

DISSERTATION

HUMAN RESOURCE DEVELOPMENT PRACTITIONERS' PERSPECTIVES ON
COMPETENCIES: AN APPLICATION OF AMERICAN SOCIETY FOR TRAINING
AND DEVELOPMENT (ASTD) WORKPLACE LEARNING AND PERFORMANCE
(WLP) COMPETENCY MODEL IN MALAYSIA

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ABSTRACT

HUMAN RESOURCE DEVELOPMENT PRACTITIONERS' PERSPECTIVES ON COMPETENCIES: AN APPLICATION OF AMERICAN SOCIETY FOR TRAINING AND DEVELOPMENT (ASTD) WORKPLACE LEARNING AND PERFORMANCE (WLP) COMPETENCY MODEL IN MALAYSIA

The intent of this research was to identify Malaysian Human Resource Development (HRD) practitioners' perceptions of competencies needed by HRD practitioners in organizations. The research was based on the American Society for Training and Development (ASTD) models for Workplace Learning and Performance (WLP) (Rothwell, Sanders, & Soper, 1999). The purpose was to assess the perceptions of Malaysian HRD practitioners in organizations regarding the importance of competencies for human resource development in organizational contexts.

This study employed quantitative, cross-sectional survey, and an existing ASTD competencies instrument. Organizations were chosen based on the Federation of Malaysian Manufacturer's (FMM) database. Data for this study were collected from 144 HRD practitioners from various organizations in Malaysia who successfully completed the web-based survey. Data were analyzed using descriptive statistics, Exploratory Factor Analysis, ANOVA, t-test, and Pearson correlation.

The findings of the study indicated that the Malaysian HRD practitioners perceived certain competencies as currently important and others as important in the future for their organization. The results were supported by a number of statistical findings with medium to small effect sizes. By using exploratory factor analysis, this study revealed that the Malaysian HRD practitioners perceived only 25 of the 52 competency items to be important. The results from this study have implications for the ASTD competency model and provide evidence that the competencies needed by employees and in organizations are changing over time.

Keywords: competencies, organization performance, human resource development.

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DEDICATION

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CHAPTER 1 : INTRODUCTION

The purpose of this research is to identify Malaysian Human Resource Development (HRD) practitioners' perceptions of competencies needed by HRD practitioners, based on the American Society for Training and Development (ASTD) models for Workplace Learning and Performance (WLP) developed by Rothwell, Sanders, and Soper (1999). This study provides empirical evidence for an understanding of human resource development in the workplace and organizations. This study will extend available knowledge on human resource development about the challenges and its impact on the success, future development, career planning, and competencies of HRD practitioners. In particular, this study used the ASTD competencies questionnaire as a benchmark for HRD practitioners to study what competencies are perceived important by HRD practitioners. Therefore, this chapter explains the background, conceptual framework, and methodology used in this study.

Background

As Malaysia moves into the post-industrial era, increasing demands for a supply of competent workers to stress effective education and preparation. To become global players, organizations need to provide workers with new and broader skills than ever before to meet the challenges of today's and tomorrow's workplace. The change in the

employment paradigm occurred due to globalization and a better understanding of how competent workers can reduce the costs of operation. According to McKelvey (2009) more employers are expecting their employees to have a college education as a marker of work skill and intellectual abilities (p. 53). The changes taking place in the workplace pose challenges to workers of all ages with regard both to continuous learning and the updating of competencies (Paloniemi, 2006, p. 439). Given these circumstances, it has become increasingly valuable for workers to develop and improve their competencies, skills, and work abilities systematically. Grubb and Ryan (1999) argued that individuals with education most likely have jobs, the capability to upgrade their motor skills and knowledge, or find jobs where they can use newly acquired competencies for pre-employment training, retraining, or remedial training. In this context, the meaning of learning in organizations, learning at work, acquiring knowledge and skills in the course of everyday learning and other informal learning and integrated forms of working and learning should become crucially important (Loogma, 2004, p. 576). It is understandable that these changes for workers occur in various ways and impact organizations worldwide, including Malaysia.

In Malaysia for the past few years, the economy and society have been undergoing changes as the result of technological progress, and altering industrial structures. The concept of socially useful work as a means of improving workers in a moral sense became a well-documented piece of human resource development. This concept of socially useful work can be translated to an understanding by organizations and top management of the nature of work in the workplace environment. The new trend is to transform knowledge, expertise, and skills of workers to prepare them to be more

competent employees and better suited to the job market. To work effectively and meet the requirements of jobs and organizations, workers must combine knowledge, skills, and other work-related capacities into specific competences actually needed (Loogma, 2004, p. 577). The situation is forcing Malaysia to shift from their current practices in human resources of training and development, to become more aware of trends in workforce competencies and their positive social and economic impacts.

Siikaniemi (2009) points out that the lack of a competent workforce is an ever-increasing challenge, which requires new ways to manage competence and employability of the personnel (p. 402). Competence and expertise are seen as one of the most valuable resources of individuals, organizations, and societies (Paloniemi, 2006, p. 439). As a result of workforce demand in industries, Malaysian national policies (such as the Third Industrial Master Plan (IMP3) (Malaysia Government, 2006), the Third Outline Perspective Plan (OPP3) (Malaysia Government, 2001), the National Economic Policy (NEP) (United Nations Development Programme, 2005), and others) have indicated indirectly of the challenges surrounding the issues of competencies in the workforce. Therefore, education has been responsive to the needs of human resource development by supplying competent graduates to the workplace. To strengthen education, it is mentioned in the OPP3, the Malaysian government emphasizes the need for fundamental realignment in the policies and strategies of human resource development for fulfilling the needs of industries (Malaysia Government, 2006). As nations develop, trained workers become indispensable to the achievement of national goals and education receives endorsements and support from the government and industries. Human resource professionals need to play an active and guiding role in enabling organizations to choose

its workers well, instill the employees with the proper responsibilities, support their growth, and respect their needs to achieve the organization's objectives (Long & Wan Ismail, 2008, p. 88).

To ensure that competent workers contribute to human resource development and minimize the competency gap between the academic environment and industrial needs, it is critical to analyze the perceptions of current HRD professionals in regards to their competency level. There is also a need for a high rate of participation of all stakeholders, including government, industries, and others, to close the competency gap and differences in perspectives. Organizations and workers should be aware of and prepared for the transition to workforce competency demands. It is important to narrow the difference gap in needed competencies because it will lead to more training and development for the workers. According to Vakola, Soderquist, and Prastacos (2007), the concept of competency lies in human resources that can provide a basic integration key of human resource activities such as selection and assessment, performance management, training, development and reward management (p. 260). There are a number of factors that influence change in the workforce including technological advances, changes in business practice, job turnover, and occupational mobility (Campbell, 1997, p. 281). For example, as technology develops at an increasing rate, some competencies become obsolete and others come into greater demand. Lin (2008) argues that as technology plays a key role in organizations, HRD professionals are expected to extend their traditional responsibilities and develop new sets of competencies (p. 96). Advancements in technologies have changed the nature of work and skill requirements (Peerapornvitoon, 1999, p. 1). Thus, flexible training and development programs capable of adapting to the

changing demands of the workforce markets can best support competent workers. This, in turn, will keep training and development programs relevant. Broader skill bases and more flexible training and development programs must be encouraged. Training and development programs should embrace the need for restructuring and shift away from the conventional forms of the theory based approach and instead focus more narrowly on work organizations and be more work-based related (Curtain, 1990). Thus, training and development programs in organizations are designed to align with workforce demand.

This study is designed to inform and balance between theory and practice regarding workforce competencies required for HRD practitioners. Thus, the purpose of this study is to examine the core competencies perceived by HRD practitioners. These findings are comparable to the other researchers' (Yang, 1994; Peerapornvitoon, 1999; Yoo, 1999; Chen, 2003) studies on the ASTD for Workplace Learning and Performance in the past few years. This study involves a survey of HRD practitioners to examine how workplace learning and performance can best contribute to human resource development. Ideally, when HRD perceptions of current experts are analyzed and made visible, any gaps between the current and future needs regarding workplace competencies are minimized.

The ASTD Workplace and Learning Performance competencies model by Rothwell, Sanders, and Soper (1999) was used as a benchmark in this study. It is the most comprehensive human resource development competency study that has been done in the United States. According to Yoo (1999) the ASTD Model for Workplace Learning and Performance is the most comprehensive and condensed HRD model, integrating the

Human Performance Improvement Model, Action Research Model, eight areas of High Performance Workplace, and seven sectors of the External Environment (p. 9). The model combines all elements from previous studies including workplace, learning, and human performance. This study replicates the study of the 1999 WLP Model and other studies conducted in Asia to provide data and direction to WLP practitioners in Malaysia.

Research Statement and Purpose of Research

Homer (2001) argued that workers' skills are probably the most important foundation for organizations because they impact on every aspect of the process (p. 59). Organizations, especially in Malaysia, have begun to restructure training and development programs at all levels in order to focus on competencies to meet local employers' needs in organizations and competitiveness. According to Siddique (2010), given the fact that Malaysia has faced growing competition from emerging destinations of international trade, it is crucial to enhance national competitiveness through reform and innovations (p. 40). This would include research, training and development, industrial and commercial, as well as organization needs. However to make all efforts successful, attention must be paid to the organization commitment. This lack of focus has resulted in the poor linkage of training and development programs with employers and in not having a basis for determining or organizing current programs, which focus on needs. Therefore this research is undertaken to seek and identify important relevant aspects in HRD competencies, in line with the needs of the present global job market in terms of human resources.

The purpose of this research is to identify Malaysian HRD practitioners' perceptions of necessary competencies needed by HRD practitioners in the organizations, based on the ASTD models for Workplace Learning and Performance (Rothwell et al., 1999). It also aims to assess the perceptions of HRD professionals in organizations regarding the impact and challenge of competencies for human resources development in organizational contexts. It will help HRD professionals to see the relevance of competencies to the world of work, improving the training and development programs, and influencing the future career choices and decisions of future educators. Through this study, the gap between current and future HRD competencies in Malaysia will also be analyzed. It is hoped that through this research, issues, challenges and recommendations put forward will further enhance better understanding for HRD professionals and the organizations.

Research Questions

To meet the study purpose, six research questions have been developed.

Descriptive Question

1. What are the competencies that the HRD practitioners in Malaysia perceive to be important as measured across the six competency groups (Analytical, Interpersonal, Technological, Business, Leadership, and Technical), seven roles (HRD Manager, HRD Analyst, Intervention Selector, Intervention Designer/Developer, Intervention Implementor, Change Leader, and Evaluator), and for each of the 52 competencies?

2. What competencies are perceived important by the HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand, as measured across the six competency groups, seven roles, and for each of the 52 competencies?

Difference Question

3. Are there differences between HRD discipline and HRD levels, in regard to competency groups?
4. Which of these different competencies are most needed by Malaysian HRD practitioners in manufacturing and non-manufacturing?

Associational Question

5. Are there significant correlations between the ratings of the HRD competencies in the three competency groups?
6. Are there significant correlations between the three competency groups (Main Competencies, Sub Competencies 1, and Sub Competencies 2) across the seven roles?

Significance of the Study

This study will help to distinguish the pattern of human resource development in terms of the competencies needed by the organization. Conducting this study may reveal the significance of HRD competencies needed by the organizations in several areas especially in analytical, technical, leadership, business, interpersonal, and technological competencies. This study was based on the comprehensive HRD competency model that reflected the latest trends and issues. The ASTD Workplace Learning and Performance

(WLP) model (Rothwell et al., 1999) is the most comprehensive human resource development competency model in the United States (Chen, 2003). The use of the ASTD WLP competency model helps in determining the competencies needed by areas, roles, and responsibilities of employees.

The findings of this research will benefit the stakeholders, especially HRD practitioners. This study can be a tool to detail which competencies are most needed by the workers before they enter the workforce. In addition, the human resource practitioner needs to frequently review the practice to realign with the organization objectives. Berge, Verneil, Berge, Davis, and Smith (2003) argued that to improve performance requires more efficient ways to identify, recruit, measure, and improve the training and education of the workforce (p. 43). Following this lead, they supported their argument by saying that the current and future success of an organization depends on competencies (p. 57). Thus, these findings can be the turning point to align the needs of stakeholders. Although the detailed findings will differ, the evaluation will improve workers competencies before entering the workforce market. However, the results are based on the perspective of experts and cannot be generalized to the future workforce in Malaysia because of the cultural differences.

Delimitation

The boundaries of this study will include its specific focus on the workplace learning and performance and perception of HRD practitioners in Malaysia. Although the findings of this study may be applicable to other countries and organizations, this study only focuses on data from the Federation of Malaysian Manufacturers (FMM). This helps

in narrowing the study's focus to a manageable scope. This study examines the competencies for workers in organizations from the perspective of HRD practitioners.

Limitation/ Assumption

In this quantitative study, the findings could be subject to the respondent's perspective. This study is based on a series of questionnaires to seek information about HRD competencies. The study is limited to a population of Malaysian HRD practitioners. Therefore, the results should not be generalized beyond the Malaysian HRD practitioner's sample.

The scope of this study was limited to the Malaysian HRD practitioner's experience and knowledge. It is assumed that the results are from their perceptions of the information requested through the survey. All participants are HRD professionals who work in various organizations. Thus, some of the perceptions are based on HRD professionals' views of their working organization. Moreover, some of the participants may be responsible for other job descriptions or responsibilities than HRD, such as management, which could alter their perceptions.

Definitions of terms

A combination of ASTD definitions (McLagan, 1989) and ASTD WLP definitions (Rothwell et al., 1999) were used to clearly define this study.

1. Competency

“An area of knowledge or skill that is critical for producing key outputs.

Competencies are internal capabilities that people bring to their jobs; capabilities

which may be expressed in a broad, even infinite, array of on-the-job behavior “
(McLagan, 1989, p. 77).

2. Human Resource Development (HRD)

“The integrated use of training and development, organization development, and career development to improve individual, group, and organizational effectiveness” (McLagan, 1996, p. 6).

3. Learning

“The process of acquiring new knowledge and skills, changing behavior or attitudes on developing new ways of thinking, and inventing new approaches”
(Rothwell et al., 1999, p. 120).

4. Organization Development

“Assuring healthy inter-unit and intra-unit relationships and helping groups initiate and manage change” (McLagan, 1989, p. 6).

5. Training and Development

“Training focuses on identifying, assuring, and helping develop, through planned learning, the key competencies that enable individuals to perform their current job” (McLagan, 1989, p. 9).

6. Workplace Learning and Performance (WLP)

“The continuing process of helping individuals, groups, and organizations to realize progressive change in the workplace through planned and unplanned learning for dual purpose of improving human performance and balancing individual and organization needs” (Rothwell et al., 1999, p. 121).

Conceptual Framework

The conceptual framework of this study is based on the ASTD competency model for Workplace Learning and Performance developed by Rothwell et al. (1999). The purpose of this conceptual framework is to illustrate the new direction of the HRD field, and to identify the roles and competencies related with workplace learning and performance. Based on the model there are a total of 52 competencies listed from the six categories. These 52 competencies are categorized into six competency groups. Table 1.1 shows the competency groups and the 52 competencies' descriptions based on the six competency groups. Table 1.2 shows the seven roles and associated competencies.

Table 1.1

Six Competency Groups and Associated Competencies (Rothwell et al., 1999, p. 52-53)

Competency Group	Competency Description
Analytical Competency	<ol style="list-style-type: none"> 1. Performance Gap Analysis 2. Analytical Thinking 3. Competency Identification 4. Workplace Performance, Learning Strategies, and Intervention Evaluation 5. Standard Identification 6. Model Building 7. Performance Theory 8. Analyzing Performance Data 9. Intervention Selection 10. Organization Development Theory and Application 11. Training Theory and Application 12. Staff Selection Theory and Application 13. Reward System Theory and Application 14. Career Development Theory and Application 15. Knowledge Management 16. Social Awareness 17. Process Consultation 18. Work Environment Analysis 19. System Thinking
Technical Competency	<ol style="list-style-type: none"> 1. Survey Design and Development 2. Questioning 3. Facilitation 4. Intervention Monitoring 5. Adult Learning 6. Feedback
Leadership Competency	<ol style="list-style-type: none"> 1. Diversity Awareness 2. Ethics Modeling 3. Leadership 4. Buy in/Advocacy 5. Visioning 6. Group Dynamics 7. Goal Implementation

Table 1.1 (Continued)

Competency Group	Competency Description
Business Competency	<ol style="list-style-type: none"> 1. Industry Awareness 2. Knowledge Capital 3. Cost-Benefit Analysis 4. Project Management 5. Evaluation of Results Against Organizational Goals 6. Ability to See the “Big Picture” 7. Identification of Critical Business Issues 8. Business Knowledge 9. Quality Implication 10. Negotiating/Contracting 11. Outsourcing Management
Interpersonal Competency	<ol style="list-style-type: none"> 1. Interpersonal Relationship Building 2. Communication Networks 3. Coping Skills 4. Consulting 5. Communication
Technological Competency	<ol style="list-style-type: none"> 1. Technology Literacy 2. Computer Mediated Communication 3. Distance Education 4. Electronic Performance Support Systems

Note: Used with permission. ASTD Model for Workplace Learning and Performance (1999).
 Alexandria, VA: American Society for Training and Development

Table 1.2

Seven Roles and Associated Competencies (Rothwell et al., 1999, p. 57-59)

Competencies	Roles						
	Manager	Analyst	¹ Selector	² Designer	³ Implementer	⁴ Change Leader	Evaluator
Analytical Competencies							
Analytical Thinking	X	X				X	X
Analyzing Performance Data			X	X		X	X
Career Development Theory and Application	X		X	X		X	
Competency Identification	X	X					
Intervention Selection			X	X			
Knowledge Management	X		X	X		X	
Model Building		X		X		X	
Organization Development Theory and Application	X		X	X		X	
Performance Gap Analysis	X	X	X				X
Performance Gap Theory	X	X	X	X		X	X
Process Consultation	X				X	X	
Reward System Theory and Application	X		X	X		X	
Social Awareness	X	X				X	
Staff Selection Theory and Application	X		X			X	
Standards Identification	X	X		X		X	X
Systems Thinking	X	X	X	X		X	X
Training Theory and Application			X	X	X	X	
Work Environment Analysis	X	X				X	X
Workplace Performance, Learning Strategies, and Intervention Evaluation				X	X	X	X
Business Competencies							
Ability to See the “Big Picture”	X	X				X	X
Business Knowledge	X	X				X	
Cost/Benefit Analysis	X		X				X
Evaluation of Results Against Organizational Goals	X					X	X
Identification of Critical Business Issues	X	X	X			X	
Industry Awareness	X	X	X	X		X	
Knowledge Capital	X					X	X
Negotiating/Contracting	X						
Outsourcing Management	X		X			X	
Project Management	X			X		X	
Quality Implication	X	X	X			X	X

Table 1.2 (Continued)

Competencies	Roles						
	Manager	Analyst	¹ Selector	² Designer	³ Implementer	⁴ Change Leader	Evaluator
Interpersonal Competencies							
Communication	X	X	X	X	X	X	X
Communication Networks	X	X	X	X	X	X	X
Consulting	X		X		X	X	
Coping Skills	X	X			X	X	
Interpersonal Relationship Building	X	X	X	X	X	X	X
Leadership Competencies							
Buy-in/Advocacy	X		X		X	X	
Diversity Awareness	X		X	X	X	X	
Ethics Modeling	X	X	X	X		X	
Group Dynamics	X	X			X	X	
Leadership	X					X	
Visioning	X					X	
Goal Implementation	X					X	
Technical Competencies							
Adult Learning			X	X	X	X	
Facilitation	X				X	X	
Feedback	X					X	X
Intervention Monitoring					X	X	X
Questioning		X					X
Survey Design and Development		X		X			
Technological Competencies							
Computer-Mediated Communication	X		X	X	X	X	
Distance Education			X	X			
Electronic Performance Support Systems			X	X	X		
Technological Literacy	X	X	X	X	X	X	X

¹ Intervention Selector² Intervention Designer and Developer³ Intervention Implementer⁴ Change Leader

Note: Used with permission. ASTD Model for Workplace Learning and Performance (1999). Alexandria, VA: American Society for Training and Development

Researcher's perspective

The researcher's perspective for this study is derived from the belief that HRD practitioners should become more competent in their work to ensure that their practice meets the changing needs of organizations. The challenges for development of HRD within organizations are becoming more grounded in theory and practice, rather than only practices. Today's HRD practitioners are more adaptable to new capabilities such as: analytical, business, interpersonal, leadership, technical, and technological, to practice new skills and high performance jobs that acquire competency. In other words, I believe HRD practitioners should become more competent and practical in organizations because it will increase the workers' and organization's performances. Aligned with that belief, the researcher considers this study to be conducted from the perspective of pragmatism. Pragmatism confronts issues, dilemmas, or problems by tracing their respective practical consequences (McClellan, 2007, p. 439). It is important to see that the results of this study will benefit organizations and higher learning institutions indirectly. Biesta and Burbules (2003) point out that pragmatism provides a different way to think of the relationship between theory and practice and, more specifically, the relationship between research and practice (p. 107). This study attempts to give insights into the competencies for Malaysian HRD practitioners based on the ASTD Models for Workplace Learning and Performance. This study will examine perspectives of the HRD practitioners in various industries. The findings will provide a better understanding of the roles and competencies for Malaysian HRD in future.

