rooted in humanistic psychology or in
philosophy (Gray, 2006). Yet, there is a more recent perception among professionals that
executive coaching may be grounded in adult learning theory (Gray, 2006). In this
context, the executive is seen as a coaching client desiring to improve his or her leadership and decision-making skills. Consideration of moderating variables such as individual learner characteristics, job attitudes, and self-perceptions about the type of intervention recommended is essential when evaluating the effectiveness of programs (Gray, 2006).

In addition, ROI remains the focal point behind training and development. ROI was finally added to Kirkpatrick’s 4-level-model developed in the late 1950s and his model is still considered by many to be the standard in the field (Holton, 1996; Phillips & Stone, 2002; Turner, 2007). Holton (1996) has described Kirkpatrick’s 4-level-model as a taxonomy of outcomes instead of an instrument for research (Holton, 1996). According to Holton, with training, a taxonomy links the beginning stages with the final stages of a developing theory. Kirkpatrick’s 4-level-model continues to appeal to many human resources departments eager to measure the value of training offered within an organization in spite of its lack of stringent empirical research factors including intervening variables affecting learning and transfer processes (Holton, 1996). Originally, Kirkpatrick’s 4-level-model was developed as a communication tool and not meant to be a measuring tool (Wang & Wilcox, 2006). It consisted of four levels:

Level I: Evaluate reaction (assessing requirements, systems and processes)
Level II: Evaluate learning (assessing performance environment)
Level III: Evaluate behavior (assessing knowledge/skill transfer)
Level IV: Evaluate results (assessing learning environment).

In 1997, Phillips added a 5th level to Kirkpatrick’s 4-level-model and called it Level V: ROI (Phillips & Stone, 2002). Kaufman and Keller (1994) created enabling and reaction
out of Kirkpatrick’s original reaction level, and their own 5th level they called societal outcomes. The updated model has 6 levels. Each one of these levels is outcome driven. For that reason, the model lacks theoretical and conceptual power. Therefore, Kirkpatrick’s 4-level model does not permit one to distinguish between moderating variables and does not allow one to examine a failure to achieve the desired outcome in training. To give an example, it may well be assumed that the training needs to be changed, when in fact the problem resides with the transfer climate (Holton, 2005).

Ensuring that the right form of intervention, be it executive coaching or traditional methods of training, is offered and conducted with leaders and that coaches or trainers are well-trained should further augment the effectiveness of each intervention chosen and enhance the performance delivered (Collins & Holton, 2004; Tan, Hall, & Boyce, 2003). As organizations shift and training is aimed at gaining and even augmenting their employees’ leadership and decision-making skills, human resources departments shift to performance improvement using a form of measurement that identifies factors affecting positive transfer of training (Holton et al., 2000). This will become a priority instead of a passing thought. Transfer of learning remains a top priority for today’s learning executives and learning organizations (Danielson & Wiggenhorn, 2003). In other words, the validation of executive coaching effectiveness has become crucial. Transfer of learning applies to traditional methods of training and to executive coaching programs.

The review of the literature confirmed a serious problem in accurately measuring and reporting on the effectiveness of executive coaching with regards to transfer of learning (Kirwan, 2005; Noe, 2000). Larouche (2006) asserted that the issue of improving management skills is an ongoing quest for human resources departments, and
Kirwan and Birchall (2006) revealed that there is a shortage of reliable and valid models to obtain accurate measures in the area of transfer of learning. Noe (2000) examined nine quasi experimental studies focusing on the learning transfer system inventory (LTSI) and concluded that all the studies used an indigenous measure of transfer of learning factors. Since the Holton evaluation model has psychometric, social, and environmental properties, it seemed a logical and an appropriate instrument to use in the current study. Furthermore, the LTSI has been used by researchers such as Kirwan and Birchall (2006) and Yamkovenko, Holton, and Bates (2007) who demonstrated its validity and appropriateness in measuring executive coaching effectiveness.

Statement of the Problem

Billions of dollars are spent annually to improve management skills (Bunch, 2007; Holton et al., 2000; Kirwan & Birchall, 2006; Larouche, 2006; Noe, 2000). Even with a surge in popularity, demonstrated by the adoption and implementation of executive coaching programs as a new paradigm, the problem of effectively measuring the transfer of learning in executive coaching within an empirical approach has not yet been presented. This current quasi experimental quantitative study was designed to measure the transfer of learning in executive coaching. Data were collected with the LTSI in an ex post facto method with 42 executives recruited through the American Society for Training and Development (ASTD). Established in 1944, the ASTD is the largest association specializing in workplace learning and the performance of professionals (“About ASTD,” n.d.). There are 140 chapters of the ASTD in the United States and several chapters elsewhere in the world, but only members working in the United States were invited to participate in this study. Both traditional methods of training and
coaching are used by members of the ASTD which made the organization ideal for the research done in the current study.

Purpose of the Study

The purpose of this ex post facto, quasi-experimental, quantitative study was to measure the transfer of learning in executive coaching. A set of transfer system scales was used. For the 16 constructs measured by the LTSI, the instrument was found to be valid and generalizable since the internal reliability showed a Cronbach’s alpha from .62 to .92. This falls within the approximate range of above .70. The LTSI scales were used to analyze the degree of effectiveness of executive coaching compared to traditional methods of training executives in leadership skills (Holton et al., 2000; Kirwan & Birchall, 2006). The intent was to illustrate that those who receive executive coaching had a higher level of leadership and/or decision-making skills at work when compared to those who had not experienced executive coaching but had instead received traditional methods of training. In the conceptual evaluation model he designed, Holton (2005) hypothesized three primary functions in the design: (a) ability, (b) motivation, and (c) environmental influences, which lead to three outcomes: learning, individual performance, and organizational performance. This model is known as the human research development (HRD), an evaluation research and measurement model (see Figure 1). The measuring instrument is known as the Learning Transfer Systems Inventory (LTSI), which measures 16 transfer-system constructs as shown in Table 1. The LTSI instrument and support were readily available to this study. Changes in any of the LTSI’s 16 transfer-system constructs (independent variables) and transfer of learning constructs (dependent variable) of the LTSI were central to this study; however, the focus was on
only one of three possible outcomes in Holton’s human resources departments evaluation research and measurement model, namely, learning.

Regarding improved self-perception, Bass (1990) noted that the accuracy of self-image was increased in programs where leaders received feedback compared to programs without the benefit of feedback. In another democratic leadership training study by Gassner, Gold, and Snadowsky (1964), no statistically significant increase was found when comparing actual improvement and self-perception in both the experimental and control groups. Furthermore, Hand and Slocum (1970) reported a sudden and immediate powerful acceptance of oneself and others at the end of training but also noted a regression 90 days after the training. House and Tosi (1963) reported there were no important advantages for management trainees in their job satisfaction and other factors studied to measure performance when compared with a control group and a 40-week training course. Argyris (1969) reported his findings on leadership training in sensitivity training as an increase in trust and openness, and an increase in the ability to communicate with others and accept responsibility for decisions.

The focus of this study was to determine the effectiveness of executive coaching (independent variable) over traditional methods of training (independent variable) by measuring the transfer of learning (dependent variable) and by examining the difference between participants who received executive coaching and those who did not receive executive coaching. Dependent variables, such as learning, can be measured while independent variables, such as forms of development, can be differentiated. For the current study, the variable to be investigated was executive coaching. Using Holton’s model, two main categories were considered: training design and environmental factors.
One dependent variable was identified for the purpose of this study, the transfer of learning as measured by the LTSl. It was expected that changes in the method of training would be associated with changes in the transfer of learning scores.

Figure 1. HRD evaluation research and measurement model.


The current study was conducted with executives who are members of the ASTD, (Allerton, 2004; Farbro, 1965; Margolis, 1979) who work in the United States, and who have indicated that they hold a position of leadership. A position of leadership included
members who indicated that they were the president, chief executive officer, manager, or
director of their organization and who supervised workers and staff members in their role
as leaders. This was done at the time they completed their membership application to the
ASTD prior to officially becoming a member. Participants indicated whether they were
completing the LTSI based on their experience of an executive coaching program or
some other form of development such as professional workshops to increase their
leadership and/or decision-making skills. The sample included 42 executives who
volunteered to participate after receiving an invitation mailed to a selected group of
members of the ASTD using a mailing list purchased from Direct Media, Inc. Obtaining a
mailing list from Direct Media, Inc., preapproved by the ASTD, constituted authorization
to survey their membership (see Appendix A). Preapproval was based on the content of
the invitation to the members which took the form of a postcard (see Appendix B) and a
reminder (see Appendix C), a confidentiality statement (see Appendix D) and an
informed consent form (see Appendix E) posted at monkeysurvey.com.

The LTSI (see Appendix F) was administered anonymously using the Internet.
The 16 constructs measured by LTSI is presented in Table 1. These are the subscales
which were used to measure the transfer of learning. The data collected were analyzed to
determine the effectiveness of coaching over training. For the purpose of this study,
executive coaching was defined as a coaching program lasting at least three months. An
executive coach could be considered internal or external to the organization. Internal and
external coaching are two separate forms of coaching strategies. In a survey conducted by
McDermott, Levenson and Newton (2007), the authors found that organizations used
external coaches for senior executives to improve planning, strategy, and leadership skills
Table 1

*Independent Variables Using Holton’s LTSI Model*

<table>
<thead>
<tr>
<th>Training-specific IVs</th>
<th>General IVs</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Content validity</td>
<td>(12) Performance – outcomes expectancy</td>
</tr>
<tr>
<td>(2) Supervisor/Manager support</td>
<td>(13) Resistance to change</td>
</tr>
<tr>
<td>(3) Personal outcomes – positive</td>
<td>(14) Performance self-efficacy</td>
</tr>
<tr>
<td>(4) Personal outcomes – negative</td>
<td>(15) Performance coaching</td>
</tr>
<tr>
<td>(5) Learner readiness</td>
<td>(16) Transfer effort – performance expectations</td>
</tr>
<tr>
<td>(6) Peer support</td>
<td></td>
</tr>
<tr>
<td>(7) Personal capacity for transfer</td>
<td></td>
</tr>
<tr>
<td>(8) Supervisor/Manager sanctions</td>
<td></td>
</tr>
<tr>
<td>(9) Opportunity to use learning</td>
<td></td>
</tr>
<tr>
<td>(10) Transfer design</td>
<td></td>
</tr>
<tr>
<td>(11) Motivation to transfer learning</td>
<td></td>
</tr>
</tbody>
</table>


while they used internal coaching to improve teamwork and strategic performance with their management-level executives within the organization. It is possible to find a combination of external and internal coaches working together with the same executive
or team of individuals (Johnson, 2004). Perhaps the most important distinction was accurately reflected by Strumpf (2002) who pointed to a question executives have when contracting with an internal executive coach: Is it possible to be truthful in my responses and still keep my job?

Executive coaching is recognized as a profession rather than a consultation intervention (Sperry, 2008). There are basic differences between internal coaches and external coaches. Internal coaches are familiar with the organization’s culture, yet external coaches may have an advantage in their ability to deal with politically charged subjects (Stumpf, 2002). An internal coach can readily tap into existing corporate human resources systems, thereby being more cost effective to the organization for the management team. An external coach has the ability to offer highly specialized skills to an executive or team of individuals (Strumpf, 2002). Business strategy is one of the principle reasons an executive hires a coach (Knudson, 2002). Executive coaching is designed to enable executives to learn specific skills to improve their performance on the job or to better prepare them for advancement in business or their professional life. Some executives utilize coaching to improve their ability to strategize more effectively (Witherspoon & White, 1996). Witherspoon and White identified four coaching roles in coaching an executive: coaching for skills, coaching for performance, coaching for development, and coaching for the executive’s agenda (see Table 2). In those roles, both internal coaches and external coaches can provide the organization with value in several areas: developing leadership skills, increasing the chances of achieving business goals, confronting future problems more effectively, and clarifying strategic visions that will provide business success into the future (Strumpf, 2002).
For the purpose of this current study, the assumption is that an executive in an organization or in a business had contracted and completed a coaching program in order to increase his or her leadership skills and decision-making skills. Decision-making skills and problem-solving skills are used interchangeably in this study. Training is defined as a traditional method of training program or workshop, internal or external to the organization, which aims to improve leadership and/or decision-making skills.

Table 2

*Features of Executive Coaching Roles*

<table>
<thead>
<tr>
<th>Coaching role</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills</td>
<td>May include a combination of coaching for basic concepts, strategies, methods, behaviors, attitudes, and perspectives associated with business success to augment learning on the job. This coaching centers on coaching for high clarity by supporting such events as a first-time board meeting with all its expectations; traditional learning with job applications; or job redesign integrating different roles and responsibilities.</td>
</tr>
<tr>
<td>Performance</td>
<td>Focusing on present position for executives who are less effective than they could be either with presenting problems or for business reasons. This coaching will confront ineffective attitudes or other motivational issues; alleviate performance problems when problems jeopardize the executive’s productivity, job, or career;</td>
</tr>
<tr>
<td>Coaching role</td>
<td>Features</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Coaching role</td>
<td>increase confidence and commitment; or deal with blind spots.</td>
</tr>
<tr>
<td>Development</td>
<td>Coaching to align performance with future advancement by strengthening leadership skills and addressing long-term development needs. Usually found in organizations with established succession plans.</td>
</tr>
<tr>
<td>Executive’s agenda</td>
<td>Involves comprehensive learning that may include coaching for insight, perspective, and constructive feedback on ideas presented by the executive. The coach acts as a confidant.</td>
</tr>
</tbody>
</table>


**Significance of the Problem**

Billions of dollars are spent yearly to coach executives, yet limited empirical evidence demonstrating the effectiveness of executive coaching can be found in the literature (Bunch, 2007; Holton et al., 2000; Kirwan & Birchall, 2006; Larouche, 2006; Noe, 2000). Training is regularly done in an effort to improve skills or retain executives within organizations and businesses (Kirwan & Birchall, 2006; Leswik & Singh, 2007; Noe, 2000; Bass 1990) acknowledged that training includes a variety of components such as the organizational climate, a trainee’s supervisor, and upper management.
The current study is important in four ways. First, the review of a large body of available information and data providing historical evidence on the widespread use of executive coaching within organizations helps to define the meaning of executive coaching. Second, the information uncovered up to this point revealed a serious lack of empirical findings (Kilburg, 2001) to support, or discredit, the effectiveness of executive coaching within an organization. The current study addressed this gap with the use of Holton’s LTSI, a validated instrument, by measuring learning transfer. Third, by measuring learning transfer, the results of the current study demonstrate whether executive coaching is more effective than traditional methods of training and permit the evaluation of the scope of executive coaching. Finally, the results and conclusions allow human resources departments and leaders alike to make better choices when it comes to selecting the proper and most effective form of intervention for individual leaders in an organization.

The results of the data collected for the current study using the LTSI provided empirical evidence for the following: (a) decisions about training intervention budgets, (b) decisions about the choice of executive coaching over traditional methods of training executives in leadership positions, and (c) decisions related to talent retention and talent performance at the highest levels in organizations. Measuring tools were indigenous (Noe, 2000) or adaptations of psychological instruments such as the Myers-Briggs Inventory’s assessment, D(drive) I(influence) S(steadiness) C(compliance) as referred to as the DiSC® Personality Assessment (Bell, 2005).
Significance of the Study about Leadership

While turnover in executive positions is one of the most expensive costs of doing business, less than effective leadership is even more costly and, unfortunately, it is prevalent in organizations around the world (Kouzes & Posner, 2002). Evidence has demonstrated that substantial investment in training is lost due to low transfer of learning and trainees tend to relapse to their pre-training patterns (Burke & Baldwin, 1999). Cromwell and Kolb (2004) reported that only 10% to 15% of training is transferred to the workplace. In addition, the amount of time a new executive has to prove himself or herself in an organization is considerably less than ever before in the history of leadership (Kirwan & Birchall, 2006). Executives are faced with increased pressure to prove themselves while keeping up with the increasing demands of a global market. Welch (2005) listed four characteristics of leaders: (a) authenticity, (b) ability to see around corners, (c) a strong ability to surround themselves with people better and smarter than themselves, and (d) extreme resilience. Training executives to become effective at decision-making skills or being able to retain them is a primary concern of organizations and businesses today (Kilburg, 2001).

Burns’ seminal work on transformational leadership theory is based on a higher moral position to create a paradigm shift that will bring change (Bass, 1990): the main idea is that leaders influence followers by creating visions of the goals to be attained and then articulate how to attain those goals (Bass, 1990). Deming (1986) defined the aim of leadership as the responsibility to increase performance and to improve machinery by increasing workmanship, output, and pride of workmanship in the workforce. Bass (1990) explained that leaders influence followers by using charisma and moral value in
three ways: highlighting the importance of the value of the task; teamwork and organizational goals instead of the individual or self; and satisfying Maslow’s higher needs such as self fulfillment.

Burns and Bass understood that transformational leadership originates from the leader’s values and beliefs instead of from commercial exchanges between leaders and followers (Kuhnert & Lewis, 1987). A study originally conducted by Graen, Liden, and Hoel (1982) and replicated by Ferris (1985), found that employees engaging in relationships involving support and exchange of emotions, and whose interactions were considered high quality transactions, were much less likely to leave their organization than those employees who were strictly task-oriented, and whose interactions were considered low quality transactions. Organizations must ensure that their leaders are skillful and effective, and also that their entire workforce is educated, trained and prepared to deal with rapid changes, demanding customers, and advances in technology, and be ready to compete in a competitive global market (Bloch, 2005; Deming, 1986).

The lack of empirical research on the effectiveness of executive coaching as a training intervention is preventing organizations from making an educated choice between executive coaching and traditional forms of training.

The subject of this study is executive coaching, and the object of executive coaching is to augment or support existing leadership and decision-making skills in executives with the goal of helping them become even more effective than before receiving coaching, or to retain those executives who demonstrate a need to improve their leadership skills (Kilburg, 2000; Niemes, 2002). Transformation is a three-fold process: behavior change, increased personal awareness, and a thinking process, which involves
better decision-making and paradigm transformation (Niemes, 2002). While traditional methods such as professional workshops and courses designed for executive development are based on a generic program intended for a wide range of applications, executive coaching is individually tailored (Jones, Rafferty, & Griffin, 2006).

The current study adds to the existing knowledge on executive coaching by examining executive coaching from a historical and constructive point of view. Historically, executive coaching continues to grow in popularity through ongoing articles and interviews but continues to lack in empirical research. Griffiths (2003) noted the increase in the number of executive coaches and even questioned the effectiveness of executive coaching. The current study thus focuses on a trend that is increasing, and it provides empirical research to examine if executive coaching is effective as a legitimate form of intervention at the highest level in the organization and workplace.

In this current study, an ex post facto, quantitative design was used to examine the effectiveness of executive coaching over traditional methods of training for the level of transfer of learning with executive coaching when compared to traditional methods of training. Holton (2005) identified three outcome levels: learning, individual performance, and organizational performance for his evaluation and research model, LTSI. The model allows for quantifying the value and effectiveness of executive coaching in an empirical fashion.

The main purpose of this study was to measure the transfer of learning in executive coaching. Such a measure could guide the choices of leaders, human resources departments, and organizations in selecting executive coaching over traditional methods of training when providing existing leaders with decision-making skills is important on
many levels. Other considerations for the current study were intellectual interests, perceived value, availability of research subjects, availability of an instrument with a high level of demonstrated reliability and validity in terms of Cronbach’s alpha, and the capacity for other researchers to contribute by replicating, or even adding to this study.

The following tasks were performed:

1. Sampling a selection of research participants from the ASTD.

2. Analysis of the content of completed LTSIs by executives who have experienced executive coaching.

3. Analysis of the content of completed LTSIs by executives who have taken traditional forms of training.

4. Empirical testing of hypotheses of interest.

The content analysis was chosen because it allows for a broad analysis of influences affecting the transfer of learning. According to Holton (1996), internal influences such as individual learning characteristics, job attitudes, perceptions of training/coaching, and external influences such as individual performance and motivation are all factors that ultimately affect learning transfer.

