The Relationship Among Training Policy, Knowledge Transfer, and Performance Improvement: A Study of Private Sector Organizations in the Kingdom of Saudi Arabia

Fayez M. Shafloot
Western Michigan University, eval.d@hotmail.com

Follow this and additional works at: http://scholarworks.wmich.edu/dissertations

Part of the Human Resources Management Commons, and the Policy Design, Analysis, and Evaluation Commons

Recommended Citation
Shafloot, Fayez M., "The Relationship Among Training Policy, Knowledge Transfer, and Performance Improvement: A Study of Private Sector Organizations in the Kingdom of Saudi Arabia" (2012). Dissertations. 120.
http://scholarworks.wmich.edu/dissertations/120
THE RELATIONSHIP AMONG TRAINING POLICY, KNOWLEDGE TRANSFER,
AND PERFORMANCE IMPROVEMENT: A STUDY OF PRIVATE SECTOR
ORGANIZATIONS IN THE KINGDOM OF SAUDI ARABIA

by

Fayez M. Shafloot

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Philosophy
Department of Evaluation, Measurement, and Research
Advisor: Chris L. S. Coryn, Ph.D.

Western Michigan University
Kalamazoo, Michigan
December 2012
THE RELATIONSHIP AMONG TRAINING POLICY, KNOWLEDGE TRANSFER, AND PERFORMANCE IMPROVEMENT: A STUDY OF PRIVATE SECTOR ORGANIZATIONS IN THE KINGDOM OF SAUDI ARABIA

Fayez M. Shafloot, Ph.D.

Western Michigan University, 2012

The purpose of this study was to explore human resource (HR) managers’ perceptions of training practices (i.e., needs assessment, trainee preparation, training program review, accountability, management support, knowledge transfer, and performance improvement) in Saudi private sector organizations. The research questions were: (1) How do HR managers perceive the importance and occurrence of training needs assessment, trainee preparation, training program review, accountability and management support? (2) How do HR managers perceive knowledge transfer and performance improvement as a function of training? and (3) What training factors do HR managers identify as being important to the delivery of training?

Data were collected with the Survey of Training Policy Effectiveness, which the researcher developed for the purpose of this study, and semi-structured interviews. Descriptive statistics were used to analyze the data for research questions 1 and 2, and theme analysis was used to analyze question 3. Results showed that overall scale means depict agreement (i.e., scale mean greater than 3.5) for all scales but Accountability ($M = 3.28$). Moderate agreement (i.e., mean greater than 3.5 and less than 4.0) occurred for three scales, Trainee Preparation ($M = 3.81$), Needs Assessment ($M = 3.70$), and Knowledge Transfer ($M = 3.98$). Respondents indicated strong agreement (i.e., mean
greater than 4.0) with the constructs presented in three of the scales, Training Program Review ($M = 4.14$), Management Support ($M = 4.10$), and Performance Improvement ($M = 4.07$). Five themes were generated as a result of the thematic analysis used to answer research question 3: (1) Training Needs Assessment Methods and Tools; (2) Trainee Preparation Techniques; (3) Training Accountability System; (4) Management Training Support Practices; and (5) Knowledge Sharing and Skills Transfer.

In sum, the results of this study found that Saudi HR managers indeed perceive that the factors explored in this study contribute to changes in the trainee and resulting on-the-job performance. Recommendations for implementation of the study’s findings and additional research are discussed.
ACKNOWLEDGMENTS

I would like to express my gratitude and acknowledge the following people who have supported and encouraged me during the process of completing my doctoral work. I thank Dr. Chris Coryn, my major advisor, for the inspiration he gave me in my writing, and the commitment he made me to see through this enormous project. His advice helped me to conduct the project in an appropriate way with correction of statistical error. Dr. Coryn was the key for my success in this degree. His thoughtful criticisms and encouragement helped to enlighten me, to recognize my weaknesses, and have the power for better learning and career development.

Other individuals I would like to thank are Dr. Arlen Gullickson and Dr. Larry Blackmer. I thank Dr. Gullickson for his contributions to my project, his friendship, his support, and his monitoring hand, which helped me to bring this research to completion. I thank Dr. Blackmer for his contributions to the project, his ample support during my study, and his honest words that inspired me to get to this stage. I also thank all of my colleagues at Western Michigan University for the wonderful supportive network system we have developed over years.

I especially thank my family. I thank my mom for her constant prayers and encouragement, saying, “Do not give up, I am waiting for you with the degree.” I thank my wife, Madiha, and our children for their patience and love, as well, as my extended family members for their support. My sincerest thanks to my brother Ali!

There are many individuals who helped to provide the resources necessary to
complete this dissertation. Saudi Ambassador, in Beriut, Ali Assiri, has been an enormous and generous support for years. Assiri has given great advice and been committed through his assistance. I thank the Saudi Arabia government, especially King Abdullah Bin Abdulaziz, who helped me to achieve my dream in obtaining the degree that will allow me to support my country in obtaining better learning systems.

Finally, special thanks goes to Ms. Mary Ramlow, Evaluation Center Office Coordinator, for her guidance, her sincere, honest, and heartfelt words, and her limitless collaboration and support.

Fayez M. Shafloot
TABLE OF CONTENTS

ACKNOWLEDGMENTS ........................................................................................................... ii
LIST OF TABLES .................................................................................................................... ix
LIST OF FIGURES .................................................................................................................. xi
CHAPTER

I. INTRODUCTION .................................................................................................................... 1
   Statement of the Problem ..................................................................................................... 1
   Purpose of the Study ........................................................................................................... 2
   Research Questions ............................................................................................................ 2
   Assumptions ....................................................................................................................... 2
   Rationale and Theoretical Framework ................................................................................. 3
   The Context of the Study .................................................................................................... 4
   The Human Resources Development Fund (HRDF) .......................................................... 4
   Human Resources Managers .............................................................................................. 5
   Importance of the Study ..................................................................................................... 6
   Limitations ......................................................................................................................... 7
   Definition of Terms ............................................................................................................ 8
   Organization of the Study ................................................................................................... 9

II. REVIEW OF LITERATURE .................................................................................................. 10
   Overview ............................................................................................................................ 10
   Relevant Studies ................................................................................................................. 12
Table of Contents—Continued

CHAPTER

Training Transfer .................................................................................................................. 16
Needs Assessment ................................................................................................................. 20
Management Support .......................................................................................................... 23
Accountability ...................................................................................................................... 26
Trainee Preparation ............................................................................................................ 27
Summary .............................................................................................................................. 29

III. METHODOLOGY ............................................................................................................. 32
Research Questions ............................................................................................................. 32
Research Design ................................................................................................................ 33
Participants ......................................................................................................................... 35
Sample ............................................................................................................................... 35
Inclusion Criteria ............................................................................................................... 36
Respondents ....................................................................................................................... 37
Instrumentation ................................................................................................................ 39
Survey of Training Policy Effectiveness ............................................................................. 39
Semi-Structured Interviews and Open-Ended Questions .................................................. 42
Data Collection Procedures ............................................................................................. 43
Data Analysis ..................................................................................................................... 45
Interview Analysis ............................................................................................................ 46

IV. RESULTS ........................................................................................................................ 48
Table of Contents—Continued

CHAPTER

Research Question 1 .................................................................................................................. 49

Training Program Review ........................................................................................................ 50
Management Support .............................................................................................................. 51
Trainee Preparation ................................................................................................................ 52
Needs Assessment ................................................................................................................... 53
Accountability .......................................................................................................................... 55
Industry Category .................................................................................................................... 56
Employee Size Category .......................................................................................................... 57
Managerial Position Category ................................................................................................. 58
Region Category ....................................................................................................................... 59

Research Question 2 .................................................................................................................. 60

Knowledge Transfer ............................................................................................................... 61
Performance Improvement ...................................................................................................... 62
Industry Category .................................................................................................................... 63
Employee Size Category .......................................................................................................... 64
Managerial Position Category ................................................................................................. 65
Region Category ....................................................................................................................... 66

Research Question 3 .................................................................................................................. 67

Training Needs Assessment Methods and Tools (TNAMT) ........................................... 67
Trainee Preparation Techniques ........................................................................................... 69
Table of Contents—Continued

CHAPTER

Training Accountability System .......................................................... 70
Management Training Support Practices (MTSP) .......................... 71
Knowledge Sharing and Skills Transfer (KSST) ............................. 72
Summary ............................................................................................ 73

V. SUMMARY, FINDINGS, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS .......................................................... 77

Summary ............................................................................................ 77
Discussion of Major Findings ................................................................. 79
Research Question 1 ........................................................................... 79
Research Question 2 ........................................................................... 84
Research Question 3 ........................................................................... 87
Conclusion .......................................................................................... 89
Limitations .......................................................................................... 93
Recommendations for Training Program Evaluation ....................... 94
Recommendations for Future Research .............................................. 94

REFERENCES ....................................................................................... 96

APPENDICES ......................................................................................... 108

A. Five Factor Survey of Training Policy Effectiveness .................... 108
B. Interview Protocols ........................................................................ 116
C. Informed Consent ........................................................................... 119
Table of Contents—Continued

APPENDICES

D. Participation Request Letter................................................................. 121

E. Human Subjects Institutional Review Board Approval......................... 123
LIST OF TABLES

1. Frequencies and Percentages of Respondent Demographic Variables ............... 38

2. Means and Standard Deviations for Training Program Review, Management Support, Trainee Preparation, Needs Assessment, and Accountability in Descending Order (N = 175) ....................................................................................................... 50

3. Means, Standard Deviations, and Percentages of Manager Response on Training Program Review Items in Descending Order (N = 175) .................. 51

4. Means, Standard Deviations, and Percentages of Manager Response on Management Support Items in Descending Order (N = 175) .................. 52

5. Means, Standard Deviations, and Percentages of Manager Response on Trainee Preparation Items in Descending Order (N = 175) .................. 53

6. Means, Standard Deviations, and Percentages of Manager Response on Needs Assessment Items in Descending Order (N = 175) .................. 54

7. Means, Standard Deviations, and Percentages of Manager Response on Accountability Items in Descending Order (N = 175) .................. 55

8. Mean of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support by Industry (N = 175) .................. 57

9. Mean of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support by Number of Employees (N = 175) .................................................................................................................................................................................. 58

10. Mean of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support by Managerial Position (N = 175) .............................................................. 59

11. Mean of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support by Region (N = 175) .................. 60

12. Means and Standard Deviations for Performance Improvement and Knowledge Transfer in Descending Order (N = 175) ................................................................. 60
List of Tables—Continued

13. Percentage of Manager Response on Knowledge Transfer in Descending Order (N =175) ................................................................................. 61

14. Percentage of Manager Response on Performance Improvement in Descending Order (N =175) ................................................................................. 63

15. Knowledge Transfer and Performance Improvement Means by Industry (N =175) ......................................................................................... 64

16. Means of Knowledge Transfer and Performance Improvement by Number of Employees (N =175) ................................................................. 65

17. Mean of Knowledge Transfer and Performance Improvement by Managerial Position (N =175) ........................................................................ 66

18. Mean of Knowledge Transfer and Performance Improvement by Company Location (N = 175) ................................................................. 66

19. Comparison of Current and Previous Research Findings................................. 92
LIST OF FIGURES

1. Study variables ........................................................................................................................................ 35
CHAPTER I

INTRODUCTION

In recent years, the Saudi government has invested billions of Saudi Riyals on training activities in the private sector to increase job seekers’ and employees’ knowledge and skills. According to the Saudi Arabian Monetary Agency Report (2009), Saudi government investments in human resource development and training was forecasted to increase during 2010, reaching approximately $36.65 billion. Thus, the government and private sector have high expectations that training efforts will contribute to organizational productivity and individual learning capacity. This study describes the implementation of training practices in the private sector in the Kingdom of Saudi Arabia based on the observations and perceptions of Human Resources Directors and Managers.

Statement of the Problem

Human resources managers (HR) have at their disposal significant Riyals to expend on training programs to improve employee performance. Without effective policy regarding the implementation of training practices, best practices leading to transfer of knowledge may not be identified and utilized to achieve the results desired through training. According to Kovach and Cohen (1992), evaluation of training transfer seldom goes beyond the reaction or learning level. An understanding of the role of needs assessment, trainee preparation, training program review, accountability, management support, knowledge transfer and performance improvement is essential for the development of policy that contributes to a method or practice of training that achieve
organizational goals and expectations. If trainees (employees) do not transfer the knowledge and skills they have learned from training to the workplace, neither the trainee nor the organization will benefit (Elangovan & Karakowsky, 1999). This study investigates these factors by surveying HR managers and learning their perceptions regarding the activities typically provided in training programs.

**Purpose of the Study**

The purpose of this study was (1) to determine which training factors are currently deemed important by HR managers and, therefore, practiced in Saudi companies, and (2) to describe which practices lead to effective policy that in turn contribute to learning transfer, skill development, and performance improvement.

**Research Questions**

1. How do HR managers perceive the importance and or occurrence of training needs assessment, trainee preparation, training program review, accountability and management support?
2. How do HR managers perceive knowledge transfer and performance improvement as a function of training?
3. What training factors do HR managers identify as being important to the delivery of training?

**Assumptions**

By studying the perceptions of HR managers as they relate to current practices, better policy may be developed to improve employee performances. In turn, HR
managers may be better equipped to design training programs that effectively meet the needs of their companies and better allocate their personnel development resources.

**Rationale and Theoretical Framework**

Companies, organizations, and centers use various models to evaluate their training programs. Kirkpatrick’s (1983) four-level evaluation model, the CIPP model (1987), and Brinkerhoff’s (1983) Success Case Method are examples of models that apply to evaluation of training. These models are also used to evaluate the progress and performance of trainings programs or trainees in their workplaces. The Kirkpatrick Model (Kirkpatrick, 1983) is one of the most recognized and widespread models for evaluating training. It consists of four levels. The first two levels, Reaction and Learning, are designed to evaluate reactions to training and measure new knowledge or skills. Levels three and four, Behavior and Results, are designed to evaluate trainee behavior and results in the workplace after completing the training program.

While the Kirkpatrick Model (Kirkpatrick, 1983) has been used widely for over 35 years to evaluate training programs and their effectiveness, it has also been criticized by scholars. A growing body of research investigating factors affecting knowledge transfer through training programs suggests that the Kirkpatrick Model may be incomplete. As stated by Cunningham (2007):

> The model is interpreted by most of its supporters as requiring evaluation at each of these levels and that there is a logical progression going up the levels. That is, you evaluate the reaction to a learning program and if that is positive go on to evaluate what people learned. If that proves positive you then see if the learners behave differently and if they do you may (if you are lucky) get the chance to evaluate the business results of the changed behavior. (p. 4)
Reeves and Hedberg (2003) criticized the Kirkpatrick Model, arguing that training outcomes, including knowledge transfer, are often influenced by many factors other than training. According to McFarlane (2006) “several factors should be taken into consideration when planning and implementing an effective training program” (p. 96). It is, therefore, appropriate to identify and examine these factors. While the Kirkpatrick Model may have its limitations, it does, nonetheless, with appropriate modifications, provide a method for the evaluation of training programs. The modification provided in this study is to include an additional focus by employing, in addition to the four levels suggested by Kirkpatrick, an assessment of pre-training needs. This needs assessment, establishes the context in which the Kirkpatrick model is then utilized.

**The Context of the Study**

The Kingdom of Saudi Arabia is currently undergoing what is called the Saudization of jobs (i.e., replacing foreign labor with domestic labor). This is occurring in the private sector with the goal of raising the quality of the national workforce and in so doing improving national productivity. According to the Saudi Arabian Ministry of Labor Employment Strategy (2009), the strategy deals with the labor market as part of the overall national economy, and seeks to establish strong institutionalized partnerships between the various government and private sector entities that affect the national economy. This study was conducted in concert with the goals of this initiative.

**The Human Resources Development Fund (HRDF)**

HRDF was established by the Saudi government in 2000 to support and sustain the general objectives of preparing a national workforce and help workers find employment in the private sector. HRDF efforts include offering grants, especially in the
private sector, to (e.g., companies, and training centers) that are involved in the preparation, training, and employment of a national workforce. Its efforts also include sharing the expenses of preparing, training, and employing the national workforce.

HRDF developed plans and procedures to render its services by providing (1) incentives for encouraging Saudi job seekers to obtain training and good employment in the private sector, and (2) promoting and encouraging the development of various training programs.

**Human Resources Managers**

In order to achieve its goals, HRDF requires that HR, training managers, or personnel managers be assigned the responsibility of being knowledgeable for all aspects of training, including the assessment of knowledge transfer and the effect of training on employee performance. A recent study conducted by HRDF (2007) of companies in the private sector found that HR directors accounted for 40% of managers in charge of training. The study also found that 29% were heads of training departments and that 25% were heads of personnel departments. Approximately 6% were “others” assigned to the training process. The study also found that two thirds (66%) of the managers held bachelor degrees or higher. The study indicated that 46% of the sample evaluated their respective training programs by using surveys, while 28% used open meetings with department managers.

Based on the role of HR managers one may conclude that HR managers are in a position to better understand and describe the training procedures and practices as they relate to gaining knowledge from training and the transfer of that knowledge to the work activity. Given the role of HR administrators and their ability to observe and evaluate training programs, a dialog, coupled with a survey of their perceptions and observations,
seems appropriate for the improvement of training practices and to achieve the goals of HRDF.

**Importance of the Study**

Cekada (2011) affirmed that a training needs assessment is the first step in starting an effective training program. In doing so, it is important to determine the learning objectives, design the training program based on the identified objectives, and develop a method of evaluating the training. Having a well-structured measuring system in place prior to training may help determine to what extent a trainee will utilize training and transfer learning to the workplace. This practice may add more value to a company's training and its associated evaluation methods, as well as help funding organizations such as HRDF achieve their ultimate goals and objectives. Crosbie (2005) indicated that organizations that undertake a leadership development initiative incorporate various aspects of a training needs assessment into their evaluations, and look beyond simply evaluating programs post training. This study asserts that studying needs prior to the implementation of the study is an essential first step in the evaluation process.

In sum, Saudi Arabia is strongly encouraging and supporting the development of workforce development programs. There appears to be strong agreement regarding the importance of an array of factors to better build and support these programs. These factors include an understanding of the role of needs assessment, trainee preparation, training program review, accountability, management support, knowledge transfer, and performance improvement. All are deemed essential for the development of training policies that contribute to achieving organization goals and expectations. Similarly, researchers agree that steps need to be taken to assess the importance and role of these
factors. At the same time, evaluation efforts until now have yet to describe how these factors are conducted and their relationships to improved workforce productivity. This study directly focuses on describing those factors.