CHAPTER 2 : LITERATURE REVIEW

The purpose of this literature review is to analyze the research on competency for Human Resource Development practitioners. This chapter presents the theoretical and empirical literature on Human Resource Development (HRD), Workplace Learning and Performance (WLP), and Competency. More specifically, this chapter discusses the related studies on ASTD competency. The literature review is organized into three sections. The first section of this review of literature begins by discussing about HRD, the HRD definition, and transition to WLP. The second section is a review on WLP, and its definition. Section three will cover competency, the competency model, and at the end of this review is a summary of previous studies on competency.

Human Resource Development

The terminology of human resource is divided into two categories containing human resource development and human resource management. Some researchers (Siikaniemi, 2009) distinguish between human resource development and human resource management. In contrast, other researchers (Haslinda, 2009) place the human resource management under the umbrella of human resource development. In many cases, the different definition can be helpful in terms of segregating the function. Human resource management is defined as a strategic and coherent approach to the management

of an organization's most valued assets; the people working there whom individually and collectively contribute to the achievement of its objective (Armstrong, 2006, p. 3).

McLagan (1989) defined human resource development as an integrated use of training and development, organization development, and career development to improve individual, group, and organizational effectiveness. With the same perspective, Smith (2004) points out that human resource development is concerned with enhancing the work-related knowledge, skills, and capability of people working as individuals, in teams, and in organizations (p. 149). While others agree that workplace performance is the defining paradigm for human resource development and they encourage learning as a defining paradigm for the field (Watkins & Marsick, 1995; Cummings & Worley, 2005). Human resource development improves performance through the integrated use of three major practice areas: training and development, career development, and organization development. This means that the workers need to develop an ability to transfer their knowledge and skills from one situation to another (Trim, 2003). Therefore, the workers or individuals need to develop an ability to transfer what they have learned from one situation to another situation.

Furthermore, the human resource development also focuses on training and development. As seen in many cases in organizations, training and development focus on the progress of the individual, primarily through planned learning experiences. In the past, formal classroom training programs comprised the majority of human resource development activities and the terms "training" and "development" were often used synonymously. At present, human resource development has evolved to a broader focus on improving workplace learning and performance by developing human potential.

Human resource development is moving away from a process identity, which defined the field by a single intervention tool and delivery mechanism for training, to an outcome identity employing a broad tool kit of performance enhancing interventions and strategies. Formal classroom training is declining in importance as human resource development is pressured to respond to the new workplace with more effective and efficient tools. One of the tools that can be used to address the relationship between HRD with individuals and organizations' performance is competencies. Heffernan and Flood (2000) said that competencies could potentially be used to integrate and link an organization's main HR process such as recruitment, training and development, performance management and rewards with the organization business strategy (p. 130).

Transition from Human Resource Development to Workplace Learning and Performance

The transition terminology from HRD to WLP occurs so that the practitioners focus more on human performance and other roles. According to Yoo (1999) the transition is more of a focus from training to human performance improvement, which extends to the roles of HRD practitioners who need to provide a variety of solutions not limited to training and development (p. 16). The shift of focus from HRD to WLP occurs since organizations are increasingly emphasizing more knowledgeable workers and higher performance. The history of HRD started when employers developed the belief that workers needed a training and development process to improve their performance. Rothwell et al., 1999 indicates that training and development equip workers with the knowledge and skills needed to carry out useful work (p. 5). Training and development helps organizations to meet their vision, mission, and objective by equipping workers

with skills and knowledge. As training and development evolve, the functions also expand to make workers more productive. Therefore, human resource and development terms become more practical. Rothwell et al., (1999), describe how practitioners use the term HRD to emphasize the relationships between employer efforts and employee performance through learning experiences (p. 6).

To encourage and facilitate HRD in organizations, human performance improvement (HPI) has been developed. HPI is a process to analyze human performance in organizations. According to Rothwell et al. (1999), HPI is the systematic process of discovering and analyzing important human performance gaps, planning for future improvements in human performance, designing and developing cost-effective and ethically justifiable interventions to close performance gaps (p. 6). Workplace learning and performance (WLP) replaced HPI and captured attention because HRD activities, such as training and development, moved and were replaced by ways to fulfill results. Additionally, the shift from HRD to WLP was also to accomplish competitiveness through knowledge. Rothwell et al., (1999), remarks that WLP is the integrated use of learning and other interventions for the purpose of improving individual and organizational performance (p. 8). Table 2.1 details the change in terms of the use from HRD to WLP.

Table 2.1

Change in Major Terms in the WLP Paradigm (ASTD, 1994, p. 35)

Old Terms	New Terms
Trainee	Learner
Employee	Performer
Continual change	Transformation
The transfer model of learning	The social model of learning
Training events	Self-directed learning on job
Big training departments	Outsourcing training
Control	Empowerment
Individual workers	Teams
School age education	Lifelong learning
Big companies	Small Companies
The invention of new training technology	The application of training technology

Workplace Learning and Performance

Workplace learning and performance (WLP) can be viewed from the perspective of learning as improvement tools. In the organizational context, WLP happens for the purpose of balancing between improving workers and organization performance.

According to Rothwell (2002) WLP is the new name for the field once called training and development (T&D), human resource development (HRD), and human performance improvement (HPI). WLP was designed to stimulate a shift toward bridging the gap between activity and results. WLP consists of two basic models: the WLP process model and the WLP discipline model.

Workplace Learning and Performance Process Model

The Workplace Learning and Performance (WLP) Model was first introduced by Rothwell in 1996. The model then developed and changed to meet the needs of

organizations. In 1999, Rothwell, Sanders, and Soper come out with the latest WLP model. Yoo (1999) pointed out that WLP models are based on four foundations consisting of: human performance improvement, action research model, internal environment, and external environment. Figure 1 shows the relationships among various processes in the WLP. The first circle represents the HPI process. WLP uses the HPI process to improve human performance. The second circle is the action research process. Rothwell et al. (1999) remarked that the action research model is useful when thinking about how learning and performance improvement occur within organizations (p. 14). The third circle is the high-performance workplace process. Workers and organizational performance can only take place when organizations support the process. All of these processes from first to third circle, are driven by the external environment. Rothwell et al. (1999) indicates that all organizations, workers and individuals learn and perform against the backdrop of an external environment (p. 15).

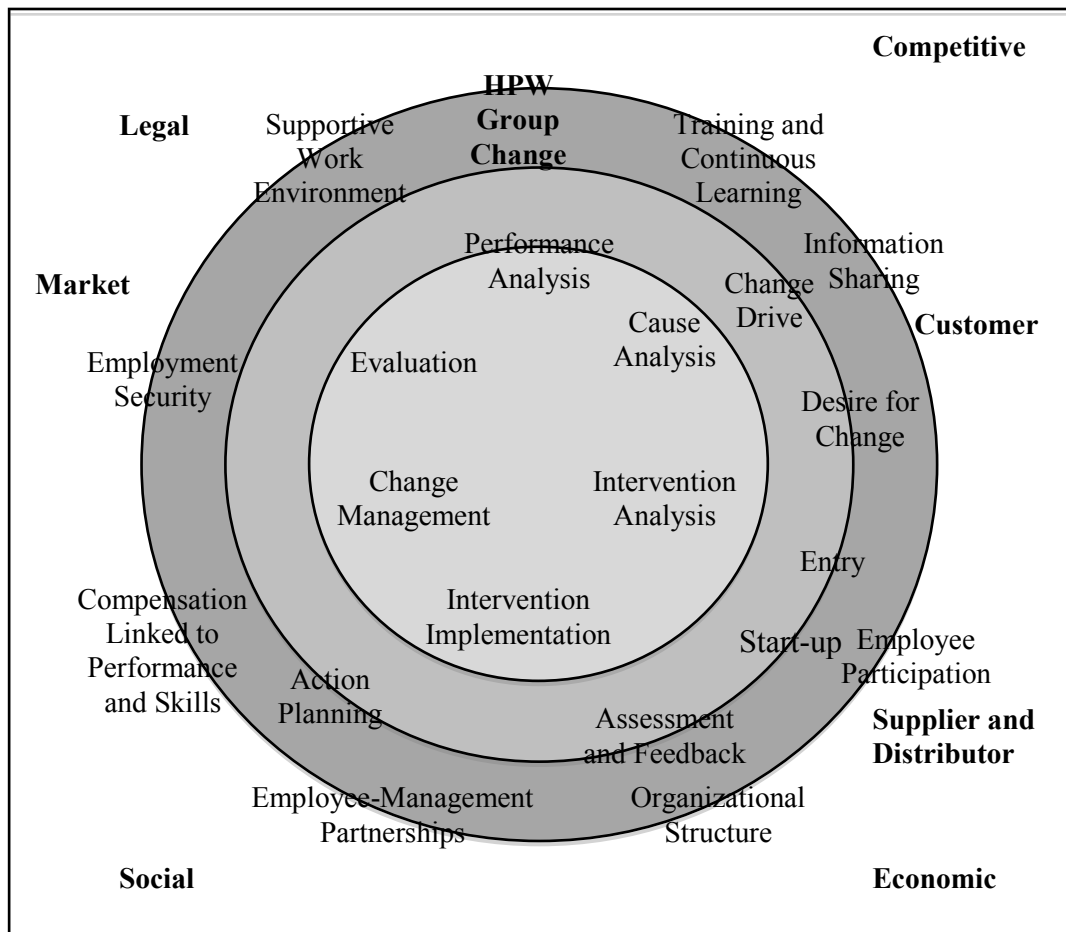


Figure 2.1 *A Model for WLP (Rothwell et al., 1999)*

Competency

In today's highly competitive workforce environment, competencies of workers are a key element in shaping organizational development. Competencies have proven to be a tool to improve human resource development and organizational performance that focuses on individual performance or competencies. According to McLagan (1989) competencies are internal capabilities that people bring to their jobs, capabilities, which may be expressed in a broad, even infinite, array of on-the-job behavior (p. 77). Even though there is no exact evidence recording when these competencies are being used, the

ASTD claim that Pinto and Walker conducted the first published HRD competency study in 1978. Bernthal et al. (2004) indicate that Pinto and Walker conducted a study named: *A Study of Professional Training and Development Roles and Competencies*, the first published effort sponsored by ASTD in 1978 (p. 87). Since then, competencies have been one of the major components applied in evaluating worker's performance in real world work environments especially in HRD. Conlon (2004) indicates that HRD is one way for organizations to address the development of workplace competencies, through formal or informal methods (p. 285).

In recent years, competencies have emerged as the primary means of organizations to evaluate the abilities and job skills of workers. However, there is no prior establishment of standard guidelines, or universal job criterion, that can be used across different countries to evaluate workers' knowledge and skills in the workforce. Competencies are a form of progress, as a tool, or point of reference, which can be used to assess and evaluate worker's performance. Moreover, competencies have become one of the review tools to evaluate workers proficiencies in hard and soft skills. Several studies have been conducted to identify the impact of competencies in real jobs situations but with the different perspectives (Yang, 1994; Yoo, 1999; Chen, 2003; Kuijpers, Schyns, & Scheerens, 2006; Dewey, Montosse, Schroter, Sullins and Mattox, 2008; Morningstar, Kim, & Clark, 2008; Lee, 2009; Velde, 2009). Some of the researchers studied the impact of competencies in organizational settings such as Yang, 1994; Yoo, 1999; Chen, 2003; and Lee, 2009; while others were in different settings. For example, Kuijpers, Schyns, and Scheerens (2006) focused on the relationship between career competencies and career success. Dewey Montosse, Schroter, Sullins, and Mattox (2008)

explored the overlaps and disconnects between the competencies evaluators acquired during graduate school, and those required and desired by employers. In contrast, Morningstar, Kim, and Clark (2008) evaluated transition competencies gained by secondary practitioners involved in a transition teacher education program.

In research scope, there have been widely differing arguments and expectations regarding competencies between academia and practitioners. Academia believes that academic programs offered in higher learning institutions should focus on competency-based learning (Voorhees, 2002). Academia claims most programs offered in higher learning institutions have transitioned from a traditional teaching and learning approach to a focus on competency-based learning. According to Svensson, Ellstrom, and Aberg (2004), much of the knowledge and competence that organizations require and seek today can be found within the established educational system. Furthermore, educational programs are becoming outcome-oriented and curricula are being designed based on competencies (Sauber, Mc Surely, & Tummala, 2008). On the other side, practitioners claim the demand for competency-based learning comes from the new skill sets required by workers across industries. The work environment is rapidly changing due to a technology base that requires employers to hire competent workers. Nixon and Helms (2002) argue that technologies and alternative sources such as professionally designed materials, effective delivery, and tailored courses of education products allow for greater customization (p. 146). To ensure that the organization performs, employers invest more on training development programs to train competent workers. Competencies are outputs in the sense that they are performed as a consequence of training or other learning programs (Hoffman, 1999, p. 280). Parallel to the organization's development, training

will affect workers' competence and performance as well. Employees who experience training development at work show more career competence than employees who experience little or no training development (Kuijpers & Scheerens, 2006, p. 317).

Different Definitions of Competency

For many years, the term "competency" has been defined in numerous ways by researchers. In creating the definition of competency, it is valuable to see how the researcher's perspective affects the definition. It will help readers to understand more and see from the same perspective as the researcher. Many authors (McLagan, 1989; Rycus & Hughes, 2000; Boyatzis, 2007; Abel, 2008; Lee, 2009) define competency based on their research. According to Rycus and Hughes (2000), competency is defined, as a set of elements of knowledge and skills required for workers to effectively perform their jobs. Another researcher, Lee (2009) defines competency as a cluster of related knowledge, skills, abilities, and behavior patterns that affect a major part of a worker's job. While, Abel (2008) describes competency as a way to put into practice some knowledge in a specific context. Additionally, Boyatzis (2007) defines competency as an individual's capacity or ability of behavior organized around an underlying construct or intent. The most prominent of competency definitions is from McLagan (1989), who conducted the research and came out with the HRD model for the American Society of Training and Development, which defines competency as an area of knowledge or skill that is critical for producing key outputs.

In spite of various definitions of competency, the focus refers to an individual or worker's performance as related to organization performance in doing tasks or jobs.

Competencies can be seen as sets of behaviors, which characterize better performance in every aspect of an individual. The individual's competencies are demonstrated in everyday tasks, jobs, roles, functions, and duties in an organization. Thus, competencies are the key elements of professional success needed to support and sustain a strategic plan, vision, mission, and goal of an organization (Hoevemeyer, 2006, p. 19).

Purpose of Competencies

There are two types of competencies in general, i.e. individual competency and organizational competency. The individual competencies are essentially related to characteristics of the individual, whether he or she can be taught, trained, and contribute to workplace activities (Garavan & McGuire, 2001). Organizational competencies are the characteristics of organizations that are attributes of the work (Garavan & McGuire, 2001). Thus, the main focus of competencies in organizations is to validate the skill levels of workers. As a result, organizations will recognize new sets of skills, which need to be transferred to the workers. Competency also enhances the quality of individual and organizational performances. Hence, organizations are more aware of how to align worker's skills with the tasks given to ensure that they are competent to undertake the job effectively. Organizations require higher competency levels of knowledge and skills that respond to the specific requirements within professional practices (Sauber, McSurely, & Tummala, 2008).

Most research suggests that competencies should be incorporated within the workplace to promote competition among employees and improve productivity within organizations (Yang, 1994; Yoo, 1999; Chen, 2003; Lee, 2009). Even though the

researchers use a different competency model, it shows that workers' competency contributes to an organization's performance. In viewing the competencies, organizations can be more successful if they know how to integrate competencies throughout all aspects of workers' jobs, including career development, professional development, and performance management. An increased need for improved performance requires more efficient ways to identify, recruit, measure, and improve the competencies of the workforce. Therefore, many organizations are adopting a competency-based model to meet their goals and needs (Berge, Verneil, Berge, Davis, & Smith, 2002, p. 43).

ASTD Competencies Model

Malaysia needs to look forward to improve the strength of workers' competencies. This can be achieved by adopting and adapting the competencies model concept from the ASTD Model for Workplace Learning and Performance by Rothwell et al. (1999). However, there are many competency models that could be applied to Malaysian organizations. Part of the challenge is in choosing the right competency model to be applied to Malaysian settings. For this study, the American Society of Training and Development (ASTD) competency model was chosen because this model has been used and tested outside of the United States (Yang, 1994; Yoo, 1999; Chen, 2003). This model concept is one of the ways to test and ensure that human resource qualities in Malaysia are enhanced and improved. Many organizations are adopting competency-based models to meet their developing goals and needs (Berge, Verneil, Berge, Davis, & Smith, 2002, p. 44). The model also needs to work in conjunction with the organization's policies and vision because it tests the worker's competencies. While there are many competency models that could be applied to a local setting, the model

itself needs to be adjusted to meet the purpose. The model can be utilized as a platform for an organization to deduce the best plan for the development of current and future workers. Investing to develop the competency levels of people is one of the most powerful ways to demonstrate to employees that they are genuinely valued, respected, and trusted (Black, 2001, p. 29).

For many years, the ASTD competency model was developed and used in the United States as a guideline in hiring employees and to provide better training and development (Pinto & Walker, 1978; McLagan, 1989; Rothwell, 1996; Smith, 2008). The competency model helps guide an organization in the hiring and selection process by selecting applicants who are already top performers in the profession (Smith, 2008, p. 446). The competency model provides the basic competencies for the employees to enhance their performances as they move into better career positions in the organization. The ASTD Competency Model defines what workers need to know and do to be successful in the organization by doing an assessment on their competency at the job. Figure 2.2 shows the ASTD competency model that encompass the cluster of skills, knowledge, abilities, and behaviors required for success across all WLP jobs (Bernthal et al., 2004). In addition, Bernthal et al. (2004) also remark that this competency model serves as an excellent resource for professional growth and development, and it is comprehensive enough to guide career development at all levels of the profession, and it covers a wider spectrum of roles than any previous ASTD model. In the context of learning and performance, the model tries to balance strategic, financial, and business goals of organizations with the interests of the people who are doing the work (Weinstein, 2005, p. 3).