Since executive coaching continues to gain popularity all over the world (Mewton, Ware, & Grantham, 2005), human resources departments and leaders would benefit from knowing about the measure of its effectiveness, and its value to both individuals and organizations. Some individuals consider executive coaching as a form of intervention that has come at the right time both for leadership development and leadership performance (Blyth, 2006; Mewton, Ware, & Grantham, 2005; Mussig, 2003). Downsizing and increased global competition appear to be yet other important drivers for
choosing executive coaching as an effective form of intervention (Flaherty, 2005). Hence, it is essential to test the claims made in favor of executive coaching. The current study analyzed the effectiveness of executive coaching over traditional methods of training executives in two critical areas: leadership skills and decision-making skills/problem-solving skills. The focus is on the level of learning transfer of one form of intervention over the other, that is, of executive coaching over traditional forms of training.

Holton (1996) considered the evaluation of training as critical and necessary for organizations today. Hence evaluating executive coaching empirically as a preferred method of training is critical. For organizations to continue offering the development of leadership and decision-making skills/problem-solving skills through executive coaching, measuring the relationship of intervening variables on specific outcomes is critical if executive coaching is to continue to flourish within organizations all over the world (Chen et al., 2005; Orenstein, 2002; Wasylyshyn, 2003). Determining the level of transfer of learning is critical to any training program (Holton, 1996) and to all organizations. At the end of the current study, empirical evidence in the following critical areas of training is provided: (a) decisions about training intervention budgets, (b) decisions about the choice of executive coaching over traditional methods of training executives in developing leaders, and (c) decisions related to talent retention and talent performance at the highest levels in organizations.

Nature of the Study

The data were collected in the form of a survey. The current study is considered a survey research study because information was gathered from a sample of participants (Bartlett, 2005) completing the LTSI, namely executives who had experienced executive
coaching or another form of training. The focus of the study was on the characteristics of a group of executives who had experienced executive coaching compared with another group of executives who had not experienced executive coaching. The survey was done electronically, and participants used the LTSI. Holton and Burnett (2005) identified five characteristics of quantitative research:

1. Determining basic questions to be answered by the study.
2. Determining participants in the study.
3. Selecting the methods needed to answer questions:
   a. Variables
   b. Measures of the variables
   c. Overall design
4. Selecting analysis tools.
5. Understanding and interpreting the results.

There is a growing body of studies looking at and supporting the notion that the work environment is critical for a positive or negative learning transfer (Holton, 1996). This notion is further supported by Holton’s research resulting in the development of the LTSI (Burke & Baldwin, 1999; Holton, 1996; Kirwan & Birchall, 2006).

According to Cooper and Schindler (2003), an ex post facto research method is used when an intervention is observed on past events through using the data collected by the researcher to discover a causality. Experimentation occurs when the systematic altering of variables is applied by the researcher and the researcher observes and records the resulting changes. By using an experimental research design, one would be able to draw conclusions based on a cause and effect relationship because the experimenter is
able to randomly assign values for the independent variables to the participants in the study. Although the ex post facto research method is not a true experimental design, it does offer advantages over an experimental design in two aspects. First, the ex post facto design enables a comparison between an independent variable and a dependent variable when experimentation or manipulation is not possible. Second, the participants included in the study are not aware that they were going to be tested when they receive coaching or training; therefore, this decreased the likelihood that the participants could influence the results of the dependent variable. In the context of the current study, the selected leaders had participated in one of two interventions that could not be controlled by the researcher. The two types of interventions, namely executive coaching and another form of training, were the focus of the study, and the two interventions were correlated to determine whether there is a relationship between the variables and learning transfer.

Coaching and training of executives are activities based on the assumption that these forms of interventions lead to higher levels of confidence in the leaders who have participated in the activity, leading in turn to increased performance in the workplace.

Considering the nature of this study, it seems appropriate to have chosen a quantitative design over a qualitative or mixed design. Ideally, a mixed study may have produced more evidence; however, in order to focus on and collect numerical data on the transfer of learning in executive coaching using a survey, other designs were eliminated. Qualitative research is used in order to gain an understanding of a paradigm. In qualitative research, little is known about the problem or variables prior to the study (Creswell, 2002). A small number of research participants is involved in qualitative research. A qualitative design would have required interviews to be conducted, recorded,
and summarized. A mixed design, including both aspects of quantitative and qualitative studies, would have required much more time than was available for this study, and the qualitative aspect would have been used to support the quantitative findings. The extra resources for the current study using a mixed design did not seem warranted since the purpose of this study seeks to understand the relationship between the dependent and the independent variables. According to Creswell (2002), a quantitative study examines factors that influence the outcome. Both and correlational studies examine a relationship between two or more variables (Muijs, 2004). For the current study, participants completed an electronic version of Holton’s LTSI from a self-perception perspective (Holton et al., 2000). The intention of the study was to clarify any relationship between differences in the participants such as gender and the number of years in management. Statistical difference was approached from an analysis perspective as well as from an analysis of variance.

For the current study, a quantitative research method was used to explore the effectiveness of executive coaching and traditional methods of training by measuring the learning transfer. Creswell (2002) defined a study as research that examines a relationship between two or more variables. From a theoretical stance, executive coaching has become an important part of organizational development and an accepted form of intervention to augment or support leadership and decision-making skills/problem-solving skills in executives (Judge & Cowell, 1997).

Such a research study begins with hypotheses generated from theory and can be used to discover a new theory or define new problems by studying relationships, interpretations and characteristics of participants (Holton & Burnett, 2005). First, the
learning transfer (dependent variable) establishes a basis for testing a causal role between two forms of interventions: executive coaching and traditional training (the independent variables) in altering performance. Second, leaders who had experienced executive coaching may or may not show signs of a learning transfer. This research design for the current study was intended to test the extent to which executive coaching, when compared with traditional forms of training, influenced increased effectiveness in performance by demonstrating a greater transfer of learning in participants. Furthermore, the study included the relationship between Holton’s 16 transfer-system constructs in both forms of interventions, namely executive coaching and training, and the degree of learning transfer (see Appendix G), whether statistically significant or not, in both interventions.

Research Question and Hypotheses

This study focused on the following question: Are one-on-one executive coaching programs more effective in the development of leadership and/or problem-solving skills than other forms of training? Some researchers have argued that executive coaching may be more effective because it gives executives a one-on-one relationship to improve their skills (Judge & Cowell, 1997) compared to a general nontailored training method used in traditional methods of training where only an estimated 10% of the training is transferred to the work environment (Cromwell & Kolb, 2004; Hoekstra, 2003). The purpose of this study was to determine whether there are differences in learning dependent on the type of training received by participants. Hence, one basic research question provided the main focus of this study: To what extent are there differences in the learning transfer between executives who have experienced executive coaching and executives who have
experienced traditional methods of management development to help improve their leadership and/or problem-solving skills at work? Executive coaching may be internal or external to the organization and includes such areas as skills, performance, development and/or the executive’s agenda. Other methods of management development may be internal or external to the organization and include forms of training such as professional workshops, classes, courses, and/or training programs.

In order to answer the research question, two hypotheses were tested using the LTSI inventory. These hypotheses provided the opportunity for observing any differences on the 16 subscales, or factors. Cooper and Schindler (2003) explain that the purpose of hypothesis testing is to determine the accuracy of hypotheses in a sample of data versus a census. A second reason for the testing of hypotheses is to determine the likelihood that the data collected in fact reveal differences (Cooper & Schindler, 2003). The following hypotheses were tested.

\[ H_01: \] There is no difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work.

\[ H_11: \] There is a statistically significant difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work.

\[ H_02: \] There is no difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced
executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work, after controlling for the demographic variables of gender, geographical location, number of years of experience in a leadership position and formal education level completed.

$H_{12}$: There is a statistical significant difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work, after controlling for the demographic variables of gender, geographical location, number of years of experience in a leadership position and formal education level completed.

Theoretical Framework

Executive coaching largely falls under transformational leadership (Crane, 2001). Kouzes and Posner (2002) drew a parallel between inviting a higher level of motivation and morality in engaging others and transformational leadership. They believed that motivation and morality can promote collectivism in the workforce. Furthermore, transformational leadership is at the base of all theories on the willingness to change. According to Yamnill and McLean (2001), three main theories are involved in learning transfer: expectancy, equity, and goal setting. Additionally, Vygotsky’s seminal work in sociocultural theory, better known as constructivist learning theory, attributed the nature of partnerships in adults as rooted in culture and societal factors (Feldman, 2005). Vygotsky believed that adaptation in the physical world was a result of the interactions amongst individuals in a cultural and meaningful manner and was primarily carried out through effective communication.
Vroom (2003) suggested that the best way to predict success or failure is not by examining the cognitive processes but by looking at social conduct. Quinn (2000) considered transformational leadership as a choice to bring about changes, which is fundamentally based on values, thoughts, and action. Quinn believed that such a choice requires an individual who is willing to take risks and who wants to change perspectives. He further asserted that productivity was a byproduct of people who have the freedom to make fundamental choices within the workplace.

Executive coaching may have its theoretical basis in behavior tradition and affective-cognitive consistency theory. In a germinal study of affective-cognitive properties, Cooke and Sheran (2004) examined seven properties: accessibility, temporal stability, direct experience, involvement, certainty, ambivalence, and affective-cognitive consistency. Their study supported other research demonstrating that individuals with high affective-cognitive consistency had stronger attitude-behavior correlations and even when they measured affective-cognitive consistency, attitude-intention relations was not affected (Cooke & Sheeran, 2004). Argyris and Schon (1974) proposed that intellectual problems that pre-existed required synthesizing thought with action. The field of psychology has been the largest contributor to executive coaching research based on the published efforts of individuals who entered the field of executive coaching as coaching psychologists at the end of the 20th century (Jackson, 2005; Kampa-Kokesch & Anderson, 2001). According to Kampa-Kokesch and Anderson, pioneer executive coaches used psychological techniques in three main areas to affect change: thinking, feeling, and behaving. Jackson (2005) proposed a typology of coaching useful for research and evaluation purposes. He believed that a typology offers a chance to compare
the effectiveness of the achievement of one approach with that of other approaches while presenting all possible dimensions at a glance (Jackson, 2005). A systems approach increases the possibilities that the desired results are achieved and that action is applied in organizational situations on completion of the coaching program (O’Neill, 2000).

A number of theories appear to be relevant to executive coaching. Kegan’s (1982) constructive-developmental theory of adult development is better known as subject-to-object theory. Astorino (2002) describes subject-to-object theory as a method of looking at the self and how meaning is constructed using the cognitive senses, affective senses, inter- and intrapersonal skills, and the moral aspect of the individual. Action learning theory (AL) is designed for individuals who are task-oriented and helps explore their ability to systematically incorporate their capacity for ongoing learning and self-improvement (Vaartjes, 2005). The founding father of action learning, Evans, developed the following formula: L (learning) = P (programmed knowledge) + Q (questioning insight), and he emphasized that learning takes place through action that requires an effective combination of two key processes: programmed knowledge and questioning insight (Smith & Peters, 1997). Smith and Peters (1997) considered AL a win/win proposal for the individual and the organization because AL is capable of solving important business, organizational, and social problems that are manifested within the system.

Another theory based on transformative learning, theory-in-practice, espoused by Argyris and Schon (1974) considered the conscious and the unconscious, thus focusing on the criterion of congruence between these two areas and the ability to transfer learning. The origin of this theory dates back to Freud and Jung whose theories are better
known as theories-in-action based on designs of actions where individuals actively design the actions to achieve certain ends or consequences. Argyris, Putnam, and McLain Smith (1985) proposed two models: Model I (theories in practice, or behavior) and Model II, (espoused theories, or thinking): Model I (see Appendix H) was observed to be true of social systems by Argyris in virtually all the individuals in his studies. Argyris and Schon (1996) stated that when individuals are embarrassed or feel threatened, their potential of creating errors will increase. Argyris further argued that although Model II (see Appendix I) was embraced by most individuals, it was inconsistent with Model I. In fact, it is Model I that individuals demonstrated on a consistent basis (Anderson, 1997). Argyris and Schon (1974) believed that learning goals must produce helpful data so that individuals can learn: such helpful data include insight into certain conditions like defensiveness that can obstruct learning. Information should be designed to provide self-improvement, to receive help from others, and to offer a chance to evaluate progress. Furthermore, such data should help individuals collect directly observable data, infer theories-in-use, alter theories-in-use, and then foster the ability to test new theories of action (Argyris & Schon, 1974).

In the literature on the theory of executive coaching, it appears that only coaching psychologists discuss the topic of theories (Kampa-Kokesch & Anderson, 2001). Generally, coaching schools and coaching sources discuss coaching principles instead of the coaching theories guiding the coaching process. Terms such as mutual respect between coach and client and practical outcomes replace theoretical constructs in coaching guides and the coaching processes (Flaherty, 2005). Hence, it may be safe to conclude that most executive coaches are not aware of the theories they use in coaching,
and even fewer executive coaches are aware that the actions they take with clients may not correspond to the theories they explicitly support (Argyris, 1980).

Since the 1980s, learning transfer continues to be an everyday topic of discussion at executive meetings, in human resources departments, and conferences. Learning transfer theories and executive coaching developed almost simultaneously in the 1980s. Seminal theoretical researchers such as Baldwin and Ford (1988) focused on central trainee characteristics such as motivation, self-efficacy and self-expectancy, and the work environment as two primary sources of influence on learning transfer. Swanson (1995) focused on the significance of improved performance resulting from the training while Kuchinke (1995) considered training as a means to an end. Holton (1996) provided a conceptual evaluation model measuring individual performance and learning transfer.

Definition of Terms

*Conscientiousness* is defined as “the extent to which someone is dependable, persevering, hardworking, disciplined, deliberate, and achievement oriented” (Herold, Davis, Fedor, & Parsons, 2002, p. 854).

*Effectiveness* is defined as a measure of the results of an intervention. Characteristics of effective leaders include, but are not limited to, a strong sense of self-awareness, adaptability, and willingness to ask for assistance. In addition, leaders are always looking to improve the self, and they undervalue rather than overvalue themselves (Zomada, 2005).

*Executive coaching*, according to the *Executive Coaching Forum Handbook* (2004), is defined as “an experiential and individualized leader development process that builds a leader’s capability to achieve short- and long-term organizational goals. It is
conducted through one-on-one interactions, driven by data from multiple perspectives, and based on mutual trust and respect. The organization, an executive, and the executive coach work in partnership to achieve maximum impact” (pp. 1-2).

*Experiential*, according to the *Executive Coaching Forum Handbook* (2004), is defined as the development of the leader by using practical, on-the-job approaches rather than through a classroom or more abstract methods.

*Goal orientation*, according to Holton (2005), refers to individuals who are learning-oriented rather than performance-oriented.

*The human research development model (HRD)* is a model of learning examining three primary functions, namely, ability, motivation, and environmental influences on training at three outcomes levels: learning, individual performance, and organizational performance (Holton, 1996).

*Laser coaching* is defined as a specialized coaching technique and approach that promotes quick alignment and a rapid sense of relief, and speeds up the coaching process to promote change in people who may have been reluctant to change their way of thinking and doing (Leonard, 2002).

*Leadership skills and decision-making skills* include management skills, self-management and personal skills, and interpersonal skills. Core leadership skills include self-awareness, articulating the vision, goal setting and planning, and communication. Support skills to the core leadership skills include delegation, feedback and control, time management and self-management, and problem-solving and decision-making skills (Zomada, 2005).
Learning transfer has been defined by Burke and Baldwin (1999) as “the degree to which trainees apply to their jobs the knowledge, skills, and behaviors learned in training” (p. 227).

The learning transfer system inventory (LTSI) is a measuring instrument relating to trainees, training design and the work environment, and how these three elements affect the transfer of learning (Holton et al., 2000).

Motivation is defined as job involvement, organizational commitment, and work commitment (Holton, 2005).

Motivation to improve work through learning (MTIWL) combines motivation to learn and motivation to transfer (Holton, 2005).

Motivation to transfer is defined as a “desire to use the knowledge and skills mastered in the training program on the job” (Noe, 1986, p. 743).

A personality style involves “individual traits that are relatively stable and enduring and that predispose a person toward certain tendencies or patterns” (Holton, 2005, p. 39). Seich (2000) attributed certain characteristics, which were classified as “typical,” to personality styles; these characteristics belonged in one of three realms: thinking, working, and emoting.

Primary influences to learning transfer include ability, motivation to learn, reaction to learning, transfer design, motivation to transfer, transfer climate, expected utility, linkage to organizational goals, and external events (Holton, 1996).

Quantitative research is defined as “an inquiry approach useful for describing trends and explaining the relationship among variables found in the literature” (Creswell, 2002, p. 58).
Secondary influences to learning transfer include personality characteristics, intervention readiness, job attitudes, and intervention fulfillment (Holton, 1996).

Self-efficacy is defined as “a high sense of learning” (Bandura & Locke, 2003, p.87) and “a person’s belief or confidence in his or her capacity to do well on a specific task” (Suzuki, Krahn, McCarthy, & Adams, 2007, p. 338).

Self-expectancy is based on the development of high expectations or standards for personal or professional performance (Schnake, Dumler, & Cochran, 1993).

Subject-to-object theory refers to a shift from one side of an issue to the other (Garvey Berger & Fitzgerald, 2002). Executive coaches have to respect and “pay close attention to their client’s current beliefs as well as to the more complex way of understanding the issues at hand” (p. 33). This process is important as it demonstrates how executive coaching actually takes the client from one point to another, bridging a gap, as opposed to training which offers knowledge to large groups of individuals.

Training is defined as professional workshops, courses or programs designed to increase knowledge, improve skills, and change attitudes, whether for job improvement or for development in the future (Kirkpatrick, 1999).

Training transfer as a transfer of learning is defined as the degree to which trainees are able to apply, generalize, and maintain new knowledge and skills received in training within an organizational system (Ruona, Leimbach, Holton, & Bates, 2002).

Assumptions

Several assumptions have been mentioned within the current study such as the types and length of executive coaching and executive training programs, participant background and experience, and participant honesty in completing the LTSI online. A
presumption was that participants took the estimated 20 to 30 minutes of their time to access and complete the survey online. Furthermore, the assumption was made that participants were in leadership positions with the potential of making a major contribution to the mission and purpose of their organization. This study focused on executives who had completed an executive coaching and/or a traditional method of training. More specifically, the focus was on leadership and decision-making skills/problem-solving skills as strong determiners for executives signing up for executive coaching or training.

Another set of assumptions involved the nonexperimental ex post facto design of the study. By using the ex post facto research design, it was assumed that the variables that were the focus of the study were actually observable in the target population. In other words, it was assumed that the executives and managers were participants who had either received executive coaching or had received some other form of traditional methods of training. Therefore, it was assumed that the executives would have had one and only one of the different forms of training in order to make a fair comparison between the groups. Hence, by using an ex post facto design, the researcher may not have obtained a representative sample of the target population because there were no limitations to the amount and type of training the executives and managers received.

Limitations

Limitations of this study are linked to the use of an updated version of Holton’s model considered more appropriate than before for empirical testing of learning transfer (Holton, 2005). The LTSI has been validated for the measurement of traditional training methods but has not been validated in measuring executive coaching. Additionally, while
self-reporting has been the norm in evaluating both training and coaching, it has been considered flawed (Holton, 1996; Tan et al., 2003).

One of the limitations of the current study is that the participants were not randomly selected to participate in the study; this limits the generalizability of the study because the sample may not be representative of the target population. Moreover, the current study was limited to participants who agreed to participate in the study and self-report on either coaching or training. Previous studies have documented variations in the assessment of learning transfer by both participants and observers (Harris & Schaubroeck, 1988). To minimize the potential effects of self-report bias, participants had the opportunity to complete the survey anonymously using the Internet. Postcards inviting participants to participate were mailed through the United States Post Office by bulk mailing to 1,250 members of the ASTD. For minimum bias, when completing the survey online, only two codes were used to specify that the participants had completed a coaching survey or a training survey. To maximize participation, the survey could be completed in the privacy of participants’ home, provided they had access to the Internet.