**Limitations**

There are several limitations to this study. This descriptive study does not assess if knowledge transfer takes place or if there is performance improvement. It only measures to some degree the perception of knowledge transfer and performance as judged by human resource managers. In addition, the absence of criteria required to measure exemplary performance was a key limitation of the study and an important implication for further research. However, there are no quantified measures about the true knowledge transfer and performance improvement; it might be greater or lesser in the reality. While there is good agreement regarding the importance of the factors studied here, there may be other factors not yet identified that play substantive roles in making training program effective in producing desired workforce changes.

Participants of this study included 175 private sector organizations in the Kingdom of Saudi Arabia. Data for this study were collected via a survey for which the response rate was 65%. That response rate is less than desired but is not unusual for studies of this type. While this study is descriptive in nature and does capture and report the observations of those surveyed, it cannot be generalized to a larger or different population. Another limitation is the time and scope of the training programs through which this study has been conducted. The study was limited to the knowledge transfer and performance improvement as a result of the training programs outputs in 2011.
Definition of Terms

**Knowledge/training transfer:** Knowledge transfer has been defined as “the process of moving useful information from one individual to another person” (Ladd & Ward, 2002, p. 3). According to Brinkerhoff and Apking (2001) transfer is “the extent to which training –acquired capabilities are applied to job performance” (p. 8). On the other hand, *knowledge transfer* is defined as “The ability to extend the knowledge and skills one has developed beyond the limited context in which they were acquired” (Pellegrino, Chudowsky & Glaser, 2001, p. 87). Knowledge transfer has several synonyms that include "application," "practice," "utilization," and "implementation." The use of these synonyms varies according to business arena. This dissertation focused on the movement of knowledge into action that reflects the commitment to use the knowledge or skills newly obtained from an intervention.

**Knowledge Sharing:** Knowledge sharing means the dissemination or exchange of explicit knowledge, ideas, skills, and technology among individual employees or group of employees (Cabrera & Cabrera, 2002; Tsai, 2002; Wang, Ahmed, & Rafiq, 2008).

**Trainee:** this study describes a trainee as: any fulltime employee who works in Saudi Arabia business sector and his company has selected him or her to attend a vocational training program.

**Evaluation:** According to Scriven (1991), evaluation refers to “the process of determining the merit, worth, or value of something, or the product of that process” (p. 139).

**Needs assessment:** is “a process or systematic set of procedures undertaken for the purpose of setting priorities and making decisions about program or organizational
improvement or allocation of resources” (Encyclopedia of Evaluation, p. 276). Scriven (1991) defined need as “anything essential for satisfactory mode of existence or level of performance” (p. 242). Needs assessments are used as a process for determining and addressing the needs for specific programs, products, or services.

Organization of the Study

The dissertation is organized into five chapters. This chapter, Introduction, presented an introduction to the background, a statement of the problem investigated, the purpose, the context, the rationale and theoretical framework, the importance, and the limitations of the study, and definition.

Chapter II, Review of the Literature, provides a review of the literature relevant to the study. This includes a review of training practices, knowledge transfer, and performance improvement.

Chapter III, Methodology, describes the survey research methods utilized. Specifically, this chapter explains the process of participant selection, instrumentation, data collection, and data analysis procedures.

Chapter IV, Results, presents the results of the study, including reliability analyses of the survey developed for the purpose of this study, and answers to the research questions stated above.

Finally, Chapter V, Summary, Findings, Conclusions, Limitations, and Recommendations, presents a brief summary of everything covered in the first four chapters. A discussion of the "so what" aspect of the findings and the study’s limitations and generalizability is provided. Practical recommendations for implementing the study's findings and suggestions for additional research are also provided.
CHAPTER II

REVIEW OF LITERATURE

This chapter reviews literature relevant to this dissertation study. As mentioned in Chapter I, this study describes the implementation of training practices in the private sector in the Kingdom of Saudi Arabia based on the observations and perceptions of Human Resources Directors and Managers. Specifically, the purpose of this study was: (1) to determine which training factors are currently deemed important by HR managers and, therefore, practiced in Saudi companies, and (2) to describe which practices lead to effective policy that in turn contribute to learning transfer, skill development, and performance improvement. Throughout the literature, five training factors in particular have been found to be important in the training context. These factors include: (1) training needs assessment, (2) management support, (3) training program review, (4) accountability, and (5) trainee preparation.

This chapter includes four sections; the first provides an overview of Saudi Arabian interests and intents, and the second provides a review of relevant studies. The third section describes training transfer and each of the five factors mentioned above in greater detail. The fourth section summarizes main points from the relevant studies and the training transfer factors.

Overview

Efforts are currently being made in the Kingdom of Saudi Arabia to raise the quality of the national workforce and improve national productivity. As a result, greater
attention has been devoted to improving training and evaluation practices within Saudi governmental agencies and private sector companies. Of particular interest is the identification of organizational practices that lead to knowledge transfer and performance improvement after a training program has been implemented.

Within the evaluation discipline, there is a growing body of theoretical and empirical literature concerning training practice, training program effectiveness, and organizational learning and motivation. This body of literature indicates that human resources department training practices can facilitate or inhibit knowledge transfer and performance improvement. For the purpose of this dissertation, knowledge transfer is defined as “the extent to which training (i.e., acquired capabilities) are applied to job performance” (Brinkerhoff & Apking, 2001, p. 8). Ineffective training practices may affect the trainees’ ability to use knowledge or skills learned from a training program. Conversely, Huselid (1995) found that use of effective human resources practices (e.g., training procedures, formal information sharing, and attitude assessment) enhance knowledge transfer and performance improvement.

Traditionally, organizational and human resources department practices used to determine the effect of training programs on knowledge transfer and performance improvement consist of post-training evaluations and assessments at the trainee level (e.g., Brinkerhoff, 1983). The Kirkpatrick Model (Kirkpatrick, 1983), for example, is one of the most recognized and widespread models for evaluating training. This model measures student reactions to training, learning, application of learning, and the extent to which intended outcomes occur as a result of training.
Several scholars have argued that training outcomes are often influenced by many factors outside training (McFarlane, 2006; Reeves & Hedberg, 2003). According to previous research, factors such as pre-training information, accountability, supervisor involvement, and management support also have a significant impact on training outcomes (Baldwin & Magjuka, 1991; Chiaburu, et al., 2010; Iqbal, Arif, & Abbas, 2011). It is, therefore, appropriate to identify and examine these factors as part of an overall training program evaluation. Unfortunately, most traditional models of evaluation do not address these or other factors outside of the training program itself.

One modification provided in this study is to study the inclusion of an assessment of pre-training needs in addition to the four levels suggested by Kirkpatrick (1983). This study also expands the literature by providing descriptive patterns and understandings of how various training factors (i.e., training needs assessment, management support, training program review, accountability, and trainee preparation) influence knowledge transfer and performance improvement. The following section describes U.S. and Saudi studies relevant to these factors and the questions explored in this study.

**Relevant Studies**

As stated above, many popular models of training program evaluation focus on only those factors related directly to training programming (e.g., Kirkpatrick, 1983). Yet, research over the past two decades has documented the presence of other wide-ranging organizational, individual, and training design factors that can influence training effectiveness (Campbell & Cheek, 1989; Colquitt, LePine, & Noe, 2000; Leifer & Newstorm, 1980; Lewis, 1995; Machles, 2002; Mathison, 2005; Taylor et al., 2009; Van
Iddekinge et al., 2009; Wexley & Baldwin, 1986). These factors occur before, during, and after training.

Research has shown that several organizational factors influence trainees' intention to practice what they have learned in the workplace setting. In their study of 193 manufacturing engineer trainees, Baldwin and Magjuka (1991), for example, found three organizational "signals" increase the probability of knowledge transfer subsequent to training. These signals were: (1) when trainees received relevant information before the training program, (2) when trainees recognized that they would be held accountable for learning, and (3) when trainees perceived training as mandatory. Not only did these pre-training factors positively influence trainees’ intentions to practice what they learned in their workplace, but they also had a positive effect on trainee perceptions of training.

Other researchers have found different sets of organizational factors that influence knowledge transfer and performance improvement. Regarding factors that affect performance, Iqbal, Arif, and Abbas (2011) stated:

…incentive pay plans positively and substantially affect performance of workers if combined with innovative work practices like (e.g., flexible job design, employee participation in problem-solving teams, training to provide workers with multiple skills, extensive screening and communication and employment security. (p. 216)

Here, Iqbal, Arif, and Abbas argue that organizational factors such as pay combined with job flexibility, security, and group problem-solving opportunities affect employee performance in ways that training programs alone do not.

Factors such as those mentioned by Iqbal, Arif, and Abbas (2011) enhance employee motivation and assist in the development of the self-efficacy needed to acquire and transfer knowledge and skills after completing training program. Chiaburu, Van
Dam, and Hutchins (2010) conducted a longitudinal study to examine the extent to which two forms of social support (i.e., organization support and supervisor support) predict training transfer. Chiaburu and his colleagues tested 111 employees, and found that supervisory support had a strong relationship with individual factors, which then influenced training transfer. Specifically, work support factors including manager support, manager sanctions, peer support, feedback, and coaching were strongly related to motivation to transfer training to the workplace (p. 189).

Overall, there is a significant relationship between the process of training selection and training outcomes. A study conducted by Al-Shar'a (2008) included 40 public joint stock companies (50% of the population), and examined the Jordanian industrial training strategy and its impact on the performance of employees. The study targeted the companies’ general managers or their assistants by distributing a questionnaire and conducting interviews to collect data. Results of the study indicated a statistically significant positive relationship between the implementation of the process of training and the performance of employees. Results of the study also showed that the degree of implementation stages of the process of training was high in these companies.

Leifer and Newstorm (1980) conducted a study on 84 human resource development professionals in which they were asked to report the most important impediments to training transfer. Their results showed that there was a set of nine frequently mentioned factors thought to impede knowledge transfer. These factors were presented again to a group of 36 trainers who ranked the three most powerful forces against transfer, which included: (1) lack of on-the-job reinforcement, (2) interference
from the immediate environment, and (3) a non-supportive organizational climate (Machles, 2002).

In regard to the private sector in Saudi Arabia, the Human Resources Development Fund (HRDF, 2006), a government entity, conducted a study on the turnover problem in privately owned businesses. The sample of the study consisted of 579 employees, 983 unemployed individual (people who worked in the past and quit for a reason, but now they are job seekers), and 439 human resources managers. Results of the study indicated that approximately 59% of the employees who quit their jobs highly agreed that they left the companies due to low motivation from their companies. The findings also showed that about 47% highly agreed that they quit the company because there was no actual career plan. These results provide some indication as to why current employees might quit their companies. The study, overall, indicated there was no significant differences between the HR manages’ and their employees’ perception about the reasons or problems that might compel an employee to quit his job.

Abdullah (2009) conducted a study as a part of a larger piece of research on HRD practices in manufacturing firms in Malaysia. The data were gathered through survey and in-depth interviews of 58 HR managers. The interview sample was selected purposively, which allowed the selection of individuals with experience and in-depth knowledge of the human resources and training development function. Findings from the study revealed that the majority of the manufacturing firms sampled had HRD specialists who lacked the knowledge and skills to carry out appropriate HRD functions. Moreover, the study found that the HR practitioners surveyed were challenged with problems relating to employees’ behavior and attitudes, wherein top and middle management behaved uncooperatively
towards HR. That behavior had a negative impact on HRD function effectiveness. Findings also revealed that lack of supervisor support impeded knowledge transfer on the part of trainees.

To summarize, the results of the studies described above provide a clear indication that factors other than those related directly to training programs have a significant impact on training outcomes, including knowledge transfer and performance improvement. Some of these factors include employee attitudes (Abdullah, 2009), organizational and supervisor support (Chiaburu, Van Dam, & Hutchins, 2010), a lack of on the job reinforcement (Leifer & Newstorm, 1980), and pay incentives combined with job flexibility and security (Iqbal, Arif, & Abbas, 2010). The section below is a discussion of knowledge transfer along with the factors explored in this study (i.e., training needs assessment, management support, training program review, accountability, and trainee preparation) in greater detail.

**Training Transfer**

The primary purpose of most training programs is to provide trainees with knowledge to be transferred to the work environment. Machles (2002) defined *knowledge transfer* as, "the process of successfully moving knowledge, skills, or attitudes from classroom to workplace – which is the ultimate goal of training" (p. 32). It includes the conditions under which the behaviors will be seen, and how a trainee will behave differently as a result of attending a training program. In other words, knowledge transfer includes all recognized activities and desired positive behavior that occur as a result of attending any intervention program. Some scholars described knowledge transfer as a mix of several factors. According to Baldwin and Ford (1988), knowledge transfer is seen
as a function of three factors: (a) trainee characteristics, including ability, personality, and motivation; (b) training design, including transfer design and content; and (c) work environment, including support and opportunity to use learned material.

Trainees acquire knowledge for different purposes. These purposes can include reasons such as to refresh their knowledge, to solve problems, or to improve performance. Rummler and Brache (1995) indicated that there are six factors that affect performance in any workplace. Two of these factors are clear performance specifications and the individual capability of performers (The ASTD Handbook of Training Design and Delivery, 2000, p. 433). Knowledge transfer occurs when existing knowledge, skills, and abilities affect the performance of new tasks (Cormier & Hagman, 1987). At times, organizations encounter difficulties in concluding if knowledge transfer has taken place. Experts estimate that the extent to which learning is transferred into performance ranges from 5% to 20% (The ASTD Handbook of Training Design and Delivery, 2000, p. 431). Yet, in instances wherein knowledge transfer has taken place, it cannot be assumed that all trainees have the same level of training transfer. Guskey (2003) suggested a need to seek agreement on criteria for effective professional development that includes an assessment of the level of knowledge or skills transferred to practice. In order for this to be accomplished, it is essential that knowledge transfer be integrated into a set of policies that ensure generating and monitor the information flow within the organization. For instance, the “before training” policies can specify how the trainees would present and manage their new ideas after training.

Regardless of a company’s learning capacity or size, knowledge transfer focuses on how an employee uses his or her knowledge and skills on his current job after training.
Kraiger (2003) refers to training as, “activities directed at the acquisition of knowledge, skills, and attitudes for which there is an immediate or near-term application” (p. 171). Therefore, the effectiveness of any intervention is determined not only by the successful acquisition of critical knowledge, but also the ability to effectively transfer that knowledge to the performance environment (Ellis et al., 2005).

Levine and Gilbert (1999) indicated five distinct stages in the process of increasing knowledge transfer: (1) creation, (2) sharing, (3) evaluation, (4) dissemination, and (5) adoption.¹ They focused on how to share ideas with others using in-person meetings or written format, and how to increase the development of the motivation needed to ensure the effective transfer of knowledge. Beyond this, it has been suggested that effective transfer of knowledge and skills requires: (1) absorptive capacity (i.e., the ability to adapt the transfer) on the workplace (Cohen & Levinthal, 1990; Szulanski, 2000), (2) organizational policies that promote sharing with others in the short and long term (Kogut & Zander, 2003), and (3) incentives for knowledge acquisition and sharing (Szulanski, 2000).

Current recommendations state that policies should be implemented before, during, and after training programs in order to enhance knowledge transfer (Leifer & Newstrom, 1980). Wexley and Baldwin (1986) conducted a study to investigate whether enhancing training programs with a post-training knowledge transfer strategy could positively affect knowledge transfer. In the study, participants were divided into four groups, three of which were experimental groups, and one control group. Each of the experimental groups was assigned a specific strategy: (1) assigned goal setting, (2) participative goal setting, and (3) a self-control technique. Results indicated that the

¹ http://www.irle.berkeley.edu/cohre/knowledge.html
assigned and participative goal-setting conditions brought about significantly greater levels of self-reported maintenance of behavior two months after the training. The assigned goal-setting treatment had a significant positive effect on both subjects' learning and behavioral maintenance. Subjects in the assigned goal-setting condition were better able to recall specific, factual content from the workshop, but the participative goal-setting treatment affected only behavior.

Overall, many different strategies can be applied in a workplace to spread knowledge or skills through the organization. These strategies (Zemke & Gunkler, 1985; Friel, 2005; Tyler, 2008) include, but are not limited to the following:

- **Sharing best practices**: Trainees share best practices they observed during the training with their fellows.
- **Storytelling**: Storytelling can take several aspects such as making a presentation or writing paper about the training program and the knowledge or skills that were obtained.
- **Job Aids**: Job aids are tools that support people as they perform specific tasks on the job. They include checklists, flow diagrams, reference tables, decision tree diagrams, etc.
- **Job Rotation**: A form of training that involves moving an employee from one workplace to another.
- **Assessing knowledge capacity**: This refers to assessing an organization’s current knowledge capacity to help identify its knowledge assets, including what knowledge is required and available. Hence, organizations can move knowledge or skills from one place to another.
Mentoring: During mentoring, an experienced, skilled person (mentor) is accompanied with unskilled or experienced person aiming to develop the person’s competency through advising and guiding.

Knowledge transfer is the key indicator of an effective training program. As stated earlier, knowledge transfer includes the ways of execution, sharing relevant knowledge or practice, and improving the business performance (Hariharan, 2002). For the purpose of this dissertation, knowledge transfer has to occur in the same business environment where training occurred.

Needs Assessment

Many problems in knowledge transfer and performance improvement stem from underlying issues in the work environment such as lack of performance indicators, limited or inadequate resources and support, and unsatisfactory and untimely feedback (Rummler & Brache, 1995). Needs assessments can help to address these problems. Needs assessment, also known as situational analysis, can be defined as, “a process or systematic set of procedures undertaken for the purpose of setting priorities and making decisions about program or organizational improvement or allocation of resources” (Encyclopedia of Evaluation, p. 276). Scriven (1991) defined need as “anything essential for satisfactory mode of existence or level of performance” (p. 242).

Situation analysis is intended to be the first stage in training planning process. Scholars suggest using a needs analysis approach that precisely identifies impediments to positive training transfer (Gaudine & Saks, 2004). In doing so, needs assessments allow managers to have an accurate and complete picture of performance deficits. Once the needs are identified, stronger objectives can then be stated (Machles, 2002). According to
Rey (2005), “the real value of training comes not from individual learning but rather from capable people transferring their knowledge, skills, and attitudes learned in training programs designed to improve organizational results” (p. 1). Thus, it is crucial to measure the employees’ “trainee” abilities before the start of training in order to find ways to improve those abilities.

Many organizations do not demonstrate an understanding the relationship between needs assessments and training outcomes (Burke & Hutchins, 2007). Tawfik (2006) indicated that identifying training needs in Arab institutions can be difficult because of the lack of an integrated system for the identification of needs, as well as the overall inability of managers to identify training needs. Not only Arab countries have deficits in these practices. Arthur, Bennett, Edens, and Bell (2003) found that only 6% (22 of 397) of organizations surveyed reported using a needs analysis when developing training programs.

Needs assessments consist of various components. Ellis and others (2005) argued that it is essential to identify the team competencies that are needed. These competencies may include the requisite knowledge, skills, behaviors, or attitudes necessary to improve performance. Other competencies might also be considered before training, such as goal setting, planning, and problem solving.