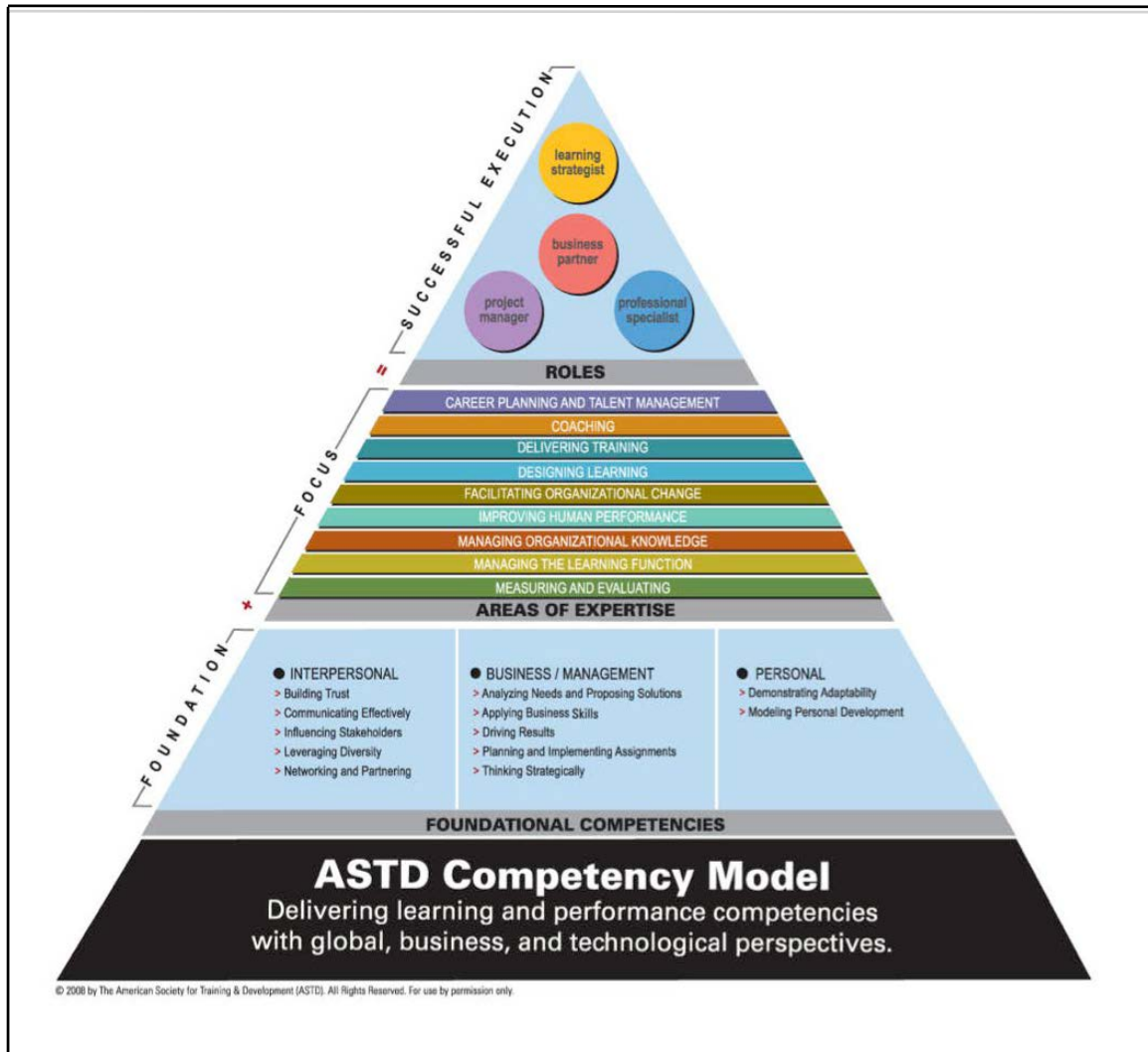


Figure 2.2 *ASTD Competency Model* (Bernthal et al., 2004).

Before professional development can take place, and even before a competency model can be developed, it is important to know what workers actually do (Pinto and Walker, 1978b). Thus, to obtain a better outlook on how this competency model works outside of the United States, it is important to merge the model with Malaysian organizations' culture and views from the management perspective. The culture of Malaysian organizations, especially in management, has been seen as hierarchical. Characteristic of a typical Malaysian management style is to maintain the "Malaysian

cultural values of saving face and maintaining harmonious relationships” (Ahmad, 2005, 0. 26).

Studies on Competencies

The ASTD has sponsored six studies of practitioner roles and competencies related to HRD in the past (Bernthal et al., 2004, p. 83). The studies include: (a) A study of professional training and development roles and competencies (Pinto & Walker, 1978), (b) Models for excellence (McLagan & McCullough, 1983), (c) Models for HRD Practice (McLagan, 1989), (d) ASTD Models for human performance improvement (Rothwell, 1999; 2000), (e) ASTD Models for Learning Technologies (Piskurich & Sanders, 1998), and (f) ASTD models for workplace learning and performance (Rothwell, Sanders, & Soper, 1999). Pinto and Walker (1978) conducted a study to define the basic skill, knowledge, understanding, and other attributes required for professionals to have effective performance in training and development activities (p. 2). McLagan (1983) conducted a study to identify a boundary of training and development and explore the training and development field in terms of competencies, roles, and output. While in 1989, McLagan developed a model of HRD consisting of five major components: (a) HRD definitions, (b) future force for HRD work, (c) outputs of HRD work, (d) quality requirements for outputs, and (e) ethical issues facing HRD professionals. In contrast, Rothwell (1996) performed a study to lay the foundation of Human Performance Improvement (HPI). There were five major outputs from the study: (a) definition of HPI, (b) key area trends, terminal outputs of HPI work, and enabling output, (c) core competencies of HPI and roles of HPI professionals, and (d) ethical

issues affecting HPI work (Rothwell, 1996). Rothwell, et al. in 1999, conducted the most recent study in HRD competencies. The output from the study included: (a) definition of WLP, (b) 52 competencies, six groups of competency, and seven roles of WLP. Table 2.2 summarizes the studies done in the United States.

Table 2.2
Summary of Representative HRD/WLP Competencies Studies (Chen, 2003, p. 32)

	1978	1983	1989	1996	1999
Year					
Researcher	Pinto & Walker	McLagan	McLagan	Rothwell	Rothwell, Sanders, & Soper
Report Title	A Study of Professional Training & Development Roles and Competencies	Model of Excellence	Model for HRD Practice	ASTD Models for Human Performance Improvement: Roles, Competencies, and Outputs	ASTD Models for Workplace Learning & Performance
Focus Area	Training & Development	Training & Development	Human Resource Development	Human Performance Improvement	Workplace Learning & Performance
Results	91 activities in 14 categories	31 Competencies, 102 Outputs, 15 Roles, 9 Human Resource specialty area	35 Competencies, 74 Output, 11 Roles, 13 Ethical issues, Quality requirements for each outputs	38 Competencies, 4 Roles, 15 ethical issues, 27 Future force	52 Competencies, 6 Group, 7 Roles

Since then, most of the researchers (Yang, 1994; Yoo, 1999; Chen, 2003) who conducted studies on HRD used the same competency model until the ASTD developed a new competency model in 2004.

A Study of Professional Training and Development Roles and Competencies

Pinto and Walker in 1978 conducted the first competency study for the ASTD to investigate basic competencies in training and development. The study was sponsored by the ASTD and it was presented in their conference as a framework for future research. Pinto and Walker (1978) described the purpose and objective of the study was to define basic skills, knowledge, understanding, and other attributes that effect the performance activities of training and development for HRD professionals (p. 2). Basically, the initial survey conducted by Pinto and Walker for HRD professionals consisted of 403 questionnaire items. However, after revision and review by the panels selected by ASTD, the final questionnaire consisted of only 92 items. All of the items were multiple choice. The questionnaire was then sent to 14,028 ASTD members and the response rate was around twenty percent. After analyzing all of the questions, 14 activities were identified as the primary area for training and development.

Models for Excellence

McLagan conducted a study in 1983 on the training and development field. McLagan tried to define training and development in its current and future direction. The study tried to find the similarities and differences in training and development from other specialty areas. Additionally, McLagan also sought out what knowledge and skills are important for workers in workplace. The objective of the study was to detail an update definitions of excellence in the training and development field and to be used as a standard for performance and development

of HR professionals (McLagan, 1983, p. 2). McLagan established the format for training and development managers and practitioners including a human resource wheel, a definition of training and development, a list of 34 future forces expected to affect the training and development field, 15 training and development roles, 102 critical outputs for the training and development field, 31 training and development competencies, four role clusters, and a matrix of 15 roles to 31 competencies (Bernthal et al., 2004, p. 87).

Models for HRD Practice

McLagan updated the competencies study in 1989 by doing the study on “Model for Excellence”. In five years, the focus on training and development had shifted to human resource development. McLagan updated the human resource development functions for future forces in human resource development work, organization development, and career development. McLagan also identified a list of competencies required by the HRD professionals. The objective of the study was to identify future forces, the HRD output, quality requirements, ethical issues, competencies of knowledge, skills and abilities, and future roles for HRD professionals.

ASTD Models for Human Performance Improvement: Roles, Competencies, and Outputs

Rothwell conducted research on competencies in 1996 to identify the new roles and outputs for human resource development. Rothwell determined that

Human Performance Improvement (HPI) was perceived as important to HRD practitioners, managers, and employees in the study. Therefore, the HPI was used as a basis for the study. According to Bernthal et al. (2004), the study scope includes definition of HPI, finding trends in five key areas, describing fourteen terminal outputs of HPI work and 81 enabling outputs, pinpoints fifteen core and 38 supporting competencies of HPI, summarizing four roles of HPI, and identifying sixteen key ethical issues affecting HPI. Based on expert opinions, Rothwell reported that the HPI is a process and not a discipline.

ASTD Models for Workplace Learning and Performance

Human resource development competencies shifted from HPI to Workplace Learning and Performance in 1999. Rothwell et al. conducted the research on HRD competencies to focus on WLP, combining workplace, learning, and human performance improvement (Yoo, 1999). The research used a systematic process to analyze a performance and response to workers and organizational needs. Rothwell et al. (1999) remarked that WLP creates positive, progressive change within organizations by balancing human, ethical, technological, and operational considerations (p. 121). According to Bernthal et al. (2004) the research used a three-fold methodology that compared perceptions of a cross-cultural mix of practitioners, senior practitioners, and line managers to identify 52 competencies (p. 84).

Perceived competencies needed by HRD managers in Korea

Yang's (1994) study focused on investigating existing human resource development competencies for Korean HRD managers. This study also examined the required expertise levels perceived by Korean HRD managers. The author developed six research questionnaires based on ASTD competency questionnaires by McLagan and Suhadolnik (1989). The central question focused on competencies that were perceived important by HRD manager in Korea. The purpose of the study was to analyze the gap between current and required expertise levels of HRD managers in HRD competencies. The researcher used a fully quantitative study in this research. The original instruments used were from the ASTD competency study (McLagan & Suhadolnik, 1989). The researcher claimed that the instrument was selected because the reliability from a previous study with Korean trainers showed that the reliability obtained was quite high, .90 and .94 respectively. A total of 350 questionnaires were sent out and 248 (81.3%) respondents replied.

The researcher segregated the findings into several sections such as demographic, importance, gap analysis between required and current competencies levels, differences across demographic information, and a comparison of HRD between Korean and American HRD managers. Factor analysis was used to categorize the 42 competency items into eight categories. The results showed no significant correlation with one another. However, there was a significant difference between the required and current expertise levels at $p < .001$. The results of the comparison between Korean and American HRD

competencies showed only two competencies were perceived important by both groups. These competencies are: training and development theories and techniques, and information searching skills.

Korean human resource development (HRD) practitioners' perceptions of expertise level and importance of workplace learning and performance (WLP) competencies

Yoo's (1999) study discussed Korean HRD practitioners' perceptions of WLP competencies. It also sought to identify the most needed competencies for workers. The researcher outlined the three purposes of the study, which were to analyze the perceptions of expertise in current and future competencies, analyze differences in perception across HRD fields, and identify the most needed competencies of Korean practitioners. The main question was on the perspective of current Korean HRD practitioners' perceived expertise levels of competencies. The study was fully quantitative. The instrument used in this study was based on the WLP competency list from ASTD Models for WLP developed by Rothwell et al. (1999). In addition, the instrument was translated and revised for use in a Korean setting. A total of 400 questionnaires were sent out, with the respondent rate of 218 (54.5%).

In the findings, the researcher segregated the results based on the research questions. In demographic information, the research reported that the overall reliability of coefficients using Cronbach's Alpha for 52 competencies tested was .94. The reliability result was satisfactory as reflected by the survey instruments. The results of MANOVA showed no significant difference in current importance

and future importance across years of professional experience in HRD fields. Results from Pillai's test and the MANOVA univariate F-test also revealed no significant difference in perceptions for six competency groups ($p > .05$) and the seven roles ($p > .05$). However, there was a significance difference in current expertise and current importance for six competency groups at a level of $p < .001$ for paired t-test results. The paired t-test result on means between the current expertise and current importance for all seven roles showed a significant difference at the $p < .001$.

A survey of workplace learning and performance: Competencies and roles for practitioners in Thailand

Peeprapornvitoon's (1999) study discussed Thailand WLP competencies in regards to practitioners' perceptions on HRD competencies. The study identified and rank-ordered the perception of present and future competencies for Thai HRD. The study examined correlations between practitioners with different disciplines in Thailand. Peeprapornvitoon developed seven research questions based ASTD Models for WLP developed by Rothwell et al. (1999). The target populations for this study were Thailand WLP practitioners. The study covered about 586 respondents, which was estimated using the computer program (REXX) at Pennsylvania State University. The researcher modified the questionnaire to adapt it to Thailand's setting. A total of 255 questionnaires were returned, which was over a 43 percent response rate.

The findings showed high agreement on the present and future importance of competencies, competency groups, and roles of WLP. Paired t-test results

revealed significantly higher means for the future for competencies, competency groups, and roles. Results of ANOVA revealed a few competencies with a significant difference in present and future levels within organizations. The Spearman Rank-Order showed a significant correlation between Thai practitioners and competency groups.

Perceptions of Taiwan practitioners on expertise level and importance of workplace learning and performance (WLP) competencies

Chen's (2003) study discussed Taiwan WLP competencies in regards to practitioners' perceptions. The purpose of the study included analyzing the perception of current expertise, current importance, and future importance of competencies, the different disciplines in competencies, and most needed competencies at present and in the future in Taiwan. The conceptual framework used for the study was taken from the ASTD Model for Workplace Learning and Performance developed by Rothwell, et al. (1999). Based on this model, there are 52 competencies identified by experts of the ASTD, which are needed by practitioners in the WLP field. The researcher used a fully quantitative research design. The target populations for the study were Taiwan WLP practitioners. The study covered about 870 respondents, estimated using a sample size calculation. The survey instruments used were a combination from Rothwell, et al. (1999) and Yoo (1999). The researcher modified the questionnaire to adapt it into Taiwan's setting. The researcher set three main dependent variables including current expertise, present importance competencies, and future importance competencies.

However, the independent variables are varied from the work discipline with three levels.

E-mail was used as a medium to send the questionnaires. A total of 266 questionnaires were returned, which is about 24.2 percent of questionnaires sent out. The findings showed that the reliability coefficient (Cronbach's Alpha) for the 52 competencies was .99. The result of the ANOVA F-test of the three dependent variables showed a statistically significant difference in perceived current expertise ($F = 8.62, p < .001$), and in current importance ($F = 5.27, p < .01$) across the different disciplines. Therefore, the post-hoc Scheffe was employed, and conversely, the F values were not significant when the researcher further examined the two dependent variables. The paired t-test results between current expertise and future importance showed significance at the $p < .001$ levels. The Pearson's correlation showed a high correlation between current importance and future importance of competencies (Pearson's $r = .72, p < .001$). Lastly, regression analysis was used to investigate the relationship between perceived current importance and perceived future importance of competencies. The result was significant ($p < .001$) and therefore the null hypothesis was rejected.

Comparisons between past studies

Based on the studies discussed above, it was found that most of the researchers had a similar perspective on competencies, even though the research had different scopes and questions on in each of the studies. Even though the studies were replicated over time, there are lessons that can be learned for use in future studies. All studies reviewed stressed how important it is that the research instruments are validated again even though

they are replication studies. Generally, the studies showed patterns in conducting replication research and the methods to help other interested researchers to study the steps.

Table 2.3 shows a compilation of the past studies to compare and contrast between several categories that were used by the researchers. Reviewing these past studies suggests that the findings support each other. It is agreed that competencies are the main variable by which to evaluate job performance across fields of employment. Stakeholders such as workers, graduates, higher learning institutions, and organizations that significantly support the job skills in HRD have been tested and verified in all of the studies selected for this paper. If the researcher can establish a link between competency development and organization performance, then it follows that certain types of competencies will be simultaneously adding to worker skills and behaviors while others will be defining the organization's capabilities (Murray, 2003, p. 306).

Table 2.3

Comparison between Past Studies on Competencies

Source / Year	Research Topic / Area	Research Problems	Research Questions	Method / Procedures	Analysis	Outcome
Study 1 Chen (2003)	Topic: Perceptions of Taiwan Practitioners on Expertise Level and important of Workplace Learning and Performance (WLP) Competencies Area: Competencies Evaluations	To identify how the Workplace Learning and Performance (WLP) practitioners in Taiwan perceive the important of WLP competencies needed at the present time, as well as its importance over the next five years.	1. What are the current levels of expertise of WLP practitioners in Taiwan, as measured across the six competency groups, the seven roles, and for each of the 52 competencies? 2. What competencies are perceived to be currently important by Taiwan WLP practitioners, as measured across the six competency groups, the seven roles, and for each of the 52 competencies? 3. What competencies are perceived to be important by Taiwan WLP practitioners, as measured across the six competency groups, the seven roles, and for each of the 52 competencies? 4. Is there any difference among current expertise, current importance, and future importance in terms of different WLP disciplines? 5. Which competencies are most needed at the present time and in the near future? 6. Is there any relationship among current importance, and future importance of the WLP competencies, and if yes, what effect does one variable have on the other?	Sample s were 1100 Taiwanese WLP professionals. Random sampling was used. Survey instrument using 5-point Likert Scale The instrument used is the ASTD Models for Workplace Learning and performance (Rothwell, Sanders, & Soper, 1999) The instrument was validated by Chinese-American bilingual WLP professionals since it was translated to Mandarin (Taiwan) language. In total, 266 usable questionnaires are returned, which is about 24%.	Based on the research questions, analyze were done using these methods: 1. Descriptive statistics to find Means and Standard Deviations. Presented in rank order. 2. Descriptive statistics to find Means and Standard Deviations. Presented in rank order. 3. Descriptive statistics to find Means and Standard Deviations. Presented in rank order. 4. One-way ANOVA, and Post Hoc tests. 5. Paired t-test 6. Pearson correlation and linear regression analysis.	The research shows that Taiwanese WLP practitioners perceived communication competencies, interpersonal related competencies, and the role of intervention implementer of being the most important competencies not only for the present but for the future as well.
Study 2 Yoo (1999)	Topic: Korean Human Resource Development (HRD) Practitioners'	To identify Korean HRD practitioners; perceptions of necessary competencies	1. What was Korean HRD practitioners' currently perceived expertise level, as measured across the six competency groups, seven roles, and for each of the 52 competencies? 2. Which competencies were perceived	Samples were 400 Korean HRD practitioners Stratified random sampling was used. Survey instrument using 5-point Likert Scale	Based on the research questions were analyzed using these methods: 1. Means and Standard Deviations	The study found that Korean HRD practitioners' perceptions about current and future importance

	Perceptions of Expertise Level and Importance of Workplace Learning and Performance (WLP) Competencies Area: Workplace Learning and Performance Competencies	at the present time and in five years, based on the ASTD models for Workplace Learning and Performance.	to be currently important by Korean HRD practitioners across the six competency groups, seven roles, and for each of the 52 competencies? 3. Which competencies were perceived to be important in the next five years by Korean HRD practitioners across the six competency groups, seven roles, and for each of the 52 competencies? 4. Are there any differences among current expertise, current importance, and future importance in terms of years of professional experience in the HRD field? 5. Which competencies are most needed at the present and in the near future?	The instrument used is the ASTD Models for Workplace Learning and performance (Rothwell, Sanders, & Soper, 1999) The instrument was validated by Korean-American bilingual HRD professionals since it was translated to the Korean language. In total, 229 usable questionnaires are returned. This is about 57.25%.	2. Means and Standard Deviations 3. Means and Standard Deviations 4. Multivariate one-way ANOVA (MANOVA), and Paired t-test. 5. Paired t-test	showed a high level of agreement regardless of years of professional development in the HRD field. Technology related competencies and the role of the evaluator were perceived as the most needed now as well as in the next five years.
Study 3 Peeraporn Vitoon (1999)	Topic: A Survey of Workplace Learning and Performance: Competencies and Roles for Practitioners in Thailand Area: WLP Competencies	To identify competencies and roles of WLP that are necessary to present and future job success for practitioners in Thailand	1. What competencies, competency groups, and roles of WLP are perceived to be important now and in five years by WLP practitioners in Thailand? 2. Are there any differences in the importance of competencies, competency groups, and roles of WLP as perceived now and in five years by Thai practitioners? 3. What competencies, competency groups, and roles of WLP are perceived to be important now and in five years by Thai practitioners of different discipline within WLP? 4. What competencies, competency groups, and roles of WLP are perceived to be important now and in five years by Thai practitioners of different level within organizations? 5. Do any significant differences exist between Thai practitioners with different disciplines in WLP as to the present and	Samples were 586 Thai HRD practitioners Simple random sampling was used. Survey instrument using 5-point Likert Scale The instrument used is the Workplace Learning and Performance Competency Questionnaire (Rothwell, Sanders, & Soper, 1999) The instrument was counter-translation for content validation since it was translated to the Thai language. In total, 255 usable questionnaires are returned. This is about 43.52%.	Based on the research questions were analyzed using these methods: 1. Frequency, Means, and Standard Deviations 2. Paired sample t-test 3. Means and Standard Deviations 4. Means and Standard Deviations 5. One-way ANOVA and Scheffe post hoc 6. One-way ANOVA and Scheffe post hoc 7. Spearman Rho correlation	The research shows that high agreement on Thai perspective practitioners in the importance of WLP competencies to job success. It is also shown that computer-mediated communication and technology literacy are ranked to be important to future job success.