All participants were recruited through one training and development organization of professionals, the ASTD, whose mission is to create a world that works better through exceptional learning and performance. The ASTD has over 70,000 members in 100 countries worldwide and is considered the world’s largest professional training and development organization (“About ASTD,” n.d.). The current study was limited to the number of participants surveyed and the amount of time available to conduct the study and therefore may not be representative of all executives. The study was also limited by the reliability of the instrument used. No pretraining measures were taken in this study.
Only posttraining measures were considered for an ex post facto study. Study participants were all selected from a list of executives and managers who are members of the ASTD.

**Delimitations**

The current study was confined to a survey of volunteer executives whose names were provided by Direct Media, Inc. These executives and managers work in a variety of organizations and are members of the ASTD. They have all received executive coaching or another form of development. The focus of the study was on the levels of transfer of learning in executive coaching and traditional training. Participants were asked to think about coaching in general or training in general in their organization before responding. Following this participative assessment, a quantitative process was implemented using statistical methods. The findings were viewed from the limited perspective of the selected participants. The modest empirical effort made is intended to add to the limited existing research.

The delimitations of the study are those that illustrate the boundaries imposed by the researcher. In turn, this means that the delimitations of the study are those that limit the results so that it is not possible to generalize the findings to the target population. A delimitation to the study was that only executives and managers were eligible to participate in this study. By using only this sample of participants, it is possible that they do not represent the entire population of executives and managers.

**Conclusion**

Chapter 1 has documented the limited available research and information on executive coaching. Yet, leadership development remains a key strategic issue for organizations which desire to compete in the marketplace. Executive coaching continues
to grow in popularity (Hargrove, 1995; Kilburg, 2001) but with minimal empirical
evidence to support the benefits of executive coaching over other training methods of
development. Furthermore, this chapter has showed the need for empowering
organizations and human resources departments to develop human talent through
facilitating the transfer of learning to increase professional and personal fulfillment in the
workforce (Chen et al., 2005). It would appear that measurement procedures have been
less than acceptable and have created serious problems for those in charge of training
needs; hence, the chance for miscalculating and misinterpreting the benefits of certain
methods of training may well be where researchers needs to focus their efforts (Holton,

While executive coaches support executives in their role as leaders of a complex,
technical, and specialized workforce in economically challenging times, the importance
of the transfer climate or environment may be the single most important area, or at least
as important as the training itself, in successfully and positively transferring training
(Holton et al., 2000; Rouillier & Goldstein, 1993; Smith-Crowe, Burke, & Landis, 2003).
Executive coaching provides a supportive one-on-one training relationship and creates a
less restrictive training climate than traditional nontailored methods of training. At the
very core of executive coaching is the knowledge that executives can professionally and
personally lead a more authentic life (Starratt & Stelmach, 2003). The current study
examined executive coaching more closely and attempted to determine its effectiveness
in a quantitative study.
Summary

The goal of an executive coach is to evoke paradigm shifts in executives that create a movement from participant to object: from individual to organization (Garvey Berger & Fitzgerald, 2002). Traditional methods of learning offer knowledge and practices that can be applied in the workplace to solve problems or create ideas (Cacioppo, 1998). When comparing executive coaching and traditional methods of training as interventions to support, sustain, or retain executives, a deeper understanding of factors above and beyond the actual intervention, such as those listed in the LTSI, is necessary to accurately evaluate and compare these two interventions. The aim of the study was to examine the transfer of learning within the context of executive coaching because little to no empirical evidence in the literature demonstrates that executive coaching is more effective in transferring learning than traditional methods of training.

Coach psychologists in coaching and consulting practices have done research on executive coaching (Whybrow & Palmer, 2006). It is not surprising that theories have been developed from the field of psychology and largely based on behaviorism. The use of the LTSI supports the need to look at both internal and external factors that affect the transfer of learning when taking a closer look at executive coaching, especially when considering the billions of dollars spent annually to augment knowledge. Executive coaching develops relationships encouraging support and exchange of emotions. In comparison, traditional methods of training engage in task-oriented approaches. Empirical research is necessary to see whether one method has a higher level of learning transfer than the other. The evidence provided by the current study was used to examine
the popular belief that executive coaching is more effective than traditional methods of training.

Finally, internal or external executive coaches can deliver executive coaching (Tyler, 2000). An internal coach has been trained to work within the confines of the organization and is limited by regulations imposed by the organization. Such a coach often acts as a mentor rather than a coach. The internal coach, already on the payroll, is less expensive to the organization and often available on call (Tyler, 2000). In contrast, an external coach is hired on contract by the organization to come in and coach employees. Advantages to hiring an external coach include providing alternative perspectives, outside of the usual company politics, and in total confidentiality. The limitations are less stringent for the external coach than the internal coach because he or she is much less limited by organizational regulations. Since the focus is on executive coaching, the literature review, which is presented in the next chapter, will be concentrating on the area of executive coaching instead of the many other areas of the profession of coaching such as business coaching and life coaching. Chapter 2 will examine the historical overview of executive coaching; the current findings; theories, assessments and perspectives; the research variables using the LTSI to measure the transfer of learning; the effectiveness of executive coaching in leadership; and finally, alternative points of view.
CHAPTER 2: REVIEW OF THE LITERATURE

The literature review examines three main areas of executive coaching and is consequently divided into three sections: an overview of coaching, the players involved in executive coaching, and how the effectiveness of executive coaching is measured. In addition, traditional methods of training have been considered. Most of all, this chapter offers a background of information to support such a study.

Chapter 2 contains nine sections: first, the documentation listing key elements being explored; second, the organization of the study with an outline of searches; third, the historical overview of executive coaching with a discussion of gaps in the literature including germinal research; fourth, current findings and studies concerning the problem statement; fifth, theories, assessments, and perspectives of executive coaching; sixth, an outline of each of the research variables in the LTSI; seventh, a brief look at the effectiveness of executive coaching in leadership; eighth, the effectiveness of executives; and ninth, a balanced discussion of alternative points of view is provided by comparing and contrasting the different points of view regarding executive coaching.

Documentation

The purpose of this quantitative, ex post facto, study was to measure the transfer of learning in executive coaching. A thorough review of the foundation of executive coaching beginning in the early 1980s to the present, demonstrating the complex nature of executive coaching in comparison with traditional methods of training executives, is discussed in this chapter. A less extensive review of the traditional methods of training executives has also been outlined. Key elements explored in this chapter are the following: (a) self-efficacy as it relates to executive wisdom; (b) performance measures
for coaching and training; (c) learning-transfer theory; (d) a learning organization, defined by Senge (1994) as an organization that is willing to expand and create a new future; and (e) the coaching and training model. Most of the literature review focused on the process of executive coaching, self-efficacy, and the transfer-learning theory. A limited approach was taken with traditional methods of training executives, or executive development and a learning organization as defined above. The review analyzes and synthesizes the research in the field of executive coaching and executive training, particularly as it relates to the advantages and disadvantages of these two forms of intervention in the training of executives.

Creswell (1994) proposed three criteria for the literature review of a research study: report the study results, bridge the gap between the study results and the literature, and provide a structure that facilitates study comparisons. For this literature review, Creswell’s (2002) five-step process was adopted: (1) definitions for the terms used in the study; finding all the literature; relevance of the literature review to the study; organizing the literature selected for the purpose of the study; and completing the literature review.

Organization of the Study

Searches included databases such as ProQuest, EBSCOhost, Sage, ProQuest Dissertations; books and Internet articles, the U.S. Department of Labor, and the Bureau of Labor. After a reduction and thematic analysis, keyword searches were used and substantive themes were identified: (a) executive coaching as a trend, (b) elements and effectiveness of executive coaching, (c) elements of traditional methods of training executives, (d) gaps in the literature, and (e) alternative points of view people hold. Keywords included, but were not limited to, executive coaching, leadership training,
executive training, leadership skills, retention, decision-making skills, problem-solving skills, and executives.

Research studies and journal articles on executive coaching largely come from the fields of organizational behavior, management consulting, training and development, consulting psychology, and coaching (Feldman & Lankau, 2005). Articles found by the research fall into the category of the anecdotal rather than the empirical, and despite the qualifications of individual coaches, methodology and theory seem to be largely left undefined (Natale & Diamante, 2005). Furthermore, there is also a lack of understanding and clarity regarding the value of executive coaching over traditional methods of executive training as expressed in research studies, conferences, on-line documents, and the press (D’Abate, Eddy, & Tannenbaum, 2003).

Historical Overview

It is impossible to uncover the moment executive coaching was introduced except than to say that there is a debate over executive coaching being an extension of the field of consulting (Kampa-Kokesch & Anderson, 2001). Despite the fact that executive coaching dates back to the 1940s, it has been receiving attention in the literature only since the 1990s (Hargrove, 1995; Kampa-Kokesch & Anderson, 2001). Consultants dabbled in coaching once they were able to reach the leaders at the top of the organization (Kilburg, 2000), and then coaching moved to the field of organizational psychology (Kampa-Kokesch & Anderson, 2001). Considering that executive coaching has gained major professional recognition as a performance enhancement process in organizations, few professional development programs in coaching exist and basic qualifications or professional standards have yet to be universally accepted (Gray, 2006).
Psychological Roots

Psychologists joined the field of executive coaching after it became popularized in the late 1980s and early 1990s and once they realized that this field could be even more lucrative than their private practices (Filipczak, 1998). Suddenly, counseling the well seemed a great alternative to counseling the sick; yet, the ability to obtain quicker results in a somewhat more enjoyable fashion seems to have been a strong second motivator (Williams, 1999). The use of the DSM IV-TR (Diagnostic and Statistical Manual of Mental Disorders) to assess dysfunctional organizations may lead to identifying dysfunctional leaders in areas such as seeking absolute power or being an offensive supervisor (Goldman, 2006). Psychologists have many of the prerequisite skills and knowledge to enter the field of executive coaching, provided they make a distinction between counseling and coaching individuals (Williams, 1999).

Phases

Kampa-Kokesch and Anderson (2001) dated the first phase in the period 1950-1979 when organizational development and psychological techniques were used with executives. They identified the second phase as 1980-1994 when there was an effort to standardize services, and there was an increased interest in the profession of executive coaching. A third phase, beginning in 1995 and still current in the first decade of the 21st century, brought increased interest in published articles and research in professional organizations such as the Professional and Personal Coaches Association and the International Coach Federation (ICF) as well as a global recognition for the need and benefit of executive coaching (Hannah, 2004; Kampa-Kokesch & Anderson, 2001). This
interest signaled a growth in the industry and the potential for validation in the
marketplace and boardrooms of organizations worldwide.

Self-Efficacy

Kilburg (2000) used the term *executive wisdom* to describe the wisdom of leaders
as an ephemeral entity. Kilburg (2006) suggested that all leaders in an executive role
yearn for this wisdom, and yet, many fail to come near or achieve that status. According
to Kilburg (2000), this executive wisdom originated a century before Socrates and Plato
at the time of Confucius, who was born in 552BC. Kampa-Kokesch and Anderson (2001)
believed that executive coaching may have started in the 1940s but noted that not much is
known on the actual techniques used or the effectiveness of the process during this initial
period. There is a push, especially by the American Psychological Association (APA) and
the International Coach Federation (ICF), to develop industry-specific guidelines and
standardize executive coaching as a legitimate profession.

Executive coaching is an extension of executive consulting, which is largely
based on sports philosophy. Bill Walsh, retired head coach of the San Francisco 49ers,
said that when looking at a team of 10 players, the first two players may be extremely
motivated and it is fairly easy to coach them to win. The next four can be coached to
reach their potential by using motivation and direction. The next two are considered
marginal and will require constant attention and feedback. Finally, the last two will not
only fail but waste the coach’s time and effort. Walsh focuses on the middle six because
these players are receptive to feedback, encouragement and coaching (Porché &
Niederer, 2001). Because of the potential to bring change management, executive
coaching is best utilized to coach the top- and middle-level executives as mentioned in Coach Walsh’s story above.

The term executive coaching was popularized in the 1990s by Thomas Leonard who founded Coach University, a virtual 2-year coach training program, and later on Coach Ville, another virtual coaching program. Both programs were enormously successful and attracted potential personal, life, executive, and business coaches from all over the world. Leonard capitalized on the joy and ease of coaching anyone in the early 1990s by being interviewed sitting in the desert next to his large Class A motorhome, thus illustrating the virtual facility of coaching anyone, anywhere online through the Internet. He was a flamboyant yet brilliant entrepreneur who did not care to screen applicants for fitness into his coaching programs (Tremblay, 2003). Instead, he started a popular movement in the field of coaching that seemed out of control but was extremely lucrative for him.

Executive coaching has been identified as one of the most powerful approaches to professional development and support (Gray, 2006) and the fastest growing in consulting as well (Eggers & Clark, 2000). Coaching is a multi-billion dollars industry mainly brought on by the fast pace of change in the global business and replacing past traditional ways of training (Kets de Vries, 2005). Gray (2006) noted that a survey of 530 United Kingdom organizations had shown that 78% had used coaching for the professional development of senior managers and executives. The ability of executives to effectively manage teams is the measure between a high-performing organization and a mediocre one (Kets de Vries, 2005). Executive coaching contracts are designed to encourage leaders to co-create a confidential professional development plan between the
organization, the executive, and the professional executive coach (Nowack, 2005). Ives (2008) proposed three possible dimensions to a coaching contract ranging from instructing or not instructing approaches, personal or developmental issues, to therapeutic or performance designs. Because executives are human, and they need to share their most intimate thoughts with someone outside their own work environment, the executive coach performs a vital function in that objective (Rudisill, Edwards, & Hershberger, 2004).

Executive Coaching

The training industry is based on the commonly held idea that through either executive coaching or a traditional method of training executives can alleviate skilled incompetence, a term coined by Argyris in the 1990s (Argyris, 1993). According to Argyris (1993), skilled incompetence is a result of individuals avoiding confrontations with colleagues, and this behavior prevents them from solving organizational problems or learning. The question that needs to be answered relates to which one of the two is the most effective method and in what circumstances is one method better than the other. According to Hendrickson (1990), the term executive coaching originated in the Hungarian village of Kocs where a covered wheeled wagon or carriage (koczi and now coaching) carried its passengers through harsh terrain while they were protected from the elements on their way from a point of departure to a point of destination. The term has also been used to coach students safely through exams, and athletes through practices and competitions.

Together with organizational consulting and executive training, coaching is a powerful tool in supporting executives in the course of their leadership experience. Hannah (2004) demonstrated that workplace coaching could improve employee
competence. Barner (2006) stressed that by using coach assessment tools and personal observations, the coach provides a unique expertise while having the ability to provide a dispassionate third-party perspective in integrating existing information. Bartlett (2007) argued that the focus of coaching is on improved performance. Similarly, Peterson and Hicks (1996) defined coaching as a process that is designed to provide skills, knowledge, a chance to increase self confidence and improve performance.

Rudisill et al. (2004) considered the executive coach as a consulting professional and a confidant that can be trusted. Kets de Vries (2005) made a strong plea for all executive coaches to take clinical training in psychology in order to recognize and effectively deal with serious psychological problems that can manifest while in coaching. Traditional forms of training deal with cognition while coaching deals with both cognition and affect. Coaching, by its nature and process, includes reflection and introspection, unlike traditional training.

Executive coaching is about commitment and trust between the organization, the executive, and the coach. It is also about results and improving performance (Bartlett, 2007; Linder-Pelz & Hall, 2008). When an executive has a financial problem, he or she calls the chief finance officer or the bank. When an executive has a legal problem, he or she refers to the corporate legal firm. The question is who can the executive go to when he or she has a personal problem (Lord, 2004). Peltier (2010) stated that it can be lonely at the top of the organization because honest feedback on issues and performance become rare therefore giving the leaders a distorted sense of how they are managing their leadership role. Since many executives acknowledge having nobody to talk with in privacy about personal issues, executive coaching provides a safe and helpful avenue for
them to do so (Kets de Vries, 2005; Rudisill et al., 2004). Turner (2006) defined the benefits of executive coaching as follows:

1. One-on-one relationship.
2. Expanded thinking through dialogue with an external coach.
3. Self-awareness, including blind spots.
4. Personal accountability for development.

Turner stressed three factors that determine successful executive coaching: an executive that enters coaching willingly, a trained coach, and clear expectations of the outcome of the coaching disclosed at the beginning of the coaching program. According to the Executive Coaching Forum Handbook (2004), three levels of learning are involved in executive coaching:

1. Tactical problem solving.
2. Developing leadership capabilities and new ways of thinking, and new ways of acting that generalize to other situations and roles.
3. Development of skills and habits of self-reflection that ensure that learning will continue after coaching ends.

Traditional methods of training have often been described as ineffective, unnecessary and expensive, even harmful at times (Mintzberg, 2004). Mintzberg noted that leadership training was an ambiguous business because it is not clear what it is exactly. Management involves several components: experience, insight, and analysis. Holton (2005) suggested three critical success-moderating variables to learning transfer: (a) learner dispositional influences, as described in the five-factor model of personality,
which are an integral part of individual personality traits, (b) job attitudes, and (c) self-perceptions of training. The five-factor model of personality consists of neuroticism (or emotional stability), extraversion, openness to experience, agreeableness, and conscientiousness (Costa & McCrae, 1995).

By the mid 1950s, training roles shifted to a performance consultant role and then to management in hopes of aligning training with organizational strategy (Phillips & Stone, 2002). Several executive coaches, not unlike teachers who did not require any specific training and experience at one time to teach in a classroom, had little to no training with assessments, human behavior modification techniques, and theoretical training. Finally, it seemed that the ability to pay the tuition for coach training at one of the hundreds of programs available was the only criterion to become a professional coach (Turner, 2007).

In a study conducted by Olivero, Bane, and Kopelman (1997), 31 managers participated in a conventional managerial training program and then took 8 weeks of face-to-face executive coaching. Results showed that conventional training contributed to a measured increase in productivity of 22.4% compared to the 88% increase in productivity after executive coaching. According to Hipwell (2005), organizations struggle to keep the cost of training down and yet retain a return on their investment. He listed key performance components as those of a balanced scorecard:

Level 1: Satisfaction

Level 2: Learning effectiveness

Level 3: (a) Job impact

(b) Time to job impact
(c) Barriers to use
(d) Post-training support

Level 4: (a) Business results
(b) Job performance change
(c) Business drivers impacted by training

Level 5: ROI

At the beginning of the 21st century, ROI may be easier to measure with traditional methods of training executives because a longer history and track record is available. The purpose of learning is to change behavior in the way individuals think, perform or act, and adapt to change in the workplace (Hipwell, 2005). According to Gray (2006), a coaching client desires to attain a higher level of performance, personal satisfaction, and learning. The objective for the organizations, and more so for the individuals in training, is to make a difference in the long term. Habits are not easy to change. Bad habits are even harder to change. Training involves learning methods and technical data. In the end, it is soft skills and interpersonal skills that improve communication with others, that will make a greater difference (Seich, 2000), and many believe that executive coaching can close that gap.

Current Findings and Studies

Many doctoral dissertations and master’s theses, journal articles and press articles, and books have been written on executive coaching in the first decade of the 21st century. In 2005, most articles published on executive coaching would be considered nonempirical and/or from an opinion-based perspective. According to Newsom (2008),
by 2005, there were only 11 published research studies on executive coaching consisting of 6 quantitative studies and 5 qualitative studies.


1. The role of the unconscious in individual and group behavior.
2. The interaction between the individual and the organization.
3. Multilevel organizational forces.
4. The coach’s use of self as a tool.

An executive coach realizes the importance of self-awareness and self-reflection leading to a deeper understanding of management concepts and techniques within a variety of organizations: corporate, nonprofit, government, and educational (Orenstein, 2002). Research has suggested the characteristics of executive coaching, its success as a leadership development method, and the positive results experienced by those who have chosen that method (Hannah, 2004). Yet, there is evidence that it may not always be an authentic relationship or presentation of services. In 2006, a scam by a nationally known firm at a professional conference for coaches in Orlando, Florida, fixed the drawing for a free three-month executive coaching program so that a specific organization would win the prize: this cheating was done in hopes of gaining an advantage for future coaching business with that organization (Turner, 2007).