The competencies developed as part of a needs assessment can be applied on either an individual or team level. According to Ellis, researchers have identified five categories of task-and team-generic competencies, three of which are considered important: (1) planning and task coordination, (2) collaborative problem solving, and (3) communication. The results of the studies described above indicate that the success of
any training program depends on the training need assessment and how it was designed. Identifying individual or team competencies alone is enough. Axtell et al. (1997) found trainees who perceived training as relevant had higher levels of immediate training use and practice. In regards to the Saudi private sector, Assad (2002) stated that:

Training programs should be concerned with individuals acquiring needed skills rather than mere certificates if they are to become successful participants in the global economy. Training should be mandatory at least every year or two depending on the job and the organization's needs. Mandatory training is important to keep abreast of rapid changes in the organization of information and new information technology. Training programs should be relevant to the jobs of those participating. Employees should be given not only a chance but incentives to use what they have learned to improve the organization. (p. 64)

Other researchers have also found weaknesses as it relates to conducting needs assessments as part of the implementation of training programs in Saudi Arabia. Bukhary-Haddad (1986) studied in-service administrative training programs in Saudi Arabia within the broad context of development and development administration in general, and the context of national development and development administration in Saudi Arabia in particular. Regardless of the sector the study was implemented on, the researcher found that there are several weaknesses concerning the general area of organizational training procedure and organization, and the particular areas of selecting and nominating trainees, placement of trainees into training programs. Bukhary-Haddad argues that the selection of trainee is a crucial process and requires evaluating the trainee on specific criteria that compose the entire nature of the trainee competency that includes:

- Learning ability: The trainee has the capability to understand, utilize, and transfer knowledge or skills. In addition, the organization has to know what degree of knowledge or skills the trainee has related to the subject of the training.
• Trainee aptitude: By assessing the trainee behavior and attitude, the employer can measure if a trainee has strong desire and motivation to transfer what he or she would obtain from training program.

• Leadership competency: Trainee ability to set goals, identify, analyze and solve problems, employ effective methods of communications to logically convince administration of new problem solving techniques or initiative ideas that could contribute to the unit or organization goals.

Management Support

Mastering skills has little business value unless it translates into improvements in on-the-job behavior and results. Lack of management involvement, commitment, and support often inhibits knowledge transfer. According to Galloway (2005), "lack of management support can undermine even the most effectively designed and delivered training program.” Machles (2002) argued that issues in management may be the primary inhibitor of knowledge transfer. In some instances, managers or supervisors do not have the appropriate knowledge or skills to direct trainees who need guidance to apply new knowledge or skills after training. When managers are not competent in guiding trainees in the use of new skills, trainees can become frustrated and lose their trust in the management system, which, in turn, affects their ability to acquire new ideas in future training programs. Thus, Levine and Gilbert (1999) stated that it is very important to evaluate programs in terms of management support in order to determine if the necessary guidance will be given. Management that provides opportunities for trainees to practice and get feedback on their use of recently learned knowledge or skills are likely to lead to
better practices of training transfer (Burke & Hutchins, 2007; Ford & Kraiger, 1995; Holladay & Quinones, 2003).

It is critical that managers allow trainees time to practice skills learned through training. Practicing skills is necessary to achieve overlearning, which has been associated with skill retention (Driskell, Willis, & Copper, 1992). According to behavior modeling learning theory, practice is a central component of achieving training transfer (Decker & Nathan, 1985; A. P. Goldstein & Sorcher, 1974).

A study conducted by Obaidat (2003) to understand HR department strategies (including training practices) in Jordanian banks found that the most important obstacles facing training were the weakness of the organizational culture in supporting employee participation in important decision-making, and lack of coordination between the Department of Human Resources and Training Department and other functional units. Overall, while supervisory support is an important factor affecting training transfer, more understanding is needed about the supervisory comportments that lead to perceptions of support by trainees (Baldwin & Ford, 1988; Diggs, 2011).

**Training Program Review**

Training program review refers to the process through which training programs are selected. Stein (2005) asserted that the training selection process has to be done in a systematic way that enhances selection of the best training vendors based on specified training needs. Organizations strive to ensure the quality of training programs by developing training policies that meet stakeholder’s needs. Having specific requirements for approving training programs may increase the quality of the training program component (e.g., content, vendor, instructor, delivery, and other variables). Training
requirements as part of training policy tools can be used ensure a certain standard of quality in the training component. For instance, having specific standards for trainer qualifications and experience may positively affect the quality of the training service. Vogt (1985) indicated the importance of considering several factors in selecting a training provider. These factors include the program structure, curriculum, and duration, and should meet the company and trainee’s needs for better results. Moreover, according to the U.S. Department of Labor Employment and Training Administration (2009), “training providers that use evidence-based learning models may be considered higher quality as they use instructional methods or program features that have shown some success in achieving positive participant outcomes” (p. 9).

Training program review also refers to the selection of training programs that trainees find relevant. According to Burke and Hutchins (2007) the trainees’ perception of the utility of trainings can be influenced by trainees’ evaluation of: (1) the credibility of the new skills for improving performance, (2) a recognized need to improve their job performance, (3) a belief that applying new learning will improve performance, and (4) the practicality of the new skills for ease of transfer (Ruona et al., 2002; Warr & Bunce, 1995; Yelon, Sheppard, Sleight, & Ford, 2004). Put simply, for maximal transfer, learners should perceive that the new knowledge and skills will improve a relevant aspect of their work performance (Baldwin & Ford, 1988; Clark, Dobbins, & Ladd, 1993). In addition, Baumgartel, Reynolds, and Pathan (1984) revealed that managers who believe in the utility of training or value the outcomes training will provide are more likely to apply skills learned in training.

---

Accountability

Accountability refers to the extent to which trainees are held responsible for implementing knowledge or skills received through trainings. Faris (1983) concluded that accountability may be the key to training success. In her study, Parkes (2000) sought to answer the question, “What happens to training once it is taken back into workplace?”

The study was conducted at the Arizona Regional Community Policing Institute, and used a qualitative design to gather data. She found that training is implemented in the workplace to a greater extent when accountability in asserted in the form of a Knowledge Transfer Action Plan (KTAP) submitted at the end of the training program. The KTAP “must describe specific action the participants will engage in to further community policing in his or her community” (p. 73). She concluded through examination of data that, the KTAP “is highly effective method for making sure that training knowledge is taken place into workplaces and subsequently utilized” (p. 74).

While the results of Parkes’ (2000) study indicated that action plans enhanced the desire to act, it is important that the trainee selection process include this plan before trainees attend training programs. This is to prepare the trainee and enhance his or her ability to acquire the useful knowledge and shape or customize it to his workplace in order to solve problems or improve performance. As indicated in the findings of Parkes’ study, the KTAP is very important because it provides specific goals for the training and transfer process, creates a structure to use, and provides steps to follow for successful consequences.
Trainee Preparation

Trainee preparation is important as it relates to knowledge transfer and performance improvement. Quality professional staff training requires a company to be clear about its policies and development strategies (McDonald, 2003). This clarity enables the trainees to have full understanding of the job functions and how the job is linked to the department and the organization goals and strategies. Therefore, a trainee should have a full understanding of the knowledge or skills to be obtained and when and how to use them.

Eddie and Danny (2001) stated that “trainees with a high level of confidence in attaining anticipated performance and behavior change will be more likely to apply what they have learned from training on the jobs” (p. 107). Trainee characteristics such as personality, trainee ability, and motivation have been identified as factors affecting transfer of training (Baldwin & Ford, 1988). Motivation includes the motivation to learn and the motivation to transfer learning to the workplace. Noe (1986) asserted that even though trainees may have the ability to master the new knowledge or skills, they may fail to transfer because of lack of motivation. Quinones (1995) found that motivation to learn was a key factor linking pre-training characteristics and training outcomes. Similarly, Axtell, Maitlis, and Yearta (1997) found that motivation to transfer learning was a statistically significant predictor of knowledge transfer. Trainees’ levels of pre-training motivation can be influenced by the level of support and encouragement given from managers (Facteau, Dobbins, Russell, Ladd, & Kudisch, 1995). According to study by Facteau and colleagues, there is a statistically significant positive correlation between pre-training motivation and training transfer as measured by supervisors. Additional
predictors of pre-training motivation to learn can include support from trainee’s manager and peers, situational obstacles, and opportunity to use trainee’s knowledge and skills (Baldwin & Ford, 1988; Machin & Fogarty, 2004).

Other influences on motivation are work environment constraints. These types of constraints influence trainees’ opportunities to transfer their new skills and knowledge, which in turn reduce trainees’ pre-training motivation (Mathieu & Martineau, 1997). According to previous research, trainees in high managerial positions were more motivated to learn and exhibited higher levels of transfer using a post-training transfer intervention (Colquitt et al., 2000; Tziner, Haccoun, and Kadish, 1991).

Another factor related to trainee preparation is organizational commitment. Organizational commitment may be an indicator of trainees' level of ability and readiness to learn from training. Batemen and Strasser (1984) defined organizational commitment as “multidimensional in nature, involving an employee’s loyalty to the organization, willingness to exert effort on behalf of the organization, degree of goal and value congruency with the organization, and desire to maintain membership” (p. 95). Mathieu et al., (1992) indicated that training transfer is positively influenced by trainees’ organizational commitment or job involvement, which was defined as “the degree to which an employee identifies with her job, actively participates in it, and considers job performance important to her self-worth” (Burke & Hutchins, 2007, p. 270). Similarly, Facteau and colleagues (1995) found that trainees who were committed to the values and goals of their organization had higher levels of pre-training motivation. Cannon-Bowers, Salas, Tannenbaum, and Mathieu (1995) found that organizational commitment was positively related to pre-training performance expectations.
It is crucial to prepare trainees before attending training programs on how they can judge their ideas before presenting them to the management. According to Levine and Gilbert, “A typical program includes how to identify problems, prioritize, analyze root causes, identify possible counter-measures, implement the solution, and check whether the solution actually works.” Trainee preparation also helps to improve the perceived value of training. Specifically, trainee preparation influences trainees’ subjective or objective estimation and/or judgment of: (1) the credibility of the new skills for improving performance, (2) the practicality of the new skills for ease of transfer, (3) a recognized need to improve their job performance (Taylor, Russ-Eft, & Taylor, 2009; Yelon, Sheppard, Sleight, & Ford, 2004).

Summary

As shown through this literature review, transfer of knowledge from the classroom to the workplace is a significant topic in the training field. This review of literature focused on the training policy factors that impact training transfer. The literature shows both the limitations of the training policy research and the lack of a comprehensive set of training policy factors that affect training transfer.

The literature review addressed the topic from different points of view of a variety of experts. First, Van Iddekinge and others (2009) investigated the unique and combined effects of actual utilization of selection and training systems of training of entry-level employees on unit performance (profit) results for practitioners, and their findings revealed the existence of a reciprocal relationship between selection, training, and unit performance. Several authors explored organizational factors that affect knowledge

\[^3\] http://www.irle.berkeley.edu/cohre/knowledge.html
transfer or performance improvement (Baldwin & Ford, 1988; Machles, 2002; Leifer & Newstorm, 1980; Lewis, 1995). Influences on knowledge transfer are seen as a function of three main factors: (a) trainee characteristics; (b) training design; and (c) work environment. Some scholars indicated some strategies to spread out the knowledge (Friel, 2005; Tyler, 2008; Zemke & Gunkler, 1985). Other scholars like Parkes (2000), focused on the development of Knowledge Transfer Action Plans (KTAP) as a tool that encourage knowledge transfer by increasing accountability.

Several experts discussed links between training (e.g., training activities, design, or content) and business outcomes. The literature discussed the barriers that could inhibit knowledge transfer, which included lack of management commitment and involvement, and trainee capacity and ability (Machles, 2002). Some authors suggested that the effectiveness of any intervention is determined not only by the successful acquisition of critical knowledge, but also the ability to effectively transfer that knowledge to the performance environment (Ellis et al., 2005). In his study of factors affecting training outcomes, Faris (1983) concluded that: (1) accountability forces may be the primary key to training success; (2) little effort seems to be devoted to selecting trainees based on an analysis of trainee needs and course objectives; (3) needs assessment, even though crucial, is not continuously a well-executed training step; and (4) overall, the practice of training course development and execution is less sophisticated and effective than is possible, and more attention must be accorded pre-training analysis.

The current study, however, focused on actual knowledge transfer and performance improvement as perceived and observed by management. The study included five factors (i.e., training needs assessment, trainee preparation, training
program review, accountability and management support) in one model that might be a base of a training policy set. The results of this study add to our understanding of how a certain set of training policy factors might affect training transfer in Saudi Arabia. This is particularly important as the Saudi labor market is different from other populations (e.g., the American labor market) in terms of: (1) current Saudi government programs designed to replace foreign labor with domestic labor, mandating companies to recruit Saudi citizens; and (2) government support and incentives for companies to train employees and job seekers. The Saudi Ministry of Labor recently implemented an example of such government-sponsored support. The Nitaqat System penalizes companies that do not increase their employment percentage of recruits from the Saudi citizenry. The results from this study contribute to the knowledge base on what factors should be taken into consideration for developing a training policy. The next chapter, Methodology, describes the methods utilized to conduct the study.
CHAPTER III

METHODOLOGY

In this chapter, the research method used to conduct this study is presented. In general, the purpose of this study was to describe the implementation of training practices in the private sector Saudi labor market. Below, the study’s specific research questions, design, participants, instrumentation, data collection procedures, and methods of data analysis are enumerated.

Research Questions

Saudi government and private sector organizations expect that training efforts will contribute to organizational productivity and individual learning. Yet, without effective policies regarding the implementation of training practices, best practices leading to transfer of knowledge may not be identified and utilized to achieve the results desired through training. Throughout the literature, five training factors in particular have been found to be important in the training context: (1) training needs assessment, (2) management support, (3) training program review, (4) accountability, and (5) trainee preparation. The following research questions were taken under consideration in order to: (a) determine which training factors are currently deemed important by HR managers and, therefore, practiced in Saudi companies, and (b) describe which practices lead to effective policy that in turn contribute to learning transfer, skill development, and performance improvement.
1. How do HR managers perceive the occurrence of training needs assessment, trainee preparation, training program review, accountability and management support?

2. How do HR managers perceive knowledge transfer and performance improvement as a function of training?

3. How do HR managers describe training needs assessment, trainee preparation, training program review, accountability and management support as being important to the delivery of training?

**Research Design**

This study utilized a mixed-methods descriptive research design. The phenomena under study in this dissertation were the training practices of Saudi private sector organizations, and the influence of these practices on knowledge transfer and performance improvement as described by the organizations’ HR managers. Generally, in Saudi Arabia, HR managers are responsible for all aspects of training, including the assessment of knowledge transfer and the effect of training on employee performance (HRDF, 2007). Based on the role of HR managers, one may conclude that HR managers are in a position to understand and describe training procedures and practices as they relate to gaining knowledge from training and the transfer of that knowledge to the work activity.

Mixed-methods research is frequently used to gain a better understanding of a phenomenon, to develop the meaning of a concept, and to increase the generalizability of research findings to a population (Creswell, 2009). A mixed-methods approach was deemed the best fit for the current study because it allowed the researcher to ask
participants a large set of predetermined questions related to training policy, knowledge transfer, and performance improvement, while also providing opportunity to question managers about their beliefs, opinions, characteristics, and behaviors in greater depth (Ary, Jacobs, Razavieh, & Sorensen, 2006; Young, 2010). Simply stated, the combination of both forms of data provided greater understanding of which aspects of training may affect knowledge transfer and performance improvement.

The quantitative aspects of this study utilized survey research to answer research questions 1 and 2. The survey instrument developed for the purpose of this research is titled the Survey of Training Policy Effectiveness. The Survey of Training Policy Effectiveness is described in greater detail in the Instrumentation section below. According to Young (2010) cross-sectional survey designs such as the one used in this study have several advantages, including allowing one to quickly collect data and analyze results in order to make decisions. Moreover, surveys can be distributed to large number of participants at lower cost, and less time than other methods.

The qualitative aspects of the study included semi-structured interviews and open-ended questions. These were embedded to help support the results achieved through the quantitative methodologies (Heiselt & Sheperis, 2010). Semi-structured interviews provide researchers with the structure needed to explore the topic under study with greater depth while also providing the flexibility to spontaneously respond to participant answers. Open-ended questions further encourage more in-depth responses (Creswell, 2009; Young, 2010).

To summarize, this study was conducted using a mixed-methods descriptive research design. The quantitative aspects of this study utilized survey research, while the
qualitative aspects utilized semi-structured interviews and open-ended questions. Figure 1 depicts the variables investigated during the study. It was anticipated that HR managers would indicate that trainees were selected for training programs according to specific criteria or organization requirements, and that then transfer the knowledge gained during training programs to the workplace under a structured training policy.

Figure 1. Study variables.

Participants

Sample

The targeted population represented in this study was Saudi companies that train their employees with the intent that they obtain new knowledge or skills. The Kingdom of Saudi Arabia is divided into five major regions: Central, Eastern, Western, Northern, and Southern. Companies are spread throughout these regions. Approximately 32% of
companies are located in the Central region, 29% in the Western region, and about 17% in the Eastern region (Saudi Trading Ministry). According the Saudi Chamber of Commerce Report (2011), there are about 11,000 companies in the Saudi labor market. In 2011, according to the HRDF database, about 900 companies trained their employees. Thus, while there are approximately 11,000 Saudi companies, the study’s population consisted only of the 900 companies that trained their employees during the data collection phase of this study.

The companies listed in the HRDF database were categorized according to the services they provide: (a) Industrial/Manufacturing, (b) Instruction, (c) Healthcare, (d) Private Education, (e) Electricity, (f) Trade, (g) Financial and Banking, (h) Insurance, (I) Hotels, and (J) Other Industries; and according to size in terms of number of employees: (a) Small, (b) Medium, and (c) Large. The database also included listings with the contact names of general, HR, training, or personnel managers, which helped the researcher to directly contact companies when needed.

Simple random sampling was used to select potential participants from the 2011 HRDF database. The targeted sample size was 269, 30% of the population. In order to draw a random sample of 269 companies, companies were assigned an identification number from 001 to 900. Based on a previous study in the same field, the response rate was expected to be between 45% and 65% (HRDF, 2004).