			<p>future importance of competencies, competency groups, and roles of WLP?</p> <p>6. Do any significant differences exist between Thai practitioners with different levels within organizations as to the present and future importance of competencies, competency groups, and roles of WLP?</p> <p>7. Are there any relationships between Thai practitioners within different disciplines and at different level within organizations as to the rank order of the present and future importance of competency groups and roles of WLP?</p>			
Study 4 Yang (1994)	Topic: Perceived Competencies Needed by HRD Managers in Korea Area: ASTD Competencies.	To identify HRD competencies and the expertise levels needed by Korean HRD managers for developing both current and potential HRD manager and their organizations.	<p>1. What are the perceptions of Korean HRD manager on the importance, required expertise levels, and current expertise levels of HRD managers in several areas of competencies?</p> <p>2. What competencies are perceived to be important by HRD managers in Korea?</p> <p>3. What expertise level is perceived to be needed for each competency by HRD managers in Korea?</p> <p>4. What expertise level each competency is perceived to be currently possessed by HRD managers in Korea?</p> <p>5. What are the gaps between desired and current expertise levels in competencies of HRD managers in Korea?</p> <p>6. Are there any differences in importance, required expertise level, and current expertise level across managerial position?</p>	<p>Samples were 350 Korean HRD managers</p> <p>Stratified random sampling was used.</p> <p>Survey instrument using 6-point Likert Scale and 4-points Likert Scale.</p> <p>The instrument used is the ASTD competency study (McLagan & Suhadolnik, 1989)</p> <p>The instrument was validated by 2 Korean experts since it was translated to the Korean language.</p> <p>Instrument was counter-translation by researcher's advisor.</p> <p>In total, 248 usable questionnaires are returned which is about 81.3%.</p>	<p>1. Means and Standard Deviations</p> <p>2. Paired t-tests.</p> <p>3. MANOVA and ANOVA.</p> <p>4. Independent t-tests.</p>	The result from the study shows that there were few differences in required and current expertise levels of HRD competencies among Korean HRD managers'.

Summary of the Literature

The literature shows that competencies are important in a variety of ways to employees and organizations. Competencies are one of the most effective tools and approaches of the organizations to place the employees in the right position within the organization. The competencies focus more on employees and organizational performances. Once the organization has the employees in the right position, the organization has opportunities to track future career development. Having clearly defined competencies also makes the employees more effective and reduces job inefficiencies. Thus, the competencies will benefit the employee skill sets and the organization's performance.

There have been a large number of competency studies involving practitioners and organizations in the literature. Many of these studies involved participants from the various HRD perspectives in their country. Thus, by comparing studies from different countries and seeing the relationships, a pattern of the current and future competencies can be predicted. The purpose of this study is to identify Malaysian HRD practitioners' perceptions of important competencies needed by HRD practitioners in their organizations, based on the ASTD models for Workplace Learning and Performance. Having a better understanding of competencies and being able to identify the importance of competencies will be beneficial to not only employees, but also to the organization.

CHAPTER 3 : METHODOLOGY

The purpose of this research is to identify Malaysian Human Resource Development (HRD) practitioners' perceptions of necessary competencies needed by HRD practitioners, based on the American Society for Training and Development (ASTD) models for Workplace Learning and Performance (WLP) developed by Rothwell, Sanders, and Soper (1999). This study provides empirical evidence to understand human resource development in the workplace and organizations. This study extends available knowledge on human resource development about the challenges and its impact on the success, future development, career planning, and competencies of HRD practitioners. In particular, this study used an ASTD competencies questionnaire as a benchmark for HRD practitioners to study what competencies are perceived important by HRD practitioners. Therefore, this chapter explains the methodology used in this study. This is a quantitative study and the survey was chosen as the main data collection instrument in this study.

This chapter also describes the procedure used to conduct the survey and collect the data, including population and samples, instrumentation, variables, and statistical procedures, and data collection and analysis of the research.

Research Method and Design

This study was conducted using a fully quantitative research design survey method because the study provides a numeric description of opinion of a population. Creswell (2009) points out that survey research provides a description of trends, attitudes, or opinions of a population by studying a sample of that population (p. 12). The study is non-experimental in design, as this does not require any changing or manipulation of the variables. A survey was determined as an appropriate approach for gathering data and information about the variables in this study because it can be generalized from a sample to a population so that inferences can be made about the same characteristics of the population. This survey design is Cross-sectional because the survey information was collected at one point in time, which reflects current attitudes, opinions, or beliefs (Creswell, 1994). In addition, Creswell (2008) remarks that survey designs are procedures in quantitative research in which researchers administer a survey to a sample or the entire population of people to describe the attitudes, opinions, behavior, or characteristics of the population (p. 388).

Population and Sample

The target population for this study is Malaysian human resource development (HRD) practitioners. Since the target population for this study was limited to those who are involved in HRD, the participants were drawn from various HRD/HRM related associates in Malaysia. The designation may vary among organizations. The HRD practitioner's job could include training and development, organization development, management development, career development, or human resource management. The lists of names associated with HRD were gathered from the Malaysian Institute of

Human Resource Management (MIHRM). However, since MIHRM does not have a list of names of the companies associated with HRD practitioners, MIHRM suggested using the list from the Federation of Malaysian Manufacturers (FMM).

The FMM is a private sector economic organization in Malaysia. Established in 1968, FMM represents over 3,000 manufacturing and industrial service companies. FMM has been recognized as a leading voice of the industry in Malaysia. Therefore, the mailing list consisting of member names of the companies in Malaysia was obtained from the FMM website. The FMM website listed approximately 2,400 companies as their members. Based on the population, a sample size was determined using a Krejcie and Morgan (1970) table for determining sample size from a given population. Using the table, the sample size for this study is 331 participants. In contrast, Dillman, Smyth, and Christian (2009) argued that to determine the size of a completed sample, a researcher has to take into account (1) how much sampling error can be tolerated within a given confidence level, (2) the amount of confidence one wishes to have in the estimates, (3) how varied the population is with respect to the characteristic of interest, and (4) the size of the population from which the sample is to be drawn (p. 55). Therefore, the required sample size was determined based on these factors including the pilot study, response rate, and calculation.

Variables

This study used the same ASTD Workplace Learning and Performance competency study conducted by Rothwell et al. (1999). Therefore, the independent

variable and dependent variable in this study were the same as those in the previous study.

Independent Variable

The independent variable in this study was WLP discipline and current levels of WLP practitioners within the organization. The discipline variable included: training, organization development, management development, human resource management, career development, generalist, and other. The levels were executive, manager, supervisor, entry, private consultant, and other.

Dependent Variable

The dependent variable in this study was: (1) current importance and (2) future importance of the six competency groups, seven roles and each of the 52 WLP competencies. The six competency groups included: analytical, business, interpersonal, leadership, technical, and technological. The seven roles were: manager, analyst, intervention selector, intervention designer, and developer. The 52 competencies details are described in Table 1.1 and Table 1.2.

Instrumentation

The original survey instrument was based on the ASTD study that was designed to be the instrument for conducting a study for HRD professionals in the United States of America. It was modified by other researchers (Pinto & Walker, 1978; McLagan, 1989; Rothwell, 1996; Rothwell et al., 1999) to suit their own study purposes. Pinto and Walker (1978) modified the survey to study professional training and development roles and competencies. McLagan (1989) modified it to meet the purpose of human resource

development, while Rothwell et al. (1999) focused on workplace learning and performance. The latest survey instrument used was based on a WLP competency list from the ASTD Model of Workplace Learning and Performance developed by Rothwell et al. (1999). This study used the same survey instrument with additional revision because it was tested outside of the United States. Because the survey instrument was modified, the researchers asked for permission and received consent to use and modify it from the original authors and ASTD. The additional revision was necessary because it involved differences in background and culture.

The current study applied a survey research methodology by administering e-mail questionnaires to gather quantitative data. It used a survey questionnaire designed and developed by Rothwell et al. (1999). The survey instrument used an online delivery system known as Qualtrics. The survey instrument consists of a total of 52 questionnaires that cover all six-competency categories including Analytical, Business, Interpersonal, Leadership, Technical, and Technologies (Appendix A). It consists of two parts: (1) Part 1: Demographics including gender, age, highest degree, current position, and year of involvement in HRD and (2) Part 2: Competencies based on the 52 WLP competencies from the ASTD Model for Workplace Learning and Performance. In addition to answering quantitative questions, participants were also given the opportunity to answer one open-ended question regarding additional competencies suitable to be applied in organizations. The instruments used a five-point Likert scale to evaluate self-reported expertise and to answer the questions. Wood (2002) explained that simple straight forward ratings have an advantage because it is easy for participants to consider

scales from best to worst, or from worst to best. The level of measurement and type of variables for the instruments vary as explained below:

Level of measurement

Level of measurement used five-point Likert scales:

1 = Less important now, Less important in five years; 2 = More important now, Less important in five years; 3 = Equivalent importance for now and in five years; 4 = Less important now, More important in five years; and 5 = More important now, More important in five years.

Measurement

WLP discipline is a nominal variable and consists of six categories:

1 = Training; 2 = Organization development; 3 = Career development; 4 = Management development; 5 = Human resource management; 6 = Generalist; and 7 = Others.

Practitioner level

Practitioner level is a nominal variable and consists of six categories:

1 = Executive; 2 = Manager; 3 = Supervisor; 4 = Entry; 5 = Private consultant; and 6 = Other.

WLP roles

WLP roles are interval data categorized into seven roles:

(1) HRD Manager; (2) HRD Analyst; (3) Intervention selector; (4) Intervention designer and developer; (5) Intervention implementor; (6) Change manager; and (7) Evaluator.

WLP competencies

WLP competencies are interval data categorized into six grouping:

(1) Analytical competencies; (2) Technical competencies; (3) Leadership competencies; (4) Business competencies; (5) Interpersonal competencies; and (6) Technological competencies.

Translation of the Original Instrument

Considering that English is not the first language in Malaysia, the researcher translated the survey instrument into the Malay language (Appendix B). Behling and Law (2000) indicated six techniques to translate an existing instrument: (a) Simple direct translation, (b) Modified direct translation, (c) Translation/ back-translation, (d) Ultimate test, (e) Parallel blind technique, and (f) Random probe technique.

In simple direct translation, a researcher translates the instrument from the source into the target language. Behling and Law (2000) argued that the simple direct translation is a practical technique and can obtain results quickly and cheaply. Modified direct translation uses a panel of experts as a reference to review the translation. Most of the time, researchers will meet twice with the panel of experts and discuss the modifications made. Another technique that is usually used is translation/ back-translation. Douglas and Graig (2007) indicated that this technique is used to provide insights into potential errors when no other means were available to assess the accuracy of the translation (p. 30).

Translation/ back-translation have four cycles that must be followed. The process requires two translators who work independently. Behling and Law (2000) describe the process:

1. A bilingual individual translates the source language instrument into the target language.
2. A second bilingual individual with no knowledge of the wording of the original source language document translates this draft target language rendering it back into the source language.
3. The original and back-translated source language versions are compared.
4. If substantial differences exist between the two source language documents, another target language draft is prepared containing modifications designed to eliminate the discrepancies. (pp. 19-20).

After reviewing all the translation techniques and the literature, the researcher decided to use a combination of simple direct translation and the translation/ back-translation techniques for the survey instrument. Simple direct translation is a translation tool that Qualtrics provides to translate the survey from English to other languages, i.e. Malay. After the translation process, the researcher used translation/ back-translation to verify and reduce semantic, conceptual, and normative errors in the first translation. Furthermore, the translation/ back-translation technique showed a high number score in criteria of usefulness. Table 3.1 shows the criteria such as informativeness, source language transparency, security, and practicality that are being used to evaluate the translation techniques. In addition, Su and Parham (2002) indicated that achieving

equivalence between the source version and the target version of an instrument is critical in translation and involves not only lingual, but also cultural considerations (p. 582). To overcome this situation, the researcher must be considerate of the target culture.

Table 3.1

The six techniques meet the four criteria for a useful technique (Behling & Law, 2000)

	Informativeness	Source Language Transparency	Security	Practicality
Simple Direct Translation	Low	Low	Low	High
Modified Direct Translation	Medium	Medium	Medium	Low
Translation/Back Translation	High	High	Medium	Medium
Parallel Blind Technique	Medium	Medium	Medium	Medium
Random Probe	Medium	Low	Low	High
“Ultimate” Test	High	Low	High	Low

Approval Procedures

In order to conduct a survey for this study, the researcher needed to gain permission. There were two types of permission needed for the study, one was the permission from the original authors (Appendix C) and the American Society for Training and Development (ASTD) (Appendix D), and the other was approval from the Institutional Review Board (IRB) of Colorado State University (Appendix E). To use the ASTD models for WLP competencies questionnaire and adapt the information from the ASTD book, the researcher obtained written permission from the authors and the ASTD publisher. For survey instruments, an electronic cover letter serving as a consent letter

was sent together for all respondents who took the survey (Appendix F). Permission from FMM was not necessary because the e-mail address was from the FMM web site and it is open to public access.

Pilot study

For the pilot study, a small number of random samples of HRD practitioners ($n = 30$) were used as a sample. Johanson and Brooks (2009) suggested that 30 representative participants from the population of interest is a reasonable minimum recommendation for a pilot study where the purpose is a preliminary survey or scale development. The survey instrument used is an Internet survey tool name Qualtrics. The purpose of the pilot was to test the online delivery system and gather feedback on the instruments used. The sample was randomly selected from the FMM listed companies. The pilot study was conducted in the end of 2010. The timeline was between two to three weeks. Participants' feedbacks were directed towards on the survey clarity, terminology and wording used, and the survey flow. The result of the pilot study showed unforeseen problems of using the web survey service by Qualtrics. Gliner, Morgan, and Leech (2009) point out that pilot participants should be asked about the clarity of the items and whether they think any items should be added or deleted (p. 209). Descriptive analysis was used to analyze the pilot study results. In addition, the pilot study participants also directly reflected the final study population. Moreover, the pilot test provided an indicator to the anticipated response rate (Farmer & Rojewski, 2001).

Validity and Reliability

Research validity refers to quality or merit of the whole study. According to Gliner, Morgan, and Leech (2009) validity is concerned with establishing evidence for use of a particular measure or instrument in a particular setting with a particular population for a specific purpose (p. 165). Even though the survey instrument for this study was used for other studies (Yang, 1994; Peerapornvitoon, 1999; Yoo, 1999; Chen, 2003), there was a need to check the instrument validity. In this study, face validity was used to assess the instruments' appearance; this was achieved by pilot testing the survey instrument and through a literature review of the research topics. In addition, two experts in the HRD field and the Malay language were appointed to verify the content validity and the translation process. Johnson and Christensen (2008) remarked that content validation is usually carried out by experts (p. 153). Construct validity was examined using literature to determine if the instrument was showing information to answer the research questions.

Cronbach's Alpha (α) coefficients were used to check for the internal consistency of the instrument. Gliner, Morgan, and Leech (2009) point out that if each item on the test has multiple choices, such as a Likert scale, then Cronbach's Alpha is the method of choice to determine inter-item reliability (p. 159). Additionally, Creswell (2009) remarks that reliability refers to whether scored items on an instrument are internally consistent, stable over time, and whether there was consistency in test administration and scoring. Blake (1999) also supports the argument by indicating that Cronbach's coefficient is a reasonable indicator of the internal consistency of instruments that do not have right or wrong marking schemes (p. 279).

Data Collection

Data collections for the sampling framework consisted of target responses from the sample of 331 HRD practitioners in Malaysia. The number of samples was based on a sample size table and the response rate. The list of participants was selected from the FMM list. Advance e-mails to the participants explaining the purpose of this study and three reminders were also sent. Since the survey instruments were done in Qualtrics, it was e-mailed to all participants in two phases because it was easy for researchers to monitor the progress. It included a cover letter, IRB permission to conduct the study, and the questionnaire. Participants were volunteers in this study and they were not forced to take the survey. The timeline for data collection was between two months. There were two phases to distribute the questionnaire. For each phase, the survey was e-mailed to approximately 1,200 respondents. The survey was distributed to 2,400 respondents although the useable respondents needed were around 331 HRD practitioners. By doing it in phases, it was easier for the researcher to manage and monitor the responses.

Data Analysis Plan

The data analysis was done in multi-stages and simultaneously with data collection. Standard, non-parametric statistics were used in the initial stage of data analysis for each question. The raw data were coded using a SPSS. A codebook was used to transfer the information into SPSS. It was segregated into various sections based on the research questionnaire such as: descriptive, correlation, regression, and analysis of variance. The Cronbach's Alpha (α) coefficients were used to determine the internal consistency reliability of the scores for individual competency, groups competency, and total competency score for the instrument. The results gave the researcher an indication

of how consistent the instrument was as a whole. Blake (1999) remarked that the best indicator for evaluating individual items is the item-total correlation, which is defined as the correlation between the individual response score for the item and the total score on the instrument (p. 280). In contrast, Gliem and Gliem (2003) argued that Cronbach's Alpha reliability coefficient's acceptable values are 0.7 to be considered of good internal consistency. Therefore, the researcher benchmarked the item-total correlation and the value of 0.7 as a reference when doing the analysis. Exploratory Factor Analysis was conducted to measure the construct.

Descriptive statistics methods were used to analyze the demographic information. Based on the findings, mean, standard deviation and ranking were calculated and tabulated to analyze the characteristics and distribution. Demographic information was divided into two categories, i.e. personal information and organization information. The personal characteristic information questions are questions one through six, and the questions included HRD discipline, current level, years of experience, level of education, age, and gender. The organization characteristic information consists of three questions, including type of business, numbers of employees, and type of organization. Data are displayed and presented using tables and graphs where possible. A summary of the variables used and analysis techniques for each of the research questions are shown in Table 4. To meet the study's purpose, six research questions for this study were developed.

The first stage of the analysis compared the competencies between other studies using means and standard deviation. Then, a Factorial Analysis of Variance (Factorial

ANOVA) compared means between HRD disciplines and HRD levels in terms of competency groups. Next, Independent t-tests were used to see the gap of competencies of HRD practitioners in Manufacturing and Non-manufacturing. The Person Product Moment Correlation was used to see if there is a relationship between the competency groups in HRD practitioners' perspectives. Finally, an Independent t-test was used to investigate the difference between competency groups. The following statistical methods were selected and implemented to analyze the questions.

Demographic Profile: What are the characteristics of participants including HRD discipline, current level, years of experience, level of education, age, gender, type of business, numbers of employees, types of organization, types of education/training received, and roles?

Means, standard deviations, ranking, frequency, and percentage for each of the demographics were calculated and presented in a table or graph to identify the characteristics of Malaysian HRD practitioners. Exploratory Factor Analysis (EFA) was conducted to measure the construct.

Research Question 1: What are the competencies that the HRD practitioners in Malaysia perceive to be important as measured across the six competency groups (Analytical, Interpersonal, Technological, Business, Leadership, and Technical), seven roles (HRD Manager, HRD Analyst, Intervention Selector, Intervention Designer/ Developer, Intervention Implementor, Change Leader, and Evaluator), and for each of the 52 competencies?

Means and standard deviations for each of the six competency groups, seven roles, and 52 competencies were calculated and presented in rank order to identify the expertise of Malaysian HRD practitioners.

Research Question 2: What competencies are perceived important by the HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand, as measured across the six competency groups, seven roles, and for each of the 52 competencies?