To complicate matters, there are very few studies documenting the effectiveness of executive coaching using empirical methods (Collins & Holton, 2004; Kilburg, 2000), pointing a need for such research. Psychotherapy has been leading the movement for
scientific knowledge and empirically validated models, and methods when coaching executives in organizations (Kilburg, 2000). Wang and Wentling (2001) researched the relationship between distance coaching and the transfer of training. Areas discussed included providing resources, building relationships, problem-solving skills, defining expectations, and scheduling coaching.

In terms of the relationship between perceived coaching success and the transfer of training, Wang and Wentling (2001) found that 50% of the factors studied had important relationships with the transfer of training. Areas researched included preparation for coaching, interaction with the coach, relationships with the coach, encouragement from the coach, and monitoring progress. Wang and Wentling examined the relationship between coaching activities and the perceived coaching success and found a statistically significant negative relationship in a series of perceptions of participants about the coach and the coaching process. Those areas included preparation for coaching, concerns from the coach, encouragement from the coach, and the overall coaching process. When researching the use of communication technologies, Wang and Wentling reported a preference by participants to establish immediate contact with the coach in order to build a coaching relationship and tap into available resources. The researchers concluded that there was a strong correlation between the transfer of training and the actual coaching process in terms of the participants’ perception of coaching.

Theories, Assessments, and Perspectives

While there are a large number of learning and instruction theories, it would be an intricate and rigorous task to explain how each theory is used in various theoretical frameworks (Kearsley, 2007). In particular, as the purpose of this study was to measure
the transfer of learning in executive coaching, applied learning theory seemed a more fitting framework. Certain early 20th century psychologists, Dewey, Piaget, and Vigotsky, to name a few, identified two models: individual constructivism leading to knowledge constructed from personal experience and social constructivism leading to knowledge constructed from a collaboration based on multiple perspectives (Almala, 2006). Since the nature of executive coaching is based on learning in action, a constructivist theory of adult learning may be the most useful framing to understand how learning occurs. Constructivism also has implications on how people know and how people learn. Furthermore, dialogue is a common assumption of both a constructivist learning theory and executive coaching (Lotz Becker, 2007).

The practice of executive coaching has preceded the theoretical development (Baek-Kyoo, 2005). There is a serious effort to standardize coaching and strengthen accreditation in the profession; however, most regulation frameworks are not yet evidence-based or empirically validated (Griffiths & Campbell, 2008). The need for executive coaching services by organizations all over the world, combined with a lack of formal executive coaching preparation or regulation in the profession of executive coaching, has been steadily growing for the past 15 years (Newsom, 2008). Since coaching is relatively young in its development, theories and perspectives are not well defined yet (Kampa-Kokesch & Anderson, 2001; Kilburg, 1996; Newsom, 2008; Orenstein, 2002). Executive coaching includes, but is not limited to, the application of the principles and methods of psychology, personal foundation, business management, leadership, a systems approach, and organizational development. Executive coaching
comes in two distinctive forms: internal coaching practiced at the managerial level and external coaching at the executive or leadership level (Baek-Kyoo, 2005).

Executive coaches gain training from a variety of schools of coach training, and each individual brings a different background and experience which may include business, psychology, and liberal arts, to name a few (Judge & Cowell, 1997). Unlike internal executive coaches who are employed within organizations, all external executive coaches are self-employed or working within a small partnership of executive coaches. They have adopted models of best practice which demand a knowledge base in the area of coaching as well as the coaching niche they have developed, character and insight, and authenticity and integrity (Baek-Kyoo, 2005). Executive coaching follows steps that Orenstein (2002) listed as follows: initial contact, the preliminary meeting, joint goal setting, contract approval, formal assessment, feedback, coaching, and termination. Based on 20 years of experience, Barner (2006) emphasized the value of adapting the assessment process to different coaching requirements.

Argyris (1964) noted a positive change in workers when they are given more opportunities to control their daily activities, which is a basic premise of executive coaching: enlarging instead of shrinking human potential and talent. A relatively recent theoretical basis of executive coaching has been appreciative inquiry, a form of actionable knowledge-base approach (Kowalski, 2008; Sekerka, Brumbaugh, Rosa, & Cooperrider, 2006). Lewin (1935), the pioneer of action research, maintained that human behavior is influenced by the environment in which events unfold. The field of psychology has adopted a systematic application of behavioral and cognitive models to design and manage executive coaching contracts (Kilburg, 2004). This process is in part
due to the psychologists’ training background as scientists and the need to have a path to follow when coaching executives.

In addition, personality and personal foundation are central to any executive coaching contract (Rosinski, 2003). While psychotherapists have a great deal of clinical and testing experience to diagnose problems of executive leadership, dysfunctional team behavior, social defenses, corporate culture, neurotic organizations, and organizational decision making (Kets de Vries, 2005), they do not possess the business coach training and experience of other executive coaches in the field. Psychotherapists tend to approach coaching from a medical perspective instead of a leadership and business frame of reference. The latter approaches executive coaching from a goal-and-action orientation instead of the passive and reflective stance of the psychotherapist/coach (Kets de Vries, 2005). Ives (2008) presented a comparative analysis of coaching approaches. He categorized coaching approaches as non-directive, goal-focused, and performance driven while non goal-oriented coaching approaches were reserved for personal growth and therapeutic situations. Diedrich and Kilburg (2001) suggested that the requirements for coaching included specialized knowledge, skills, and techniques as well as several disciplines: being able to organize, manage, lead, and have an understanding of economics.

Flaherty (2005) explained that the premise of coaching is the introduction by the coach to the client of a new language that supports better understanding and greater learning leading to new behaviors in a self-correcting and self-generating way. Hence, Flaherty’s view of coaching is that it gives individuals a chance to change, become more effective and competent, and excellent at what they do. He also discounted any theories
that some clients are uncoachable. That all clients are coachable was also supported by Porché and Niederer (2001). All the authors believed that everyone can improve in life when someone like a well-trained coach demonstrates care, is resourceful and focused. Howard (2006) outlined two emotional roles activated in coaching: a positive emotional attractor (PEA) that invites constructive and physiological responses in others, and a negative emotional attractor (NEA) that focuses on current social and environmental stressors which will stimulate a different set of emotions.

Although executive coaching is not a panacea, it has been a strong alternative to traditional methods of training executives. Talkington, Voss, and Wise (2002) surveyed 300 companies and showed that almost 60% of these used coaching services and/or other developmental counseling services. They further reported a study on executive coaching showing that the hospitality industry had saved $30-$60 million by coaching 200 top executives to be more effective as leaders. In another example, Talkington et al. (2002) quoted a conservative amount of $100,000 saved by coaching two key executives for retention and improving efficiency and sales in excess of $250,000.

Research Variables

The LTSI is divided into two categories representing two construct domains: training specific to measure individual perceptions and transfer of learning specific to measure individual perception or psychological climate. First, there are 76 items measuring 11 constructs which represent a specific training program received. In fact, participants in this study were asked to “think about this specific training program” (Holton et al., 2000, p. 340). Specifically, the following constructs apply: learner readiness, motivation to transfer, positive personal outcomes, negative personal
outcomes, personal capacity for transfer, peer support, supervisor support, supervisor sanctions, perceived content validity, transfer design, and the opportunity to use the training in the workplace.

Second, general factors that are less training or program specific, yet potentially can influence results, have been included. Participants are asked to think about training in general in their organization prior to making their selection. In this section, 36 statements measure the transfer of 5 constructs: effort-performance, performance outcomes, openness to change, performance self-efficacy, and feedback-performance coaching.

There are three outcomes, or variables, using this method of transfer of learning: learning, individual performance, and organizational performance. For the purpose of this study, learning was the only outcome being researched.

The Effectiveness of Executive Coaching in Leadership

Since executive coaching is considered by many to be in its infancy, there is a lack of empirical evidence demonstrating that it improves performance (Kampa-Kokesch & Anderson, 2001). Barner (2006) asserted that coaches are involved in leadership development and career planning. In a study using the LTSI, Knasawneh, Bates, and Holton (2006) found that there were differences across the situational level variables that included types and choice of training as well as organizational sectors and tasks.

In another study, Thach (2002) tracked 281 executives over a 6-month coaching period using a 360-degree feedback instrument. Compared with self-perception assessments, a 360-degree feedback method adds both objectivity and incremental validity to individual performance (Van der Heijden & Nijhof, 2004). Thach concluded that with a talented coach, leaders can increase their leadership abilities; managers that
show leadership potential can sharpen their skills; and executives that are derailing can turn around and not get fired. Executive coaching is a specialty that focuses on developing skills and knowledge in managers and leaders ensuring increased organizational performance and personal satisfaction (Bougae, 2005; Kilburg, 2006). Since executive coaching is still in its developmental phase, it appears that the practice of executive coaching has come before the study of the process and methods of coaching (Bougae, 2005).

Bass (1990) identified several leadership styles: authoritarian, autocratic, democratic, directive, laissez-faire, participative, relations-oriented, and task-oriented. Coaching-based development for executives enhances their achievement irrespective of their style of leadership (Jones et al., 2006). Furthermore, executive coaching has the distinction of moving people from where they are to where they want to be more rapidly than most other methods of training (Hargrove, 1995). The matter of generation change is an important one. As the baby boomers leave top management in great numbers, organizations will need executive coaching more now than before in order to help the younger executives reach their potential and become fully productive after the baby boomers have left their employ (Casavant & Cherkowski, 2001; Morgan & Hawkins, 2006).

In a study reported by Parker-Wilkins (2006), a 700% ROI was realized by using coaching programs totaling $3,268,325 in measurable gains to organizations. However, in spite of numerous reports of positive ROI, development programs have the potential to do more damage than add value (Eggers & Clark, 2000). While ROI has been used to measure the effectiveness of executive coaching, the LTSI has not yet been documented
to study executive coaching. Researchers have used the LTSI to study “the relationship between training transfer and transfer climate” (Hogan, 2005, p. 26) in a variety of settings, mostly in traditional methods of training.

**Alternative Points of View**

Leadership is “declaring a future and enrolling people into making that future happen” (Porché & Niederer, 2001, p. 4). While good leaders may be hard to find and keep, leaders at the turn of the 21st century are challenged perhaps even more than before in history. Rapid changes in technology, marketplaces, organizational alliances, mergers, and partnerships; increased global competitiveness; accelerated diversity of ideas along with various individual backgrounds, beliefs, abilities, and experiences; constant reengineering of processes and right-sizing of organizations and flattening of organizational forms – leadership has become everyone’s business (Kouzes & Posner, 1995). It is helpful to have an executive coach to share the burden with, to solve personal issues with, and to learn to effectively balance the numerous responsibilities associated with the position of being a leader/executive (Gray, 2006). The historical and philosophical development of the field of executive coaching was discussed earlier in this chapter. Executive coaching appears to have become a strong movement that is popular and growing. The literature review supports the theoretical framework and variables associated within the field of executive coaching.

Since organizations and businesses will never stop searching for talent, executive coaching may be the best form of fine-tuning or rebuilding the competencies in existing talent (Hannah, 2004). It could also help bring the new generation of leaders, who are replacing the retiring baby boomers, to full potential and it may remain the most powerful
strategic and tactical tool within the reach of executives everywhere (Kets de Vries, 2005). Kets de Vries concluded that coaching was the single best way to create mutual accountability and drive change even more effectively in teams of executives. The success of an executive coaching relationship is based on the ability of the coach to ask strategic questions that lead to an expansion of thought, feelings, and actions. Strategic questions are designed to create movement leading to a shift in thinking, feeling, or behaving (“Shaping a strategic question,” n.d.). Schwartz and Collyns (2007) described strategy as a “pattern of actions that intervenes in the ongoing development of the organization to make desirable outcomes more likely” (pp. 13-14). Executive coaching aims to draw a direct line from where the executive is at the moment coaching begins and where he or she wishes to be when it ends. It is an action-oriented form of development.

Executive coaching affects both the professional and personal life of the executive (Hannah, 2004). In comparison, traditional methods of training often promise and deliver information or techniques that tend to regress shortly after the training has taken place (Hoekstra, 2003). Traditional methods of training coupled with executive coaching may have a much greater chance of sustainability and effectiveness.

Conclusions

Chapter 2 has examined the historical overview; the current findings in the literature; theories, assessments and perspectives; the research variables using the LTSI to measure transfer of learning; the effectiveness of executive coaching in leadership; and finally, alternative points of view. The literature review represents a foundation for this ex post facto, quasi-experimental, quantitative study to measure the transfer of learning in executive coaching. The review was as extensive as possible, considering the limited
empirical research that is available. The focus of this review was limited to presenting differences between executive coaching and traditional methods of training in providing executives with leadership skills. There is detailed information relating to research available and to the LTSI. Based on the limited empirical research available on executive coaching, the research question was grounded on the need to measure transfer of learning among executives who have experienced this form of development.

Summary

Existing but limited empirical research in executive coaching has been documented in this chapter. This current study adds to the limited body of evidence that has been documented on executive coaching (Collins & Holton, 2004; Kilburg, 2000; Noe, 2000; Olivero, Bane, & Kopelman, 1997). Chapter 3 describes the methodology that was followed in order to research the level of comparative relationship between executive coaching and traditional methods of training using the LTSI in calculating the transfer of learning in these two forms of leadership development.
CHAPTER 3: METHOD

Chapter 2 reviewed the literature on executive coaching and the traditional methods of training from a historical and current perspective. Theoretical foundations were explored as well. Chapter 3 presents and discusses the research methodology employed for the purpose of this research study.

The lack of empirical evidence in the field of executive coaching has been emphasized in the literature review. The main purpose of this quantitative study employing an ex post facto design was to measure the transfer of learning in executive coaching by comparing participants who had experienced executive coaching with those who had experienced other methods of training such as taking a class, course, or workshop in leadership skills. Those measures were obtained by using the LTSI. A total of 42 volunteers who had experienced some form of executive development were administered the LTSI. The author granted permission to the researcher to use this instrument for the explicit purpose of carrying out this research study (see Appendix J). The use of volunteers is typical in such studies as long as they are not coerced, deceived, or duped into participating (Meltzoff, 1998).

The objective is to answer the research question and to determine the effectiveness of executive coaching (independent variable) over traditional methods of training (independent variable) by measuring the transfer of learning (dependent variable) and by examining the correlation between participants who received executive coaching as compared with those who did not receive executive coaching. The research question: “To what extent are there differences in the learning transfer between executives who have experienced executive coaching and executives who have experienced traditional
methods of management development to help improve their leadership and/or problem-solving skills at work?” More specifically, sections of this chapter explain in greater detail the research design and methods used to collect the data. A quantitative study discovers whether a relationship may exist between a set of independent variables and dependent variables (Creswell, 2002). According to Tvorik (1996), by establishing a relationship between competencies and a set of variables, it is possible to determine a means of multiple regression through measurement. Holton’s (1996) quantitative research model created the necessary step in theory development for this study: the model is comprehensive, and includes both external and internal factors for measuring learning transfer. Executive coaching is both unique and effective. The question was how unique and effective it is in comparison to traditional methods of training.

Research Design

This study employed a nonexperimental quantitative, ex post facto methodology to determine whether an executive coaching program, when compared with traditional methods of training, is more effective by measuring the level of learning transfer in participants. It was considered nonexperimental since participants were not randomly selected, and there was no manipulation of the independent variable, that is, the type of training received by the executives. The outcome variable was the transfer of learning scores as measured by the LTSI.

Several designs were considered for this study. Most of the existing research designs in the field of executive coaching research have been either qualitative or case studies. Rarer still are mixed design studies and even fewer were a quantitative design. Therefore, to add to the limited number of quantitative designs in this field of study, an
ex post facto design was employed. This is the most appropriate design since an analysis of the relationship between variables was conducted in order to reveal a relationship (Creswell, 2005). The research involved 42 participants, and the relationship between variables was analyzed using quantifiable data. There was no manipulation of the treatment (training) since the study was conducted after executives had received their training or coaching. Therefore, the levels of the independent variable were fixed so that the researcher was unable to assign the treatment groups to the individuals in the study.

The nonexperimental ex post facto design is not a true experimental design because the researcher does not have the ability to control the specific levels or categories of the independent variable. This means that, for the present study, the researcher was not able to randomly assign values to the participants in order to make causal inferences between the type of training program and the transfer learning scores (Cozby, 2001). Specifically, the researcher was not able to express whether the independent variable caused the change in the dependent variable. However, the researcher was able to evaluate the relationship between the independent and dependent variables in order to conclude whether the independent variable had a statistically significant influence on the dependent variable. Thus the researcher was able to address the research questions and objectives of the study through using statistical procedures designed for true experimental designs.

By the nature of the study, the research design is quantitative for the reason that a comparison was made between an independent variable and a dependent variable. This means that the researcher was able to assign quantitatively numerical values to the independent and dependent variables so that a comparison could be made. Even though
these quantitative numerical values (i.e., representing group numbers) could not be assigned to the individuals randomly as in a true experimental design, it was still possible to compare the values of the independent variables with those of the dependent variable, since it is important to determine whether statistically significant differences exist between the levels of the groups in the study (Cozby, 2001). The values for the independent and dependent variables were obtained by using a survey instrument designed to measure the effectiveness of a specific type of training program and the transfer learning scores.

Executives belonging to the ASTD, a Virginia-based professional organization of over 70,000 members in over 100 countries, were asked to submit the contact information of former executive clients so that they may be invited to participate in the study ("About Us," n.d.). Out of a possible 39,000 members working in the United States, only the minimum of 5,000 ASTD members randomly selected from a master file were requested. From that list of 5,000 names, every fourth name was selected, and the individuals received an invitation to volunteer in this study. The ASTD is considered to be the leading association for workforce learning professionals ("About Us," n.d.). Since the ASTD offers both training and coaching, members were selected at random from a mailing list supplied by Direct Media, Inc and asked to complete the survey for either training or coaching. Direct Media, Inc. is an Internet-based, leading marketing services company, based in Greenwich, Connecticut. The final list of every 4 names was bulk mailed by a bulk mail service in Maine.

A representative sample of executives, though not the entire population of executives who are members of the ASTD, contain the same characteristics as the entire
population of those executives who have received executive coaching and traditional methods of training in leadership and problem-solving skills. Therefore, it was possible to draw inferences about population parameters from the sample data collected (Muijs, 2004; Nardi, 2003). Holton’s LTSI is a Likert-type survey instrument which consists of several questions designed to quantitatively measure underlying construct variables. This survey instrument enables the measure of the desired variables, which in turn permitted the description of the characteristics of the population in this study in terms of the underlying variables. As suggested by Creswell (1998), generalizations of the findings from the responding sample to the target population of interest were possible. The current research study was based on data with equal units of change for the different categories found in Holton’s model. In this study, the interval scales represented quantitative values. The LTSI instrument was used without interference or change. A multiple linear regression was utilized to look at the combined effects of the type of training (traditional or executive coaching) and the demographic variables (gender, geographical location, and number of years of management).

The study was guided by one research question that referred to the variables contained within Holton’s LTSI instrument, as previously shown in Table 1 in chapter 1. This instrument allows for the number of influences on learning to be considered which consists of personal and environmental factors. Comparative data were analyzed, and hypotheses were tested using Holton’s LTSI instrument. The current study aimed to identify the extent to which there are differences between the executives who have experienced executive coaching and those who have experienced traditional training in the area of leadership and problem-solving skills.
Appropriateness of Design

The quantitative, nonexperimental, ex post facto design was appropriate for this study since the objective was to determine whether there are differences between the types of training programs and the transfer learning scores. The ex post facto design was appropriate for this study since the levels or categories for the independent variable were already defined or classified so that the researcher did not have the opportunity to manipulate or randomly assign individuals to certain groups. A quantitative research approach was more appropriate for the proposed study than a qualitative design because, with a qualitative design, it would not be possible to assess the direct relationship between two variables based on the open-ended questions. The responses received, based on the questions asked, had to be interpreted and coded to identify trends or relationships in the responses. Since the information had to be coded by the researcher conducting the analysis, the finding may be biased. To reduce the amount of subjective bias in the results, the researcher received assistance from another individual to increase the objectivity.