**Inclusion Criteria**

Human Resources or Training Department managers from companies that provided employee training during the year 2011 were included as potential participants in this study. These managers had to have been Human Resources or Training
Department managers that were full time employees and had at least two years of experience in the same position and in the same company. HR managers of private sector Saudi organizations were chosen to respond to the survey rather than trainees. This choice was based on several factors. First, HR managers were of Saudi nationality and had experience and knowledge about training needs assessment and transfer (HRDF, 2007). Second, concerns have been raised about potential bias in ratings of training transfer. These concerns have been particularly prevalent in relation to the use of trainees’ self-ratings. Researchers have often avoided relying on trainees’ self-ratings in evaluating transfer of training because of concerns that self-ratings are potentially biased (L. A. Burke & Baldwin, 1999; Rosti & Shipper, 1998; Taylor, Russ-Eft, & Taylor, 2009). Moreover, Taylor, Russ-Eft, and Taylor argued that “trainees may exaggerate the true impact of training because of their expectation that the training was supposed to have an effect and that to indicate otherwise would reflect poorly on themselves, on training staff, or both” (p. 106).

**Respondents**

The respondents in this study were HR managers of private sector Saudi organizations who held their positions for at least two years, as opposed to trainees. Out of the 269 Saudi companies contacted by the researcher, 175 responded to the invitation to participate in the survey, producing an overall response rate of 65 percent. Table 1 below shows four characteristics of this sample: company location, size (i.e., total number of employees), industry field, and trainee managerial position level.

As Table 1 shows, the largest group of the companies was from the Central region of Saudi Arabia. The second most highly represented region was Western. All remaining
participants, about a quarter of the sample, were from the Eastern region. The sample included no participants from the northern and southern regions. The companies represented several different industries. The largest group of participants came from the Industrial and Manufacturing industry and from Trade. Together these two industries accounted for approximately two-thirds of the participants. The large majority of respondents (84%) were from large companies with more than 200 employees and less than 5 percent had fewer than 100 employees. The majority of respondents were in low (50%) or middle management positions (42%).

Table 1

Frequencies and Percentages of Respondent Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>79</td>
<td>45.1</td>
</tr>
<tr>
<td>Western</td>
<td>50</td>
<td>28.6</td>
</tr>
<tr>
<td>Eastern</td>
<td>46</td>
<td>26.3</td>
</tr>
<tr>
<td>Northern</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Southern</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial or manufacturing</td>
<td>70</td>
<td>40.0</td>
</tr>
<tr>
<td>Electricity</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td>Trade</td>
<td>42</td>
<td>24.0</td>
</tr>
<tr>
<td>Construction</td>
<td>18</td>
<td>10.3</td>
</tr>
<tr>
<td>Financial and banking</td>
<td>4</td>
<td>2.3</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>4</td>
<td>2.3</td>
</tr>
<tr>
<td>Healthcare</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Private education</td>
<td>7</td>
<td>4.0</td>
</tr>
<tr>
<td>Insurance</td>
<td>3</td>
<td>1.7</td>
</tr>
<tr>
<td>Hotels</td>
<td>11</td>
<td>6.3</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>7.4</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 1—Continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>( f )</th>
<th>( % )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 200 employees</td>
<td>147</td>
<td>84.0</td>
</tr>
<tr>
<td>100 to 199 employees</td>
<td>20</td>
<td>11.4</td>
</tr>
<tr>
<td>50 to 99 employees</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Less than 50 employees</td>
<td>7</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Managerial Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low management</td>
<td>73</td>
<td>41.7</td>
</tr>
<tr>
<td>Middle management</td>
<td>88</td>
<td>50.3</td>
</tr>
<tr>
<td>Top management</td>
<td>14</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Instrumentation**

The instrumentation used to collect data for this dissertation include: (a) Survey of Training Policy Effectiveness; (b) semi-structured interviews and open-ended questions; and (c) a demographic questionnaire. Respondents were given both Arabic and English versions of the survey. One hundred fifty companies completed the English version of the survey.

**Survey of Training Policy Effectiveness**

The Five Factor Survey of Training Policy Effectiveness (FFSTPE) was developed by the author for the purpose of this dissertation (Appendix A). The survey consisted of 30 items that were rated using a 5-point Likert-type scale that ranged from 1 (strongly disagree) to 5 (strongly agree). The 30 items on the FFSTPE were designed to cover the five levels in training policy examined in this study (i.e., needs assessment, trainee preparation, training program review, accountability, and management support).
and the two post-training outcome variables (i.e., knowledge transfer and performance improvement).

The five levels of training policy and two levels of post-training outcomes combined to create seven scales on the FFSTPE: (1) Needs Assessment; (2) Trainee Preparation; (3) Training Program Review; (4) Accountability; (5) Management Support; (6) Knowledge Transfer; and (7) Performance Improvement.

- Questions 1 through 6 comprised the Needs Assessment scale, and included items such as: *The company assesses the trainee’s knowledge before selecting the training program*, and *The company selects trainees based on annual performance appraisal*.

- Questions 7 through 9 comprised the Trainee Preparation scale. It included items such as *The company explains to the trainee its expectations of how the training results would be used*, and *The company provides the trainee with enough information about the training program*.

- Questions 10, *The company obtains full information of the training program content before it starts*, and 11, *The company selects training programs based their effectiveness reports during the previous year*, comprised the Training Program Review scale.

- Questions 12 through 15 comprised the Accountability scale. An example Accountability question is, *The company requires an after training action plan*.

- Questions 16 through 19 comprised the Management Support scale, and included questions such as *The company gives the trainees opportunities to practice their new skills*. 
Questions 20 through 25 comprised the Knowledge Transfer scale, and included questions such as, *After training, trainees demonstrate new skills*, and *After training, trainees provide creative solutions for specific problems*.

Finally, questions 26 through 30 comprised the Performance Improvement scale, and included questions such as *Trainees mistakes are decreased after completing the training program*.

**Face validity.** A pilot test was employed to test the FFSTPE’s validity and to "determine whether individuals in the sample have sufficient knowledge and understanding to express a meaningful opinion about the topic" (Gall, Gall, & Borg, 2007, p. 235). The survey was distributed to number of faculty members from the College of Education at King Saud University in English format to judge the relatedness of each indicator to its domain. More specifically, each member was asked to rate each question’s relatedness to its domain on a scale of 1 to 10, and given the opportunity to add variables, and make comments or suggestions. Their feedback was considered to adjust the survey. Most of their feedback was mainly focused on adding some questions to each domain, and deleting the Evaluation domain and substituting it with Trainee Preparation. They indicated that the variables in the Evaluation domain should be included in the Needs Assessment domain instead. Another significant piece of feedback given indicated that more variables should be added to the Knowledge Transfer domain.

After incorporating the raters’ feedback, the survey was distributed to a small sample of the targeted population, who were asked to voluntarily provide the researcher with their feedback regarding the survey clarity in an Arabic language compared to the attached English language. Their responses were considered in adjusting minor points
regarding the wording of sentences. As a final step, both surveys were given to a Saudi doctoral candidate student majoring in human resources to review the accuracy of the English translation. See Appendix A for the Arabic and English surveys.

**Semi-Structured Interviews and Open-Ended Questions**

Semi-structured interviews and open-ended questions were used to broaden the scope of possible responses to the research questions under study. More specifically, semi-structured interviews and open-ended questions were used to gather more in-depth information regarding the training factors, knowledge transfer, and performance improvement, with specific attention to evidence and tools used during the training process.

As noted above, the purpose of interviewing was to better understand the company environment and get more evidence about the implementation of the training factors, knowledge transfer, and performance improvement from a manager’s perspective. The interviews were also designed to evoke participants’ interpretation of why certain factors tested in the quantitative phase may be significant as it relates to knowledge transfer and performance improvement. This process is consistent with the recommendation of Patton (2002) who indicated that multiple sources of data be gathered to increase the accuracy and credibility of findings. As mentioned previously, the interviews provided the researcher more flexibility to ask for more information, evidence, or explanations as well as provided the respondents the opportunity to get any clarification. See Appendix B for the interview protocols for both groups of participants.
Data Collection Procedures

Data collection for this research study was approved by Western Michigan University Human Subjects Institutional Review Board (HSIRB). After obtaining HSIRB approval, the FFSTPE along with an informed consent document (Appendix C) was distributed between December 15, 2011 and January 15, 2012 to the private sector companies in the Kingdom of Saudi Arabia that were identified using the sampling procedures described in the Participant section above. This timeframe was selected to allow managers enough time to observe changes for their trainees in terms of knowledge transfer or performance improvement after the implementation of a training program that occurred between January and September 2011. These steps helped to ensure that the schedule for the study was the same in all locations and that the sample was made up of those who attended training programs between January and September, 2011. Certainly not all companies performed training at the same time, but that has limited effect on responses since the study focused on training practices.

The researcher obtained most of the information needed about the selected companies (e.g., phone and fax numbers, and the general manager, human resource, or training manager’s cellphone number, and companies’ addresses) exclusively from HRDF database, which facilitated the data collection process. The researcher grouped the selected sample members according to their address to assist in reaching all companies in shortest amount of time with the least amount of effort. The researcher also recruited two individuals to help in distributing and collecting surveys, and making follow-up contacts. These two individuals showed much commitment and interest in working on this study. The researcher trained them on how to communicate with companies, including how to
introduce themselves and how to give information on the study purposes and how the findings might be used in the future. They were also given information on research ethics and confidentiality.

The researcher and data collection team visited companies and distributed surveys personally, given that the response rates for mailed questionnaires are usually low (Newman, 2003; Sekaran, 2003). At each company, either the researcher or the other two individuals explained the purpose of the study, provided background information, and discussed confidentiality and possible motivation for participating. Envelopes were attached to the surveys so that they could be individually sealed by participants to emphasize confidentiality. Managerial level participants were offered a free one-day training workshop and a copy of the completed study which can be utilized for improving their training programs, policies, and implementation procedures as incentive.

After initial contacts, follow-ups were made by phone three times to encourage the participants to complete the questionnaire. The first follow-up call was made after a period of three days to all participants to remind them to complete the questionnaire and of when they would be collected. Two days later another follow-up call was made to those whose surveys were not completed during the first three days. A third follow-up call was made in two days after the second call. Response rate information was not collected to enable assessing the relative effects of each follow-up call.

After collecting the quantitative survey data, the semi-structured interviews took place during January and February, 2012. Initially, the researcher made phone calls to a purposively selected sample of 12 HR managers to request their participation in the interviews. The preliminary data analysis showed that these companies had indicated
positive or negative results in knowledge transfer and performance improvement. They also represented different industries of the private sector. Six companies agreed to conduct the interviews. Three out of six interviews were conducted by phone for two reasons: the participant was either in the eastern or western region of Saudi Arabia and the managers’ schedules were too busy, or the participant indicated that he or she would be more comfortable with a phone interview. The remaining interviews were conducted in person.

For both types of interviews, the researcher sent introductory letters to participants (Appendix D), which were followed by a scheduled interviewer visit or call. One of the respondents was not available at the first time, so the interviewer scheduled another time. The letter of invitation described the purpose of the study and the role of participants. The interviewer identified himself in a friendly way to the participants, stated the purpose of the interview, and briefly discussed background information and confidentiality. The interviews were then scheduled at a time and place selected by participants. During the interview, the researcher explained the format of the interview, how the data would be collected and used, indicated how long the interview could take, informed the participants of the reason for the taping of the interview, and that the information would remain confidential with the tapes being carefully stored. In addition, the interviewer provided his contact information to the participants, and finally recorded the interview using a digital recorder and taking notes.

**Data Analysis**

The Statistical Package for Social Science (SPSS) was used to conduct the statistical analyses and answer the research questions. Descriptive statistics, including
means, standard deviations, frequencies, and percentages were calculated to describe the characteristics of variables and how they are distributed. The results were reported in percentiles and averages, median, mode, range, variance, and standard deviation. The results are presented in various tables and figure formats, including pie, column, bar, and scatter charts. These are presented in Chapter IV.

**Interview Analysis**

Qualitative aspects of this dissertation were analyzed using the procedures described by Ary and colleagues (2006), which involves organizing the data, synthesizing the information, searching for significant patterns, and making sense of the patterns to create explanations of the variables. Accordingly, the researcher followed analyzed the data in three stages: (1) familiarization and organization, (2) coding and recording, and (3) summarizing and interpreting (p.490). Additionally, the researcher completed an intensive review of literature regarding the topic under investigation to enhance his knowledge and skills during the interview to get more details and explanations for each question and make better interpretations and enhance the trustworthiness of the data, as indicated by Kvale (1996).

A concern specific to this dissertation was that of translation. According to Temple and Young (2010), it is important to indicate that interviews were translated, as was the case in this study. Interviews were translated by the researcher from Arabic to English. This process was used despite the argument made by Temple and Young that there may be concerns with interviews translated by the researcher. Others, for example Marshall and Rossman (2006), have argued that these concerns are naïve, and in fact,
more problems may arise when interviews are translated by others who may not understand meanings and nuances associated with the topic under study.

This concludes the description of the research methodology used to conduct this study. The next chapter, Chapter IV, *Results*, presents the findings of the study, including quantitative and qualitative results in relation to the research questions stated above.
CHAPTER IV

RESULTS

This chapter presents the results of this study. Recall from previous chapters that the purpose of this study was to describe the implementation of training practices in the private sector Saudi labor market. The factors explored included: (1) training needs assessment, (2) trainee preparation for training, (3) training program review, (4) accountability system for knowledge transfer, (5) management training support, (6) knowledge transfer, and (7) performance improvement. Five of these factors address the training programs implemented in the respective companies (i.e., factors 1 through 5). Two factors (i.e., factors 6 and 7) address the effects of those programs after training has occurred. The researcher sought to determine which of the five training factors Saudi HR managers currently deem important, and their perceptions of how these factors contribute to changes in the trainee and resulting on-the-job performance. The specific research questions were: (1) How do HR managers perceive the occurrence of factors 1 through 5? (2) How do HR managers perceive knowledge transfer and performance improvement (i.e., factors 6 and 7) as a function of training? and (3) How do HR managers describe factors 1 through 5 as being important to the delivery of training?

Data were collected using a 30-item questionnaire titled the Survey of Training Policy Effectiveness and semi-structured interviews. The researcher developed the Survey of Training Policy Effectiveness for the purpose of this study. Descriptive statistics including means and percentages were used to analyze the data and are
presented in tables throughout the chapter. Themes derived from the interviews are also presented. Respondents were asked to rate their level of agreement to each of the items on the Survey of Training Policy Effectiveness on a scale that ranged from 1 (strongly disagree) to 5 (strongly agree). For each factor, a scale mean and standard deviation were computed. The mean score for the Needs Assessment scale was derived using the average rating of items 1 through 6; the Trainee Preparation mean is the average of items 7 through 9; the Trainee Program Review mean is the average of items 10 and 11; the Accountability mean is the average of items 12 through 15; the Management Support mean is the average of items 16 through 19; the Knowledge Transfer mean is the average of items 20 through 25; and finally, the Performance Improvement mean is the average of items 26 through 30. There were no missing data. Item means were also computed for individual items within each scale.

**Research Question 1**

How do HR managers perceive the occurrence of training needs assessment, trainee preparation, training program review, accountability and management support?

Research question 1 addressed HR managers’ perceptions of the integration of the first five factors of the Survey of Training Policy Effectiveness into their training policies. As indicated above, respondents rated their level of agreement to the items associated with each factor on a scale that ranged from 1 (strongly disagree) to 5 (strongly agree). The items were all worded to reflect the occurrence of the factors. Table 2 presents the means and standard deviations for each of the five factors in descending order.
Table 2

Means and Standard Deviations for Training Program Review, Management Support, Trainee Preparation, Needs Assessment, and Accountability in Descending Order (N = 175)

<table>
<thead>
<tr>
<th>Factor</th>
<th>N Items</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Program Review</td>
<td>2</td>
<td>4.14</td>
<td>0.67</td>
</tr>
<tr>
<td>Management Support</td>
<td>4</td>
<td>4.10</td>
<td>0.56</td>
</tr>
<tr>
<td>Trainee Preparation</td>
<td>3</td>
<td>3.81</td>
<td>0.69</td>
</tr>
<tr>
<td>Needs Assessment</td>
<td>6</td>
<td>3.70</td>
<td>0.61</td>
</tr>
<tr>
<td>Accountability</td>
<td>4</td>
<td>3.28</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

As shown in Table 2, the overall scale means depicts agreement (i.e., scale mean greater than 3.5) for all scales but Accountability (M = 3.28). Moderate agreement (i.e., mean greater than 3.5 and less than 4.0) occurred for two scales, Trainee Preparation (M = 3.81) and Needs Assessment (M = 3.70). Respondents indicated strong agreement (i.e., mean greater than 4.0) with the constructs presented in two of the scales, Training Program Review (M = 4.14) and Management Support (M = 4.10).

Training Program Review

Respondents’ agreement with the constructs presented in the five scales can be further explored by examining the means and percentages of responses of the ratings for each item. Table 3 presents the means and percentages of HR managers’ responses to the constructs presented in the Training Program Review scale. As shown in Table 3, most respondents perceive that training program review is a part of their training policies. Specifically, results indicate that 96% of HR managers agree or strongly agree that training program content is fully reviewed before selection (M = 4.45), and
approximately 69% of respondents agree or strongly agree that training programs are selected based on effectiveness reports from the previous year ($M = 3.83$).

Table 3

*Means, Standard Deviations, and Percentages of Manager Response on Training Program Review Items in Descending Order (N = 175)*

<table>
<thead>
<tr>
<th>Item</th>
<th>$M$</th>
<th>$SD$</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Program Review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company obtains full information about the training program content before it starts.</td>
<td>4.45</td>
<td>0.57</td>
<td>0.0</td>
<td>0.0</td>
<td>4.0</td>
<td>46.9</td>
<td>49.1</td>
</tr>
<tr>
<td>The company selects training programs based on effectiveness reports from the previous year.</td>
<td>3.83</td>
<td>0.99</td>
<td>2.9</td>
<td>6.3</td>
<td>22.3</td>
<td>42.3</td>
<td>26.3</td>
</tr>
</tbody>
</table>

*Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.*

Management Support

Table 4 presents the means and percentages of HR managers’ responses to the constructs presented in the Management Support scale in descending order. As shown, most respondents perceive that managers provide employees with the support needed to transfer skills after receiving training. The highest rated item was *The company gives the trainees opportunities to practice their new skills* ($M = 4.37$), with approximately 95% of participants responding Agree (53%) and Strongly Agree (42%) to the item. *The company gives the trainees opportunities to practice their new knowledge* ($M = 4.13$) was also rated high, with approximately 92% of respondents responding Agree (69%) and Strongly Agree (23%). While the majority of respondents also agreed or strongly agreed with the remaining items on the Management Support scale, the percentage of
respondents who did so was observed to be less. Approximately 83% of respondents indicated that they agreed (57%) or strongly agreed (26%) with the item, *The company follows-up with an after training action plan (M = 4.03)*, and 78% of respondents responded Agree (58%) or Strongly Agree (20%) to the item *The company provides trainees with job aids (M = 3.86)*. This item had 17% fewer respondents who agreed or strongly agreed to the construct than the highest rated item.