Means and standard deviations for each of the 52 competencies were calculated and presented in rank order to identify the expertise of Malaysian HRD practitioners. The data was compared and ranked with data from Taiwan, South Korea, and Thailand.

Research Question 3: Are there differences between HRD discipline and HRD levels, in regard to competency groups?

Means, standard deviations, and Factorial Analysis of Variance (Factorial ANOVA) were used. Also, a post-hoc procedure was employed to identify statistical differences among groups.

Research Question 4: Which of these different competencies are most needed by Malaysian HRD practitioners in manufacturing and non-manufacturing?

Independent t-tests were used to see if there was a gap between manufacturing and non-manufacturing in competencies of HRD in Malaysia.

Research Question 5: Are there significant correlations between the ratings of the HRD competencies in the three competency groups?

Pearson's Product Moment Correlation coefficient was used to see if there is a relationship between current importance and future importance in six competency groups of HRD in Malaysia.

Research Question 6: Are there significant correlations between the three competency groups (Main Competencies, Sub Competencies 1, and Sub Competencies 2) across the seven roles?

Independent t-tests were used to see if there is a gap between the Competency Groups and the seven roles in competencies of HRD in Malaysia.

Table 3.2

Summary of Data Analysis Technique by Research Questions and Variables

Research Question	Variable (Measurement)	Analysis Technique
Demographic Profile: What are the characteristics of participants including HRD discipline, current level, years of experience, level of education, age, gender, type of business, numbers of employees, types of organization, types of education/training received, and roles?	<ul style="list-style-type: none"> • Demographic 	Mean, SD, Rankings, Frequency, Percentage
RQ1: What are the competencies that the HRD practitioners in Malaysia perceive to be important as measured across the six competency groups (Analytical, Interpersonal, Technological, Business, Leadership, and Technical), seven roles (HRD Manager, HRD Analyst, Intervention Selector, Intervention Designer/ Developer, Intervention Implementor, Change Leader, and Evaluator), and for each of the 52 competencies?	<ul style="list-style-type: none"> • Competencies • Competency Groups (Interval) • Roles (interval) 	Mean, SD, rankings.
RQ2: What competencies are perceived important by the HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand, as measured across the six competency groups, seven roles, and for each of the 52 competencies?	<ul style="list-style-type: none"> • Competencies • Competency Groups (Interval) • Roles (interval) 	Mean, SD, rankings.
RQ3: Are there differences between HRD discipline and HRD levels, in regard to competency groups?	<ul style="list-style-type: none"> • Competencies • Competency Groups (Interval) • Discipline (Nominal) • Levels (Nominal) 	Mean, SD, ANOVA
RQ4: Which of these different competencies are most needed by Malaysian HRD practitioners in manufacturing and non-manufacturing?	<ul style="list-style-type: none"> • Competencies 	Independent t-test
RQ5: Are there significant correlations between the ratings of the HRD competencies in the three competency groups?	<ul style="list-style-type: none"> • Competencies 	Person's correlation coefficient
RQ6: Are there significant correlations between the three competency groups (Main Competencies, Sub Competencies 1, and Sub Competencies 2) across the seven roles?	<ul style="list-style-type: none"> • Competencies 	Independent t-test

CHAPTER 4 : DATA ANALYSIS AND FINDINGS

The purpose of this research was to identify Malaysian Human Resource Development (HRD) practitioners' perceptions of competencies needed by HRD practitioners. The list of competencies was based on the American Society for Training and Development (ASTD) models for Workplace Learning and Performance (WLP) developed by Rothwell, Sanders, and Soper (1999). The results of the study are presented in this chapter, including descriptive findings from the survey, an analysis of the data, and a summary of the data analysis.

Research Questions

The data obtained by the research instruments were analyzed in relationship to the research questions. The following research questions regarding the perceptions of competencies needed by HRD practitioners in Malaysia helped guide this analysis process:

1. What are the competencies that the HRD practitioners in Malaysia perceive to be important as measured across the six competency groups (Analytical, Interpersonal, Technological, Business, Leadership, and Technical), seven roles

(HRD Manager, HRD Analyst, Intervention Selector, Intervention Designer/ Developer, Intervention Implementor, Change Leader, and Evaluator), and for each of the 52 competencies?

2. What competencies are perceived important by the HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand, as measured across the six competency groups, seven roles, and for each of the 52 competencies?
3. Are there differences between HRD discipline and HRD levels, in regard to competency groups?
4. Which of these different competencies are most needed by Malaysian HRD practitioners in manufacturing and non-manufacturing?
5. Are there significant correlations between the ratings of the HRD competencies in the three competency groups?
6. Are there significant correlations between the three competency groups (Main Competencies, Sub Competencies 1, and Sub Competencies 2) across the seven roles?

Demographic Profile

The respondents in this study were Human Resource Development (HRD) practitioners in Malaysia. A total of 2,357 online surveys were distributed and 172 (7.30%) respondents took the survey. Among the total, 28 (1.19%) were incomplete surveys and 144 (6.11%) were completed. The overall response rate for this study was about six percent. Although the response rate is considered low, it is acceptable. Kwak and Radler (2002) argued that studies have generally reported e-mail or web survey response rates ranging from 8.0 percent to 37.2 percent (p. 258). In contrast, Dillman,

Smyth, and Christian (2009) indicate that responses via the web typically ranged from 5.0 percent to 20 percent (p. 417).

Descriptive statistical analysis including frequencies and percentages were used to analyze and interpret this research question. The demographic profile of the respondents for this study is shown in Table 4.1. The primary discipline of the respondents was *Human Resource Management*. It showed that 40.3 percent of the respondents were in the *Human Resource Management* discipline, and 59.7 percent of respondents were in all other areas. Most of the respondents were at a *Manager* level in their organizations, 43.1 percent of the total sample. The demographics indicated that 29.2 percent have one to five years of experience and 28.5 percent had six to ten years. Most of the respondents had some type of formal education and about 54.9 percent of the respondents had a *bachelor's degree* as the highest level of education received. The ages of respondents ranged from 25 and under to over 65. Respondents between the ages of 46 to 55 years (43.1%) were the most frequent age group in this study. There were 87 male respondents (60.4%) from the total sample. In terms of business types, *manufacturing* represented 56.3 percent of the respondents while *non-manufacturing* was about 43.8 percent. Respondents mostly worked for organizations that had less than 100 full-time employees, 46.3 percent of the respondents. The majority of the respondents in this study worked in *local companies* representing about 63.2 percent of the total respondents.

Table 4.1
Demographic profile of Malaysian Human Resource Development Practitioners
(n = 144)

Variables	n	%	Variables	n	%
1. Discipline			5. Age (years)		
Human Resource Management	58	40.3	25 and under	12	8.3
Career Development	19	13.2	26 to 35	38	26.4
Organization Development	19	13.2	36 to 45	62	43.1
Generalist	15	10.4	46 to 55	28	19.4
Management Development	14	9.7	56 to 65	3	2.1
Training	14	9.7	Over 65	1	0.7
Other	5	3.5	Total	144	100
Total	144	100			
2. Current Level in Organization			6. Gender		
Manager	62	43.1	Male	87	60.4
Executive	33	22.9	Female	57	39.6
Supervisor	25	17.4	Total	144	100
Entry	14	9.7			
Private Consultant	7	4.9	7. Primary Type of business		
Other	3	2.1	Manufacturing	81	56.3
Total	144	100	Non-manufacturing	63	43.8
			Total	144	100
3. Professional Experience (years)			8. Number of Full-time Employees		
Less than 1 year	15	10.4	Less than 100	67	46.5
1-5	42	29.2	100 - 199	19	13.2
6-10	41	28.5	200 - 299	18	12.5
11-15	24	16.7	300 - 399	10	6.9
16-20	14	9.7	400 - 499	7	4.9
More than 20 years	8	5.6	500 or more	23	16.0
Total	144	100	Total	144	100
4. Highest Level of Education			9. Type of Organization		
Diploma/ Certificate	32	22.2	Local company	91	63.2
Bachelors	79	54.9	International company	29	20.1
Masters	38	18.8	Global company	24	16.7
Doctoral	3	2.1	Total	144	100
Other	3	2.1			
Total	144	100			

**Note: Due to rounding, individual percentage may not add up to 100 percent*

The data in Table 4.2 show the responses of professional development sources. When inspecting the type of training received, Malaysian HRD practitioners responded that *independent self-directed learning* (26.7%) and *in-house formal professional development program* (19.6%) were the two most frequent primary sources of professional development.

Table 4.2
Malaysian Human Resource Development Practitioners' Source of Professional Development (n = 144)

Type of Training WLP Practitioner Received for Their WLP Roles	Responses (Multiple Choices)		
	Counts	% of response	% of cases
Independent Self-Directed Learning	86	26.7	59.7
In-house Formal Professional Development Program	63	19.6	43.8
Peer or Supervisor Mentorship	61	18.9	42.4
External Formal Professional Development Program	55	17.1	38.2
Academic Degree Program	46	14.3	31.9
Other	11	3.4	7.6
Total in Responses	322	100	

Note: Respondents were allowed to check more than one response

Table 4.3 displays the Malaysian HRD practitioner perceptions on the effective source of training. It was reported that the *other* source of training ranked first ($M = 3.42$, $SD = 1.16$) as the most effective source of professional development when analyzed by mean. In contrast, *independent self-directed learning* was ranked first when frequency count was employed to the analysis.

Table 4.3

Malaysian Human Resource Development Practitioners' Perceptions of the Effectiveness of Training Source (n = 144)

Rank*	Effectiveness of Training	M	SD
1	Other	3.43	1.16
2	Independent self-directed learning	3.19	1.41
3	In-house formal professional development program	3.14	1.17
4	Peer or supervisor mentorship	3.13	1.16
5	External formal professional development program	3.10	1.20
6	Academic degree programs	3.10	1.25

*Rank based on mean value. Rating of 1 indicates perceived most effective while rank 6 indicates least effective.

Rank*	Effectiveness of Training	Frequency
1	Independent self-directed learning	121
2	In-house formal professional development program	113
3	External formal professional development program	106
4	Peer or supervisor mentorship	104
5	Academic degree programs	101
6	Other	23

*Rank based on respondent frequency. Rank of 1 indicates perceived most effective by frequency counts while rank 6 indicates least effective frequency counts.

Table 4.4 shows what the most frequently WLP *Role* in Malaysian HRD practitioners perceived themselves to be. The two best-described *roles* in the organization as pointed out by the respondents are *HRD Manager* (22.8%) and *HRD Analyst* (18.4%). *Intervention Designer/ Developer* was chosen least (10.8%). Respondents indicated an average of 2.83 values.

Table 4.4
Perceived WLP Roles by Malaysian Human Resource Development Practitioners'
(n = 144)

WLP Role	Responses (Multiple Choices)		
	Counts*	% of response	% of cases
HRD Manager	93	22.8	64.6
HRD Analyst	75	18.4	52.1
Intervention Implementor	52	12.7	36.1
Evaluator	52	12.7	36.1
Intervention Selector	46	11.3	31.9
Change Leader	46	11.3	31.9
Intervention Designer/ Developer	44	10.8	30.6
Total Responses	408	100	

*Respondent were allowed to check more than one response

Reliability and Validity

The internal consistency reliability for each *Competency groups* measured in this study, including *analytical competencies*, *technical competencies*, *leadership competencies*, *business competencies*, *interpersonal competencies*, and *technological competencies* is presented in Table 4.5. The Cronbach's Alpha (α) values indicated that respondent perceptions across the dependent variables were reliable. The overall reliability for the 52 competency items in this study was .96 (Cronbach's Alpha). Table 4.12 shows that the reliability for each *competency group* ranged from .70 to .90. The highest alpha value for *competencies groups* is *Analytical competencies* with .90, while the lowest one is *Technical competencies* (.70). Yang and Green (2011) point out that Cronbach's Alpha of .70 or higher was the cutoff value for scales used in the initial level of development (p. 381). Additionally, Gliner, Morgan, and Leech (2009) indicate that reliability coefficients, alpha, should be above .70 (p. 220).

Table 4.5

Reliability Coefficients (Cronbach's Alpha) by Six Competencies Groups

Competency Group	Number of Items	Cronbach's Alpha (α)
Analytical competencies	19	.90
Business competencies	11	.88
Leadership competencies	7	.82
Technological competencies	4	.80
Interpersonal competencies	5	.78
Technical competencies	6	.70
Overall	52	.96

To further investigate the structure and validity of items in this study, Exploratory Factor Analysis (EFA) was conducted. Gliner, Morgan, and Leech (2009) remarked that factor analysis can provide evidence based on internal structure when a construct is complex and several aspects are measured (p. 168). Therefore, *principal axis factor analysis* with *oblique rotation* was conducted to assess the underlying structure for the 52 competencies. The result of a Kaiser-Meyer-Olkin measure of sampling adequacy value was .782, which suggested that there was correlation among items. EFA then revealed the presence of eleven components with eigenvalues exceeding 1.00. The analysis was done using a scree plot (see Figure 4.1) with eigenvalues on the y-axis and factor numbers on the x-axis. Jackson (1993) suggested that the point where the first few eigenvalues depart from the line distinguishes the interpretable and trivial components (p. 2206).

Additionally, Costello and Osborne (2005) point out that the scree plot test involves examining the graph of the eigenvalue and looking for the natural bend or break point in the data where the curve flattens out (p. 3). Figure 4.1 displays an inspection analysis using a scree plot test, and suggests that three factors may be appropriate for the break point in the data where the curve flattens.

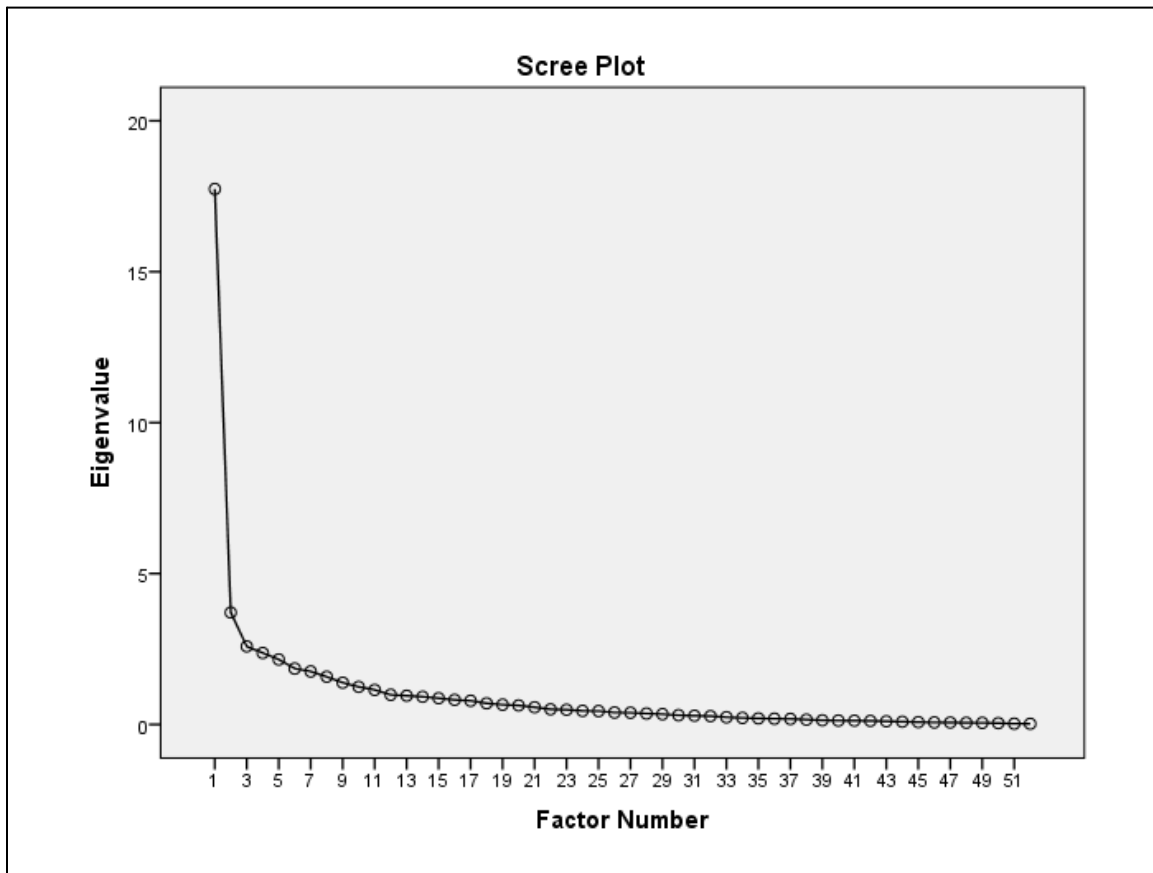


Figure 4.1 Scree Plot for Competencies Items

Three factors were requested based on the fact that the items were shown to index three constructs and consideration of the meaningfulness of a solution. Table 4.6 displays the items and three factor loadings for the rotated factors, with loadings less than .40 omitted to improve clarity. The communalities for all items were relatively high, between .897 to .744, and indicated the reliability of the loading factor was strong. After rotation, the first factor accounted for 33.07 percent of the variance, the second factor accounted for 6.14 percent, and the third factor accounted for 4.02 percent. The first factor (Factor 1), appeared to represent *Main Competencies* where 18 items were loaded. However, after reviewing the items grouping, the researcher decided to reduce the items into ten

items that related to the *Organizational Competencies*. Items that loaded on Factor 2 appeared to represent *Sub Competencies 1* where eight items represent the *Thinking Competencies*. Items that loaded on the Factor 3 appeared to represent *Sub Competencies 2* where seven items represent the *Application Competencies*. A total of 19 items were excluded from this analysis because of the same weight in linear combination of the variables that showed in the pattern matrix. Although the excluded items are helpful in descriptive statistical analyzing, the 19 items are not put into the three identified constructs.

Table 4.6
Factorial Loadings for the Rotated Factors

Scale Items	Factor Loadings			Communality
	1	2	3	
Outsourcing Management	0.771			0.849
Technological Literacy	0.771			0.897
Computer Mediated Communication	0.754			0.848
Quality Implications	0.701			0.854
Communication Networks	0.690			0.881
Negotiating/Contracting	0.664			0.744
Group Dynamics	0.661			0.824
Identification of Critical Business Issues	0.657			0.879
Communication	0.648			0.758
Buy-in/Advocacy	0.631			0.811
Social Awareness	0.623			0.759
Electronic Performance Support Systems	0.614	-0.433		0.879
Ability To See the "Big Picture"	0.591			0.882
Systems Thinking	0.586			0.868
Goal Implementation	0.568			0.808
Work Environment Analysis	0.560			0.784
Consulting	0.526			0.755
Visioning	0.519			0.836
Cost/Benefit Analysis	0.504			0.889
Distance Education	0.489			0.842
Industry Awareness	0.464			0.845
Knowledge Management	0.451			0.837
Intervention Monitoring	0.430			0.744
Knowledge Capital	0.429			0.871
Interpersonal Relationship Building	0.422			0.851
Evaluation of Result Against Organizational Goals	0.422			0.776
Ethics Modeling	0.419			0.832
Standard Identification		0.691		0.782
Competency Identification		0.611		0.777
Workplace Performance, Learning Strategies, and Intervention Evaluation		0.598		0.840
Facilitation		0.533		0.829
Questioning		0.530	-0.484	0.822
Analytical Thinking		0.520		0.776
Model Building		0.504		0.806
Leadership		0.483		0.832

Table 4.6 (Continued)

Scale Items	Factor Loadings			Communality
	1	2	3	
Training Theory and Application			-0.828	0.844
Staff Selection Theory and Application			-0.747	0.846
Feedback			-0.641	0.800
Reward system theory and Application			-0.625	0.889
Career Development Theory and Application			-0.549	0.879
Organization Development Theory and Application			-0.531	0.831
Process Consultation			-0.512	0.846
Eigenvalue	17.20	3.19	2.09	
% of variance	33.07	6.14	4.02	

Note. Loadings <.40 are omitted

To assess whether the new constructs that were summed to create the competency group formed a reliable scale, Cronbach's alphas were computed one more time. Table 4.7 shows the alpha for the *Organizational Competencies (Main Competencies)* was .88, *Thinking Competencies (Sub Competencies 2)* was .87, and *Application Competencies (Sub Competencies 2)* was .88, indicating that the items have reasonable internal consistency. Furthermore, the overall Cronbach's alpha was .93, meaning an overall high internal consistency.