By implementing a quantitative research design for the study, one is able to collect more information as well as obtain a larger sample size than in a qualitative study (Cozby, 2001). For this reason, a quantitative approach was appropriate for the current study. An observational or descriptive study design could have been implemented for this study. However, the researcher would not have been able to determine the direct impact the independent variable, namely the type of training method, would have had on the transfer learning scores, which made the nonexperimental ex post facto research design more appropriate.
Participants volunteered to complete the LTSI online at a specific URL created through surveymonkey.com, and they were assured complete anonymity. The data collection was automatically provided by surveymonkey.com. The data were then analyzed through one of the most commonly used statistical software program in quantitative research in education, the Statistical Package for the Social Sciences Student Version™ 16.0 (SPSS). Using the LTSI, generalizations were deduced from the data collected. Since the goal of this study was to measure actuality through the administration of the LTSI instrument, the application of a quantitative methodology was appropriate for this study (Creswell, 2002).

**Research Question**

This study was guided by one research question: To what extent are there differences in the learning transfer between executives who have experienced executive coaching and executives who have experienced traditional methods of management development to help improve their leadership and/or problem-solving skills at work?

**Hypotheses**

In order to be able to address the research question for the study, a series of null and alternative hypotheses was posed in order to meet the objectives of the study through using statistical procedures. For this reason, the null and alternative hypotheses for this study were as follows:

\[ H_0: \quad \text{There is no difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work.} \]
\( H_1 \): There is a statistically significant difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work.

\( H_0 \): There is no difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work, after controlling for the demographic variables of gender, geographical location, number of years of experience in a leadership position and formal education level completed.

\( H_2 \): There is a statistically significant difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work, after controlling for the demographic variables of gender, geographical location, number of years of experience in a leadership position and formal education level completed.

Participants

A randomly selected list of 1,250 participants were invited to participate through a postcard mailed directly, out of a list received from Direct Media, Inc. consisting of 5,000 executives and manager members of the ASTD. All the executives had experienced both executive coaching and traditional methods of training, or one form of development only, to either support or augment their leadership and problem-solving skills. At the least, participants had to have completed a coaching program or a traditional training
program in specific areas of leadership skills and/or problem-solving skills. Executives who had recently signed up for coaching for the first time and had not been coached for a minimum of three months, or who were currently participating in a traditional training program for the first time, were excluded from the study.

The second criterion for participation was that the participants had to consent to participate prior to completing the survey. Participating executives were male or female and not selected by race or ethnicity. These participants worked and resided anywhere in the United States. The minimum total number of participants was set at 30. The required sample size was determined using the central limit theorem.

The actual number of participants surveyed in the study was 42, which was larger than the required sample size. Participants reflected a heterogeneous population consisting of executives who had experienced executive coaching and traditional methods of training to augment or support existing knowledge with regards to leadership and decision-making skills. The source of the executive coaching or the traditional methods of training could be either internal or external to the organization. Data were collected from participants in a variety of organizations, locations, and industries in the United States.

Informed Consent

An invitation to participate in this study was mailed to every fourth individual out of a list of 5000, totaling 1,250 individuals. Direct Media, Inc supplied their minimum list of 5,000 executive members of ASTD. Participation in the study was strictly voluntary. Prior to participating in this study, each potential participant received an invitation to participate (see Appendix B); a confidentiality statement (see Appendix D) and a
standardized consent form (see Appendix E) were posted at surveymonkey.com. As is customary, the consent form required the participants’ acceptance before they could complete the online survey. The consent form provides an explicit agreement to participate in the study. Provided participants agreed to the consent statement, the next step was to select one type of training or executive coaching received over the past 12 months. They were specifically asked whether they were assessing executive coaching or another traditional form of executive development for the current study. The final questions were about gender and the number of years they had been in management.

Sampling Frame

Participants were executives who themselves were members of the ASTD. The postcard describing the purpose of the study was sent to the potential participants by using the United States Postal Service (USPS). The link to the online survey at surveymonkey.com was provided to each individual. The researcher obtained a list of 5,000 names from the ASTD of potential participants who were in leadership positions within their respective organizations. A systematic sampling procedure was then used where every fourth individual was selected on the list, which resulted in a total of 1,250 postcards mailed through the USPS to ASTD members.

The data from the link at surveymonkey.com were collected over a 2-week period. A reminder to participate postcard (see Appendix C) was sent to the same 1,250 volunteers one week after the first mailing in order to allow the participants sufficient time to complete the LTSI instrument and return the completed form to the researcher via surveymonkey.com. Those individuals who did not respond to the survey instrument within the allotted time period were not included in the study.
Sample Size

The minimum total number of participants was set at 30. The required sample size was determined using the central limit theorem. The calculation allowed for a sample size of at least 30 as sufficient enough to approximate the normal distribution from any population. The larger the sample size, the better the normal approximation to the sampling distribution of the mean. In this case, the mean of the sample mean would approximate that of the population mean, and the standard error of the mean is smaller than the population standard deviation. The real advantage of the central limit theorem is that sample data drawn from populations with not normal distributions or from populations of unknown shape can also be analyzed using the normal distribution, because it is assumed that the sample means are normally distributed for sample sizes of at least 30 (Arjomand, 2002).

Confidentiality

Each invitation included directions to surveymonkey.com for completion and submission of the LTSI. A confidentiality statement (see Appendix D) was part of the information found at surveymonkey.com for each potential participant, and there was mention of the anonymity of those who volunteered to participate. The statement discussed the need to understand English sufficiently to complete the assessment. It was clearly specified that each potential participant was volunteering to complete the LTSI. Participants were informed that no harm or risk was anticipated from completing the assessment and that there would be no loss of benefit or possibility of repercussion for taking part in the study. Participants were advised of the anonymity of their responses,
and each name was assigned an alphanumerical character such as C1 for coaching participant number 1 or T1 for training participant number 1.

**Geographic Location**

Although executives live and work all over the world, geographic location was limited to the United States. One limitation is that they had to be able to read and understand English in order to be able to complete the LTSI. To facilitate the completion of the survey, everyone had to participate electronically via a computer and had to have access to surveymonkey.com. Therefore, the LTSI was accessible from anywhere in the United States through the Internet.

**Instrumentation**

Holton’s (1996) model was selected because it describes “a sequence of influences on outcomes occurring in a single learning experience and does not demonstrate any feedback loops” (Kirwan & Birchall, 2006, p. 257). Holton developed his holistic model to evaluate training. Holton’s model has become the conceptual basis for the LTSI, measuring factors such as trainee, training design, and work environment (Kirwan & Birchall, 2006). Previous studies have validated the LTSI and demonstrated its reliability to measure the transfer of learning using 16 constructs (Bates, Kauffeld, & Holton, 2007; Chen, 2003; Holton et al., 2000; Kirwan & Birchall, 2006).

This instrument consists of two sections. Each section represents a distinct construct domain: (a) program-specific transfer constructs and (b) general transfer constructs (Holton et al., 2000). The first section is factor-analyzed using 76 items focusing on the specific training program, and the second section analyzes 36 items
focusing on general transfer constructs (see Appendix F). Participants rated each item on a Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree.

Based on their experience, each participant was asked to complete one LTSI. The LTSI is considered the only validated instrument of learning transfer in the United States and globally with the primary purpose of diagnosing strengths and weaknesses in organizational transfer systems (Chen et al., 2005; Knasawneh et al., 2006; Kirwan & Birchall, 2006). The instrument contains 89 items assessing 16 factors divided into two major categories: training specifics and learning. Participants were asked to state their gender, number of years in management, and whether they had completed a traditional training or executive coaching program within the past 12 months.

Using the data from this assessment, statistical analyses were then performed, focusing on the comparison of learning transfer scores between participants who had experienced executive coaching and participants who had experienced other forms of training. Central to the model used in this study is the “effect of different motivational elements on outcomes” (Kirwan & Birchall, 2006, p. 258), as motivation to learn has been identified as a direct precursor of learning in previous studies. Although research continues to perfect criterion validation to measure learning transfer, the 16 factors found in Holton’s LTSI are believed to be representative of the factors influencing learning transfer (Holton, 2005). In one study, the LTSI has been used with 1,616 participants attending nine different training programs from government, for-profit training, and non-profit organizations (Chen et al., 2005).
Data Collection Procedures

A total of 1,250 potential participants were approached to assess the level of learning transfer of their executive coaching and traditional training experiences. Executives who have experienced executive coaching and other traditional forms of training were asked to participate. A mail invitation was sent to executives and managers who were members of the ASTD from varied organizations in the United States. They were asked to evaluate either executive coaching or any form of traditional training they had participated in to increase or support their leadership and problem-solving skills at work. Such skills have been studied previously (Lozar Glenn, 2006; McLester & McIntire, 2006; Neupert, Baughn, & Lam Dao, 2005; Terrion, 2006). Each volunteering participant was directed to go to a specific URL to electronically sign a consent form and to complete the survey. Surveymonkey.com has controls in place to ensure that only one survey can be completed by each participant.

In order to recruit executives who had experienced traditional forms of training or an executive coaching program, a mailing list of members of the ASTD was obtained from Direct Media, Inc. Every fourth name was chosen and mailing labels were generated. These executives and managers were asked to go to a specific website and specify whether they were completing the survey to evaluate their training or their coaching program. Participants were not able to complete the survey until they agreed to an informed consent and confidentiality statements posted at surveymonkey.com. After agreeing, participants were asked to complete all items from the LTSI online. Completion of the LTSI was done electronically through surveymonkey.com and returned for compilation and analysis using the SPSS program.
The raw survey data that were collected from surveymonkey.com were entered into an Excel spreadsheet with the corresponding question number and category comprising the variable header. In order to maintain confidentiality, only the researcher had access to the account on surveymonkey.com which contained the responses to the survey instruments. Each participant was also assigned a unique identification number in place of his or her name; this number ensured anonymity while permitting the distinction between participants in terms of statistical analyses. The data from this study will be retained for a period of 2 years after completion of the study and will then be destroyed by deleting the files as well as the account data on surveymonkey.com to maintain participant confidentiality.

Data Analysis

General principles of graphic display and analysis were followed using the SPSS data analysis program Version 16.0 for Windows. Learning transfer scores were computed based on the responses to Holton’s LTSI instrument. The descriptive statistics were computed for each of 16 factors in the LTSI. Descriptive statistics (mean, median, minimum, maximum and standard deviation) were reported for the overall sample and separately for the subsample of executives who received executive coaching and the subsample of executives who received other forms of training in leadership skills and problem-solving skills.

Independent sample $t$ tests were performed in order to assess whether the differences between the two groups (executive coaching or other forms of training), in terms of learning transfer scores, are statistically significant. This test is appropriate when the mean of an outcome variable is to be compared between two mutually exclusive
groups; consequently, it was appropriate for the objectives of the present study. In order to control for the effects of demographic factors on learning transfer scores, a multiple linear regression analysis was also performed. One such analysis was performed for each subscale of the LTSI as a dependent variable.

The independent variables were the respondents’ gender, geographical location, number of years of experience in a leadership position, formal education level completed, and a dummy variable representing whether the respondents had experienced executive coaching or other forms of training. The response code was “1” if a respondent had experienced executive coaching and “2” if a respondent had experienced traditional training. This analysis enabled the assessment of the difference in learning transfer scores between respondents who had experienced executive coaching or other forms of training after controlling for the aforementioned demographic factors, which might also have had an effect on learning transfer scores. Therefore, the results of this analysis enabled the evaluation of the net effect of executive coaching, after removing the effects of gender, geographical location, formal training, and experience.

Validity and Reliability

According to Creswell (2002), validity comes in at least two forms: external and internal. External validity refers to the level of certainty of inferences concerning causal relationships determined in a study. Internal validity refers to those elements of the research study which may interfere with the researcher’s ability to develop correct inferences based on the responses of participants or the accuracy of the data that will be collected. There are situations, given the type of study, wherein participants may mature,
or their points of view may change over time. In these cases, issues of validity may arise and interfere with the validity of the data.

Construct validity can be divided into two parts: translation validity which includes face and content validity and criterion-related validity which includes predictive, concurrent, convergent, and discriminant validity. Traditionally, construct validation consists of “establishing convergent and divergent validity with other constructs through correlational studies” (Holton et al., 2000, p. 342); now, factor analysis is also recognized as a construct validation. According to Nunnally and Bernstein (1994), factor analysis is considered central in the measurement of psychological constructs.

Reliability and validity are two criteria used in evaluating the instrument as a measuring tool. Holton et al. (2000) established the validity of the LTSI in a study of 1,616 participants from a variety of organizations. Chen et al. (2005) established the reliability of the LTSI by comparing measures of transfer between Taiwan and the United States. Holton et al. (2002) were able to establish a clean interpretable factor structure of the LTSI’s 16 transfer system factors (See Appendix K). Their study was able to validate a variety of practical uses in identifying organizational interventions in several important areas such as assessing potential transfer factors creating problems, such as a follow-up evaluation of existing training programs, and such as a diagnostic tool for investigating known transfer of training problems, to name a few.

According to Cooper and Schindler (2003), the measurement instrument should be sufficiently sensitive to capture the meaning of the variable and to capture the meaning of changes occurring over time. One of the issues in the literature concerns the limitations of existing training effectiveness assessment tools such as Kirkpatrick’s simple 4-level
model (Holton, 2005). In comparison, Holton’s LTSI is sensitive to both personal and work environmental factors. The model measures five individual characteristics: conscientiousness, neuroticism (emotional stability), openness to experience, goal orientation, and locus of control (Holton, 2005).

According to Ferguson (2004), internal validity is considered the greatest threat in research, yet controlling for threats to internal validity may result in a reduction in external validity. Researcher bias is another major component of internal validity. In the case of this study, these issues should not have impacted the validity of the study as the research instrument was self-administered, leaving little to no room for researcher influence on participants’ answers. Yin (2003) noted that internal validity is a concern for causal comparative studies, that is, those studies that explore whether one event has caused another. Another concern for researchers about internal validity is the issue of inference and its role within the context of the case study. Yin noted that researchers tend to infer each time an event cannot be observed directly but is present in the evidence collected.

*External Validity*

External validity, according to Yin (2003), deals with the issue of generalizing beyond the study. Yin specifically addressed the issue of generalizing from a sample to a larger group. Yin explained that “survey research relies on statistical generalization, whereas a case study relies on analytical generalization” (p. 37). Analytical generalization allows for a generalization from a set of results to a broader theory.

Based on the nature of this study, the possible limitations of external validity may exist. One of the possible threats towards or weaknesses of the external validity of this
study is that the sample collected for the study was not a random sample of the target population. Rather, the sample that was obtained was based on a nonprobabilistic sampling method where the respondents voluntarily completed the online survey instrument. For this reason, there may not have been a representative sample of the target population because the individuals who responded to the survey instrument may have had something in common with one another than could not or was not measured in the study. It is this commonness of the individuals who responded to the survey that makes generalizations questionable because the sample may only represent those individuals in which the commonness is observed.

Similarly, another threat to external validity for this study is the fact that the data were collected via an online survey instrument. This is a threat to external validity because not all participants responded to the survey; in other words, one may not end up with a representative sample of the target population. Another threat to external validity based on the survey instrument is that the survey is a self-report survey. Therefore, it is possible that participants’ answers were not accurate or may possibly have been invented if participants were unable to accurately recall something or if they provided an answer to the Likert-type scales questions that was not representative of their true perceptions. In this sense, the researcher had to take the responses of the participants as accurate measures of their true feelings and/or perceptions.

The issue of reliability is also a major factor in this research study. The LTSI is considered a reliable instrument based on prior application and testing (Holton & Bates, 2007; Holton et al., 2000; Yamkovenko, Holton & Bates, 2007). Administering the instrument in a consistent manner aids the reduction of reliability issues. For this study,
validity and reliability constructs are derived from an instrument referred to as the LTSI developed by Holton (Holton, 1996, 2005; Holton et al., 2000) in the field of learning transfer. Measures range from one-item scales quantifying a variety of constructs to multiple-item scales while the content is validated in situation-specific scales (Holton, 1996). The LTSI studies 16 transfer factors defining and measuring variables in three areas: transfer design, transfer climate, and motivation to transfer (Holton, 2005). Both validity and reliability of the Holton model have been considered reasonable in measuring learning transfer (Kirwan & Birchall, 2006). The model addresses primary intervening variables such as ability, motivation, and work environment factors (Kirwan & Birchall, 2006).

Validity of the LTSI

The validity of the LTSI has been established in several published studies (Bates & Holton, 2004; Kirwan & Birchall, 2006). It is not the intention in this section to look at all the studies using the LTSI. Instead, the aim is to give a brief summary of the psychometric qualities of this instrument.

In the very beginning of its development, the LTSI factor analyzed nine constructs specific to transfer climate, mainly related to environmental factors (Holton, Bates, Seyler, & Carvalho, 1997). The LTSI was expanded (Holton et al., 2000) by incorporating the factors into an evaluation model known as Holton’s HRD model (Holton, 1996), and the following constructs were added: motivational-related factors, referring to the expectancy and motivation to transfer; ability-relation factors, referring to the personal capacity for transfer; and trainee-characteristics-related factors, relating to learner readiness and performance self-efficacy (Chen et al., 2005). The construct validity
of the 16 constructs was documented and validated using exploratory factor analysis (Yamnill, 2001).

Divergent and convergent validity confirmed that the LTSI has unique constructs and in fact diverges from any existing construct in transfer of learning (Booker, 1999). Convergent validity is concerned with demonstrating that two independent methods for inferring an attribute lead to similar ends (Nunnally & Bernstein, 1994). In practice, convergence is often demonstrated by examining the extent to which measures of the same or similar variables are correlated. The underlying assumption is that a measure accurately represents a variable if it correlates highly with other measures of the same or similar variable. Divergent validity is concerned with the extent to which a measure is novel in the sense of measuring something different from that provided by other measures. Divergence is thus concerned with empirically establishing a measure’s relative uniqueness. Divergent validity is evidenced when different attributes of theoretical interest are not correlated to an extremely high degree; that is, they share little common variance (Whitley, 1996). The LTSI was found to have mostly divergent relationships, further demonstrating the uniqueness of the LTSI constructs. The 16 constructs are able to explain the different learning transfer characteristics of participants. By establishing the divergent relationship with other known constructs, the usefulness of the LTSI for transfer research is enhanced (Holton et al., 2000).

Additionally, other studies have documented criterion validity with regards to environmental factors, and more specifically interpersonal support, which are considered the most powerful predictors of individual performance (Holton et al., 1997), with motivation to transfer considered the next most important (Seyler, Holton, Bates, Burnett,
& Carvalho, 1998). Finally, another study reported that reaction utility may not be
directly related to performance but instead to the motivation to transfer (Ruona et al.,
2002).

*Reliability of the LTSI*

Reliability of the LTSI has been established in several published studies (Chen,
2003; Holton et al., 2000; Kirwan & Birchall, 2006). The issue of reliability is also a
major factor in this research study. The LTSI is considered a reliable instrument based on
prior application and testing (Holton et al., 2000; Yamkovenko et al, 2007).

Administering the instrument in a consistent manner will ensure reduction of any
reliability issue.