Table 4

*Means, Standard Deviations, and Percentages of Manager Response on Management Support Items in Descending Order (N = 175)*

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company gives the trainees opportunities to practice their new</td>
<td>4.37</td>
<td>0.58</td>
<td>0.0</td>
<td>0.0</td>
<td>5.1</td>
<td>53.1</td>
<td>41.7</td>
</tr>
<tr>
<td>skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company gives the trainees opportunities to practice their new</td>
<td>4.13</td>
<td>0.58</td>
<td>0.0</td>
<td>1.1</td>
<td>7.4</td>
<td>68.6</td>
<td>22.9</td>
</tr>
<tr>
<td>knowledge.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company follows-up with an after training action plan.</td>
<td>4.03</td>
<td>0.79</td>
<td>1.1</td>
<td>3.4</td>
<td>12.6</td>
<td>56.6</td>
<td>26.3</td>
</tr>
<tr>
<td>The company provides trainees with job aids.</td>
<td>3.86</td>
<td>0.90</td>
<td>1.7</td>
<td>8.6</td>
<td>12.0</td>
<td>57.7</td>
<td>20.0</td>
</tr>
</tbody>
</table>

*Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.*

Trainee Preparation

Table 5 presents the means and percentages of HR managers’ responses to the items in the Trainee Preparation scale in descending order. Inspection of the individual items shows quite strong agreement with two of the three items (mean scores greater than
4) but overall neutrality on the third item \((M = 3.28)\). The third item, *The company substitutes the assigned trainee with another employee to cover them during the training period*, had a majority (51\%) of HR managers who responded Agree (35\%) or Strongly Agree (16\%), but nevertheless had more managers who indicated neutrality (18\%) or high levels of disagreement (30\%) (Disagree = 21\%; Strongly Disagree = 9\%) than on any other item in the Trainee Preparation scale.

Table 5

*Means, Standard Deviations, and Percentages of Manager Response on Trainee Preparation Items in Descending Order\((N = 175)\)*

<table>
<thead>
<tr>
<th>Item</th>
<th>(M)</th>
<th>(SD)</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trainee Preparation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company explains to the trainee its expectations of how the training results would be used.</td>
<td>4.11</td>
<td>0.93</td>
<td>1.7</td>
<td>5.7</td>
<td>10.3</td>
<td>44.6</td>
<td>37.7</td>
</tr>
<tr>
<td>The company provides the trainee with enough information about the training program.</td>
<td>4.04</td>
<td>0.94</td>
<td>0.6</td>
<td>12.6</td>
<td>1.1</td>
<td>53.7</td>
<td>32.0</td>
</tr>
<tr>
<td>The company substitutes the assigned trainee with another employee to cover them during the training period.</td>
<td>3.28</td>
<td>1.23</td>
<td>9.1</td>
<td>21.1</td>
<td>18.3</td>
<td>35.4</td>
<td>16.0</td>
</tr>
</tbody>
</table>

*Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.*

**Needs Assessment**

Table 6 presents the means and percentages of HR managers’ responses to the items in the Needs Assessment scale in descending order. Inspection of the individual items in Table 6 shows moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) with all of the Needs Assessment items but one.
The item, *Employees have the training the department needs for better performance* \((M = 4.46)\) had 58% of managers respond Strongly Agree. In fact, this item received more responses in the Strongly Agree category than any other item on the entire survey. It also had the highest mean of any item on the survey. Conversely, the item *The company requires trainees to conduct performance self-evaluations*, had the lowest mean of any item on the survey. As shown, a majority of respondents (57%) responded Strongly Disagree (26%) or Disagree (31%) to the self-evaluation item.

Table 6

*Means, Standard Deviations, and Percentages of Manager Response on Needs Assessment Items in Descending Order (N = 175)*

<table>
<thead>
<tr>
<th>Item</th>
<th>(M)</th>
<th>SD</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Needs Assessment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees have the training the department needs for better performance.</td>
<td>4.46</td>
<td>0.75</td>
<td>0.6</td>
<td>1.7</td>
<td>6.9</td>
<td>33.1</td>
<td>57.7</td>
</tr>
<tr>
<td>The company assesses the trainee’s skills before selecting the training program.</td>
<td>3.97</td>
<td>0.91</td>
<td>0.0</td>
<td>10.9</td>
<td>10.3</td>
<td>50.3</td>
<td>28.6</td>
</tr>
<tr>
<td>The company selects trainees based on annual performance appraisal.</td>
<td>3.81</td>
<td>0.96</td>
<td>2.3</td>
<td>8.0</td>
<td>19.4</td>
<td>46.9</td>
<td>23.4</td>
</tr>
<tr>
<td>The company selects trainees based on their job description.</td>
<td>3.80</td>
<td>0.96</td>
<td>2.3</td>
<td>7.4</td>
<td>21.7</td>
<td>45.1</td>
<td>23.4</td>
</tr>
<tr>
<td>The company assesses the trainee’s knowledge before selecting the training program.</td>
<td>3.75</td>
<td>0.96</td>
<td>0.0</td>
<td>16.0</td>
<td>13.7</td>
<td>49.7</td>
<td>20.6</td>
</tr>
<tr>
<td>The company requires trainees to conduct performance self-evaluations.</td>
<td>2.44</td>
<td>1.22</td>
<td>26.3</td>
<td>30.9</td>
<td>23.4</td>
<td>11.4</td>
<td>8.0</td>
</tr>
</tbody>
</table>

*Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.*
Accountability

Finally, Table 7 presents the means and percentages of HR managers’ responses to the items in the Accountability scale in descending order. Overall, results indicate only weak (i.e., mean less than 3.5) to moderate (i.e., mean greater than 3.5 and less than 4.0) agreement with the items on the Accountability scale. The item with the highest mean was *The company requires trainees to know how to fix problems after training* (*M* = 3.78), with 50% of HR managers responding Agree (50%) or Strongly Agree (21%) to the item. The item with the second highest mean, *The company gives trainees more responsibilities after training* (*M* = 3.34), had 52% of managers who responded Agree (43%) and Strongly Agree (9%). As shown, the remaining items had high percentages of managers who were neutral or had some level of disagreement with the items.

Table 7

*Means, Standard Deviations, and Percentages of Manager Response on Accountability Items in Descending Order (N = 175)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage of Respondents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td><strong>Accountability</strong></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>The company requires trainees to know how to fix problems after training.</td>
<td>3.78</td>
<td>0.94</td>
</tr>
<tr>
<td>The company gives trainees more responsibilities after training.</td>
<td>3.34</td>
<td>1.02</td>
</tr>
<tr>
<td>The company requires an after training action plan.</td>
<td>3.11</td>
<td>1.23</td>
</tr>
<tr>
<td>The company requires trainees to make a presentation after training.</td>
<td>2.88</td>
<td>1.27</td>
</tr>
</tbody>
</table>

*Note.* Scale ranges from 1 (*strongly disagree*) to 5 (*strongly agree*), where 1 = *strongly disagree*; 2 = *disagree*; 3 = *neutral*; 4 = *agree*; and 5 = *strongly agree*. 
Another way to explore results describing HR managers’ perceptions concerning the occurrence of the five factors included in research question 1 is by demographic information. The sections below explore the means of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support scales by industry, number of employees, managerial position, and region.

**Industry Category**

Table 8 presents training factor means by industry type. As shown, there was some variability within the industries in terms of level of agreement. Results show that the Electricity industry ($M = 5.00$) showed strong agreement (i.e., mean greater than 4.0) on the Needs Assessment scale, while the industry with the lowest Needs Assessment mean, Healthcare ($M = 3.50$), only showed moderate agreement (i.e., mean greater than 3.5 and less than 4.0). Electricity also had the highest mean for Trainee Preparation ($M = 4.67$), Training Program Review ($M = 5.00$), and Accountability ($M = 4.50$), while it was the second highest mean in Management Support ($M = 4.50$), all indicating strong agreement. All industries had a mean over 4.00 in Training Program Review except Industrial and Manufacturing ($M = 3.84$), showing moderate agreement for that scale. Accountability showed the greatest variability, with means ranging from 2.38 (moderate disagreement) for Transportation and Warehousing to 4.50 (strong agreement) for Electricity. Management Support had means that ranged from 3.50 (moderate agreement) in Insurance to 4.96 (strong agreement) in Private Education. As shown in the sections above, Accountability not only had the lowest mean of the five factors, but also showed the greatest variability by industry.
Table 8

*Mean of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support by Industry (N = 175)*

<table>
<thead>
<tr>
<th>Industry</th>
<th>Needs Assessment (M)</th>
<th>Trainee Preparation (M)</th>
<th>Training Program Review (M)</th>
<th>Accountability (M)</th>
<th>Management Support (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial or Manufacturing</td>
<td>3.53</td>
<td>3.57</td>
<td>3.84</td>
<td>3.19</td>
<td>3.93</td>
</tr>
<tr>
<td>Electricity</td>
<td>5.00</td>
<td>4.67</td>
<td>5.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Trade</td>
<td>3.65</td>
<td>3.94</td>
<td>4.25</td>
<td>3.48</td>
<td>4.17</td>
</tr>
<tr>
<td>Construction</td>
<td>3.99</td>
<td>3.91</td>
<td>4.44</td>
<td>2.92</td>
<td>4.15</td>
</tr>
<tr>
<td>Financial and Banking</td>
<td>3.83</td>
<td>4.33</td>
<td>5.00</td>
<td>4.25</td>
<td>4.00</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>4.04</td>
<td>4.08</td>
<td>4.00</td>
<td>2.38</td>
<td>4.25</td>
</tr>
<tr>
<td>Healthcare</td>
<td>3.50</td>
<td>3.33</td>
<td>4.50</td>
<td>2.75</td>
<td>3.75</td>
</tr>
<tr>
<td>Private Education</td>
<td>3.64</td>
<td>4.05</td>
<td>4.79</td>
<td>2.54</td>
<td>4.96</td>
</tr>
<tr>
<td>Insurance</td>
<td>3.89</td>
<td>3.67</td>
<td>4.50</td>
<td>3.08</td>
<td>3.50</td>
</tr>
<tr>
<td>Hotels</td>
<td>4.30</td>
<td>4.39</td>
<td>4.27</td>
<td>3.84</td>
<td>4.43</td>
</tr>
<tr>
<td>Other</td>
<td>3.55</td>
<td>3.64</td>
<td>4.04</td>
<td>3.40</td>
<td>4.04</td>
</tr>
<tr>
<td>Total</td>
<td>3.70</td>
<td>3.81</td>
<td>4.14</td>
<td>3.28</td>
<td>4.10</td>
</tr>
</tbody>
</table>

*Note.* Scale ranges from 1 (*strongly disagree*) to 5 (*strongly agree*), where 1 = *strongly disagree*; 2 = *disagree*; 3 = *neutral*; 4 = *agree*; and 5 = *strongly agree*.

**Employee Size Category**

Table 9 shows Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support means by the number of employees within respondents’ companies. The data showed less variability when compared by number of employees versus industry. All company sizes showed at least moderate agreement (i.e., mean greater than 3.5 and less than 4.0), and in most cases strong
agreement (i.e., mean greater than 4.0) in all scales but Accountability. Companies with 50 to 99 employees showed disagreement on the Accountability scale, with a mean of 1.75.

Table 9

<table>
<thead>
<tr>
<th>Employees</th>
<th>Needs Assessment (M)</th>
<th>Trainee Preparation (M)</th>
<th>Training Program Review (M)</th>
<th>Accountability (M)</th>
<th>Management Support (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50</td>
<td>3.88</td>
<td>3.48</td>
<td>3.86</td>
<td>3.96</td>
<td>4.04</td>
</tr>
<tr>
<td>50-99</td>
<td>4.17</td>
<td>3.67</td>
<td>3.50</td>
<td>1.75</td>
<td>4.75</td>
</tr>
<tr>
<td>100-199</td>
<td>3.53</td>
<td>3.62</td>
<td>3.73</td>
<td>3.09</td>
<td>3.89</td>
</tr>
<tr>
<td>200 and more</td>
<td>3.72</td>
<td>3.85</td>
<td>4.21</td>
<td>3.28</td>
<td>4.12</td>
</tr>
<tr>
<td>Total</td>
<td>3.70</td>
<td>3.81</td>
<td>4.14</td>
<td>3.28</td>
<td>4.10</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Managerial Position Category

Table 10 presents Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support means by managerial position. As shown, there was little variability among the different managerial levels. Respondents who held high managerial positions had the highest means for all training factors. Specifically, middle and low-level management showed moderate agreement (i.e., mean greater than 3.5 and less than 4.0) on the Needs Assessment scale, while high-level management showed strong agreement (i.e., mean greater than 4.0). Middle and low-level management showed weak agreement (i.e., mean greater than 3.0 and less than 3.5) on the Accountability scale, while high-level management showed moderate agreement.
Table 10

Mean of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support by Managerial Position (N = 175)

<table>
<thead>
<tr>
<th>Managerial Position</th>
<th>Needs Assessment (M)</th>
<th>Trainee Preparation (M)</th>
<th>Training Program Review (M)</th>
<th>Accountability (M)</th>
<th>Management Support (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>4.00</td>
<td>3.90</td>
<td>4.46</td>
<td>3.52</td>
<td>4.16</td>
</tr>
<tr>
<td>Middle</td>
<td>3.60</td>
<td>3.73</td>
<td>4.16</td>
<td>3.30</td>
<td>4.09</td>
</tr>
<tr>
<td>Low</td>
<td>3.77</td>
<td>3.89</td>
<td>4.05</td>
<td>3.20</td>
<td>4.09</td>
</tr>
<tr>
<td>Total</td>
<td>3.70</td>
<td>3.81</td>
<td>4.14</td>
<td>3.28</td>
<td>4.10</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Region Category

Table 11 presents Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support means by region. Results show that companies located in the Central region had the lowest mean scores on all training factors, while companies in the Western region had the highest mean scores on all training factors except Management Support (M = 4.18). In most instances, the Western region was also the only region to differ in terms of level of agreement. The Western region (M = 4.08) showed strong agreement (i.e., mean greater than 4.0) in Trainee Preparation, while the Central (M = 3.68) and Eastern (M = 3.73) showed moderate agreement (i.e., mean greater than 3.5 and less than 4.0) on that scale. On Accountability, the Western region (M = 3.69) showed moderate agreement, while the Central (M = 3.10) and Eastern (M = 3.14) regions showed weak agreement (i.e., mean greater than 3.0 and less than 3.5). All regions differed in level of agreement on the Needs Assessment scale. The Western region (M = 4.04) showed strong agreement, the Eastern region (M = 3.79) showed moderate agreement, and the Central region (M = 3.49) showed weak agreement.
Table 11

Mean of Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support by Region (N = 175)

<table>
<thead>
<tr>
<th>Location</th>
<th>Needs Assessment (M)</th>
<th>Trainee Preparation (M)</th>
<th>Training Program Review (M)</th>
<th>Accountability (M)</th>
<th>Management Support (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>3.49</td>
<td>3.68</td>
<td>4.04</td>
<td>3.10</td>
<td>3.97</td>
</tr>
<tr>
<td>Western</td>
<td>4.04</td>
<td>4.08</td>
<td>4.28</td>
<td>3.69</td>
<td>4.18</td>
</tr>
<tr>
<td>Eastern</td>
<td>3.70</td>
<td>3.73</td>
<td>4.15</td>
<td>3.14</td>
<td>4.23</td>
</tr>
<tr>
<td>Total</td>
<td>3.70</td>
<td>3.81</td>
<td>4.14</td>
<td>3.28</td>
<td>4.10</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Research Question 2

How do HR managers perceive knowledge transfer and performance improvement (i.e., factors 6 and 7) as a function of training?

Research question 2 addressed HR managers’ perceptions of knowledge transfer and performance improvement as a function of training. As indicated above, respondents rated their level of agreement to the items associated with each factor on a scale that ranged from 1 (strongly disagree) to 5 (strongly agree). The items were all worded to reflect improvements in knowledge transfer and performance after training. Table 12 presents the means and standard deviations for the two factors in descending order.

Table 12

Means and Standard Deviations for Performance Improvement and Knowledge Transfer in Descending Order (N = 175)

<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Improvement</td>
<td>4.07</td>
<td>0.46</td>
</tr>
<tr>
<td>Knowledge Transfer</td>
<td>3.98</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.
As shown in Table 12, the overall scale means depict moderate agreement (i.e., mean greater than 3.5 and less than 4.0) Knowledge Transfer ($M = 3.98$) and strong agreement (i.e., mean greater than 4.0) with Performance Improvement ($M = 4.07$).

**Knowledge Transfer**

Respondents’ agreement with the constructs presented in Knowledge Transfer and Performance Improvement can be further explored by examining the means and percentages of responses of the ratings for each scale’s items. Table 13 presents the means and percentages of HR managers’ responses to the constructs presented in the Knowledge Transfer scale. As shown in Table 13, HR managers indicated moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) to all items on the Knowledge Transfer scale. Perhaps most importantly, over 90% of respondents Agreed (68%) or Strongly Agreed (22%) that trainees demonstrate new skills after training.