Table 4.7

Reliability Coefficients (Cronbach's Alpha) for New Construct

Competency Group	Number of Items	Cronbach's Alpha (α)
Organizational competencies (Main Competencies)	10	.88
Thinking competencies (Sub Competencies 1)	8	.87
Application competencies (Sub Competencies 2))	7	.88
Overall	25	.93

To review the validity of the new items, EFA using principal axis analysis with oblique rotation was conducted one more time. In total eight items from the *Main Competencies (Organizational Competencies)* were removed because they could not fit with the first construct. The results of the *Kaiser-Meyer-Olkin* measure of sampling adequacy value was .857, suggesting that there is correlation between items. Three factors were requested, based on the fact that the items were designed to index three constructs: *Main Competencies (Organizational Competencies)*, *Sub Competencies 1 (Thinking Competencies)*, and *Sub Competencies 2 (Application Competencies)*. After rotation, the first factor accounted for 36.17 percent of the variance, the second factor accounted for 7.59 percent, and the third factor accounted for 6.01 percent. Table 4.8 displays the new items for the rotated factor, with loading less than .40 omitted to improve clarity. To confirm the numbers of factors in the EFA, *Parallel Analysis* and *Minimum Average Partial (MAP)* was conducted. The results from parallel analysis and minimum average partial suggested that three factors occurred. According to Watkins (2006), parallel analysis is one of the most accurate guides for determining the number of factors to extract in EFA (p. 344).

Table 4.8

Factorial Loadings for the Rotated Factors for Main Competencies, Sub Competencies 1, and Sub Competencies 2

Scale Items	Factor Loadings			Communality
	Main Comp	Sub Comp 1	Sub Comp 2	
Identification of Critical Business Issues	0.692			0.585
Communication	0.645			0.608
Group Dynamics	0.629			0.564
Work Environment Analysis	0.589			0.517
Goal Implementation	0.583			0.627
Buy-in/Advocacy	0.569			0.575
Consulting	0.567			0.575
Negotiating/Contracting	0.561			0.466
Systems Thinking	0.555			0.669
Visioning	0.448			0.589
Workplace Performance, Learning Strategies, and Intervention Evaluation		0.732		0.655
Competency Identification		0.707		0.662
Facilitation		0.679		0.646
Standard Identification		0.667		0.543
Questioning		0.628		0.635
Model Building		0.572		0.597
Analytical Thinking		0.562		0.523
Leadership		0.462		0.658
Staff Selection Theory and Application			-0.774	0.689
Training Theory and Application			-0.761	0.705
Feedback			-0.617	0.690
Reward system theory and Application			-0.539	0.724
Organization Development Theory and Application			-0.483	0.619
Career Development Theory and Application			-0.474	0.716
Process Consultation			-0.447	0.701
Eigenvalues	9.04	1.90	1.50	
% of variance	36.17	7.59	6.01	

Note. Loadings <.40 are omitted

Findings for Research Question One

1. *What are the competencies that the HRD practitioners in Malaysia perceive to be important as measured across the six competency groups (Analytical, Interpersonal, Technological, Business, Leadership, and Technical), seven roles (HRD Manager, HRD Analyst, Intervention Selector, Intervention Designer/Developer, Intervention Implementor, Change Leader, and Evaluator), and for each of the 52 competencies?*

Descriptive statistics were performed and explored to assess data of Malaysian HRD practitioners' perceptions for current importance and future importance of WLP competencies. Table 4.9 provides information for all respondents in this study regarding *each competency, competency group, and roles*. The table also illustrates the ranks, means, and standard deviations for each category of competency. A one-to-five Likert type rating scale of importance was used. The rating scale ranged from 1 (*Less important now, Less important in 5 years*), 2 (*More important now, Less important in 5 years*), 3 (*Equivalent important for now and in 5 years*), 4 (*Less important now, More important in 5 years*) and 5 (*More important now, More important in 5 years*). Rankings on perception for the importance of WLP competencies were based on the mean values. It was perceived that the greater the mean value, the more competencies would be important now and in the next five years. The five years index was used in this study to predict the future.

The results show that the mean values ranged from a low of 3.28 to a high of 3.89. Malaysian HRD practitioners perceived that *process consultation, reward system theory and application, communication, facilitation, and career development theory and*

application were the most important competencies currently and in the future. The least important competencies were *intervention selection*, *group dynamics*, *intervention monitoring*, *performance gap analysis*, and *survey design and development*. Even though the competency items were ranked based on the mean values, the analysis of the gap between the top five items and the bottom five items was small (.04 to .06) and indicates that the competencies were perceived as important in organizations. Further analysis by *competency group* showed that *Interpersonal Competencies* ($M = 3.83$, $SD = .74$) was the most important competency group as ranked by Malaysian HRD practitioners. While for competency *roles*, HRD practitioners perceived *HRD Analyst* ($M = 3.68$, $SD = .96$) to be the most important role in the organization.

Table 4.9

Malaysian HRD Practitioners' Perceptions Regarding Current Importance and Future Importance of WLP Competencies (n = 144)

Category and/or Competency	Rank*	M	SD
All Competencies			
<i>Top 5 Items</i>			
Process Consultation	1	3.89	.93
Communication	2	3.85	1.01
Reward System Theory and Application	3	3.85	1.12
Facilitation	4	3.83	.92
Career Development Theory and Application	5	3.83	1.00
<i>Bottom 5 Items</i>			
Intervention Selection	48	3.41	.81
Group Dynamics	49	3.38	.96
Intervention Monitoring	50	3.33	.97
Performance Gap Analysis	51	3.32	.83
Survey Design and Development	52	3.28	1.00
By Competency Group (original)			
Interpersonal Competencies (5 items)	1	3.82	.74
Technological Competencies (4 items)	2	3.70	.77
Business Competencies (11 items)	3	3.69	.63
Leadership Competencies (7 items)	4	3.63	.64
Analytical Competencies (19 items)	5	3.61	.57
Technical Competencies (6 items)	6	3.54	.60
By Role			
HRD Analyst	1	3.67	.94
Intervention Selector	2	3.67	.97
HRD Manager	5	3.65	.94
Change Leader	3	3.61	.93
Evaluator	4	3.58	.94
Intervention Implementor	6	3.57	.93
Intervention Designer/ Developer	7	3.55	.90

*Note: Rank is based on the mean values

Further analysis examining the data by means show that the Malaysian HRD perceptions of competencies to be equivalent for current importance and future importance. Table 4.9 shows that means for *each competency* ranged from 3.89 to 3.28. By construct, the competencies fell into six categories or groupings: *Analytical Competencies* (19 items), *Business Competencies* (11 items), *Interpersonal Competencies* (five items), *Leadership Competencies* (seven items), *Technical Competencies* (six items), *Technological Competencies* (four items). For *competency groups*, the means ranged from 3.83 to 3.54. Examined by *roles*, which consisted of seven roles including *Manager, Analyst, Intervention Selector, Intervention Designer/ Developer, Intervention Implementor, Change Leader, and Evaluator*, the means ranged from 3.68 to 3.56.

Findings for Research Question Two

2. *What competencies are perceived important by the HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand, as measured across the six competency groups, seven roles, and for each of the 52 competencies?*

Descriptive statistics were used to rank the items based on mean values. Table 4.10 and Table 4.11 shows the comparison of competency groups between studies in four countries in Asia, including Malaysia, Taiwan, South Korea, and Thailand. Asian countries were chosen in this study to compare and contrast the findings based on the factor that all these countries had similar demographics and working culture. Moreover, the studies used the same scale of measurement. To compare the competencies perceived important by HRD practitioners currently and in the future, data from Taiwan, South Korea, and Thailand were used. Ranking was based on the mean values. Taiwan, South Korea, and Taiwan used five-point Likert type-rating scales of agreement that indicated *Not Important* (1), *Slightly Important* (2), *Important* (3), *Very Important* (4) and *Extremely Important* (5). In contrast, this study in Malaysia used integrated rating scales for the combining the current and the future competencies. Five-point Likert type-rating scales of importance indicated: *Less important now, Less important in five years* (1), *More important now, Less important in five years* (2), *Equivalent important for now and in five years* (3), *Less important now, More important in five years* (4) and *More important now, More important in five years* (5).

It is important to describe the demographics of previous studies before comparisons are made. The Taiwan study was done in 2003 and consisted of a sample size of 245 WLP professionals. The South Korean study was conducted in 1999 and

consisted of a sample size of 281 HRD practitioners. The Thailand study was performed in 1999 and consisted of a sample size of 251 HRM/HRD practitioners. In comparison, the Malaysian study in 2011 had a sample size of 144 HRD practitioners. Looking at competencies seen to be important, Table 4.2 shows that the four countries had different competencies of perceived importance by the practitioners. In the top five items for each country competency *communication* was listed for Malaysia ($M = 3.85$, $SD = 1.01$) and Taiwan ($M = 4.08$, $SD = .75$). The analysis showed Taiwan WLP practitioners perceived that *communication* was very important with a mean score of 4.08. *Interpersonal relationship building* was listed in three countries including Taiwan ($M = 3.98$, $SD = .75$), South Korea ($M = 3.89$, $SD = .78$), and Thailand ($M = 3.95$, $SD = .84$).

In contrast, for the five items valued lowest, *survey design and development* was listed in three countries including Malaysia ($M = 3.28$, $SD = 1.00$), Taiwan ($M = 3.19$, $SD = .96$), and South Korea ($M = 3.13$, $SD = .87$). Additionally, *ethic modeling* was also listed in the bottom five in three countries including Taiwan ($M = 3.19$, $SD = .96$), South Korea ($M = 3.38$, $SD = .91$), and Thailand ($M = 3.14$, $SD = 1.08$). Comparing across the countries data for current importance competencies reveals that the mean gap between top items and bottom items was small.

As for competencies in the future, the analysis showed that the mean values were higher compared to current competencies. Based on the scale provided earlier, respondents in Taiwan, South Korea, and Thailand perceived that future competencies were more important when compared to current competencies. An analysis of future competencies shows that, *visioning* was listed in three countries including Taiwan ($M =$

4.38, $SD = .72$), South Korea ($M = 4.53$, $SD = .67$), and Thailand ($M = 4.47$, $SD = .74$).

For the bottom five in future competencies, all countries listed *survey design and development* including Malaysia ($M = 3.28$, $SD = 1.00$), Taiwan ($M = 3.44$, $SD = .93$), South Korea ($M = 3.39$, $SD = .88$), and Thailand ($M = 3.66$, $SD = .92$). When the gap was compared across the data for future importance competencies, it was revealed that the mean gap between top items and bottom items averaged about .60.

Table 4.10

HRD Practitioners' Perceptions of the Current Importance of WLP Competencies by Competency in Four Studies

Competency 2011	Malaysia (n = 144)		Competency 2003	Taiwan (n = 245)		Competency 1999	S. Korea (n = 218)		Competency 1999	Thailand (n = 251)	
	M	SD		M	SD		M	SD		M	SD
<i>Top 5 Items</i>											
Process Consultation	3.89	.93	Communication	4.08	.75	Leadership	3.98	.77	Interpersonal Relationship Building	3.95	.84
Communication	3.85	1.01	Interpersonal Relationship Building	3.98	.75	Visioning	3.93	.86	Leadership	3.93	.88
Reward System Theory and Application	3.85	1.12	Goal Implementation	3.94	.81	Interpersonal Relationship Building	3.89	.78	Competency Identification	3.92	.83
Facilitation	3.83	.92	Communication Network	3.90	.78	Communication	3.86	.76	Visioning	3.85	.94
Career Development Theory and Application	3.83	1.00	Coping Skills	3.88	.82	Communication Network	3.83	.81	Computer Mediated Communication	3.83	.88
<i>Bottom 5 Items</i>											
Intervention Selection	3.41	.81	Intervention Monitoring	3.23	1.01	Negotiating/ Contracting	3.41	.81	Ethics Modeling	3.14	1.08
Group Dynamics	3.38	.96	Survey Design and Development	3.19	.96	Electronic Performance Support System	3.40	.93	Reward System Theory and Application	3.11	.93
Intervention Monitoring	3.33	.97	Ethics Modeling	3.19	.96	Work Environment Analysis	3.39	.76	Diversity Awareness	3.01	.93
Performance Gap Analysis	3.32	.83	Distance Education	3.10	1.14	Ethics Modeling	3.38	.91	Distance Education	2.97	.96
Survey Design and Development	3.28	1.00	Outsourcing Management	3.03	1.05	Survey Design and Development	3.13	.87	Model Building	2.90	.97

*Note: Ranks are based on the mean values

Competencies for Malaysia are based on a combination of perceptions of current competencies and future competencies

Competencies for Taiwan, South Korea, and Thailand are based on current competencies

Table 4.11

HRD Practitioners' Perceptions of the Future Importance of WLP Competencies by Competency in Four Studies

Competency 2011	Malaysia (n = 144)		Competency 2003	Taiwan (n = 245)		Competency 1999	S.Korea (n = 218)		Competency 1999	Thailand (n = 251)	
	M	SD		M	SD		M	SD		M	SD
Top 5 Items											
Process Consultation	3.89	.93	Communication	4.41	.69	Visioning	4.53	.67	Computer Mediated Communication	4.63	.65
Communication	3.85	1.01	Interpersonal Relationship Building	4.38	.65	Leadership	4.48	.65	Technological Literacy	4.53	.69
Reward System Theory and Application	3.85	1.12	Visioning	4.38	.72	Knowledge Management	4.44	.78	Visioning	4.47	.74
Facilitation	3.83	.92	Goal Implementation	4.33	.71	Knowledge Capital	4.41	.70	Buy-in/ Advocacy	4.46	.73
Career Development Theory and Application	3.83	1.00	Communication Network	4.31	.74	Computer Mediated Communication	4.36	.76	Competency Identification	4.41	.70
Bottom 5 Items											
Intervention Selection	3.41	.81	Social Awareness	3.63	.90	Ethics Modeling	3.78	1.00	Ethics Modeling	3.73	1.02
Group Dynamics	3.38	.96	Quality Implications	3.61	.96	Training Theory and application	3.74	.84	Diversity Awareness	3.67	.88
Intervention Monitoring	3.33	.97	Ethics Modeling	3.61	.89	Staff Selection Theory and Application	3.74	.90	Survey Design and Development	3.66	.92
Performance Gap Analysis	3.32	.83	Outsourcing Management	3.49	.97	Questioning	3.69	.90	Reward System Theory and Application	3.59	.98
Survey Design and Development	3.28	1.00	Survey Design and Development	3.44	.93	Survey Design and Development	3.39	.88	Model Building	3.58	.92

*Note: Ranks are based on the mean values

Competencies for Malaysia are based on a combination of perceptions of current competencies and future competencies

Competencies for Taiwan, South Korea, and Thailand are based on future competencies

Table 4.12 and table 4.13 show the comparison data for Malaysia, Taiwan, South Korea, and Thailand by *competency groups*. The data in table 4.12 revealed that *interpersonal competencies* were currently the most important competency as perceived by the HRD practitioners by *competency groups*. Malaysia ($M = 3.82$, $SD = .74$), Taiwan ($M = 3.92$, $SD = .68$), South Korea ($M = 3.78$, $SD = .62$) and Thailand ($M = 3.64$, $SD = .70$) all listed *interpersonal competencies* as the most important competency. In contrast, the least important competency, *technical competencies* was the same for three countries including Malaysia ($M = 3.54$, $SD = .60$), South Korea ($M = 3.48$, $SD = .61$), and Thailand ($M = 3.43$, $SD = .65$) as perceived by HRD practitioners. Taiwan HRD practitioners ($M = 3.39$, $SD = .84$) perceived *technological competencies* as the least important. The table shows that the distribution of means for each country for current importance was almost the same.

Table 4.12
HRD Practitioners' Perceptions of the Current Importance of WLP Competencies by Competency Group in Four Studies

Competency Group	Malaysia ($n = 144$)			Taiwan ($n = 254$)			South Korea ($n = 218$)			Thailand ($n = 251$)		
	R	M	SD	R	M	SD	R	M	SD	R	M	SD
Interpersonal competencies	1	3.82	.74	1	3.92	.68	1	3.78	.62	1	3.64	.70
Technological competencies	2	3.70	.77	6	3.39	.84	3	3.64	.73	4	3.45	.73
Business competencies	3	3.69	.63	3	3.46	.68	4	3.61	.61	3	3.50	.72
Leadership competencies	4	3.63	.64	2	3.59	.76	2	3.66	.64	2	3.53	.70
Analytical competencies	5	3.61	.57	3	3.46	.68	5	3.57	.53	4	3.45	.73
Technical competencies	6	3.54	.60	5	3.45	.78	6	3.48	.61	6	3.43	.65

*Note: Ranks are based on the mean values

Competencies for Malaysia are based on a combination of current and future competencies

Competencies for Taiwan, South Korea, and Thailand are based on current competencies

For future competencies, data showing a comparison of the *competency group* in Table 4.13, revealed that *interpersonal competencies* and *technological competencies* were the most important competencies perceived by the HRD practitioners. Malaysia ($M = 3.82$, $SD = .74$) and Taiwan ($M = 4.28$, $SD = .60$) listed *interpersonal competencies* for most important competencies while South Korea ($M = 4.19$, $SD = .57$) and Thailand ($M = 4.17$, $SD = .61$) listed *technological competencies*. In contrast, the least important competency was *technical competencies*, which was the same for all countries including Malaysia ($M = 3.54$, $SD = .60$), Taiwan ($M = 3.80$, $SD = .66$), South Korea ($M = 3.85$, $SD = .60$), and Thailand ($M = 3.89$, $SD = .58$). The analysis also indicated that the mean values for Taiwan, South Korea, and Thailand are higher compared to currently important competencies.

Table 4.13

HRD Practitioners' Perceptions of the Future Importance of WLP Competencies by Competency Group in Four Studies

Competency Group	Malaysia ($n = 144$)			Taiwan ($n = 254$)			South Korea ($n = 218$)			Thailand ($n = 251$)		
	R	M	SD	R	M	SD	R	M	SD	R	M	SD
Interpersonal competencies	1	3.82	.74	1	4.28	.60	2	4.19	.57	2	4.17	.61
Technological competencies	2	3.70	.77	3	3.95	.58	1	4.22	.66	1	4.27	.60
Business competencies	3	3.69	.63	4	3.92	.56	3	4.14	.54	3	4.12	.59
Leadership competencies	4	3.63	.64	2	3.59	.76	4	4.12	.55	4	4.10	.55
Analytical competencies	5	3.61	.57	5	3.90	.58	5	4.02	.48	5	4.03	.50
Technical competencies	6	3.54	.60	6	3.80	.66	6	3.85	.60	6	3.89	.58

*Note: Ranks are based on the mean values

Competencies for Malaysia are based on a combination of current and future competencies

Competencies for Taiwan, South Korea, and Thailand are based on current competencies

Table 4.14 and Table 4.15 illustrate the comparison data for Malaysia, Taiwan, South Korea, and Thailand for competency by *roles*. Table 4.14 provides the data of HRD perceptions on the current importance of competencies by roles. The analysis of this data revealed that HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand differed in perceptions of which competencies were the most important by roles. HRD practitioners in Malaysia ($M = 3.67$, $SD = .94$) perceived that *HRD Analyst* was the most important role while Thailand ($M = 3.62$, $SD = .64$), Taiwan ($M = 3.78$, $SD = .62$) and South Korea ($M = 3.59$, $SD = .65$) perceived *Intervention Implementor* as the most important role. In contrast, respondents each country perceived that *Intervention Designer/ Developer* was a less important role in an organization. Malaysia ($M = 3.55$, $SD = .90$) and Thailand ($M = 3.47$, $SD = .60$) means ranked the role at the bottom while Taiwan ($M = 3.50$, $SD = .63$) and South Korea ($M = 3.62$, $SD = .54$) listed it second to the bottom.