For this study, validity and reliability constructs are derived from an instrument
referred to as the LTSI developed by Holton (Holton, 1996, 2005; Holton et al., 2000) in
the field of learning transfer (see Appendix F). Measures range from one-item scales
quantifying a variety of constructs to multiple-item scales while having the content
validated in situation-specific scales (Holton, 1998). The LTSI studies 16 transfer factors
defining and measuring variables in three areas: transfer design, transfer climate, and
motivation to transfer (Holton, 2005). An alpha coefficient of .70 or better is considered
acceptable (Nunnally, 1978). Since the value of alpha is dependent largely on the
average an inter-item correlation and the number of items in the scale for those scales that
have a smaller number of items, a lower alpha level is acceptable (Carmines & Zeller,
1979). For example, a 10-item scale with a .4 inter-item correlation would have an alpha
level of .87 while that of a 2-item scale (having the same inter-item correlation value)
would be .572.
Table 3

*Alpha Coefficients for the LTSI*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Alpha</th>
<th>Factor</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner readiness</td>
<td>0.77</td>
<td>Perceived content validity</td>
<td>0.81</td>
</tr>
<tr>
<td>Motivation to transfer</td>
<td>0.82</td>
<td>Transfer design</td>
<td>0.81</td>
</tr>
<tr>
<td>Positive personal outcomes</td>
<td>0.75</td>
<td>Opportunity to use</td>
<td>0.74</td>
</tr>
<tr>
<td>Negative personal outcomes</td>
<td>0.68</td>
<td>Effort-performance expectations</td>
<td>0.83</td>
</tr>
<tr>
<td>Personal capacity for transfer</td>
<td>0.62</td>
<td>Performance-outcome expectations</td>
<td>0.70</td>
</tr>
<tr>
<td>Peer support</td>
<td>0.90</td>
<td>Resistance to change</td>
<td>0.84</td>
</tr>
<tr>
<td>Manager support</td>
<td>0.92</td>
<td>Performance self-efficacy</td>
<td>0.79</td>
</tr>
<tr>
<td>Manager sanctions</td>
<td>0.85</td>
<td>Feedback and coaching</td>
<td>0.78</td>
</tr>
</tbody>
</table>


Table 3 shows that both validity and reliability of the Holton model have been considered acceptable in measuring learning transfer (Kirwan & Birchall, 2006). Since the acceptable level of internal reliability is a Cronbach’s alpha of above .70, 14 of the 16 constructs show that the reliability falls into the acceptable range. However, for the negative personal outcomes and personal capacity for transfer, the Cronbach’s alpha is .68 and .62 respectively which is still within the range of .70. Therefore, these were also considered to be acceptable for this study. The model addresses primary intervening
variables such as ability, motivation, and work environment factors (Kirwan & Birchall, 2006).

Summary

Chapter 3 has provided an overview of the research methodology used in this study. A quantitative, ex post facto design, using the LTSI as a measurement tool, was used to measure the level of learning transfer after executive coaching compared with that obtained after traditional methods of executive training. Based on the objective nature of this study, a quantitative methodology was utilized. Generalizations from the collected data were possible as was the establishment of a relationship between learning transfer and types of training. Descriptive and inferential statistical analysis was applied to the data collected in this study. Validity, reliability, instrumentation, and analysis were discussed in chapter 3. Chapter 4 covers a review and analysis of the study’s findings. Recommendations, based on the findings, are discussed in chapter 5.
CHAPTER 4: RESULTS

Chapter 3 provided an overview of the research methodology used in this study. This chapter is used to report on the statistical analysis performed to answer the research question provided in chapter 1 of this quantitative study. The LTSI measured the level of learning transfer between two forms of training: executive coaching and traditional methods of executive training. Based on the objective nature of this study, a quantitative methodology was employed to establish a relationship between learning transfer and two types of training.

Research Instrument

The instrument used in this study was the LTSI, a reliable and validated instrument developed by Holton (Holton, 1996, 2005; Holton et al., 2000) in the field of learning transfer (see Appendix F), which uses a Likert-type survey. The data collected via surveymonkey.com, an Internet-housed survey site, was incorporated into a computer database.

Participants

A total of 1,250 executives and managers living in the United States who are members of the ASTD were invited to participate in the study via the United States Post Office by way of a postcard. Of those solicited, 42 (less than 4%) completed the LTSI, and these executives and managers served as the sample for this quantitative study. Demographic information (gender, work experience, and experience with a coaching/training program) was collected to provide information about the participants.

The main objective of the study was to examine the differences in learning transfer between executives who have experienced executive coaching and executives
who have experienced traditional methods of training. In line with this aim, two hypotheses were formulated:

\( H_01: \) There is no difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work.

\( H_11: \) There is a statistically significant difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work.

\( H_02: \) There is no difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work, after controlling for the demographic variables of gender, geographical location, number of years of experience in a leadership position and formal education level completed.

\( H_12: \) There is a statistically significant difference in the mean learning transfer scores for executives who have experienced executive coaching compared to those who have not experienced executive coaching but received traditional methods of training to improve their leadership and/or problem-solving skills at work, after controlling for the demographic variables of gender, geographical location, number of years of experience in a leadership position and formal education level completed.
Prior to answering the two hypotheses, the descriptive statistics are presented for each of 16 factors in the LTSI for the overall sample and separately for the subsample of executives who received executive coaching and the subsample of the executives who received other forms of training in leadership skills and/or problem-solving skills. The results of the $t$ tests are presented after the descriptive statistics, and they are followed by the multiple linear regression analysis.

The Sample

*Description of the Sample*

The frequency counts and percentages for the sample demographics are presented in Table 4. There were more females than males in this sample. More than half of the sample had received a traditional form of training in the past 12 months (61.9%); about a tenth had received executive coaching (9.52%). Most had spent over 7 years in management (88.1%).
Table 4

*Frequency Counts and Percentages for Demographic Variables (N=42)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
<td>59.52</td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>40.48</td>
</tr>
<tr>
<td>Years in management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>3</td>
<td>7.14</td>
</tr>
<tr>
<td>4 to 7 years</td>
<td>2</td>
<td>4.76</td>
</tr>
<tr>
<td>Over 7 years</td>
<td>37</td>
<td>88.10</td>
</tr>
<tr>
<td>Training received in past 12 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive coaching</td>
<td>4</td>
<td>9.52</td>
</tr>
<tr>
<td>Traditional form of training</td>
<td>26</td>
<td>61.90</td>
</tr>
<tr>
<td>Both executive coaching and traditional form of training</td>
<td>12</td>
<td>28.57</td>
</tr>
<tr>
<td>Program to evaluate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive coaching</td>
<td>14</td>
<td>33.33</td>
</tr>
<tr>
<td>Traditional form of training</td>
<td>28</td>
<td>66.67</td>
</tr>
</tbody>
</table>

*Description of the Outcome Variable*

The descriptive statistics of the transfer scores calculated from the LTSI for the overall sample are presented in Table 5. The descriptive statistics for the subsample of executives who received executive coaching and the subsample of those who received other forms of training in leadership skills and/or problem-solving skills are presented in
Table 5

*Descriptive Statistics for Study Variables*

<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>Mdn</th>
<th>Min</th>
<th>Max</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived Content Validity</td>
<td>0.05</td>
<td>-0.04</td>
<td>-1.93</td>
<td>2.38</td>
<td>0.96</td>
</tr>
<tr>
<td>2. Supervisor/Manager Support</td>
<td>-0.06</td>
<td>0.17</td>
<td>-2.25</td>
<td>1.35</td>
<td>1.03</td>
</tr>
<tr>
<td>3. Personal Outcomes-Positive</td>
<td>-0.05</td>
<td>0.10</td>
<td>-2.34</td>
<td>2.67</td>
<td>1.01</td>
</tr>
<tr>
<td>4. Personal Outcomes-Negative</td>
<td>-0.03</td>
<td>0.02</td>
<td>-2.76</td>
<td>2.48</td>
<td>0.99</td>
</tr>
<tr>
<td>5. Learner Readiness</td>
<td>0.08</td>
<td>0.11</td>
<td>-2.08</td>
<td>1.50</td>
<td>0.86</td>
</tr>
<tr>
<td>6. Peer Support</td>
<td>-0.06</td>
<td>0.04</td>
<td>-3.98</td>
<td>1.87</td>
<td>0.97</td>
</tr>
<tr>
<td>7. Personal Capacity for Transfer</td>
<td>-0.13</td>
<td>0.10</td>
<td>-2.56</td>
<td>2.18</td>
<td>1.03</td>
</tr>
<tr>
<td>8. Supervisor/Manager Sanctions</td>
<td>-0.04</td>
<td>0.11</td>
<td>-1.73</td>
<td>2.13</td>
<td>1.04</td>
</tr>
<tr>
<td>9. Opportunity to Use Learning</td>
<td>-0.02</td>
<td>0.29</td>
<td>-2.71</td>
<td>1.96</td>
<td>1.04</td>
</tr>
<tr>
<td>10. Transfer Design</td>
<td>0.01</td>
<td>0.02</td>
<td>-2.47</td>
<td>2.51</td>
<td>0.95</td>
</tr>
<tr>
<td>11. Motivation to Transfer Learning</td>
<td>-0.02</td>
<td>0.01</td>
<td>-2.88</td>
<td>1.85</td>
<td>0.98</td>
</tr>
<tr>
<td>12. Performance—Outcomes Expectations</td>
<td>-0.12</td>
<td>-0.07</td>
<td>-2.54</td>
<td>1.57</td>
<td>1.00</td>
</tr>
<tr>
<td>13. Resistance/Openness to Change</td>
<td>-0.05</td>
<td>-0.29</td>
<td>-1.81</td>
<td>2.88</td>
<td>0.97</td>
</tr>
<tr>
<td>14. Performance Self-Efficacy</td>
<td>-0.01</td>
<td>-0.02</td>
<td>-2.64</td>
<td>2.33</td>
<td>1.04</td>
</tr>
<tr>
<td>15. Feedback/Performance Coaching</td>
<td>-0.08</td>
<td>0.06</td>
<td>-2.22</td>
<td>2.03</td>
<td>1.03</td>
</tr>
<tr>
<td>16. Transfer Effort—Performance Expectations</td>
<td>-0.09</td>
<td>0.02</td>
<td>-3.11</td>
<td>2.33</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 6. The findings show that the mean transfer scores of executives who received executive coaching are higher than those of executives who received a traditional form of training in 9 out of 16 factors. These factors are: 1. Perceived Content Validity, 2. Supervisor/Manager Support, 5. Learner Readiness, 6. Peer Support, 8. Supervisor/Manager Sanctions, 9. Opportunity to Use Learning, 12. Performance—Outcomes Expectations, 13. Resistance/Openness to Change, and 16. Transfer Effort—Performance Expectations.

Table 6

Descriptive Statistics for Study Variables by Executive Coaching and Traditional Training Subgroups

<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>Mdn</th>
<th>Min</th>
<th>Max</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Coaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Perceived Content Validity</td>
<td>0.22</td>
<td>0.01</td>
<td>-1.76</td>
<td>2.28</td>
<td>1.07</td>
</tr>
<tr>
<td>2. Supervisor/Manager Support</td>
<td>-0.06</td>
<td>0.14</td>
<td>-2.12</td>
<td>1.20</td>
<td>1.14</td>
</tr>
<tr>
<td>3. Personal Outcomes-Positive</td>
<td>-0.23</td>
<td>-0.31</td>
<td>-2.34</td>
<td>2.67</td>
<td>1.14</td>
</tr>
<tr>
<td>4. Personal Outcomes-Negative</td>
<td>-0.28</td>
<td>-0.13</td>
<td>-1.52</td>
<td>0.38</td>
<td>0.62</td>
</tr>
<tr>
<td>5. Learner Readiness</td>
<td>0.24</td>
<td>0.35</td>
<td>-0.99</td>
<td>1.46</td>
<td>0.75</td>
</tr>
<tr>
<td>6. Peer Support</td>
<td>0.13</td>
<td>-0.01</td>
<td>-0.89</td>
<td>1.87</td>
<td>0.67</td>
</tr>
<tr>
<td>7. Personal Capacity for Transfer</td>
<td>-0.28</td>
<td>-0.59</td>
<td>-1.21</td>
<td>1.14</td>
<td>0.85</td>
</tr>
<tr>
<td>8. Supervisor/Manager Sanctions</td>
<td>0.18</td>
<td>0.15</td>
<td>-1.73</td>
<td>1.41</td>
<td>0.84</td>
</tr>
<tr>
<td>9. Opportunity to Use Learning</td>
<td>0.10</td>
<td>0.21</td>
<td>-2.71</td>
<td>1.96</td>
<td>1.19</td>
</tr>
<tr>
<td>10. Transfer Design</td>
<td>-0.14</td>
<td>0.02</td>
<td>-1.38</td>
<td>0.70</td>
<td>0.64</td>
</tr>
<tr>
<td>11. Motivation to Transfer Learning</td>
<td>-0.15</td>
<td>-0.09</td>
<td>-2.88</td>
<td>1.85</td>
<td>1.13</td>
</tr>
</tbody>
</table>
### 12. Performance—Outcomes

| Expectations       | 0.22 | 0.13 | -2.54 | 1.57 | 1.00 |

### 13. Resistance/Openness to Change

| -0.05 | -0.28 | -1.81 | 2.38 | 1.00 |

### 14. Performance Self-Efficacy

| -0.14 | -0.25 | -2.64 | 2.33 | 1.33 |

### 15. Feedback/Performance Coaching

| -0.26 | -0.10 | -1.93 | 1.04 | 0.91 |

### 16. Transfer Effort—Performance

| Expectations       | 0.06 | -0.03 | -1.46 | 2.33 | 1.11 |

### Traditional Form of Training

| 1. Perceived Content Validity | 0.07 | -0.01 | -1.67 | 2.38 | 0.86 |

| 2. Supervisor/Manager Support | -0.07 | 0.18 | -2.25 | 1.35 | 1.03 |

| 3. Personal Outcomes-Positive | -0.03 | 0.14 | -2.15 | 1.38 | 0.96 |

| 4. Personal Outcomes-Negative | 0.18 | 0.26 | -1.88 | 2.48 | 1.00 |

| 5. Learner Readiness       | 0.03 | 0.04 | -2.08 | 1.50 | 0.94 |

| 6. Peer Support           | -0.22 | 0.03 | -3.98 | 1.19 | 1.08 |

| 7. Personal Capacity for Transfer | -0.15 | 0.12 | -2.56 | 1.55 | 1.06 |

| 8. Supervisor/Manager Sanctions | -0.04 | 0.09 | -1.63 | 2.13 | 1.10 |

| 9. Opportunity to Use Learning | -0.06 | 0.39 | -2.52 | 1.05 | 0.99 |

| 10. Transfer Design       | 0.12 | 0.02 | -2.47 | 2.51 | 1.01 |

| 11. Motivation to Transfer Learning | 0.02 | -0.02 | -2.29 | 1.52 | 0.94 |

| 12. Performance—Outcomes | Expectations       | -0.25 | -0.14 | -2.54 | 1.02 | 0.97 |

| 13. Resistance/Openness to Change | -0.11 | -0.30 | -1.09 | 2.88 | 0.85 |

| 14. Performance Self-Efficacy | 0.09 | 0.02 | -2.33 | 1.83 | 0.86 |
Test of Two-Sample Difference

As the $t$ test is based on an equal variance assumption of the two independent samples, before conducting the $t$ test to assess whether the differences in learning transfer scores between the two groups (executive coaching or other forms of training) are statistically significant or not, Levene’s test for equality of variances was performed to validate the use of the $t$ test in this situation. The results of Levene’s test are presented in Table 7. All $p$-values are greater than 0.05, indicating that there is not enough evidence to reject the equal variance hypothesis. Therefore, it is appropriate to use the $t$ test to assess the differences between the two groups.

Table 7

*Levene’s Test for Equality of Variances Results*

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived Content Validity</td>
<td>1.52</td>
<td>0.345</td>
</tr>
<tr>
<td>2. Supervisor/Manager Support</td>
<td>1.23</td>
<td>0.630</td>
</tr>
<tr>
<td>3. Personal Outcomes-Positive</td>
<td>1.41</td>
<td>0.440</td>
</tr>
<tr>
<td>4. Personal Outcomes-Negative</td>
<td>2.61</td>
<td>0.072</td>
</tr>
<tr>
<td>5. Learner Readiness</td>
<td>1.56</td>
<td>0.401</td>
</tr>
<tr>
<td>6. Peer Support</td>
<td>2.62</td>
<td>0.071</td>
</tr>
<tr>
<td>7. Personal Capacity for Transfer</td>
<td>1.53</td>
<td>0.426</td>
</tr>
</tbody>
</table>
Results from the $t$ test of two independent samples are shown in Table 8. The results suggest that the difference in mean transfer learning scores is not statistically significant between the two groups on these 16 factors.

Table 8

| Variable                                           | DF | t value | Pr $>$ |t| |
|----------------------------------------------------|----|---------|--------|---|
| 1. Perceived Content Validity                      | 40 | 0.47    | 0.640  |   |
| 2. Supervisor/Manager Support                      | 40 | 0.05    | 0.962  |   |
| 3. Personal Outcomes-Positive                      | 40 | -0.62   | 0.540  |   |
| 4. Personal Outcomes-Negative                      | 40 | -1.59   | 0.119  |   |
| 5. Learner Readiness                               | 40 | 0.72    | 0.476  |   |
| 6. Peer Support                                    | 40 | 1.11    | 0.273  |   |
Multiple Regression on 16 Factor Scores

Separate multiple linear regression analyses were performed: for each individual factor score (the dependent variable) and the method of training (the independent variable). This was to assess whether the mean learning transfer score difference for executives who had experienced executive coaching versus those who had not experienced executive coaching but had received traditional methods of training were statistically significant, or not, after controlling for the demographic variables of gender and number of years of experience in a leadership position. Results are presented in Table 9. It is noticeable that the type of training received is not statistically associated with transfer learning scores after accounting for gender and years in management (all \( p \)-values are greater than 0.05). However, there is sufficient evidence to show that gender
significantly influences the respondents’ score in Personal Capacity for Transfer (p-value=0.018) and Motivation to Transfer Learning (p-value=0.028). On average, males scored 0.747 higher than females in the factor Personal Capacity for Transfer and 0.724 higher in the factor Motivation to Transfer Learning. Years in management is not a statistically significant predictor of transfer learning scores.