Table 13

*Percentage of Manager Response on Knowledge Transfer in Descending Order (N = 175)*

<table>
<thead>
<tr>
<th>Items</th>
<th>$M$</th>
<th>$SD$</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge Transfer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After training, trainees demonstrate new skills.</td>
<td>4.12</td>
<td>0.57</td>
<td>0.0</td>
<td>0.6</td>
<td>9.1</td>
<td>68.0</td>
<td>22.3</td>
</tr>
<tr>
<td>After training, trainees are willing to make better changes in the work system.</td>
<td>4.03</td>
<td>0.73</td>
<td>0.0</td>
<td>1.7</td>
<td>20</td>
<td>51.4</td>
<td>26.9</td>
</tr>
<tr>
<td>After training, trainees share new knowledge with co-workers.</td>
<td>3.94</td>
<td>0.58</td>
<td>0.6</td>
<td>0.0</td>
<td>16.6</td>
<td>70.3</td>
<td>12.6</td>
</tr>
</tbody>
</table>
Table 13–Continued

<table>
<thead>
<tr>
<th>Items</th>
<th>M</th>
<th>SD</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>After training, trainees criticize work with full knowledge.</td>
<td>3.94</td>
<td>0.73</td>
<td>0.0</td>
<td>2.9</td>
<td>20.6</td>
<td>56.0</td>
<td>20.6</td>
</tr>
<tr>
<td>After training, trainees initiate to assist their coworkers in solving problems.</td>
<td>3.93</td>
<td>0.66</td>
<td>0.0</td>
<td>1.1</td>
<td>21.7</td>
<td>60.0</td>
<td>17.1</td>
</tr>
<tr>
<td>After training, trainees provide creative solutions for specific problems.</td>
<td>3.91</td>
<td>0.72</td>
<td>0.0</td>
<td>2.9</td>
<td>21.7</td>
<td>56.6</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Performance Improvement

Table 14 presents the means and percentages of HR managers’ responses to the items presented in the Performance Improvement scale. As shown in Table 14, HR managers showed strong agreement (i.e., mean greater than 4.0) to all of the Performance Improvement items, except Trainees performed tasks faster ($M = 3.94$), which received moderate agreement (i.e., mean greater than 3.5 and less than 4.0). It appears that HR managers perceived that performance is improved after training, especially as it relates to outcomes, which had 91% of respondents Agree (68%) or Strongly Agree (23%) that trainee work outcomes were improved. Moreover, improvements were not only perceived in work tasks, but in behavior as well, with 89% of respondents agreeing (67%) or strongly agreeing (22%) that behavior improved as a result of training.
Table 14

*Percentage of Manager Response on Performance Improvement in Descending Order (N = 175)*

<table>
<thead>
<tr>
<th>Items</th>
<th>M</th>
<th>SD</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trainee work outcomes were improved.</td>
<td>4.14</td>
<td>0.56</td>
<td>0.0</td>
<td>0.6</td>
<td>8.0</td>
<td>68.0</td>
<td>23.4</td>
</tr>
<tr>
<td>Trainee mistakes were decreased after completing the training program.</td>
<td>4.13</td>
<td>0.68</td>
<td>0.0</td>
<td>0.6</td>
<td>15.4</td>
<td>54.9</td>
<td>29.1</td>
</tr>
<tr>
<td>Trainees behaved positively after training.</td>
<td>4.10</td>
<td>0.57</td>
<td>0.0</td>
<td>0.0</td>
<td>11.4</td>
<td>66.9</td>
<td>21.7</td>
</tr>
<tr>
<td>Trainees performed new tasks in better ways.</td>
<td>4.05</td>
<td>0.58</td>
<td>0.0</td>
<td>0.0</td>
<td>14.3</td>
<td>66.3</td>
<td>19.4</td>
</tr>
<tr>
<td>Trainees performed tasks faster.</td>
<td>3.94</td>
<td>0.66</td>
<td>0.0</td>
<td>1.1</td>
<td>21.1</td>
<td>60.0</td>
<td>17.7</td>
</tr>
</tbody>
</table>

*Note.* Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

As with the five factors in the section above, another way to explore results describing HR managers’ perceptions of knowledge transfer and performance improvement as a function of training is by demographic information. The sections below explore the means of these two factors by industry, number of employees, managerial position, and region.

**Industry Category**

Table 15 presents Knowledge Transfer and Performance Improvement means by industry. The highest mean for Knowledge Transfer was in Electricity ($M = 4.67$), while the lowest mean was in Transportation and Warehousing ($M = 3.54$). Conversely, the highest means for Performance Improvement were in Transportation and Warehousing...
(M = 4.75), and Private education (M = 4.74), while the Healthcare (M = 3.60) had the lowest mean in Performance Improvement. As shown, the overall scale means depict moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) in all industries.

Table 15

Knowledge Transfer and Performance Improvement Means by Industry (N = 175)

<table>
<thead>
<tr>
<th>Industry</th>
<th>N</th>
<th>Knowledge Transfer (M)</th>
<th>Performance Improvement (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial or Manufacturing</td>
<td>70</td>
<td>3.92</td>
<td>3.93</td>
</tr>
<tr>
<td>Electricity</td>
<td>2</td>
<td>4.67</td>
<td>4.20</td>
</tr>
<tr>
<td>Trade</td>
<td>42</td>
<td>4.07</td>
<td>4.13</td>
</tr>
<tr>
<td>Construction</td>
<td>18</td>
<td>4.02</td>
<td>4.29</td>
</tr>
<tr>
<td>Financial and Banking</td>
<td>4</td>
<td>3.67</td>
<td>4.00</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>4</td>
<td>3.54</td>
<td>4.75</td>
</tr>
<tr>
<td>Health Care</td>
<td>1</td>
<td>3.83</td>
<td>3.60</td>
</tr>
<tr>
<td>Private Education</td>
<td>7</td>
<td>4.07</td>
<td>4.74</td>
</tr>
<tr>
<td>Insurance</td>
<td>3</td>
<td>3.72</td>
<td>3.80</td>
</tr>
<tr>
<td>Hotels</td>
<td>11</td>
<td>3.94</td>
<td>4.00</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>4.14</td>
<td>3.95</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>3.98</td>
<td>4.07</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Employee Size Category

Table 16 presents Knowledge Transfer and Performance Improvement means by company employee size. The data revealed that the range of Knowledge Transfer means varied slightly among all companies, with the lowest mean in companies with 50 to 99 employees (M = 3.83) and the highest mean in companies with less than 50 employees (M = 4.07). The range of means on Performance Improvement was between 3.94 in
companies with 100 to 199 employees and 4.40 in companies with 50 to 99 employees. Again, the overall scale means depict moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) in all companies based on number of employees.

Table 16

Means of Knowledge Transfer and Performance Improvement by Number of Employees (N = 175)

<table>
<thead>
<tr>
<th>Employees</th>
<th>N</th>
<th>Knowledge Transfer (M)</th>
<th>Performance Improvement (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50</td>
<td>7</td>
<td>4.07</td>
<td>4.17</td>
</tr>
<tr>
<td>50-99</td>
<td>1</td>
<td>3.83</td>
<td>4.40</td>
</tr>
<tr>
<td>100-199</td>
<td>20</td>
<td>3.96</td>
<td>3.94</td>
</tr>
<tr>
<td>200 and more</td>
<td>147</td>
<td>3.98</td>
<td>4.08</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>3.98</td>
<td>4.07</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Managerial Position Category

Table 17 presents the means of Knowledge Transfer and Performance Improvement by managerial position. The overall scale means depict moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) among all managerial levels, and in fact, all moderate means were very close to strong. As shown, the data revealed that the highest managerial level indicated higher knowledge transfer (M = 4.29) and performance improvement (M = 4.34), whereas the middle managerial position had the reported the smallest agreement regarding Knowledge Transfer (M = 3.94) and Performance Improvement (M = 3.99) means.
Table 17

Mean of Knowledge Transfer and Performance Improvement by Managerial Position (N = 175)

<table>
<thead>
<tr>
<th>Managerial Position</th>
<th>N</th>
<th>Knowledge Transfer (M)</th>
<th>Performance Improvement (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>14</td>
<td>4.29</td>
<td>4.34</td>
</tr>
<tr>
<td>Middle</td>
<td>88</td>
<td>3.94</td>
<td>3.99</td>
</tr>
<tr>
<td>Low</td>
<td>73</td>
<td>3.97</td>
<td>4.13</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>3.98</td>
<td>4.07</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Region Category

Table 18 presents the means of Knowledge Transfer and Performance Improvement by company region. Data from the regions category was similar to the data in the regions category of the first five factors. Namely, the companies in the Central region had the lowest means on Knowledge Transfer (M = 3.78) and Performance Improvement (M = 3.93). Western companies had the highest means on Knowledge Transfer (M = 4.24) and Performance Improvement (M = 4.33).

Table 18

Mean of Knowledge Transfer and Performance Improvement by Company Location (N = 175)

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>Knowledge Transfer (M)</th>
<th>Performance Improvement (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>79</td>
<td>3.78</td>
<td>3.93</td>
</tr>
<tr>
<td>Western</td>
<td>50</td>
<td>4.24</td>
<td>4.33</td>
</tr>
<tr>
<td>Eastern</td>
<td>46</td>
<td>4.04</td>
<td>4.03</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>3.98</td>
<td>4.07</td>
</tr>
</tbody>
</table>

Note. Scale ranges from 1 (strongly disagree) to 5 (strongly agree), where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.
Research Question 3

What training factors do HR managers identify as being important to the delivery of training?

To answer this question, semi-structured interviews with five general employees and six human resource managers representing six different companies were conducted. Five themes emerged from the participant narratives. These themes described the common experiential pattern of the participants with regard to knowledge transfer and performance improvement separately, and are as follows:

1. Training Needs Assessment Methods and Tools
2. Trainee Preparation Techniques
3. Training Accountability System
5. Knowledge Sharing and Skills Transfer

The scope of each theme was defined based on the information collected from the interviews and learned by the literature review. Themes one through four can be generally categorized as training policy characteristics that organizations should practice. Theme five can be categorized as results that organizations desire. The following sections include explanations of themes that merged from the analysis of data, as well as excerpts from interview transcripts are provided that support the findings of themes.

Training Needs Assessment Methods and Tools (TNAMT)

The concept of TNAMT refers to the mechanism or approaches an organization uses to first assess the necessity of the training program, followed by an assessment of the knowledge or skills required to improve performance. Based on the interviews findings,
all participants emphasized that training needs assessment is crucial, and it has to be conducted in a professional manner. Regarding the professional manner necessary for training needs assessments, One an HR manager, stated, “My company conducts training needs assessments by assessing the employees’ strengths and weak points. It’s mostly department managers who do that for their employees.”

The same HR manager mentioned that complacency sometimes plays a major role in determining training needs. That means managers occasionally recommend an employee to get training in any field regardless of its necessity to the department. Traditionally, a training needs assessment asks employees to list or rank desired training courses. Such an approach can include many employees. However, while the results may temporarily boost employee morale, the success in actually improving employee performance on the job is limited” (Cekada, 2011, p. 29).

Assessing true needs takes time, effort, and honesty, which varies from one company to another. Human resources departments usually take the lead in gaining required information from all departments. The HR manager mentioned a very important point that affects the validity of the assessment information gathered from departments, “Most departments do not take the training needs assessment seriously. They do not have enough knowledge about the magnitude of this process.” On the other hand, a different HR manager, stated, “In order to get accurate information regarding true training needs, especially for soft skills, the company has to assess the reliability of tests.” Most of the interviewees indicated that the accuracy and fidelity of department managers’ training needs assessment reports is 80%, which is somewhat questionable and points to the need for greater understanding in how to improve the precision of training needs assessments.
According to the first HR manager, “The accuracy and fidelity of department managers’ training needs assessment reports is 80%. The HR department only sometimes makes site visits to company departments and branches to assess their training needs.”

**Trainee Preparation Techniques**

The preparation trainees receive prior to entering a class or acquiring new knowledge or skills should include a process whereby HR or the training department informs trainees about their weakness, strengths, and performance gaps. Department managers should explain to trainees the knowledge or skills they need, and how the training would solve a problem or improve employee performance. This is very important in order to give training attention and value. As noted by Hyde (2010), “The extra time spent may improve learner readiness by communicating why the information in the training is important and how the context was defined” (p. 91). An administration manager respondent in this study, stated, “Trainee preparation is very important because an employee cannot practice what he would learn in a good shape unless he was well prepared.” He attributed the weak knowledge transfer to several factors and weak preparation is one of them.

Trainee preparation was discussed by one respondent to a large extent. He stated, “Trainee preparation help trainees to practice skills by 70%.” He indicated that they use two methods to prepare employees for training; either email or manual invitation. They inform the trainee that his performance will be evaluated after the training in order to measure to what extent the training program improved his knowledge or skills. For long-term training that is over three months, the company asks trainees to sign an agreement that includes staying with the company during training and not leaving the company after
training. He added that they also inform the trainees that they will have the opportunity to attend other training programs if management notices that the employee utilizes the knowledge or skills he gained from training. In fact, all participants mentioned that direct managers follow up to determine employee knowledge transfer or performance improvement through daily observation.

Somewhat differently, a training manager, stated, “The employee’s age affects knowledge transfer. A young trainee usually does not have the basic information about the training course before it starts, but he gets prepared during the class.” Occasionally companies pay less attention and give less of an effort to prepare trainees due to several factors such as a shortage in the workforce, priorities for other tasks, and lack of awareness on the part of management regarding the significance preparation. Nevertheless, all participants agreed that preparing trainees before a training program is a very important factor in knowledge transfer and performance improvement.

**Training Accountability System**

Training accountability system refers to an employee being committed to training and development, and being responsible for transferring knowledge or skills to his current job by sharing and practicing what he learned. The companies in this study varied in the ways they practiced the training accountability concept. One company required employees to email their managers with the benefit they gained from training. About this, an HR manager said, “After completing a training program, the trainee has to submit two reports, one of which is to the HR department. This report includes the main advantages of the training program, the strengths, and weaknesses. Then another report has to be submitted to the trainee’s department manager, which has to include the trainee plan to
“Practice what was learned.” He went on to explain that a training action plan would not be effective unless there was strong follow-up system that forced accountability on the part of employees, while also forcing managers to follow their employees. Moreover, he stated that “Department managers should be required to submit a report to HR department indicating to what extent trainees applied new skills.” Still others lacked a formal accountability system. Another HR manager said, “Absolutely we do not have a training accountability system.”

Some companies focus on employee satisfaction and retention as a top priority, believing that will enhance productivity, creativity, and commitment to the employers. One of the respondents indicated that his company motivates employees to get academic degrees in any related field to their job. The company also reduces the employee workload in order to assist with having enough time for classes and assignments. Two respondents discussed competition among departments and branches to increase knowledge transfer. One said, “Monthly incentives will encourage employees to utilize latest knowledge and practice new skills with proficiency.” Overall, all participants, including employees, acknowledged that training accountability systems positively affect knowledge transfer.

**Management Training Support Practices (MTSP)**

MTSP refer to opportunities companies provide employees to transfer and practice new skills, or share knowledge. It is commonly comprised of: (a) a written policy that is used to develop tools to encourage trainees to practice and transfer new skills or knowledge. (b) incentives for creative employees, and (c) the manager’s or supervisor’s personal skills and ability to motivate trainees. Having updated technology, software,
places, and time are crucial tools that encourage and motivate trainees to spread out knowledge, creativity, and sharpen their new skills through engaging with experienced team or experts; however, the interviews showed that providing tools, equipment, and resources is not enough to encourage trainees to practice new skills. One respondent stated “The manager who believes in training, as a tool to improve the employee’s performance, strongly support trainees to practice either directly or indirectly.” Besides this, he indicated that a manager could support trainees through giving employees equal chances to train and then by motivating them to make more contributions to work and double their efforts for better performance. Another respondent summarized her company’s training support system in three points:

1. Explain to trainee his or her weaknesses and strengths points;
2. Retain productive employees who show new skills and performance, offer a promotion in case he or she wants to quit the job; and
3. Support productive employees by giving the opportunity to make presentations to his colleagues in order to show how he or she has transferred the new skills and how his performance was improved.

Her final point is traditionally explained as an accountability criterion, however, her company philosophy flipped this concept; the company uses presentation as a recognition tool to motivate the best employee as a leader or model who has practiced new skills and utilized the knowledge gained from training.

**Knowledge Sharing and Skills Transfer (KSST)**

KSST refers to what extent trainees share new knowledge or skills with co-workers, and what techniques have been used to spread knowledge or skills to the work
environment. All participants indicated that sharing knowledge relies mostly on trainee personality, but also on trainee initiative to help others and share their thoughts during teamwork. Employees who attempt to hide knowledge or skills from colleagues could be recognized as non-collaborative and affect his yearly performance appraisal, thereby encouraging knowledge sharing regardless of competition among employees.

**Summary**

The sections above presented the results of data collected to answer the research questions of this study. Research question 1 addressed how Saudi HR managers perceive the occurrence of: (1) training needs assessment, (2) trainee preparation for training, (3) training program review, (4) accountability system for knowledge transfer, and (5) management training support in the training policies of private sector industries. As shown, the overall scale means depict agreement (i.e., scale mean greater than 3.5) for all scales but Accountability. Moderate agreement (i.e., mean greater than 3.5 and less than 4.0) occurred for two scales, Trainee Preparation and Needs Assessment. Respondents indicated strong agreement (i.e., mean greater than 4.0) with the Training Program Review and Management Support scales. One of the strongest findings based on inspection of each scale’s individual items showed that an exceptionally low mean on one item in the Needs Assessment scale made its overall mean much lower than it would have been otherwise. This is important, as it appears that without this item, respondents moderately to strongly agree that they engage in the tasks associated with needs assessments.

Most respondents perceived that training program review is a part of their training policies. This meant that training program content is fully reviewed before selection and
training programs are selected based on effectiveness reports from the previous year. Results concerning management support indicate that HR managers perceive that trainees are given opportunities to practice new skills or knowledge, but have less support from managers in terms of post-training follow-up or job aids. Trainees are also much less likely to get material support for their jobs while they are being trained, but are well prepared in terms of the provision of information concerning the content and expected results of training programs. Moreover, the selection of training programs is made carefully and based on departmental needs and manager evaluations of employees’ skills and knowledge. Finally, after training, trainees are expected to be better at fixing problems; yet, there are few formal measures of accountability such as the implementation of an action plan, or sharing knowledge with others.

Inspection of the individual items in the Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support scales by industry, number of employees, managerial position, and region provided further insight into the occurrence of the five training factors in Saudi private sector training policies. There was little variability among managers from different levels. Respondents who held high managerial positions had the highest means for all training factors. What variability there was in terms of level of agreement on the factors was found among this group. Similarly, few notable differences were found among respondents by region. Accountability showed the greatest variability by industry, with Transportation and Warehousing showing weak agreement, and Electricity showing strong agreement. Here is where another one of the study’s strongest findings was found in terms of insight into how Accountability became ranked lowest among the five factors. Companies with 50 to 99 employees showed
disagreement on the Accountability scale, with a mean of 1.75. This was the lowest mean associated with the study’s findings.

As it relates to research question 2, HR managers perceived that both knowledge transfer and performance improvement occurred as a function of training. HR managers indicated moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) on all items on the Knowledge Transfer scale, and strong agreement on all items on the Performance Improvement scale, except the item related to performing tasks faster which received moderate agreement.

Different than in research question 1, exploration of Knowledge Transfer and Performance Improvement data by demographic information provided little insight into the results for research question 2. In fact, exploration into Knowledge Transfer and Performance Improvement produced the study’s weakest findings, as all mean scores indicated moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) on these two factors. Similar to what was shown among the first five factors, Electricity was the highest scoring industry on Knowledge Transfer, while Transportation and Warehousing was the lowest. There was very little variability in agreement in terms of company size, managerial position, and region. Companies with less than 50 employees showed strong agreement on the Knowledge Transfer scale. All companies showed strong agreement on the Performance Improvement scale, except companies with 100 to 199 employees. Those respondents showed moderate agreement. Respondents with the highest managerial positions also had the highest scores on the two factors, and as in the first five factors, companies in the Central region had the lowest means on Knowledge Transfer and Performance Improvement, while companies in the
Western region had the highest means on Knowledge Transfer and Performance Improvement.