Table 4.14
HRD Practitioners' Perceptions of the Current Importance of WLP Competencies by Roles in Four Studies

Roles	Malaysia ($n = 144$)			Taiwan ($n = 254$)			South Korea ($n = 218$)			Thailand ($n = 251$)		
	R	M	SD	R	M	SD	R	M	SD	R	M	SD
HRD Analyst	1	3.67	.94	7	3.49	.62	7	3.60	.55	5	3.53	.64
Intervention Selector	2	3.67	.97	5	3.53	.62	5	3.64	.52	4	3.55	.62
HRD Manager	3	3.65	.94	3	3.55	.61	2	3.69	.57	1	3.59	.66
Change Leader	4	3.61	.93	4	3.54	.62	2	3.69	.56	3	3.57	.66
Evaluator	5	3.58	.94	2	3.59	.61	2	3.69	.57	6	3.52	.65
Intervention Implementor	6	3.57	.93	1	3.62	.64	1	3.78	.62	1	3.59	.65
Intervention Designer/ Developer	7	3.55	.90	6	3.50	.63	6	3.62	.54	7	3.47	.60

*Note: Ranks are based on the mean values

Competencies for Malaysia are based on a combination of current and future competencies
Competencies for Taiwan, South Korea, and Thailand are based on current competencies

Table 4.15 presents the data of HRD perceptions of the importance of competencies in the future by *roles*. The analysis of this data revealed that HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand differed in perceptions of which competencies were most important by roles. HRD practitioners in Malaysia ($M = 3.67$, $SD = .94$) and South Korea ($M = 4.18$, $SD = .46$) perceived that *HRD Analyst* and *Evaluator* were the most important roles while Taiwan ($M = 4.05$, $SD = .55$) and Thailand ($M = 4.20$, $SD = .52$) listed *Intervention Implementor* as the most important role. Taiwan perceived *HRD Analyst* and *Intervention Designer/ Developer* as the least important role. Similarly, Thailand practitioners also perceived two roles as the least important in the future including *Intervention Selector* and *Intervention Designer/ Developer*.

Table 4.15
HRD Practitioners' Perceptions of the Future Importance of WLP Competencies by Roles in Four Studies

Roles	Malaysia (<i>n</i> = 144)			Taiwan (<i>n</i> = 254)			South Korea (<i>n</i> = 218)			Thailand (<i>n</i> = 251)		
	R	M	SD	R	M	SD	R	M	SD	R	M	SD
HRD Analyst	1	3.67	.94	5	3.95	.51	7	4.01	.50	6	4.08	.54
Intervention Selector	2	3.67	.97	6	3.94	.52	6	4.05	.49	4	4.11	.50
HRD Manager	3	3.65	.94	3	4.00	.50	2	4.16	.48	2	4.14	.51
Change Leader	4	3.61	.93	4	3.98	.51	3	4.10	.51	2	4.14	.54
Evaluator	5	3.58	.94	2	4.02	.52	1	4.18	.46	5	4.09	.54
Intervention Implementor	6	3.57	.93	1	4.05	.55	3	4.10	.53	1	4.20	.52
Intervention Designer/ Developer	7	3.55	.90	6	3.94	.53	5	4.06	.48	6	4.08	.50

*Note: Ranks are based on the mean values

Competencies for Taiwan, South Korea, and Thailand are based on future competencies

Competencies for Malaysia are based on a combination of current and future competencies

Findings for Research Question Three

3. *Are there differences between HRD discipline and HRD levels, in regard to competency groups?*

To do the analysis for the data, descriptive statistics were applied to check the frequency and percentage of the respondents. Factorial Analysis of Variance (Factorial ANOVA) then was employed to compare the mean importance scores for each competency by discipline and level. Data in Table 4.16 revealed Malaysian HRD practitioners frequencies count by discipline. *Organization performance* was the combination of various disciplines including *Training*, *Organization Development*, *Management Development*, *Career Development*, *Generalist*, and *Other*. The data illustrated that, by frequency counts, most respondents in this study were from *Organization Performance* ($n = 86$) representing 59.7 percent while *Human Resource Management* ($n = 58$) represented 40.3 percent from the total population.

Table 4.16
Malaysian Human Resource Development Practitioners' by Discipline (n = 144)

Discipline	n	%
Human Resource Management	58	40.3
Organization Performance	86	59.7
Total	144	100

Table 4.17 presents the frequency counts of HRD practitioners by *Level*. The levels were grouped into three categories including: Top Level Managers, Middle level Managers, and Other. *Top Level Managers* represent executive and managers, *Middle Level Managers* represent supervisor and entry-level, while *Other* represents private consultant and other levels. It was indicated that the most frequent respondents for this study were *Top Level Manager* ($n = 95$), representing 66.0 percent, while *Middle Level*

Managers ($n = 39$) were the second highest respondents with 27.0 percent of the population.

Table 4.17
Malaysian Human Resource Development Practitioners' by Level, Frequency and Percentage (n = 144)

Level	n	%
Top Level Managers	95	66.0
Middle Level Managers	39	27.0
Other	10	7.0
Total	144	100

Factorial ANOVA for *Organizational Competencies* was conducted. The Levene's test of homogeneity of variance was conducted to test the assumption for equality of variances. Levene's test indicated the equality of variances for the groups of independent variables on the dependent variable (Field, 2000). The assumption of homogeneity of variance was not violated. The assumption of normal distributions of the dependent for each group was not violated. Table 4.18 shows the number of subjects, the mean, and standard deviation of *Organizational Competencies* for each cell. Table 4.19 revealed that the Factorial ANOVA results for *Organizational Competencies* were not significant, meaning that the test met the equal variance assumption. Post hoc was not necessary because there were no significant differences between discipline and level of HRD practitioners with all variances.

Table 4.18

Organizational Competencies as a Function of Discipline and Level, Means, Standard Deviations, and n

Level	Disciplines						Total	
	Human Resource Management			Organization Performance				
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Top Level Managers	43	3.69	.73	52	3.71	.61	3.70	.66
Middle Level Managers	12	3.58	.54	27	3.54	.57	3.55	.55
Other	3	3.47	.45	7	3.67	.96	3.61	.82
Total	58	3.65	.68	86	3.65	.63	3.65	.65

Table 4.19

Factorial Analysis of Variance (ANOVA) for Organizational Competencies as a Function of Discipline and Level

Variable and source	df	MS	F	η^2	eta
Organizational Competencies					
Discipline	1	.060	.141	.001	.032
Level	2	.278	.652	.009	.095
Discipline*Level	2	.048	.113	.002	.044
Error	138	.427			

Factorial ANOVA for *Thinking Competencies* was conducted. Table 4.20 shows the number of subjects, the means, and standard deviations of *Thinking Competencies* for each cell. Table 4.21 revealed that the Factorial ANOVA results for *Thinking Competencies* were not significant, meaning that the test met the equal variance assumption. Post hoc was not necessary because there were no significant differences between discipline and level of HRD practitioners with all variances.

Table 4.20

Thinking competencies as a Function of Discipline and Level, Means, Standard Deviations, and n

Level	Disciplines						Total	
	Human Resource Management			Organization Performance				
	<i>n</i>	M	SD	<i>n</i>	M	SD	M	SD
Top Level Managers	43	3.73	.73	52	3.73	.72	3.73	.72
Middle Level Managers	12	3.89	.68	27	3.56	.60	3.66	.63
Other	3	3.50	.76	7	3.43	.78	3.45	.73
Total	58	3.75	.71	86	3.65	.69	3.69	.70

Table 4.21

Factorial Analysis of Variance (ANOVA) for Thinking Competencies as a Function of Discipline and Level

Variable and source	df	MS	F	η^2	eta
Thinking Competencies					
Discipline	1	.257	.523	.004	.063
Level	2	.275	.559	.008	.089
Discipline*Level	2	.326	.663	.010	.100
Error	138	.492			

Factorial ANOVA for *Application Competencies* was conducted. Table 4.22 shows the number of subjects, the means, and standard deviations of *Application Competencies* for each cell. Table 4.23 revealed that the Factorial ANOVA results for *Sub Competencies 2* were not significant, meaning that the test met the equal variance assumption. Post hoc was not necessary because there were no significant differences between discipline and level of HRD practitioners with all variances.

Table 4.22

Application Competencies as a Function of Discipline and Level, Means, Standard Deviations, and n

Level	Disciplines						Total	
	Human Resource Management			Organization Performance				
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Top Level Managers	43	3.55	.82	52	3.76	.71	3.66	.77
Middle Level Managers	12	3.80	.73	27	3.68	.72	3.72	.72
Other	3	3.19	.58	7	3.98	.79	3.74	.79
Total	58	3.58	.79	86	3.75	.72	3.68	.75

Table 4.23

Factorial Analysis of Variance (ANOVA) for Application Competencies as a Function of Discipline and Level

Variable and source	df	MS	F	η^2	eta
Application Competencies					
Discipline	1	1.223	2.165	.014	.118
Level	2	.125	.222	.003	.055
Discipline*Level	2	.759	1.343	.019	.138
Error	138	.565			

Findings for Research Question Four

4. Which of these different competencies are most needed by Malaysian HRD practitioners in manufacturing and non-manufacturing?

To determine which competencies are most needed by HRD practitioners in Malaysia an Independent Sample t-test was used to investigate the difference between respondents in the *manufacturing sector* and in the *non-manufacturing sector*. Data for the t-test are presented in Table 4.24. The data revealed that the means of *consulting* for the *manufacturing sector* were significantly different from the *non-manufacturing sector* ($p = .008$) and *competency identification* ($p = .027$). Inspecting the two groups' means indicated the average *consulting* data competency for *non-manufacturing* ($M = 3.35$) was significantly lower than the competency for *manufacturing* ($M = 3.77$). The difference between means was .43 and the effect size (d) was .46, which is less than medium. Each of the top five competencies showed typical effect sizes ranging from .46 to .27. The t-test result by *competency groups* revealed that *manufacturing sector* was not significantly different from the *non-manufacturing sector* on *application competencies*, ($p = .057$). The two group means indicated that the *application competencies* mean for *manufacturing* ($M = 3.79$) was significantly higher than the means for *non-manufacturing* ($M = 3.55$). The difference between means was .24 and the effect size d was approximately .32, which is small. Results for *roles* indicate that *HRD Analyst* was ranked first, based on mean difference (.17). The result also revealed that the *manufacturing sector* did not differ significantly from the *non-manufacturing sector* on *HRD Analyst*, ($p = .198$). The Bonferroni adjustment was performed but no significance in p -value was found except for *consulting* and *competency identification*, as rated.

Table 4.24

Independent T-test Results of Competencies Between Manufacturing and Non-manufacturing

Category and/or Competency	Rank*	Manufacturing		Non-Manufacturing		Mean Diff.	t	p	d**
		M	SD	M	SD				
By Each Competency									
Top 5 Items									
Consulting	1	3.77	.91	3.35	.92	.42	2.71	.008	.46
Competency Identification	2	3.88	1.03	3.48	1.11	.40	2.24	.027	.37
Training Theory and Application	3	3.69	.93	3.37	1.13	.33	1.90	.059	.31
Staff Selection Theory and Application	4	3.65	1.03	3.35	1.05	.31	1.75	.082	.29
Reward System Theory and Application	5	3.98	1.08	3.68	1.16	.29	1.56	.121	.27
Bottom 5 Items									
Work Environment Analysis	21	3.64	.83	3.57	.88	.07	0.50	.621	.08
Facilitation	22	3.85	.91	3.79	.94	.06	0.38	.707	.06
Workplace Performance, Learning Strategies, and Intervention Evaluation	23	3.79	.97	3.75	.90	.04	0.28	.780	.04
Leadership	24	3.74	.97	3.78	.94	.04	- 0.23	.818	.04
Negotiating/ Contracting	25	3.69	.92	3.73	.99	.04	- 0.24	.808	.04
By Competency Group									
Application competencies	1	3.79	.74	3.55	.75	.24	1.92	.057	.32
Organizational competencies	2	3.72	.64	3.56	.64	.17	1.56	.121	.25
Thinking competencies	3	3.75	.68	3.61	.71	.14	1.21	.227	.20
By Roles									
HRD Analyst	1	3.81	.54	3.64	.59	.17	1.30	.198	.30
Intervention Designer/ Developer	2	3.53	.31	3.66	.72	.13	0.83	.412	.23
Intervention Implementor	3	3.67	.45	3.55	.64	.12	0.74	.461	.22
HRD Manager	4	3.69	.52	3.58	.67	.11	0.92	.360	.18
Evaluator	5	3.64	.47	3.60	.65	.03	0.22	.827	.07
Change Leader	6	3.66	.39	3.65	.67	.02	0.10	.922	.02
Intervention Selector	7	3.69	.43	3.68	.68	.01	0.04	.970	.02

*Rank is based on the mean difference between Manufacturing and Non-manufacturing

**d ≥ 1.00 ; Much larger than typical

> .80; Larger or larger than typical

> .50; Medium or typical

> .20; Small or smaller than typical

Findings for Research Question Five

5. *Are there significant correlations between the ratings of the HRD competencies in the three competency groups?*

To investigate the relationships between the competencies in each of the new three competency groups, correlations were computed. All variables were normally distributed and the assumption of linearity was not markedly violated. Pearson's correlations were computed to examine and analyze this question and intercorrelations of the variables. Each competency group was listed in Table 4.25. The Pearson correlation coefficient showed significant correlations with all variables. The strongest positive correlation, with a large effect size, was between *organizational competencies* and *thinking competencies*, $r(142) = .53, p < .001$. This means that HRD practitioners perceived the strongest *organizational competencies* to have the strongest *thinking competencies*. Each competencies group was also positively correlated with each other and had a medium effects size or correlations according to Cohen (1992).

Table 4.25

Intercorrelations, Means, and Standard Deviations for Competency Group (n = 144)

Variable	Organizational competencies	Thinking competencies	Application competencies	M	SD
Organizational Competencies	--	.53**	.51**	3.57	.64
Thinking competencies	--	--	.41**	3.62	.67
Application Competencies	--	--	--	3.70	.75

Note ** $p < .001$ (2-tailed)

Findings for Research Question Six

6. *Are there significant correlations between the three competency groups (Main Competencies, Sub Competencies 1, and Sub Competencies 2) across the seven roles?*

To investigate differences between the competencies in each of the new three competency groups across the seven roles, a descriptive test was employed. Rothwell (2000) remarked that WLP practitioners enact seven distinct roles, that some WLP practitioners do certain roles in the context of their jobs, and that WLP practitioners will usually perform several roles at the same time (p. 140). Table 4.26 showed *Roles* of Malaysian HRD practitioners. It indicated that the most important roles in the organization, as pointed out by the respondents, are *HRD Manager* (25.3%). In contrast, Table 4.27 showed the *number of roles* of Malaysian HRD practitioners. To run the statistical analysis, respondents who identified with one primary role ($n = 68$) were selected. Respondents with more than one role were excluded from this analysis because it would interfere with the purpose of this analysis.

Table 4.26
Perceived WLP Role by Malaysian Human Resource Development Practitioners'
($n = 144$)

Role	Responses (Multiple Choices)		
	Counts*	% of response	% of cases
HRD Manager	93	22.8	64.6
HRD Analyst	75	18.4	52.1
Intervention Implementor	52	12.7	36.1
Evaluator	52	12.7	36.1
Intervention Selector	46	11.3	31.9
Change Leader	46	11.3	31.9
Intervention Designer/ Developer	44	10.8	30.6
Total in Responses	408	100	

*Respondent were allowed to check more than one response

Table 4.27

Perceived Numbers of Roles by Malaysian Human Resource Development Practitioners' (n = 144)

Numbers of role	Responses (Multiple Choices)	
	Counts*	% of response
One role	68	47.2
Two roles	13	9.0
Three roles	16	11.1
Four roles	13	9.0
Five roles	7	4.9
Six roles	10	6.9
Seven roles	17	11.8
Total in Responses	144	100

*Respondent were allowed to check more than one response

Table 4.28 shows the frequency of roles by Malaysian HRD practitioners. Based on the frequencies, only the *HRD Manager* and *HRD Analyst* can be compared to the three *competency groups*. Other *roles* showed too few of an *n* to be compared with each other.

Table 4.28

Frequency and Percentage of Malaysian Human Resource Development Practitioners' Who Identified One Role (n = 144)

Role	Responses (Multiple Choices)	
	Frequency	%
HRD Manager	30	20.8
HRD Analyst	23	16.0
Intervention Implementor	5	3.5
Evaluator	3	2.1
Intervention Selector	4	2.8
Change Leader	3	2.1
Intervention Designer/ Developer	-	-
Total in Responses	68	47.2

*Respondent were allowed to check more than one response

An Independent Sample t-test was used to investigate the difference between the *HRD Manager* and *HRD Analyst* in three *competency groups*. Data for the t-test was presented and divided into *Organizational Competencies*, *Thinking Competencies*, and

Application Competencies. Table 4.29 shows the Independent t-test result for *Organizational competencies*. Independent Sample t-test results revealed that each of the other nine competencies in the *Main Competencies* group were not significantly different between the *HRD Manager* and *HRD Analyst* except for *communication*. The t-test result showed that the *HRD Manager* was significantly different from the *HRD Analyst* on *communication*, ($p = .013$). Inspection of the two group means indicates that the average *HRD Analyst* data for *communication* ($M = 4.48$) is significantly higher than the data for *HRD Manager* ($M = 3.80$). The difference between means is .68 and the effect size d is approximately .71, which is larger than typical.

Table 4.29
Independent t-test result of Organizational Competencies between HRD Manager and HRD Analyst

Category and/or Competency	HRD Manager (<i>n</i> = 30)		HRD Analyst (<i>n</i> = 23)		<i>t</i>	<i>p</i>	<i>d</i> *
	M	SD	M	SD			
	By Organizational competencies						
Communication	3.80	1.00	4.48	.90	-2.56	.013	.71
Systems Thinking	3.73	.94	4.17	.89	-1.73	.090	.48
Consulting	3.60	.89	3.96	.93	-1.42	.163	.40
Identification of Critical Business Issues	3.80	.93	3.52	.85	1.13	.265	.31
Negotiating/Contracting	3.67	.92	3.91	.90	-.97	.335	.26
Visioning	3.87	.86	4.04	1.07	-.67	.507	.18
Goal Implementation	3.73	1.05	3.91	1.00	-.63	.530	.18
Buy-in/Advocacy	3.70	.84	3.83	.83	-.54	.588	.15
Group Dynamics	3.40	.93	3.26	.92	.54	.590	.15
Work Environment Analysis	3.73	.83	3.78	.67	-.23	.817	.07

* $d \geq 1.00$; Much larger than typical
 > .80; Larger or larger than typical
 > .50; Medium or typical
 > .20; Small or smaller than typical

Table 4.30 shows the Independent t-test result for *Thinking Competencies*. An Independent Sample t-test result revealed that each of nine competencies in the *Thinking Competencies* group was not significantly different between the *HRD Manager* and *HRD*

Analyst except for *analytical thinking*. The t-test result showed the *HRD Manager* was significantly different from the *HRD Analyst* on *analytical thinking*, ($p = .042$).

Inspection of the two group means indicates that the average *HRD Analyst* data for *communication* ($M = 4.00$) is significantly higher than the data for *HRD Manager* ($M = 3.47$). The difference between means is .53 and the effect size d is approximately .57, which is medium.

Table 4.30

Independent t-test Result of Thinking Competencies between HRD Manager and HRD Analyst

Category and/or Competency	HRD Manager (<i>n</i> = 30)		HRD Analyst (<i>n</i> = 23)		t	<i>p</i>	<i>d</i> *
	M	SD	M	SD			
By Thinking competencies							
Analytical Thinking	3.47	.94	4.00	.91	-2.08	.042	.57
Questioning	3.50	.97	3.87	1.10	-1.30	.201	.36
Facilitation	3.73	.87	4.04	.93	-1.25	.217	.34
Workplace Performance, Learning Strategies, and Intervention Evaluation	3.77	.90	4.04	.93	-1.10	.278	.30
Standard Identification	3.57	.97	3.87	1.06	-1.08	.284	.30
Leadership	3.77	.97	4.04	.93	-1.05	.300	.28
Model Building	3.53	.94	3.74	1.01	-.77	.447	.22
Competency Identification	3.63	1.16	3.87	1.29	-.70	.487	.20

* $d \geq 1.00$; Much larger than typical
 $> .80$; Larger or larger than typical
 $> .50$; Medium or typical
 $> .20$; Small or smaller than typical

Table 4.31 showed the Independent t-test result for *Application competencies*. An Independent Sample t-test result revealed that none of the competencies in the *Application Competencies* group were significantly different between the *HRD Manager* and *HRD Analyst*. The t-test result showed the *HRD Manager* was not significantly different from the *HRD Analyst* on *process consultation*, ($p = .148$). Inspection of two group means indicates that the *HRD Analyst* average data for *communication* ($M = 4.09$)

is significantly higher than data of the *HRD Manager* ($M = 3.70$). The difference between means is .39 and the effect size d is approximately .41, which is small.