Table 9

*Regression Coefficients for the Regressions on Learning Transfer Scores*

<table>
<thead>
<tr>
<th>Factor</th>
<th>constant</th>
<th>training</th>
<th>gender</th>
<th>years_4-7</th>
<th>years_over</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validity</td>
<td>Beta</td>
<td>-0.138</td>
<td>0.220</td>
<td>-0.073</td>
<td>-0.094</td>
</tr>
<tr>
<td>p-value</td>
<td>0.799</td>
<td>0.672</td>
<td>0.485</td>
<td>0.937</td>
<td>0.876</td>
</tr>
<tr>
<td>2. Supervisor/Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>Beta</td>
<td>-0.010</td>
<td>-0.215</td>
<td>-0.302</td>
<td>0.461</td>
</tr>
<tr>
<td>p-value</td>
<td>0.658</td>
<td>0.978</td>
<td>0.541</td>
<td>0.770</td>
<td>0.493</td>
</tr>
<tr>
<td>3. Personal Outcomes-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>Beta</td>
<td>0.196</td>
<td>-0.516</td>
<td>-0.672</td>
<td>0.698</td>
</tr>
<tr>
<td>p-value</td>
<td>0.445</td>
<td>0.545</td>
<td>0.105</td>
<td>0.466</td>
<td>0.246</td>
</tr>
<tr>
<td>4. Personal Outcomes-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>Beta</td>
<td>0.429</td>
<td>-0.295</td>
<td>-0.469</td>
<td>-0.016</td>
</tr>
<tr>
<td>p-value</td>
<td>0.941</td>
<td>0.167</td>
<td>0.322</td>
<td>0.591</td>
<td>0.977</td>
</tr>
<tr>
<td>5. Learner Readiness</td>
<td>Beta</td>
<td>-0.185</td>
<td>0.148</td>
<td>0.594</td>
<td>-0.137</td>
</tr>
<tr>
<td>p-value</td>
<td>0.705</td>
<td>0.540</td>
<td>0.611</td>
<td>0.490</td>
<td>0.805</td>
</tr>
<tr>
<td>Factor</td>
<td>Beta</td>
<td>constant</td>
<td>training&lt;sup&gt;a&lt;/sup&gt;</td>
<td>gender&lt;sup&gt;b&lt;/sup&gt;</td>
<td>years_4-7&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------</td>
<td>----------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>6. Peer Support</td>
<td>Beta</td>
<td>-0.600</td>
<td>-0.254</td>
<td>-0.132</td>
<td>1.504</td>
</tr>
<tr>
<td></td>
<td>p-value</td>
<td>0.368</td>
<td>0.440</td>
<td>0.677</td>
<td>0.113</td>
</tr>
<tr>
<td>7. Personal Capacity for</td>
<td>Beta</td>
<td>0.561</td>
<td>0.068</td>
<td>-0.747</td>
<td>0.500</td>
</tr>
<tr>
<td>Transfer</td>
<td>p-value</td>
<td>0.383</td>
<td>0.829</td>
<td>0.018*</td>
<td>0.578</td>
</tr>
<tr>
<td>8. Supervisor/Manager</td>
<td>Beta</td>
<td>0.552</td>
<td>-0.270</td>
<td>0.628</td>
<td>-1.139</td>
</tr>
<tr>
<td>Sanctions</td>
<td>p-value</td>
<td>0.420</td>
<td>0.424</td>
<td>0.059</td>
<td>0.238</td>
</tr>
<tr>
<td>9. Opportunity to Use</td>
<td>Beta</td>
<td>-0.256</td>
<td>-0.104</td>
<td>-0.317</td>
<td>1.352</td>
</tr>
<tr>
<td>Learning</td>
<td>p-value</td>
<td>0.726</td>
<td>0.774</td>
<td>0.366</td>
<td>0.194</td>
</tr>
<tr>
<td>10. Transfer Design</td>
<td>Beta</td>
<td>0.029</td>
<td>0.225</td>
<td>-0.136</td>
<td>-0.635</td>
</tr>
<tr>
<td></td>
<td>p-value</td>
<td>0.964</td>
<td>0.473</td>
<td>0.653</td>
<td>0.475</td>
</tr>
<tr>
<td>11. Motivation to Transfer</td>
<td>Beta</td>
<td>-0.072</td>
<td>0.171</td>
<td>-0.724</td>
<td>0.767</td>
</tr>
<tr>
<td>Learning</td>
<td>p-value</td>
<td>0.914</td>
<td>0.604</td>
<td>0.028*</td>
<td>0.414</td>
</tr>
<tr>
<td>12. Performance—</td>
<td>Beta</td>
<td>-0.772</td>
<td>-0.377</td>
<td>-0.124</td>
<td>0.462</td>
</tr>
<tr>
<td>Outcomes Expectations</td>
<td>p-value</td>
<td>0.244</td>
<td>0.249</td>
<td>0.693</td>
<td>0.616</td>
</tr>
<tr>
<td>13. Resistance/Openness to</td>
<td>Beta</td>
<td>-0.014</td>
<td>-0.088</td>
<td>-0.155</td>
<td>-0.458</td>
</tr>
<tr>
<td>Change</td>
<td>p-value</td>
<td>0.982</td>
<td>0.778</td>
<td>0.606</td>
<td>0.604</td>
</tr>
<tr>
<td>Factor</td>
<td>constant</td>
<td>training(^a)</td>
<td>gender(^b)</td>
<td>years(_{4-7})(^c)</td>
<td>years(_{over7})</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------</td>
<td>----------------</td>
<td>-------------</td>
<td>------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>14. Performance Self-Efficacy</strong></td>
<td>Beta</td>
<td>-0.695</td>
<td>0.279</td>
<td>0.250</td>
<td>0.039</td>
</tr>
<tr>
<td></td>
<td>p-value</td>
<td>0.339</td>
<td>0.435</td>
<td>0.469</td>
<td>0.969</td>
</tr>
<tr>
<td><strong>15. Feedback/Performance</strong></td>
<td>Beta</td>
<td>-1.210</td>
<td>0.411</td>
<td>-0.280</td>
<td>1.580</td>
</tr>
<tr>
<td></td>
<td>p-value</td>
<td>0.072</td>
<td>0.210</td>
<td>0.375</td>
<td>0.093</td>
</tr>
<tr>
<td><strong>16. Transfer Effort—</strong></td>
<td>Beta</td>
<td>-0.012</td>
<td>-0.133</td>
<td>-0.288</td>
<td>-0.079</td>
</tr>
<tr>
<td></td>
<td>p-value</td>
<td>0.985</td>
<td>0.671</td>
<td>0.343</td>
<td>0.929</td>
</tr>
</tbody>
</table>

a. training=1 if respondent choose to evaluate executive training; training=0 if respondent choose to evaluate traditional form of training
b. gender=1 if respondent is female; gender=0 if respondent is male
c. years=0 if respondent have spent 1-3 years in management; years=1 if respondent have spent 4-7 years in management; years=2 if respondent have spent over 7 years in management.

Summary of Findings

Although descriptive statistics showed that the performance of executive coaching is slightly higher than those without an experience of executive coaching, statistical findings indicate that there is no difference in mean learning transfer scores for executives who have experienced executive coaching versus those who have not experienced executive coaching but received traditional methods of training. This conclusion remains valid even after controlling for demographic difference in gender and years of management experience. The next chapter presents the final conclusions and recommendations.
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to measure the transfer of learning for executive coaching. The intent of the study was to illustrate that the use of executive coaching produces a higher level of leadership and/or decision-making skills in executive leaders when compared to the level obtained after traditional methods of training. A valid and reliable set of transfer system scales was used to analyze the degree of effectiveness of both executive coaching and traditional training methods using the LTSD instrument for the study (Holton et al., 2000; Kirwan & Birchall, 2006).

A sample of 42 executives, who are members of the ASTD, completed the LTSI instrument. A multiple linear regression was used to look at the combined effects of the type of training (traditional or executive coaching) and the demographic variables (gender, geographical location, and number of years of management). The LTSI takes into consideration the possible influences on learning, namely personal and environmental factors. This study aimed to identify the extent to which there are differences between the executives who have experienced executive coaching and those who have experienced traditional training in the area of leadership and decision-making skills. Until now, no study existed that examined the transfer of learning for executive coaching.

Based on the results reported in chapter 4, this chapter includes several major sections. The first section discusses the findings and conclusions of the study based on the research question; the next sections include a discussion of the assumptions, limitations, and delimitations of the study and the significance of the study. The final section provides a discussion of recommendations resulting from the study’s findings,
which includes implications for human resources departments’ practice, and suggestions for future research directions in this field. A brief summary concludes the chapter.

Findings and Conclusions

Findings

Despite an initial suggestion from the descriptive statistics that the mean transfer scores of executives who had received executive coaching were higher than those of executives who had received traditional training methods, results from the $t$ test indicated that these differences were not statistically significant. Multiple regression analysis revealed that the type of training received was not statistically significant after controlling for gender and years in management. The analysis revealed that gender had a statistically significant influence on scores for the factors of personal capacity for transfer ($p=.018$) and motivation to transfer learning ($p=.028$), with males on average scoring higher than females for both factors. The variable of years in management was not a statistically significant predictor of transfer of learning scores among any factors.

This study focused on the transfer of learning, comparing executives who had been trained traditionally to executives who had received executive coaching. Although the difference between the two groups was statistically insignificant, there was a substantial perceived transfer of learning in both groups. Transfer of learning was measured in a total of 16 factors, and 9 factors, or 56.25%, showed that coaching was recording higher scores than training: (1) Perceived Content Validity; (2) Supervisor/Manager Support; (3) Learner Readiness; (4) Peer Support; (5) Supervisor/Manager Sanctions; (6) Opportunity to Use Learning; (7) Performance –
Outcomes Expectations; (8) Resistance/Openness to Change; and (9) Transfer Effort – Performance Expectations.

As mentioned in previous chapters, coaching focuses on specific areas designed for one individual or a group of individuals whereas training is a no tailored system. When considering that 56.25% of the factors measured in this study favored coaching over training, the result may be indicative of the power of coaching over training in upper management and executives. The remainder 43.75% of the factors favoring training over coaching may point to areas where coaching can improve its performance in the delivery of its services and at the same time ensure a meaningful impact on upper management and executives.

Discussion of the Findings

The findings, based on the descriptive statistics collected with the Holton model in this study, indicated no statistically significant difference in mean learning transfer scores for executives who have experienced executive coaching versus those who have not experienced executive coaching but received traditional methods of training. Personal preference and cost effectiveness will continue to determine the method of training executives. This germinal study demonstrates that when considering transfer of learning, there is statistically no difference in mean learning transfer scores for executives who had experienced executive coaching versus those who had received traditional methods of training.

Yet, the literature review and generally shared knowledge of executive training programs promote the value of one-on-one learning over a larger group such as in a training program or in a classroom. Kets de Vries (2005) affirmed that coaching was the
single best way to create mutual accountability and drive change even more effectively in
teams of executives. According to Kampa-Kokesch and Anderson (2001), executive
coaching is considered an intervention whose goal is to help executives to improve their
skills and therefore improve the performance of the entire organization. Research has
revealed the characteristics of executive coaching, its success as a leadership
development method, and the positive results experienced by those who have chosen that
method (Hannah, 2004).

Although executive coaching is not a panacea, it has been a strong alternative to
traditional methods of training executives, particularly in terms of cost and potential ROI
(Talkington et al., 2002). The findings in the current study were unable to prove that
executive coaching was superior to traditional methods of training. This conclusion may
be due to the limitations in the study, but it could also imply that the difference between
the two methods is not statistically significant at all. When presented with the option of
choosing executive coaching or a traditional form of training, organizations and human
resources departments may well question how cost effective the choice is. Because the
perceived transfer of learning is essentially equal, the choice to be coached or take a
traditional form of training may well be determined by cost and personal preference.

Internal and external coaching were both evaluated by study participants and then
compared with other traditional forms of training. In promoting the value of executive
coaching, it is important to remember that in this study no statistically significant
differences existed when measuring the transfer of learning between executive coaching
and other traditional forms of executive training. Therefore, individual training
preference, cost of delivering the training, and the desired objectives and/or goals are of primary importance.

A basic premise of traditional methods of training is knowledge and skills training most often in a large group setting. Traditional methods of training may require time away from work and home, tuition fees and training materials, traveling costs, and any other costs involved in obtaining such training. Leadership seminars, conventions, classroom learning, and other forms of training all have tremendous value in ways that cannot always be measured, such as networking and the value of physically getting away from the work environment to learn something new. The first consideration for training should be to improve executive performance through skills training in order to be able to face the numerous challenging situations found in the world of business. A second consideration remains the cost of providing training or coaching. Finally, individual learning styles and preferences, or needs, should also be considered. These two methods of learning, executive coaching and traditional forms of training, need to meet the professional and personal needs of the individual who is seeking training. They also need to meet the training budget of the organization responsible for the payment of such training. Each method of training offers unique advantages and disadvantages that may or may not fit the needs of each executive-in-training.

A basic premise of an executive coaching program is establishing a partnership between the executive, the coach, and the organization with a set of clear goals based on a strategic organizational objective. The coaching process is initiated with the establishment of a relationship built on a personal connection between the executive coach, the executive, and the organization (Newsom, 2008). The single most valuable
advantage of executive coaching remains the one-on-one, open relationship between an external executive coach and the executive, with a context-specific learning goal (Baek-Kyoo, 2005). This relationship is critical when considering the need to make an internal shift in order to move from one point to another in the way an executive operates on a day-to-day basis. As mentioned earlier in the current study, it can be very lonely at the top for an executive because there is often nobody to share feelings with about important organizational decisions. When an executive has a legal problem, he or she can consult with an attorney at law. When the same executive has a financial problem, he or she can consult with the director of finance or the bank manager. When there is a personal problem or struggle, there may not be anyone with whom he or she can consult with in confidence (Lord, 2004). Among the many areas the executive coach is trained to handle, coaching an executive experiencing a personal problem or struggle may well be one of the most rewarding aspects of the work of the executive coach. Gray (2006) noted that it is helpful to have an executive coach to share burdens with, solve personal issues, and learn to effectively balance the numerous responsibilities associated with the position of leader/executive.

Assumptions, Limitations, and Delimitations

Some of the limitations of the current study should be mentioned. First and as noted earlier, it may have been preferable to conduct a pre and post facto analysis using separate samples. Furthermore, research participants were not provided an opportunity to add items other than those that were provided in the LTSI instrument. Therefore, the current measure of transfer of learning was limited in that it may not have captured learning in its entirety. Finally, the results did not fully examine and reveal the predictive
validity of all three training climate dimensions: learning, individual performance, and organizational performance. Instead, the focus of this study was only on learning.

Assumptions

The research question focused on the assumption that one-on-one executive coaching programs in the development of leadership and/or decision-making skills are more effective than other forms of development in leadership skills. Given the continued interest of human resources departments’ practitioners and others in the transfer of learning, a rigorous validation analysis of learning was warranted in this case. The LTSI was selected as the research instrument in this study because it was appropriate for measuring the learning outcome. According to Tracey and Tews (2005), the LTSI can be used as a diagnostic tool and for testing new theories wherever there is a need to measure the transfer of learning. Furthermore, across a variety of settings, Holton et al. (2003) have demonstrated sufficient psychometric and predictive validity results using the LTSI.

Limitations

The data were collected from study participants in this ex post facto, quasi-experimental, quantitative study measuring the transfer of learning once executives had completed either an executive coaching program or another traditional form of training program either within or outside of their organization. Although 1,250 executives and managers were invited to participate, only 42 participants completed the LTSI and 14/42 completed the LTSI from a coaching program perspective. Of this sample of 42, all participants were from the United States.

Given this limited sample and geographic limitation, results may not be indicative of all executives or managers who have received executive coaching to augment their
leadership and/or decision-making skills. The LTSI was quite extensive and required
participants to spend 20-30 minutes to complete the survey. It is possible that respondents
were less inclined to complete the survey once they realized the time and effort required
for completion of the survey. They were also asked to recall a coaching or training event
that occurred in the past versus immediately after the coaching or training event. These
may be issues to consider in future research using the LTSI. Participation was voluntary,
and therefore there is no possible way of knowing how respondents differed from
nonrespondents. It is possible that there was some form of selection bias in this study,
whereby participants had some characteristic that is different from the general population.
For example, participants may have been generally more motivated and thus have better
learning transfer than the general population. This is a limitation of any study in which
participation is voluntary.

Delimitations

Research participants were given the choice of evaluating an executive coaching
program or another traditional form of training program, not both. When using the LTSI,
researchers usually collect data with pen and paper, and the instrument is usually
administered immediately following the training (Holton et al., 2000). The differences
between collecting data post facto via an Internet survey versus immediately following
the training could have influenced the factor structures. For example, trainees who
complete the LTSI immediately following training may perceive their learning
experience differently from those who completed such a survey weeks or months
following the training experience based on their perceptions of what may have happened
in their work settings as was the case in this study.
Thus, it is possible that the concept of transfer of learning may be indistinguishable to trainees weeks and months after the training. Furthermore, their ability to recall may be biased by their experience on the job following their training experience. As in all research, this study is not without its own limitations. This study was based on an assumption that one-on-one executive coaching is more effective than traditional forms of training executives in leadership and/or decision-making skills. Yet, it is undeniable that statistical findings indicate that there is no difference in mean learning transfer scores for executives who have experienced executive coaching versus those who have not experienced executive coaching but received traditional methods of training.

Significance of the Study

This study is important for two reasons. From a practical point of view, human resources departments’ practitioners need to know in advance which learning programs are designed for maximum learning and then transfer that learning into the workplace. Then, in terms of the training needs assessment process, it would be unwise to implement new training programs when a work environment does not adequately weigh the transfer of learning process or support the use of newly acquired skills once trainees return to their jobs. Therefore, valid measures of transfer of learning are necessary to identify which method of training is recommended. Efforts can be made to address concerns prior to making investments in training programs and implementing leadership training.
Recommendations

Implications for Human Resources Departments and Others

Human resources departments, the ICF, the ASTD, universities, coach training programs all over the world, professional organizations, management and training journals may find this study useful when considering executive training. Because statistical findings indicate that there is no difference in mean learning transfer scores for executives who have experienced executive coaching versus those who have received traditional methods of training, cost comparisons along with personal preference in the form of training in leadership and decision-making skills remain central to choosing executive coaching over traditional forms of training and vice versa. Without further research on the transfer of learning, the argument can no longer automatically be made that executive coaching delivers a more powerful transfer of learning advantage over any other traditional form of training.

Recommendations for Future Research

In sum, research and practice have recognized that learning plays an important role in training effectiveness. This particular study has an impact on the value of executive coaching interventions and therefore the buying decisions by human resources departments and organizations. The study has provided evidence of transfer of learning by comparing executive coaching to other traditional forms of training programs in leadership and/or problem-solving skills. It would certainly be beneficial to replicate the study with the inclusion of a pre and post facto analysis using separate samples. In addition, because research participants were not provided an opportunity to add items other than those that were provided in the LTSI instrument, a mixed methodology study
incorporating the use of open-ended questions could be useful in establishing a deeper understanding of the learning in both executive coaching and traditional training methods.

Although this study was able to investigate whether there is a significant difference between the transfer of learning scores for executives who have experienced executive coaching and those who have received traditional methods of training, it is important to replicate the current study in a variety of organizational settings and to continue to integrate learning into new theories of training and development. It is likely that the LTSI and other instruments will continue to provide validated instruments to facilitate future research into the transfer of learning.

Summary

Although the intent of the current study was to illustrate that the use of executive coaching produces a higher level of leadership and/or decision-making skills in executive leaders when compared to traditional methods of training, the current study demonstrates that there is statistically no difference in mean learning transfer scores for executives who have experienced executive coaching versus those who have received traditional methods of training. In terms of learning transfer, the two methods thus appear to be equal. The decision of the type of executive training to use then becomes more related to what fits the circumstances and the executives involved. The focus can therefore be on the specific needs of the individuals and the best way to meet those needs in terms of executive training or coaching. More research on the effectiveness of these strategies for executive training needs to be done to obtain a better understanding of the effectiveness of these training methods, individual preferences and individual circumstances.
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APPENDIX A: PERMISSION TO USE ASTD MEMBERS IN STUDY
ETHELLE LORD

From: Tania
To: Ethelle
Cc: Scott
Sent: Friday, February 15, 2008 11:08 AM
Subject: RE: MAILER ETHELLE LORD ASTD - SAMPLES

Hello Ethelle,

Your sample mail pieces have been approved.

Please let me know if you have any questions.

Thank you
Tania

Tania

--- Original Message ---
From: Scott
To: Ethelle
Cc: Tania
Sent: Thursday, December 20, 2007 10:05 AM
Subject: RE: ASTD Lists

Please see links below to ASTD data cards. Please feel free to contact me at your earliest convenience to discuss further.

3/16/2008
ASTD Members

ASTD Masterfile

Thanks,

Scott
Sr. Account Executive
Direct Media

You can find up to date order status here
For list information go to our List Search Page
You can e-mail us your orders or fax us
All other requests can be faxed to
For career opportunities, go to

3/16/2008
Dear ASTD member:

As part of the requirement for graduation at the University of Phoenix, I would appreciate your help with a study to determine the effectiveness of executive coaching in the areas of leadership and decision making skills. Your name was selected by a sampling method to obtain a representative sample of the target population.

In return for your participation I am offering you a free Career and LifeView Assessment report. Simply follow the instructions at the end of the survey.

Only individuals who are in an executive or supervisory position and working in the United States may participate in the study. You’ll be helping to add to the body of knowledge on transfer of learning and executive coaching.

Please take a few minutes right now to complete this survey
Go to http://www.surveymonkey.com/surveyEC

It has taken me five years to collect data, I am grateful for your volunteer participation. Thank you in advance for participating in this important study on transfer of learning to advance the knowledge and goals of organizations everywhere. The survey ends in two weeks. Thank you.