Research question 3 further addressed factors perceived as important to training. Rather than present respondents with a pre-determined set of factors as in the Survey of Training Policy Effectiveness, semi-structured interviews were used to learn respondents' own ideas on this topic. Five themes were generated as a result: (1) Training Needs Assessment Methods and Tools; (2) Trainee Preparation Techniques; (3) Training Accountability System; (4) Management Training Support Practices; and (5) Knowledge Sharing and Skills Transfer. Themes one through four can be generally categorized as training policy characteristics that organizations should practice. Theme five can be categorized as results that organizations desire. The themes generated from the semi-structured interviews provide: (a) support for the inclusion of the Needs Assessment, Trainee Preparation, Training Program Review, Accountability, and Management Support factors in the Survey of Training Policy Effectiveness, and (b) evidence that many of the constructs presented within U.S. based literature are applicable to the Saudi private sector context.

The next chapter, Chapter V, provides a more detailed explanation of the study’s major findings. Conclusions, limitations of the study, and recommendations for implementation of findings and additional research are also discussed.
Chapter V consists of five major sections. The first section is a brief summary of the information covered in previous chapters. The second section is a discussion of the study’s major findings. Next, a conclusion is provided, along with a discussion of limitations of the study. Finally, recommendations for implementation of the study’s findings and additional research are also discussed.

Summary

Saudi organizations invest billions of dollars in human resource development and training in order to improve organizational outcomes (Saudi Arabian Monetary Agency Report, 2009). Yet, there is a paucity of research addressing training policy factors that may improve employee performance in the Saudi context. Throughout the literature, five factors in particular have been found to be important to training: (1) training needs assessment, (2) trainee preparation for training, (3) training program review, (4) accountability system for knowledge transfer, and (5) management training support.

Factors 1 through 5 address training programs implemented within the respective companies of this study. The current study also included two additional factors to be studied along with the first five factors. The factors (6) knowledge transfer, and (7) performance improvement address program effects after training has occurred. The
purpose of this study was to describe the implementation of these seven training practices in the private sector Saudi labor market.

It was believed that the addition of a study that explored the seven factors listed above would provide much needed information to assist Saudi Human Resources HR managers in designing better training programs. As described in the review of literature, research generally indicates that many personal, organizational, and environmental factors influence knowledge transfer and affect employee commitment to training outcomes; yet, few studies have explored these factors within Saudi organizations.

According to Machles (2002), needs assessments allow managers to have an accurate and complete picture of employee performance deficits. Once needs are identified, stronger objectives can then be stated. Trainee preparation helps to improve the perceived value of the identified training objectives, and judgment of: (1) the credibility of the new skills for improving performance, (2) the practicality of the new skills for ease of transfer, (3) a recognized need to improve their job performance (Taylor, Russ-Eft, & Taylor, 2009; Yelon, Sheppard, Sleight, & Ford, 2004). Training program review is key in that for maximal transfer, learners should perceive that the new knowledge and skills would improve a relevant aspect of their work performance (Baldwin & Ford, 1988; Clark, Dobbins, & Ladd, 1993). As it relates to accountability, Parkes (2000) found that accountability is important because it provides specific goals for the training and transfer process, creates a structure, and provides steps for evaluation. Finally, as it relates to management support, Machles further argued that issues in management might be the primary inhibitor of knowledge transfer. This argument is supported by other scholars who assert that management that provides opportunities for
trainees to practice and get feedback on their use of recently learned knowledge or skills are likely to lead to better practices of training transfer (Burke & Hutchins, 2007; Ford & Kraiger, 1995; Holladay & Quinones, 2003).

The results of this study found that Saudi HR managers indeed perceive that the above factors contribute to changes in the trainee and resulting on-the-job performance. The sections below discuss these findings for each of the study’s research questions.

**Discussion of Major Findings**

**Research Question 1**

How do HR managers perceive the occurrence of training needs assessment, trainee preparation, training program review, accountability and management support?

Research question 1 addressed HR managers’ perceptions of the integration of five factors on the Survey of Training Policy Effectiveness into their training policies. Respondents rated their level of agreement to the items associated with each factor on a scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The items were all worded to reflect the occurrence of the factors. The overall scale means for each factor depict agreement (i.e., scale mean greater than 3.5) for all scales except Accountability. Respondents indicated moderate agreement (i.e., mean greater than 3.5 and less than 4.0) with the constructs presented in the Trainee Preparation and Needs Assessment scales. Respondents indicated strong agreement (i.e., mean greater than 4.0) with the constructs presented in the Training Program Review and Management Support scales.

The extent to which respondents agree with the items in each scale reflect training practices with current training tools that are being used with a lack of proficiency. Hence, respondents indicate their training practices are less in the factors that need significant
measures or tools (i.e., Accountability, Needs Assessment, and then Trainee Preparation). Current procedures, processes, and tools that are used as part of various training practices may not be appropriate for all industries or occupations. More efforts are needed to evaluate effectiveness of these processes, procedures, and tools to understand how they can better meet real needs. This assertion is supported by the interviews conducted as a part of this study, which revealed that HR managers placed emphasis on the practice outcomes more than training practice processes. This emphasis may weaken the overall outcomes of training practices, as well as their usefulness.

**Training Program Review.** In one of the scales rated with strong agreement by respondents, Training Program Review, most HR managers surveyed perceived that training program review was a part of their training policies. Nearly 96% of the HR managers agreed or strongly agreed that training program content is fully reviewed before selection. Approximately 69% of respondents agreed or strongly agreed that training programs were selected based on effectiveness reports from the previous year. As stated above, scholars suggest that training program review is a key aspect of a training policy (Baldwin & Ford, 1988; Clark, Dobbins, & Ladd, 1993). This suggestion was supported by the results of this study, as Training Program Review was the highest rated scale among respondents, indicating that Saudi managers also value training program review, as evidenced by its high reported occurrence within the sample. Generally in the Saudi labor market, training centers do not provide actual training program content to companies, but centers do provide training course outlines, a description of the target audience, expected outcomes, and sometimes an instructor’s curriculum vita. Hence, it is apparent that practices of “obtaining full information about the training program content” are to some extent superficial. This conclusion is supported by the occurrence of less
agreement on the item, *The company selects training programs based on effectiveness reports from the previous year*, which had a mean score of 3.83, compared to a mean score of 4.45 on the item, *The company obtains full information of the training program content before it starts*. Training program review practices may not be consistent and integrated with each other. More efforts are needed to align the various practices of training program review so that they better support each other. A specific effort would be to require that training program reports be standardized and mandatory.

**Management Support.** The second highest rated scale, Management Support, indicated that most respondents perceived that managers provide employees with the support needed to transfer skills after receiving training. However, from the results it appeared that HR managers perceived that trainees are given opportunities to practice new skills or knowledge, but have less support from managers in terms post-training follow-up or job aids. That Saudi employees are given opportunities to practice new skills is beneficial as this type of management support has been associated with skill retention in other settings, and is believed to be central to achieving knowledge transfer. It is possible, however, that less support in terms of post-training follow-up or job aids may dampen the overall perception of management support. That is, employees may perceive that they have opportunity to practice new skills, but are not given the resources or ongoing support to do so. Logically, more supports lead to better performance; however, the management support that is provided seems to be a consequence of daily practice or routine; it does not seem to be as extra efforts for best practices. Thus, management support methods or techniques need to be redesigned to include clear definitions of the goal, strategy, and process of management and co-worker support, and how it may
enhance the overall efforts for best practices and performance, as well as employee career development.

**Trainee Preparation.** Trainee Preparation was the third highest rated scale, and received moderate agreement from respondents overall. Results showed quite strong agreement with two of the three items, with mean scores greater than 4.0, but overall neutrality on the third item. This third item, *The company substitutes the assigned trainee with another employee to cover them during the training period*, had 30% of HR managers who indicated some level of disagreement in terms of its occurrence. That Trainee Preparation was rated third out of the five factors is important as trainee preparation has been determined to be essential to increasing trainee motivation, which in turn has been determined to be a key factor linking pre-training characteristics and training outcomes. Nevertheless, in this situation, HR managers seem to say trainees are provided good information concerning the content and expected results of training programs, but are much less likely to get material support for their jobs while they are being trained.

In addition, not all managers provide trainees with detailed information about how to use the training or/and how it may impact an employee’s performance. Hence, broad and ambiguous information may result in misunderstanding of the detailed purposes of training, as well as may dampen the trainee self-motivation to seek useful knowledge and skills.

**Needs Assessment.** The Needs Assessment scale ranked fourth of the five factors. Like Trainee Preparation, it also received moderate agreement from respondents overall. The individual items on the Needs Assessment scale ranged from moderate (i.e., mean
greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) on all items but one. This item, *The company requires trainees to conduct performance self-evaluations*, in fact, had the lowest mean of any item on the survey with 57% of respondents responding Strongly Disagree or Disagree. The low mean on this self-evaluation item seems to be the reason the Needs Assessment scale ranked fourth out of the five factors. Otherwise, HR managers indicated that careful consideration is given to the selection of training programs in terms of departmental needs and manager evaluations of employees’ skills and knowledge.

It seems there is a partial contradiction in HR practices in which respondents perceive that the right training programs are selected (i.e., $M = 4.46$), in spite of implementing less practices to assess needed knowledge and skills (i.e., $M = 3.97 \& 3.75$). This leads one to conclude that current Needs Assessment practices are superficial in nature; the low mean on this self-evaluation item supports that conclusion. Improvements in needs assessment may prove somewhat difficult, however, as there is a need in the Saudi labor market for practical assessment tools or inventories that measure required skills and knowledge for each job. Defining training needs reduces the investment on training by selecting the right or tailored training program, which also improves organizational learning and performance through appropriate training transfer practices.

**Accountability.** Finally, the lowest ranked scale was Accountability. The scale’s individual items indicated only weak (i.e., mean less than 3.5) to moderate (i.e., mean greater than 3.5 and less than 4.0) agreement. Two of the four items on the scale had high percentages of managers who were neutral or had some level of disagreement with the
items. Overall, from the responses on the Accountability scale, it appears that there is some expectation that trainees be better able to fix problems after training; yet, there are few formal measures of accountability such as action plans or sharing knowledge with others.

HR managers’ perceptions concerning the occurrence of the five factors in research question 1 were also explored by demographic information. The Employee Size category in particular provides further insight into how Accountability became ranked lowest among the five factors. Companies with 50 to 99 employees showed high disagreement on the Accountability scale, with a mean of 1.75, while the means of the other companies ranged from 3.09 to 3.96. This indicates that there was something unique about companies with 50 to 99 employees, which may have skewed the data.

From the results of this study, it appears that companies require trainees to know how to fix problems after training with either limited resources, or unclear directions. That may be tolerable for manual labor types of jobs, but less suitable for other types of careers such as marketing or sales jobs, which require, to some extent, more knowledge than skills. As suggested through the qualitative portion of this study, it may be better if trainees work with managers to develop an action plan or making presentation after training, which could serve three purposes: (1) provide clear direction on what should be accomplished, (2) provide a greater sense of obligation to transfer knowledge and skills, and (3) improve employee careers.

**Research Question 2**

How do HR managers perceive knowledge transfer and performance improvement as a function of training?
Research question 2 addressed HR managers’ perceptions of knowledge transfer and performance improvement as a function of training. As indicated above, respondents rated their level of agreement to the items associated with each factor on a scale that ranged from 1 (\textit{strongly disagree}) to 5 (\textit{strongly agree}). The items were all worded to reflect improvements in knowledge transfer and performance after training. The overall scale means depict moderate agreement (i.e., mean greater than 3.5 and less than 4.0) for Knowledge Transfer and strong agreement (i.e., mean greater than 4.0) for Performance Improvement.

**Knowledge Transfer.** The purpose of the Knowledge Transfer scale was to determine HR managers’ perceptions concerning if trainees “successfully move knowledge, skills, or attitudes from class room to workplace” after training, “which is the ultimate goal of training” (Machles, 2002, p. 32). According to Kraiger (2003), training can be defined as, “activities directed at the acquisition of knowledge, skills, and attitudes for which there is an immediate or near-term application” (p. 171). HR managers indicated moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e., mean greater than 4.0) to all items on the Knowledge Transfer scale. This showed that managers perceive trainees to be involved in a variety of knowledge sharing tasks post training, including enacting changes, critical thinking, assisting co-workers, and creative problem solving. In effect, HR managers perceive that trainees successfully transfer knowledge acquired through training to the workplace.

Successful knowledge transfer means that trained skills are used in the workplace. Several practices can enhance knowledge transfer. Written action plans of transfer goals, for example, connect the training curriculum with the knowledge and skills that should be
transferred. If shared with an employee’s department manager, these action plans can help to link overall achievement and trainee performance evaluation with depth of knowledge transfer. Having appropriate knowledge transfer measurements, which measure accuracy, comprehensiveness, and suitability could further motivate trainees. Companies could encourage the implementation of ideas presented during training, and conduct evaluations using a more effective and systematic basis and incorporate them into business practice.

**Performance Improvement.** Because HR managers perceive that trainees successfully transfer knowledge acquired through training to the workplace, it follows logically that HR Managers also ranked Performance Improvement high. In fact, Performance Improvement was ranked somewhat higher than Knowledge Transfer. HR managers showed strong agreement (i.e., mean greater than 4.0) to all of the Performance Improvement items, except *Trainees performed tasks faster*, which received moderate agreement (i.e., mean greater than 3.5 and less than 4.0). Overall, HR managers perceived that performance was improved after training, especially as it relates to outcomes, which had 91% of respondents Agree or Strongly Agree that trainee work outcomes were improved. Moreover, improvements were not only perceived in work tasks, but in behavior as well, with 89% of respondents agreeing or strongly agreeing that behavior improved as a result of training. In sum, HR managers’ perceptions of performance improvement were lower on items that used direct statements (i.e., trainees performed tasks faster), and were to some extent are related to knowledge transfer. Exploration of research question 2 by demographic item revealed little information. Overall scale means depict moderate (i.e., mean greater than 3.5 and less than 4.0) to strong agreement (i.e.,
mean greater than 4.0) in Knowledge Transfer and Performance Improvement in all industries; companies based on number of employees; managerial levels; and regions.

The performance improvement perceived by HR managers can be attributed to many causes. However, to attribute performance improvement to specific training practices would require more specific evaluation techniques, techniques that could analyze and determine to what extent each training factor has an impact on employee and organization performance.

**Research Question 3**

What training factors do HR managers identify as being important to the delivery of training?

To answer research question 3, semi-structured interviews with five general employees and six human resource managers representing six different companies were conducted. Five themes emerged from the respondent narratives:

1. Training Needs Assessment Methods and Tools
2. Trainee Preparation Techniques
3. Training Accountability System
5. Knowledge Sharing and Skills Transfer

Overall, these themes support the data obtained through the quantitative portion of this study. Namely, findings revealed that HR managers perceive training needs assessment to be a very important step for better employee performance; however, through the interviews it was learned that some HR managers perceive that the needs assessment methods and tools being used are limited, and not integrated into a unique and continuous assessment system. Nevertheless, there were a variety of needs assessment
techniques reported. Results showed that managers use some techniques for more than one purpose; for instance, they might nominate trainees, who show better knowledge or skills practice for a training program as an incentive, or as a punishment for those who do not.

Respondents also reported the preparation trainees receive prior to entering a class or acquiring new knowledge or skills to be important. Like needs assessment, a variety of methods were also used to prepare employees for training. These methods included inviting employees to participate in training by email or in-person; informing the trainee that his performance will be evaluated after the training in order to measure to what extent the training program improved his knowledge or skills; and asking trainees to sign an agreement to stay with the company for a period during and after training.

In the quantitative portion of this dissertation described above, respondents indicated only weak (i.e., mean less than 3.5) to moderate (i.e., mean greater than 3.5 and less than 4.0) agreement on the Accountability scale. Yet, in the qualitative portion of the study, all participants, including employees, acknowledged that training accountability systems positively affect knowledge transfer. Some companies required employees to report what was gained from training; the main advantages of the training program, the strengths, and weaknesses; and an action plan. Other companies, however, had no formal accountability system, which may explain low scores on the Accountability scale, despite reported beliefs concerning its importance.

Finally, management support and knowledge sharing and skills transfer were reported to be essential components of a training policy. These findings are consistent with a recent study that suggested managers who interact with employees in work
environment before and after training may increase the possibility that trainees will transfer training to their current job (Kazbour, 2011). When describing management support, respondents spoke of opportunities companies provide employees to transfer and practice new skills, or share knowledge. These opportunities consisted of written policies, incentives, and personal motivation skills.

Overall, the interviews support the findings from the quantitative survey described above by clarifying the processes, procedures, or methods companies use in training practices. Interviewees affirmed the need to systemize practices and integrate all training efforts to get best results from each training practice step. The interviews and survey’s findings revealed that companies may have sound training practices, but not “best training practices” from the perspectives of Saudi HR managers. To work toward best practices, it is highly recommended that companies reform their training systems to include full descriptions of each procedure, and its proposed impact on overall knowledge transfer, performance improvement, or other purposes. In addition, a training guide that contains scenario-based examples of workflow is needed; the examples or methods used may not always be the only way to complete a given task, but can help in giving direction of how to approach certain tasks.

**Conclusion**

The overall perceptions of HR managers as they related to the identified 30-items of training practices revealed that the companies in the Saudi labor market performed training practices that meet their basic conscious needs. These findings were supported by the interviews findings that highlighted the importance of integrating and performing
these factors in order to have high level of knowledge transfer and performance improvement.

The data from this study revealed that Saudi training programs successfully implement the five factors explored in this research, with resulting knowledge transfer and performance improvement. However, while respondents made qualitative reports suggesting that accountability is an important factor in training policies, some companies had no formal accountability systems. This may have accounted for the low scores obtained on the Accountability scale, and may represent a general area for improvement in Saudi training policies. However, the study confirms previous research, and found that accountability factors are one of the main factors in training policies which may support training system for high level of knowledge transfer. In addition it may influence trainees’ willingness to practice their new skills, especially for medium and low management levels.

The findings from this study extend research on knowledge transfer by providing descriptive patterns and understandings of knowledge transfer factors in Saudi labor market. Even though the managers perceive trainees to be involved in a variety of knowledge transfer, more information is needed to determine the proficiency of knowledge transfer individually. Thus, more efforts are needed to standardize the assessment of knowledge transfer practices in order to precisely measure each individual level of practice, and to be able to compare the results with other trainees.

The findings of this study revealed that HR managers perceived that performance is improved after training, especially as it relates to outcomes. However, the study showed the need to design appropriate training tools that can measure performance
changes after training. Without such tools, HR and training professionals may find it difficult to attribute changes in trainee performance to a specific training program.

Managers are instrumental in training practices in several ways. The study’s interviews revealed that management support and follow-up practices are used for two purposes: to support knowledge transfer and performance improvement, and for accountability purposes, to push trainees to be committed to practice their new skills in a specific manor. Management Support was the second highest rated training factor in the quantitative portion of the study. However, management support practices differed across managerial levels; survey findings suggest that companies provided less support in the middle and low managerial position than the high position. That means more practices in management support are needed specifically in these two managerial levels.

This study did not address every training factor, training transfer, or performance improvement research question. However, this study provides a sense of direction and ideas for future research. In particular, it appears that the study’s findings can provide a baseline to improve the shortage in the training accountability practices and develop an accountability training policy that supports the other factors: Training Needs Assessment, Training Program Review, Trainee Preparation, and Management Support. The policy may contribute to better knowledge transfer and performance improvement. It also contributes to evaluation methodology in that it provides a framework for measuring similar variables.

The current study is not a replication of any previous study, so it is not possible to compare previous findings with the current study’s findings. The current study attempted to describe the HR managers’ perception on specific training factors that are scattered in
previous studies and research. Table 19 to some extent shows the previous research findings compared to the above findings.

Table 19

**Comparison of Current and Previous Research Findings**

<table>
<thead>
<tr>
<th>Current Study</th>
<th>Previous Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>53% of participants responding Agree and 42% responding Strongly Agree to the item (<em>The company gives the trainees opportunities to practice their new skills</em>).</td>
<td>Santos, A., &amp; Stuart, M. (2003) Respondents perceived a moderate-to-low level of line management involvement in discussion training needs, setting and reviewing development goals and providing coach and guidance developing manager encouragement any training.</td>
</tr>
<tr>
<td>69% of participants responding Agree and 23% responding Strongly Agree to the item (<em>The company gives the trainees opportunities to practice their new knowledge</em>).</td>
<td>62% of respondents reported that they were satisfied with the opportunities to use knowledge or skills.</td>
</tr>
<tr>
<td>57% of participants responding Agree and 26% responding Strongly Agree to the item (<em>The company follows-up with an after training action plan</em>).</td>
<td>18% of respondents were least satisfied with line management follow up and the levels of resources supports needed to effectively transfer training.</td>
</tr>
<tr>
<td>68% of participants responding Agree and 22% responding Strongly Agree to the item (<em>After training, trainees demonstrate new skills</em>).</td>
<td>47% of respondents reported not havening applied new skills or knowledge at some point.</td>
</tr>
<tr>
<td>68% of participants responding Agree and 22% responding Strongly Agree to the item (<em>After training, trainees demonstrate new skills</em>).</td>
<td>Axtell, Maitlis, and Yearta (1997) discuss essential elements in the evaluation of training in terms of trainee transfer (i.e., relevance or usefulness of the training to the students’ job or task, the principles of learning used, characteristics of the learner (self-efficacy, motivation, job involvement, ability), and managerial support (control or autonomy available on the job, climate).</td>
</tr>
<tr>
<td>57% of participants responding Agree and 19% responding Strongly Agree to the item (<em>After training, trainees provide creative solutions for specific problems</em>).</td>
<td>Casper (2005), Baldwin &amp; Ford (1988); Leifer &amp; Newstrom, 1980; Wexley &amp; Baldwin, 1986; Ford’s et al., 1992. Respondents who have higher degree of opportunities to practice have reported greater degree of transfer.</td>
</tr>
<tr>
<td></td>
<td>Saks (2002), about 40% of trainees fail to transfer immediately after training, 70% falter in transfer 1 year after the program.</td>
</tr>
</tbody>
</table>
Table 19–Continued

<table>
<thead>
<tr>
<th>Current Study</th>
<th>Previous Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>43% of participants responding Agree and 9% responding Strongly Agree to the</td>
<td>Broad and Newstrom (1992) suggested the following accountability-related mechanisms to increase transfer:</td>
</tr>
<tr>
<td>item (<em>The company gives trainees more responsibilities after training.</em>).</td>
<td>build transfer of training into supervisory performance standards</td>
</tr>
<tr>
<td>47% of participants responding Agree and 23% responding Strongly Agree to the</td>
<td>Colquitt, LePine, and Noe (2000); Casper (2005); Broad &amp; Newstrom (1992); Leifer &amp; Newstrom (1980); Noe</td>
</tr>
<tr>
<td>item (<em>The company selects trainees based on annual performance appraisal.</em>).</td>
<td>(1986). They indicated Career planning, motivation to learn, supervisory support, appropriate tools</td>
</tr>
<tr>
<td>50% of participants responding Agree and 29% responding Strongly Agree to the</td>
<td>encompasses job-related information, job aids were related to positively to learning transfer,</td>
</tr>
<tr>
<td>item (<em>The company assesses the trainee’s skills <em>before</em> selecting the training program.</em>).</td>
<td>Individuals assess their strengths and weaknesses</td>
</tr>
<tr>
<td>45% of participants responding Agree and 38% responding Strongly Agree to the</td>
<td></td>
</tr>
<tr>
<td>item (<em>The company explains to the trainee its expectations of how the training results would be used.</em>).</td>
<td></td>
</tr>
<tr>
<td>58% of participants responding Agree and 20% responding Strongly Agree to the</td>
<td></td>
</tr>
<tr>
<td>item (<em>The company provides trainees with job aids.</em>).</td>
<td></td>
</tr>
</tbody>
</table>

**Limitations**

The current study has some limitations. Despite a response rate of 65%, the sample describes a specific population, those that completed the survey and describes only their perceptions. It should be noted that perceptions are not the same as actual practices. Moreover, any generalizations made based on the results of this study should be made with care, as findings were gathered from a specific population, and other populations are likely to differ. Another limitation to this study is that the data consists primarily of HR or training department managers’ perceptions only. HR managers were the most appropriate participants for the purpose of this study because they are responsible for training and have the most understanding of entire company performance; nevertheless, surveying other company employees would have allowed for comparisons.
among groups and provided richer data. However, there are no quantified measures about the true knowledge transfer and performance improvement; it might be greater or lesser in the reality.

There are limitations in the time and scope of the training programs through which this study has been conducted. The study was limited to the knowledge transfer and performance improvement as a result of the training programs outputs in 2011. Hence, extra time for collecting data might affect the internal validity of the study. In addition, the study was based on the HR managers’ perceptions of knowledge and skills. The absence of criteria required to measure exemplary performance was a key limitation of the study and an important implication for further research. Including an additional segment in the study that explored types of training employees received during last year would have also added to the depth of the study.

**Recommendations for Training Program Evaluation**

Findings from this study benefits HR professionals providing empirical documentation of training factors that are currently performed as well as knowledge transfer and performance improvement factors. HR professionals can use the information obtained in this study to improve overall training and program evaluation by considering factors not included in traditional program evaluation methods like the Kirkpatrick Model. Ideally, the findings of this study will result in more companies developing well-fitting training policies that improve knowledge transfer and performance improvement.

**Recommendations for Future Research**

Further research is needed to clarify the results of this study related to accountability and knowledge transfer. One suggestion is to utilize a more refined
measure of accountability. Additional research should also explore other variables and how they relate to knowledge transfer and performance improvement.

One the other hand, previous studies mentioned that negative feedback could affect performance. The current study discussed the management feedback as a function of management support regardless of its type, positive or negative. Further research could also explore the effects of negative management feedback on knowledge transfer or performance improvement. To accomplish this, additional research employing quantitative and qualitative approaches, may provide greater clarity on the affects of accountability to training transfer and the impact of negative feedback on performance and employee career development.
REFERENCES


Human Resource Development Fund. (2007, April) Study of Internal Training Situation in Saudi Companies that supported by HRDF.


U.S. Department of Labor (DOL) Employment and Training Administration (ETA). Ensuring the Quality of Training Providers under the Workforce Investment Act (WIA).


Appendix A

Five Factor Survey of Training Policy Effectiveness
 pontosrih – مدير الموارد البشرية

1. اسم الشركة: 

2. القسم الذي تعمل به: 

3. المنصب الوظيفي: 

4. المجال أو الصناعة الذي تعمل فيه الشركة: 
  الصناعة ☐ 
  الكهرباء ☐ 
  التجارة ☐ 
  المقاولات ☐ 
  المالية / البنوك ☐ 
  النقل والتخزين ☐ 
  العناية الصحية ☐ 
  التعليم الخاص ☐ 
  أخرى ☐

5. عدد موظفي الشركة: 
  أقل من 50 موظف ☐ 
  50 - 99 موظف ☐ 
  100 - 199 موظف ☐ 
  أكثر من 200 موظف ☐

6. المستوى الوظيفي لمعظم المتدربين خلال عام 2011: 
  عالي ☐ 
  متوسط ☐ 
  موظفو إداريين أو عملاء ☐

7. المنطقة التي تعمل بها: 
  العربية ☐ 
  الشمالية ☐ 
  الشرقية ☐ 
  الجنوبية ☐

8. هل لديك سياسة تدريبية محددة: 
  نعم ☐ 
  لا ☐
القسم الثاني: الاستنتاج المتعلقة بالسياسات التربوية

الهدف من هذا القسم هو قياس المعايير المستخدمة عند اختيار المتدرب أو البرنامج التربوي

الرجاء الإجابة على الاستنتاج التالية.

إلى أي مدى ترى أن الحوارات التالية تناسب وتطبيق على شركتك؟

<table>
<thead>
<tr>
<th>شرط الإنترنت التربوي</th>
<th>مرشح للمواطن</th>
<th>مرشح غير مشخيص</th>
</tr>
</thead>
<tbody>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
</tbody>
</table>

1- التشريعة توضح لنفسها حول تطبيق الاستغلال من محتوى ونظم التشريعة.
2- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
3- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
4- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
5- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
6- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

7- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
8- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
9- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

10- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
11- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

12- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
13- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
14- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
15- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

16- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
17- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
18- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
19- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

20- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
21- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
22- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
23- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
24- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
25- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

26- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
27- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
28- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
29- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
30- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

<table>
<thead>
<tr>
<th>شرط الإنترنت التربوي</th>
<th>مرشح للمواطن</th>
<th>مرشح غير مشخيص</th>
</tr>
</thead>
<tbody>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
<tr>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
<td>يتم اختيار الموظف</td>
</tr>
</tbody>
</table>

1- التشريعة توضح لنفسها حول تطبيق الاستغلال من محتوى ونظم التشريعة.
2- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
3- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
4- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
5- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
6- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

7- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
8- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
9- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

10- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
11- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

12- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
13- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
14- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
15- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

16- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
17- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
18- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
19- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

20- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
21- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
22- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
23- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
24- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
25- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.

26- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
27- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
28- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
29- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
30- تشريعة تشريعات مختلطة كافية عن التشريعة التشريعي.
First Section: Individual Demographics

Please select the appropriate answer about you:

1. **Company name:**

2. **In which department do you work?**

3. **What is your position title?**

4. **In which industry do you work?**
   - [ ] Industrial and Manufacturing
   - [ ] Electricity
   - [ ] Trade
   - [ ] Construction
   - [ ] Financial and Banking
   - [ ] Transportation and Warehousing
   - [ ] Health Care
   - [ ] Private Education
   - [ ] Other:

5. **How many employees in the company?**
   - [ ] Less than 50 employees
   - [ ] 50 – 99 employees
   - [ ] 100 – 199 employees
   - [ ] 200 employees and more

6. **Most trainees’ managerial levels (position) who got training this year is:**
   - [ ] High
   - [ ] Middle
   - [ ] Low

7. **In which city do you work?**
   - [ ] Central region
   - [ ] Western Region
   - [ ] Eastern Region
   - [ ] Northern Region
   - [ ] Southern Region
8. Do you have a written training policy?

<table>
<thead>
<tr>
<th>Yes:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No:</td>
<td></td>
</tr>
</tbody>
</table>
Second Section: Policy Questions

The purpose of this section is to measure the company’s resources or criteria that are available and used to select a train or training program.

Please indicate how strongly you agree with the following statements.

<table>
<thead>
<tr>
<th>Q #</th>
<th>Need assessment</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The company selects trainees based on their job description</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>2.</td>
<td>The company selects trainees based on annual performance appraisal</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>3.</td>
<td>The company assesses the trainee’s knowledge before selecting the training program</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>4.</td>
<td>The company assesses the trainee’s skills before selecting the training program</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>5.</td>
<td>The company requires trainees to conduct performance self-evaluation</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>6.</td>
<td>Employees attended the training that fit our department needs for better performance.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trainee Preparation</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>The company explains to the trainee its expectations of how the training results would be used.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>The company provides the trainee with enough information about the training program.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
</tr>
<tr>
<td>9.</td>
<td>The company substitutes the assigned trainee with another employee to cover him during the training period.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
</tr>
<tr>
<td>Training Program Review</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>---------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>10. The company <strong>obtains a full information</strong> of the training program content before it starts.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>11. The company <strong>selects training programs</strong> based their <strong>effectiveness reports</strong> during the previous year.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accountability</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. The company requires an after training <strong>action plan</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>13. The company requires trainees to <strong>make a presentation</strong> after training</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>14. The company <strong>gives</strong> trainees <strong>more responsibilities</strong> after training</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>15. The company <strong>requires</strong> trainees to know <strong>how to fix problems</strong> after training</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management Support</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. The company <strong>provides</strong> trainees with <strong>job aids</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>17. The company <strong>gives</strong> the trainees <strong>opportunities to practice</strong> their new <strong>knowledge</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>18. The company <strong>gives</strong> the trainees <strong>opportunities to practice</strong> their new <strong>skills</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>19. The company <strong>follow-up after</strong> training <strong>action plan</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>
## Third Section: After Training

<table>
<thead>
<tr>
<th>Knowledge Transfer</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. After training, trainees <strong>share new knowledge</strong> with co-workers</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>21. After training, trainees <strong>demonstrate new skills</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>22. After training, trainees <strong>provide creative solutions</strong> for specific problems</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>23. After training, trainees <strong>initiate to assist</strong> their coworkers <strong>in solving problems</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>24. After training, trainees <strong>criticize work with full knowledge</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>25. After training, trainees <strong>suggest better changes</strong> in the work system</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Improvement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. Trainees <strong>perform new tasks in better ways</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>27. Trainees work <strong>mistakes are decreased</strong> after completing the training program</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>28. Trainees <strong>behaved positively</strong> after training</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>29. Trainees <strong>perform tasks faster</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>30. Trainee work <strong>outcomes were improved</strong></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>
Appendix B

Interview Protocols
Interview Protocols

Manager Interview Questions:

The interview questions will focus mainly on the research questions which are:

1. To what extent do conducting need assessment for selecting a trainee result in practicing what he or she has learned from the training program?
   i. What tools are used to assess the training needs?
   ii. How do these tools assist in describing the true needs?

2. To what extent does the trainee preparation affect knowledge transfer?
   i. How do you prepare trainees to go to training?

3. To what extent does the organization training accountability system affect knowledge transfer?
   i. To what extent trainees are accountable for transferring knowledge?

4. To what extent does management training support system affect knowledge transfer?
   i. How management support trainee before and after training?
   ii. What are the best available supportive tools are being used to encourage or support trainees to transfer knowledge?
Co-worker Interview Questions:

The interview will be conducted face to face in order to encourage the interviewee to provide the truth and make him feel comfortable during the interview process. Interview questions will include five main topics:

1. How does management support the trainee after before and after completing training?

2. How does management motivate trainee after completing training?

3. How does trainee practice his new skills?

4. How does trainee transfer new skills or knowledge to his co-workers?

5. What does affect trainee to transfer new skills?
Appendix C

Informed Consent
Western Michigan University
Interdisciplinary Ph.D. Program in Evaluation (IDPE)

Principal Investigator: Dr. Chris Coryn
Student Investigator: Fayez Shafloot
Title of Study: The Relationship Among Training Policy, Knowledge Transfer, And Performance Improvement: A Study of Private Sector Organizations in the Kingdom of Saudi Arabia

You are invited to participate in a research project entitled “The Relationship Among Training Policy, Knowledge Transfer, And Performance Improvement: A Study of Private Sector Organizations in the Kingdom of Saudi Arabia.” If you choose to participate, please complete a questionnaire entitled “HR Department Manager” Topics include your opinions on the training policy practices, knowledge transfer and performance improvement. It will take approximately 10 minutes to complete the questionnaire. You will be able to complete it today.

All the information collected from you is confidential. That means your name or other identifying features will not be used in any analysis or in any reporting of the research. Data will be reported only in aggregate form. All questionnaires will be retained for at least three years in a locked file, with only coded identifying marks, in the principal investigator’s office. Only the co-principal investigators will have access to the file.

Your participation in this research is voluntary. You may elect not to participate at any time, to not answer certain questions, or to request that your data not be included in the analysis without prejudice or penalty.

If you have any questions or concerns about this study, you may e-mail or call me: Fayez Shafloot at eval.p@hotmail.com (0568002211). You also may contact the director of the Interdisciplinary Program in Evaluation, Dr. Chris Coryn at (001) 269 387-5895 or chris.coryn@wmich.edu, the chair of the Human Subjects Institutional Review Board at (001) 269-387-8293, or the Vice President for Research at (001) 269-387-8298 with any concerns you have.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is more than one year old.

Your signature below indicates that you have read or had explained to you, or both, the purpose and requirements of the study and that you agree to participate.

Please Print Your Name

___________________________________
Participant’s signature

___________________________________
Date
Appendix D

Participation Request Letter
Participation Request Letter

Dear Sir/ Madam:

My name is Fayez Shafloot, and I am a doctoral student in the Interdisciplinary Ph.D. in Evaluation Program (IDPE) at Western Michigan University. I am conducting research for my dissertation about training policy effect on knowledge transfer in the private sector in Saudi Arabia.

The company has been randomly selected to participate in the study, and I am hoping that you will be willing to help me with my research. I encourage you to participate and complete the questionnaire, which should take approximately 5-10 minutes. If results of this study are published or presented, individual names and other personally identifiable information will not be used. All the information collected from you is confidential, which means your name or other identifying features will not be used in any analysis or in any reporting of the research.

All questionnaires will be retained for at least three years in a locked file, with only coded identifying marks, in Dr. Chris Coryn’s office. Only the co- principal investigators will have access to the file. Your participation in this research is voluntary, and you may select not to participate at any time or to not answer certain questions, without penalty.

If you have any questions in the meantime, please do not hesitate to contact me by e-mail me at eval.p@hotmail.com.

Best regards,

Fayez Shafloot
Appendix E

Human Subjects Institutional Review Board Approval
Date: December 9, 2011

To: Chris Coryn, Principal Investigator
    Fayez Shafroo, Student Investigator for dissertation

From: Victoria Janson, Interim Chair

Re: Approval not needed for protocol 10-11-24

This letter will serve as confirmation that the changes to your project "The Effects of Training Processes Evaluation on Knowledge Transfer" have been reviewed by the Human Subjects Institutional Review Board (HSIRB). Based on that review, the HSIRB has determined that approval is not required for you to add interviews and a survey to this project because you are studying processes and are not collecting personal information about individuals. Thank you for your concerns about protecting the rights and welfare of human subjects.

A copy of your protocol and a copy of this letter will be maintained in the HSIRB files.