Sincerely,

Ethelle G. Lord, M.Ed., DM (Candidate)
APPENDIX C: REMINDER POSTCARD INVITATION TO ASTD MEMBERS
Dear ASTD member:

As part of the requirement for graduation at the University of Phoenix, I would appreciate your help with a study to determine the effectiveness of executive coaching in the areas of leadership and decision making skills. Your name was selected by a sampling method to obtain a representative sample of the target population.

In return for your participation I am offering you a free Career and LifeView Assessment report. Simply follow the instructions at the end of the survey.

Only individuals who are in an executive or supervisory position and working in the United States may participate in the study. You’ll be helping to add to the body of knowledge on transfer of learning and executive coaching.

Please take a few minutes right now to complete this survey
Go to http://www.surveymonkey.com/surveyEC

It has taken me five years to collect data, I am grateful for your volunteer participation. Thank you in advance for participating in this important study on transfer of learning to advance the knowledge and goals of organizations everywhere. The survey ends in two weeks. Thank you.

Sincerely,
Ethelle G. Lord, M.Ed., DM (Candidate)

If you have completed your survey, kindly disregard this reminder. Thank you.
APPENDIX D: CONFIDENTIALITY STATEMENT
Dear ASTD member,

I appreciate that you have agreed to participate in this study on executive coaching. Your participation is greatly valued and most appreciated. The answers that you provide will help to increase knowledge concerning the value and effectiveness of executive coaching. Please allow a few minutes of your time to complete this survey.

This survey is a self-assessment set up to be totally anonymous. You will be given a choice of completing the survey for either coaching or another form of training. Codes will be used to identify the type of assessment completed. For example, C1 will serve to identify coaching, participant one; T1 will serve to identify training, participant one, and so on so forth. There is no foreseeable risk, monetary cost, or loss of benefit to you for your participation or nonparticipation in this assessment. For your participation in this research process, you will receive the study’s results via email. If you have any questions, you may contact the researcher, Ethelle Lord, via e-mail and/or telephone.

E-mail: x
Telephone: (xxx) xxx-xxxx

Dr. Stephen Tvorik, my committee chairperson for this study, may also be contacted via e-mail and/or telephone.

Email: x
Telephone: (xxx) xxx-xxxx

Sincerely yours,

Ethelle G. Lord, DM (Candidate)
APPENDIX E: INFORMED CONSENT
Dear ASTD member,

I am a student at the University of Phoenix, working on a Doctorate of Management in Organizational Leadership degree. I am conducting a research study entitled *A study of executive coaching from a transfer learning perspective*. The purpose of this research study is to measure the transfer of learning in executive coaching.

Your participation will involve filling out one survey estimated to take between 15 and 30 minutes depending on how quickly or slowly you move through the survey. You will be given a choice to complete the survey for either coaching or any other form of development or training. Coaching is intended for an executive coaching program lasting at least three months. Training is intended for a development program or training you have actually completed. Either forms of development must have been to augment or support your leadership and/or problem-solving skills at work.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself. The results of the research study may be published but your name will not be used and your results will be maintained in confidence.

In this research there are no foreseeable risks to you. Although there may be no direct benefit to you, the possible benefit of your participation is to determine the value of executive coaching over other forms of development for leaders of people in the workplace. If you have any questions concerning the research study, please call me at xxx-xxx-xxxx. Your completion of this survey will indicate your consent to participate. Do let me know if there is anything further I can do for you.

Sincerely yours,

Ethelle G. Lord, DM (Candidate)
APPENDIX F: LEARNING TRANSFER SYSTEM INVENTORY (LTSI)
### Learning Transfer System Inventory

Please circle the number (1, 2, 3, 4 or 5) to the right of each item that most closely reflects your opinion about training:

1 - Strongly disagree  
2 - Disagree  
3 - Neither agree nor disagree  
4 - Agree  
5 - Strongly agree

For the following items, please think about THIS SPECIFIC TRAINING PROGRAM:

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prior to the training, I knew how the program was supposed to affect my performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Training will increase personal productivity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. When I leave training, I can't wait to get back to work to try what I learned.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I believe the training will help me do my current job better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I get excited when I think about trying to use my new learning on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. If I successfully use my training, I will receive a salary increase.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. If I use this training, I am more likely to be rewarded.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I am likely to receive some 'perks' if I use my newly learned skills on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Before the training, I had a good understanding of how it would fit my job-related development.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I knew what to expect from the training before it began.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I don’t have time to try to use this training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. Trying to use this training will take too much energy away from my other work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. The expected outcomes of this training were clear at the beginning of the training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Employees in this organization are penalized for not using what they have learned in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. If I use what I learn in training, it will help me get higher performance ratings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

*Please turn to the next page*
<table>
<thead>
<tr>
<th></th>
<th>1 - Strongly disagree</th>
<th>2 - Disagree</th>
<th>3 - Neither agree nor disagree</th>
<th>4 - Agree</th>
<th>5 - Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>Employees in this organization receive various 'perks' when they utilize newly learned skills on the job.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>If I do not use my training I am unlikely to get a raise.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I am more likely to be recognized for my work if I use this training.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>My workload allows me time to try the new things I have learned.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>There is too much happening at work right now for me to try to use this training.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>If I do not use new techniques taught in training I will be reprimanded.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Successfully using this training will help me get a salary increase.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>If I do not utilize my training I will be cautioned about it.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>When employees in this organization do not use their training it gets noticed.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I have time in my schedule to change the way I do things to fit my new learning.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Someone will have to change my priorities before I will be able to apply my new learning.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>I wish I had time to do things the way I know they should be done.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>My colleagues appreciate my using new skills I have learned in training.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>My colleagues encourage me to use the skills I have learned in training.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>At work, my colleagues expect me to use what I learn in training.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>My colleagues are patient with me when I try out new skills or techniques at work.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>My supervisor meets with me regularly to work on problems I may be having in trying to use my training.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>My supervisor meets with me to discuss ways to apply training on the job.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>My supervisor will object if I try to use this training on the job.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Please turn to the next page*
<p>| | | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>35. My supervisor will oppose the use of techniques I learned in this training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36. My supervisor thinks I am being less effective when I use the techniques taught in this training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37. My supervisor shows interest in what I learn in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38. My supervisor opposes the use of the techniques I learned in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39. My supervisor sets goals for me which encourage me to apply my training on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40. My supervisor lets me know I am doing a good job when I use my training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>41. My supervisor will not like it if I do things the way I learned in this training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>42. My supervisor doesn't think this training will help my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>43. My supervisor helps me set realistic goals for job performance based on my training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>44. My supervisor would use different techniques than those I would be using if I use my training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>45. My supervisor thinks I am being ineffective when I use the techniques taught in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>46. My supervisor will probably criticize this training when I get back to the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>47. The instructional aids (equipment, illustrations, etc.) used in training are very similar to real things I use on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>48. The methods used in training are very similar to how we do it on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>49. I like the way training seems so much like my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50. I will have the things I need to be able to use this training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51. I will be able to try out this training on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

*Please turn to the next page*
1 - Strongly disagree  
2 - Disagree  
3 - Neither agree nor disagree  
4 - Agree  
5 - Strongly agree

For the following items, please think about THIS SPECIFIC TRAINING PROGRAM:

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>The activities and exercises the trainers used helped me know how to apply my learning on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>53</td>
<td>It is clear to me that the people conducting the training understand how I will use what I learn.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>54</td>
<td>The trainer(s) used lots of examples that showed me how I could use my learning on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>55</td>
<td>The way the trainer(s) taught the material made me feel more confident I could apply it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>56</td>
<td>The resources I need to use what I learned will be available to me after training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>57</td>
<td>I will get opportunities to use this training on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>58</td>
<td>What is taught in training closely matches my job requirements.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>59</td>
<td>The situations used in training are very similar to those I encounter on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>60</td>
<td>There are enough human resources available to allow me to use skills acquired in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>61</td>
<td>At work, budget limitations will prevent me from using skills acquired in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>62</td>
<td>Our current staffing level is adequate for me to use this training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>63</td>
<td>It will be hard to get materials and supplies I need to use the skills and knowledge learned in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Please complete questions 64 - 89 on the following pages.  
Note that these items have new instructions  
Please read them carefully.
<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>1 - Strongly disagree</th>
<th>2 - Disagree</th>
<th>3 - Neither agree nor disagree</th>
<th>4 - Agree</th>
<th>5 - Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.</td>
<td>The organization does not really value my performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>65.</td>
<td>My job performance improves when I use new things that I have learned.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>66.</td>
<td>The harder I work at learning, the better I do my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>67.</td>
<td>For the most part, the people who get rewarded around here are the ones that do something to deserve it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>68.</td>
<td>When I do things to improve my performance, good things happen to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>69.</td>
<td>Training usually helps me increase my productivity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>70.</td>
<td>People around here notice when you do something well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>71.</td>
<td>The more training I apply on my job, the better I do my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>72.</td>
<td>My job is ideal for someone who likes to get rewarded when they do something really good.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>73.</td>
<td>People in my group generally prefer to use existing methods, rather than try new methods learned in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>74.</td>
<td>Experienced employees in my group ridicule others when they use techniques they learn in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>75.</td>
<td>People in my group are open to changing the way they do things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>76.</td>
<td>People in my group are not willing to put in the effort to change the way things are done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>77.</td>
<td>My workgroup is reluctant to try new ways of doing things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>78.</td>
<td>My workgroup is open to change if it will improve our job performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>79.</td>
<td>After training, I get feedback from people on how well I am applying what I learn.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>80.</td>
<td>People often make suggestions about how I can improve my job performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

*Please turn to the last page*
<table>
<thead>
<tr>
<th>1 - Strongly disagree</th>
<th>2 - Disagree</th>
<th>3 - Neither agree nor disagree</th>
<th>4 - Agree</th>
<th>5 - Strongly agree</th>
</tr>
</thead>
</table>

For the following items, please **THINK ABOUT TRAINING IN GENERAL** in your organization.

81. I get a lot of advice from others about how to do my job better. 1 2 3 4 5
82. I am confident in my ability to use new skills at work. 1 2 3 4 5
83. I never doubt my ability to use newly learned skills on the job. 1 2 3 4 5
84. I am sure I can overcome obstacles on the job that hinder my use of new skills or knowledge. 1 2 3 4 5
85. At work, I feel very confident using what I learned in training even in the face of difficult or taxing situations. 1 2 3 4 5
86. People often tell me things to help me improve my job performance. 1 2 3 4 5
87. When I try new things I have learned, I know who will help me. 1 2 3 4 5
88. If my performance is not what it should be, people will help me improve. 1 2 3 4 5
89. I regularly have conversations with people about how to improve my performance. 1 2 3 4 5
APPENDIX G: MODELS OF LEARNING TRANSFER
<table>
<thead>
<tr>
<th>Model</th>
<th>Core Characteristics</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad &amp; Newstrom (1992)</td>
<td>Identifies contribution to transfer of trainee, trainer and manager</td>
<td>Practical focus</td>
<td>Explains little or nothing of the transfer process</td>
</tr>
<tr>
<td>Kozlowski &amp; Salas (1997)</td>
<td>Indicates transfer effects at individual, team and organizational level</td>
<td>Recognizes complexity of transfer process &amp; relationships between levels</td>
<td>Lacks specificity regarding transfer factors</td>
</tr>
<tr>
<td>Machin (2000)</td>
<td>Indicates transfer effects at different levels and links transfer outcomes to training outcomes</td>
<td>Integrates multi-level approach &amp; relationships between inputs &amp; outcomes</td>
<td>Developed in/for very specific (aviation team) settings</td>
</tr>
<tr>
<td>Thayer &amp; Teachout (1995)</td>
<td>Includes a range of factors discussed in the literature</td>
<td>Identifies factors at organizational level that influence</td>
<td>No indication of relative strength of factors or</td>
</tr>
<tr>
<td>Colquitt et al, (2000)</td>
<td>A meta-analytic study of (mainly) trainee factors</td>
<td>Identifies interactions among transfer factors; comprehensive coverage of trainee factors</td>
<td>Does not include training design factors</td>
</tr>
</tbody>
</table>

APPENDIX H: CHARACTERISTICS OF MODEL I, THEORY-IN-USE
<table>
<thead>
<tr>
<th>Governing Values</th>
<th>Primary Strategies</th>
<th>Operational Basis</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieve the purpose as the actor defines it</td>
<td>Control environment &amp; task unilaterally</td>
<td>Unillustrated attributions and evaluations (i.e., “You seem unmotivated”)</td>
<td>Defensive relationships</td>
</tr>
<tr>
<td>Win, do not lose</td>
<td>Protect self and others unilaterally</td>
<td>Advocating courses of action which discourage inquiry (i.e., “Let’s not talk about the past, that’s over.”)</td>
<td>Low freedom of choice</td>
</tr>
<tr>
<td>Suppress negative feelings</td>
<td></td>
<td>Treating ones’ own views as obviously correct</td>
<td>Reduced production of valid information</td>
</tr>
<tr>
<td>Emphasize rationality</td>
<td></td>
<td>Making covert attributions and evaluations</td>
<td>Little public testing of ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Face-saving moves such as leaving potentially embarrassing facts unstated</td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX I: CHARACTERISTICS OF MODEL II, ESPOUSED THEORY
<table>
<thead>
<tr>
<th>Governing Values</th>
<th>Strategies</th>
<th>Operational Basis</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid information</td>
<td>Sharing control</td>
<td>Attribution &amp; evaluation illustrated with relatively directly-observable data</td>
<td>Minimally defensive relationships</td>
</tr>
<tr>
<td>Free &amp; informed choice</td>
<td>Participation in design &amp; implementation of action</td>
<td>Surfacing conflicting view</td>
<td>High freedom of choice</td>
</tr>
<tr>
<td>Internal commitment</td>
<td>Encouraging public testing of evaluations</td>
<td>Increased likelihood of double-loop learning</td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX J: PERMISSION TO USE THE LTSI
Learning Transfer System Inventory Agreement

Permission is hereby granted to use the Learning Transfer System Inventory (LTSI), an organizational assessment instrument, owned by Elwood F. Holton III and Reid A. Bates. Permission is granted to the following people for the timeframe, payment and purposes specified below:

<table>
<thead>
<tr>
<th>Permission granted to:</th>
<th>Ethelle G. Ford, M.Ed., DM (Candidate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name, company, address, phone number, e-mail, etc.</td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td>Doctoral Research</td>
</tr>
<tr>
<td>Time Period</td>
<td>March-April 2008 (surveying 2000-5000 participants)</td>
</tr>
<tr>
<td>Other Conditions</td>
<td>LTSI will be available to participants only by accessing monkeysurvey.com</td>
</tr>
<tr>
<td>Payment</td>
<td>Research</td>
</tr>
</tbody>
</table>

It is understood that, by agreeing to use the Learning Transfer System Inventory, you are accepting the following conditions:

1. Any use other than that specified above is prohibited without to prior written authorization by the authors (E. F. Holton III & R. A. Bates).

2. No changes whatsoever can be made to the LTSI without prior written consent of the authors.

3. The authors retain full copyright authority for the LTSI. Therefore, the LTSI cannot be copied or reproduced in any fashion without the authors’ prior written consent. Every copy must carry the following copyright notice:

   ©Copyright 1998, Elwood F. Holton III and Reid A. Bates, all rights reserved

4. Discussion and presentation of the LTSI will accurately reflect the composition of the
instrument and will use only original scale names, scale definitions, and item groupings.

5. A copy of all data collected with the instrument are given to the authors free of charge and in a timely manner. This data will only be used for research purposes and will not be reported in such a manner that would identify individual organizations, without written permission of the organization.

6. Unless otherwise acceded, the authors will share in the authorship of any publications which result from the use of the instrument or the data collected with the LTBI.

7. The authors reserve the right to withdraw the LTBI from use at any time if any terms or conditions of this agreement are violated.

8. Any reports published or presented resulting from data collected using the LTBI shall clearly indicate that instrument authors did not participate in preparing the reports.

Signed:

<table>
<thead>
<tr>
<th>LTBI user (print name)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethelle G. Lord</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral student at University of Phoenix</td>
<td></td>
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</table>

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<th>LTBI user signature</th>
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<tbody>
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<td>Ethelle G. Lord</td>
<td>January 28, 2008</td>
</tr>
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<table>
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<th>Date</th>
</tr>
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<tbody>
<tr>
<td>Elwood F. Holton III or Reid A. Bates</td>
<td>1/31/08</td>
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</tbody>
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Elwood F. Holton III or Reid A. Bates, LTBI authors
APPENDIX K: LTSI DEFINITIONS AND SAMPLE ITEMS
### Learning Transfer System Inventory (LTSI) Definitions and Sample Items

<table>
<thead>
<tr>
<th>Factors</th>
<th>Definition</th>
<th>Sample Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Training-specific scales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learner readiness</td>
<td>Extent to which individuals are prepared to enter and participate in training</td>
<td>Before the training, I had a good understanding of how it would fit my job-related development</td>
</tr>
<tr>
<td>Motivation to transfer</td>
<td>Direction, intensity, and persistence of effort toward using in a work setting skills and knowledge learned</td>
<td>I get excited when I think about trying to use my new learning on my job</td>
</tr>
<tr>
<td>Positive personal outcomes</td>
<td>Degree to which applying training on the job leads to outcomes that are positive for the individual</td>
<td>Employees in this organization receive various “perks” when they use newly learned skills on the job</td>
</tr>
<tr>
<td>Negative personal outcomes</td>
<td>Extent to which individuals believe that that now applying skills and knowledge learned in training will lead to</td>
<td>If I do not use my training. I will be cautioned about it</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Personal capacity for transfer</td>
<td>Extent to which individuals have the time, energy, and mental space in their work lives to make changes required to transfer learning to the job</td>
<td>My workload allows me time to try the new things I have learned</td>
</tr>
<tr>
<td>Peer support</td>
<td>Extent to which peers reinforce and support use of learning on the job</td>
<td>My colleagues encourage me to use the skills I have learned in training</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>Extent to which supervisors/managers support and reinforce use of training on the job</td>
<td>My supervisor sets goals for me that encourage me to apply my training on the job</td>
</tr>
<tr>
<td>Supervisor sanctions</td>
<td>Extent to which individuals perceive negative responses from supervisors/managers when applying skills learned in training</td>
<td>My supervisor opposes the use of the techniques I learned in training</td>
</tr>
<tr>
<td>Perceived content validation</td>
<td>Extent to which trainees judge training content to accurately reflect job requirements</td>
<td>What is taught in training closely matches my job requirements</td>
</tr>
<tr>
<td>Transfer design</td>
<td>Degree to which (a) training has been designed and delivered to give trainees the ability to transfer learning to the job, and (b) training instructions match job requirements</td>
<td>The activities and exercises the trainers used helped me know how to apply my learning on the job</td>
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<tr>
<td>Opportunity to use</td>
<td>Extent to which trainees are provided with or obtain resources and tasks on the job enabling them to use training on the job</td>
<td>The resources I need to use what I learned will be available to me after training</td>
</tr>
<tr>
<td>(2) General scales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer effort-performance expectations</td>
<td>Expectations that effort devoted to transferring learning will lead to changes in job performance</td>
<td>My job performance improves when I use new things that I have learned.</td>
</tr>
<tr>
<td>Performance-outcomes expectations</td>
<td>Expectations that changes in job performance will lead to valued outcomes</td>
<td>When I do things to improve my performance, good things happen to me.</td>
</tr>
<tr>
<td>Resistance/openness to change</td>
<td>Extent to which prevailing group norms are perceived by individuals to resist or</td>
<td>People in my group are open to changing the way they do things</td>
</tr>
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<td></td>
<td>Discourage the use of skills and knowledge acquired in training</td>
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</tr>
<tr>
<td><strong>Performance self-efficacy</strong></td>
<td>An individual’s general belief that they are able to change their performance when they want to</td>
<td>I am confident in my ability to use newly learned skills on the job</td>
</tr>
<tr>
<td><strong>Performance coaching</strong></td>
<td>Formal and informal indicators from an organization about an individual’s job performance</td>
<td>After training, I get feedback from people about how well I am applying what I learned</td>
</tr>
</tbody>
</table>