Table 4.31

Independent t-test Result of Application Competencies between HRD Manager and HRD Analyst

Category and/or Competency	HRD Manager (<i>n</i> = 30)		HRD Analyst (<i>n</i> = 23)		t	<i>p</i>	<i>d</i> *
	M	SD	M	SD			
By Application competencies							
Process Consultation	3.70	.92	4.09	1.00	-1.47	.148	.41
Organization Development Theory and Application	3.50	.86	3.35	.71	.69	.496	.19
Training Theory and Application	3.50	1.17	3.39	1.20	.33	.741	.09
Feedback	3.67	.84	3.74	1.01	-.28	.777	.07
Reward system theory and Application	3.90	1.13	3.96	1.26	-.17	.864	.05
Staff Selection Theory and Application	3.47	1.04	3.52	1.41	-.16	.871	.04
Career Development Theory and Application	4.13	.97	4.13	.87	.01	.991	0

* $d \geq 1.00$; Much larger than typical
 > .80; Larger or larger than typical
 > .50; Medium or typical
 > .20; Small or smaller than typical

CHAPTER 5 : SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This research focused on examining the core competencies as perceived by Malaysian Human Resource Development (HRD) practitioners. A survey of HRD practitioners examined how workplace learning and performance can best contribute to workers' competencies. The purpose of this research was to identify Malaysian HRD practitioners' perceptions of competencies important to HRD practitioners in their organizations. The competencies were based on the American Society for Training and Development (ASTD) models for Workplace Learning and Performance (Rothwell, Sanders, & Soper, 1999). In addition, this study also assessed the perceptions of HRD professionals regarding the impact and challenge of competencies for human resources development in organizational contexts. This chapter presents a brief discussion based on the research findings and possible interpretations or explanations in a sequential manner for each research question. It also describes the limitations of this study, suggestions for future studies and conclusions of this study.

Summary of the Study

This study was conducted using a non-experimental quantitative survey design. The cross-sectional data for this study were gathered through an online web-based using Qualtrics. The survey was sent to approximately 2,357 participants in Malaysian

organizations. The timeframe for data collection was approximately two months. The consent form was presented to each respondent (Appendix F), which assured that privacy and confidentiality would be maintained. Respondents who wished to not complete the survey could opt out of the process. A total of 144 respondents completed surveys, which were used for data analysis, this represents a six percent response rate. Raw data from the web survey were transferred, coded, and analyzed using SPSS. Frequencies, percentages, means, and standard deviations were computed and presented in tables and explained. The data were then analyzed using an exploratory factor analysis to validate the underlying structure of each competencies list group being used. Comrey (1973) stated that one of the reasons a researcher would use factor analysis is to measure a collection of variables to have some idea about what construct might be used to explain the intercorrelations among variables in the study (p. 4). A reliability analysis was run to assess internal consistency and how well items in each scale correlated with one another. Through Exploratory Factor Analysis some of the items from the original instruments were deleted. Further statistical analyses used the new constructs named Organizational Competencies (Main Competencies), Thinking Competencies (Sub Competencies 1), and Application Competencies (Sub Competencies 2). An analysis of variance (ANOVA), t-tests, and correlations were used to address the specific research questions. The study is summarized in Table 5.1.

Table 5.1
Summary of the Study

Research Topic / Area	Research Problems	Research Questions	Method / Procedures	Analysis	Outcome
<p>Topic: Human Resource Development Practitioners' Perspectives On Competencies: An Application of American Society for Training and Development (ASTD) Workplace Learning and Performance (WLP) Competency Model in Malaysia</p> <p>Area: Competencies Evaluations</p>	To identify how the Workplace Learning and Performance (WLP) practitioners in Malaysia perceive the important of WLP competencies needed at the present time, as well as its importance over the next five years.	<p>1. What are the competencies that the HRD practitioners in Malaysia perceive to be important as measured across the six competency groups (Analytical, Interpersonal, Technological, Business, Leadership, and Technical), seven roles (HRD Manager, HRD Analyst, Intervention Selector, Intervention Designer/ Developer, Intervention Implementor, Change Leader, and Evaluator), and for each of the 52 competencies?</p> <p>2. What competencies are perceived important by the HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand, as measured across the six competency groups, seven roles, and for each of the 52 competencies?</p> <p>3. Are there differences between HRD discipline and HRD levels, in regard to competency groups?</p> <p>4. Which of these different competencies are most needed by Malaysian HRD practitioners in manufacturing and non-manufacturing?</p> <p>5. Are there significant correlations between the ratings of the HRD competencies in the three competency groups?</p> <p>6. Are there significant correlations between the three competency groups (Main Competencies, Sub Competencies 1, and Sub Competencies 2) across the seven roles?</p>	<p>Sample Selected; was 2,357 Malaysian HRD practitioners. Random sampling was used.</p> <p>Survey instrument using 5-point Likert Scale</p> <p>The instrument used is the ASTD Models for Workplace Learning and performance (Rothwell, Sanders, & Soper, 1999)</p> <p>The instrument was validated by Malaysian HRD professionals since it was translated to Malay language.</p> <p>In total, 144 usable questionnaires are returned, which is about 6%.</p>	<p>Based on the research questions, analysis were done using these methods:</p> <p>1. Descriptive statistics to find Means and Standard Deviations. Presented in rank order</p> <p>2. Descriptive statistics to find Means and Standard Deviations. Presented in rank order</p> <p>3. Factorial ANOVA</p> <p>4. Independent t-test.</p> <p>5. Pearson's correlation coefficient</p> <p>6. Independent t-test</p>	<p>The findings shows that Malaysian HRD practitioners perceived organizational competencies, thinking competencies, and application competencies were the most important competencies not only for the present but for the future as well.</p>

Discussions of Research Findings

This section discusses the survey data and the findings. The main objective of this research was to identify Malaysian HRD practitioners' perceptions of important competencies needed by HRD practitioners in their organizations, based on the ASTD models for Workplace Learning and Performance. This study was guided by six research questions that concentrated on competencies perceived as important, currently and in the future for organizations. The questions were categorized into descriptive questions, associational questions, and difference questions. It is important to emphasize that because the findings were compared with the previous studies, the discussions are based on a retrospective study view.

Demographics and Background of Respondents

The analysis of demographics of Malaysian HRD practitioners showed wide variations in background characteristics. These background characteristics were organized into three categories; individual, organization and WLP. In regard to individual profiles, six questions were asked. In terms of discipline, most of the respondents in Malaysia were from Human Resource Management (40.3%). These findings correspond to published studies, which indicate that a majority of disciplines in Malaysia Human Resource professional are HRM. Most of the respondents in this study were Managers (43.1%) at the organization level. This shows that most respondents were clustered in decision-making positions and top-level management. In terms of gender, most respondents were male (60.4%) while females were 39.6 percent. This result is similar to the overall workforce in the country. According to UNdata (2011), the Malaysian female

labor force participation in 2008 was 44.6 percent. For the organization profile, six different questions were asked. The findings showed a balance between the manufacturing sector (56.3%) and non-manufacturing sector (43.8%). The types of businesses for this study were diverse including automotive, construction, telecommunication, finance, and others.

Exploratory Factorial Analysis (EFA) was conducted to check the factor structure of the 52 items in the WLP competencies list. EFA is used to discover and investigate the theoretical construct based on the ASTD WLP Competency Model. This study did not find the same factor structure as a previous study had. Thus, three new categories or constructs of the Malaysian HRD Competencies were developed. The new constructs are Main Competencies representing *Organizational Competencies*, Sub Competencies 1 representing *Thinking Competencies*, and Sub Competencies 2 representing *Application Competencies*. Figure 5.1 illustrated the integrated competency model for HRD practitioners in Malaysia. Sherman (2004) remarks that the competency model looks at the role of an individual in the organization. The numbers of competencies were reduced from 52 to 25 items. The new competency groups represent the current and future competencies perceived important by the Malaysian HRD practitioners. The Malaysian HRD Competencies Model shows the relationship between Main Competencies and two Sub Competencies groups. The three competency groups are skill sets acquired by the practitioners. Table 5.1 shows the competency groups based on the three new constructs and their relationship. Similarly, in the literature review and in the Bernthal et al. (2004) findings on the ASTD 2004 competency study, the items in the competencies list were reduced over time. In the ASTD 2004 competency study the foundation of competencies

were divided into three categories: interpersonal items, business/management items, and personal items. In total, there were 12 competency items in the ASTD 2004 competencies study.

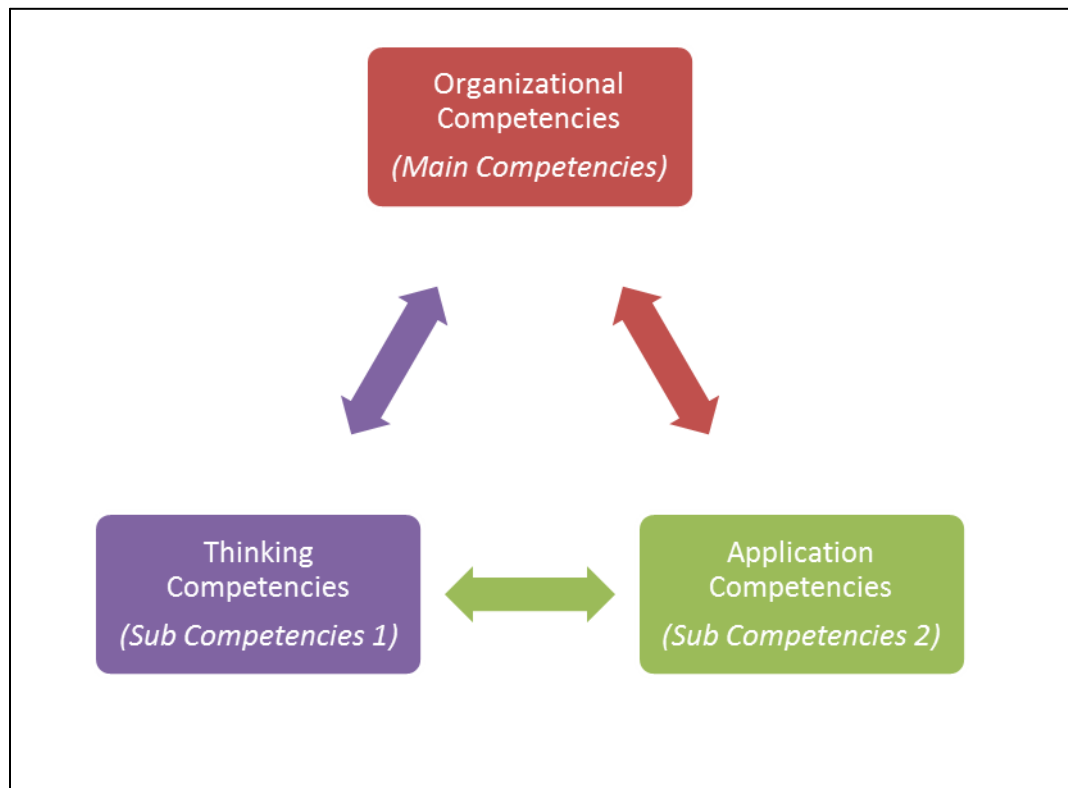


Figure 5.1 Competency Model for Malaysian HRD Practitioners

The elements of the competency model for Malaysian HRD practitioners in Figure 5.1 are consistent with the literature describing competency models. Rothwell (2002) remarked that there are core competencies required for all workers including knowledge, skills, and abilities. Organizational competencies are more about comprehension, articulation, and a combination of skill, attitudes, knowledge, and employee behavior needed in an organization. Similarly, Sherman (2004) indicated that competencies are the combination of knowledge, abilities, personal attributes, and skills

that contribute to individual and organizational performance (p. 75). Organizational competencies are considered essential for employees regardless of their roles, level, and discipline in the organization. It links an organization's essential values, mission, and vision to the employees. Organizational competencies are also an effective performance tool, as well as a necessary guide for development process in organizations. It is the most important competencies to reinforce the two other sub competencies in the organization.

Conversely, thinking competencies are more related to skill and knowledge. Thinking competencies are most effective in support long-term planning in regards to the employees' professional and career development process in an organization. Thinking competencies can help employees develop and generate better ideas, processes, and approaches that shape the organization. Application competencies are more about attitudes and behavior. Application competencies help employees understand the right attitudes, morale, values, and behavior that are needed for an organization. It is also related to the employee's level of satisfaction and motivation in the organization. Overall, the combination of these three competencies in organizations should enhance workers competency and organizational performance. This study revealed that in most organizations in Malaysia, only a few competencies can draw out potentially useful skills, attitudes, knowledge, or behavior from employees. As a result (Table 5.1), only 25 competencies from the original 52 competencies that were tested are perceived important to the HRD practitioners in Malaysia when factor analyzed.

Table 5.2

Three Competency Groups for Malaysian HRD Practitioners

Competency Group	Competency Description
Organizational Competencies (Main Competencies)	<ol style="list-style-type: none"> 1. Identification of Critical Business Issues 2. Communication 3. Group Dynamics 4. Work Environment Analysis 5. Goal Implementation 6. Buy-in/Advocacy 7. Consulting 8. Negotiating/Contracting 9. Systems Thinking 10. Visioning
Thinking Competencies (Sub Competencies 1)	<ol style="list-style-type: none"> 1. Workplace Performance, Learning Strategies, and Intervention Evaluation 2. Competency Identification 3. Facilitation 4. Standard Identification 5. Questioning 6. Model Building 7. Analytical Thinking 8. Leadership
Application Competencies (Sub Competencies 2)	<ol style="list-style-type: none"> 1. Staff Selection Theory and Application 2. Training Theory and Application 3. Feedback 4. Reward System Theory and Application 5. Organization Development Theory and Application 6. Career Development Theory and Application 7. Process Consultation

Discussion of Research Question One

What are the competencies that the HRD practitioners in Malaysia perceive to be important as measured across the six competency groups (Analytical, Interpersonal, Technological, Business, Leadership, and Technical), seven roles (HRD Manager, HRD Analyst, Intervention Selector, Intervention Designer/ Developer, Intervention Implementor, Change Leader, and Evaluator), and for each of the 52 competencies?

The data provided by the HRD practitioners in Malaysia showed that the most important competency as perceived by HRD practitioners is process consultation ($M = 3.89$, $SD = .93$). Even though process consultation was ranked first, the mean difference between the top ranked item and the bottom item was small. It was indicated that the Malaysian HRD practitioners perceived all 52 competency items were important. Bernthal et al. (2004) indicated that competencies encompass the cluster of skills, knowledge, abilities, and behaviors required for success across all WLP jobs. Similarly, Sherman (2004) supported this definition saying that competencies are the combination of knowledge, abilities, personal attributes, and skills that contribute to individual and organizational performance (p. 75). The top five items ranked most important were also included in one of the new constructs either in Organizational Competencies, Thinking Competencies, or Application Competencies. In contrast, further analysis of the lowest ranking items in the list of competencies revealed that none of the items were included in these three groups, the exception was for Group Dynamics. Long and Ismail (2010) remarked that Malaysian HRD has emerged as a strategic paradigm in which individual human resource functions, such as recruitment, selection, training, compensation, and performance appraisal, are closely aligned with each other and also with the overall

strategy of the organization (p. 28). This situation indicates that organizations in Malaysia need overall competencies to make sure the organization can perform and stay competitive. The findings also revealed that communication is one of the top items perceived important by the Malaysian HRD practitioners. This is similar to the literature that suggested communication is the foundation of competencies under the interpersonal cluster. Bernthal et al. (2004) described communication as expressing thoughts, feelings, and ideas in a clear, concise, and compelling manner in both individual and group situations. Additionally Rothwell and Sredl (1992) indicated that organizational communication occurs within an organizational structure and it is a basic process underlying all management and learning functions (p. 57). Similarly, this result supported Conrad and Newberry (2011) findings indicating that communication skills are highly valuable to employees and organizations.

This study also found similarities with competency groups perceived important by the Malaysian HRD practitioners. Interpersonal competencies ($M = 3.83$, $SD = .74$) were perceived the most important in competency groups. It is related to communication under the interpersonal competencies cluster directly or indirectly. Researchers in many areas have discussed interpersonal competencies widely. For example, Duffy et al. (2004) stated that while communication skills are the performance of specific tasks and behaviors by an individual, interpersonal skills are inherently relational and process oriented. Interpersonal skills focus on the effect of communication on another person (p. 497). Overall, the findings show that Malaysian HRD practitioners perceived all competencies, competency groups, and roles as important to employees and organizations.

Discussion of Research Question Two

What competencies are perceived important by the HRD practitioners in Malaysia, Taiwan, South Korea, and Thailand, as measured across the six competency groups, seven roles, and for each of the 52 competencies?

This question addressed similarities and differences between studies of the competencies in four countries in Asia. The researcher chose to compare and contrast findings between these countries because they are in the same region (Asia) and they have similar working culture. By doing this analysis, the researcher not only gained important information about competencies but also additional important information about HRD. The findings from Taiwan, South Korea, and Thailand suggested that future competencies are perceived to be more important than current ones based on the mean values. Yoo's (1999) and Peeraparnvittoon's (1999) findings suggested all competencies, competency groups, and roles were perceived to be significantly more important in the future than at the present (p. 117). This is similar to Rothwell's et al. (1999) findings in the ASTD competencies study, they remarked that competency assessment methods must become future focused and anticipate the characteristics necessary for high performance and changing environmental conditions (p. 21). Changing environments not only involve employees but also organizations. Thus, organizations need to create an environment that supports change and develops learning opportunities for employees. Organizations need to support linking of employee and organizational development. Gilley and Maycunich (2000) point out that organizations must create supportive learning environments that emphasize development in order to heighten the integration between work and learning,

and include identification of competencies that are aligned with organization goals (p. 160).

Discussion of Research Question Three

Are there differences between HRD discipline and HRD levels, in regard to competency groups?

This study found no significant difference between HRD disciplines and HRD levels in three competency groups. The analysis revealed that even though studies in South Korea, Taiwan, and Thailand found significant differences, it does not mean that the same pattern would be found in Malaysia. The findings showed that competencies in organizations and other countries are not static, but rather dynamic. This is consistent with the literature review, which suggests that competencies are a development process. Rothwell et al. (1999) remarked that competencies not only vary by discipline, industry, and organization, but changes in the general marketplace will inevitably change the importance of competencies and roles needed to meet this new reality (p. 115). In contrast, Bernthal et al. (2004) pointed out that globalization is one of the factors that shape businesses and organizations. Globalization can create diverse environments in organizations. Thus, with the impact of globalization, organizations are exposed to cross-cultural contact and more competitive global markets, which demand competent and diverse workers. Organizations operating abroad might need to break out of their own paradigm and make a point to understand the cultural issues that could lead to low productivity and labor strife, resulting from a lack of motivation of culturally diverse populations (Bernthal et al., 2004, p. 11).

Discussion of Research Question Four

Which of these different competencies are most needed by Malaysian HRD practitioners in manufacturing and non-manufacturing?

This question compared and contrasted manufacturing and non-manufacturing factors. It is important to look at these two sections because the respondents for this study are almost equally balanced between manufacturing (56.3%) and non-manufacturing (43.8%). The findings revealed that Malaysian HRD practitioners perceived Consulting to be the most needed competency in manufacturing and non-manufacturing. The effect size for consulting was medium ($d = .46$) indicating that it is practically significant. Rothwell et al. (1999) explained consulting as understanding the results that stakeholders desire from a process and providing insight into how they can best use their resources to achieve their goals. In contrast, Gilley and Maycunich (2000) contend consulting to be more of an organizational role. The role of performance consultant effectively enhances a HRD professional's organizational influence and impacts organizational results (p. 322). The findings for *competency identification* as one of the important competencies show similarities with the literature review. Rothwell et al. (1999) described competency identification as identifying skills, knowledge, and attitudes to perform work. Both HRD practitioners in the manufacturing sector and the non-manufacturing sectors believed that competent employees are essential for organization performance. Organizations should hire and develop future employees based on the competencies needed and follow a specific model. In doing that, the future employee will be ready with the skill set required and competencies needed to become a more productive worker. The competencies are a

decision tool that describes the key capabilities for performing a specific job in a way that management should be able to understand and teach (McLagan, 1996, p. 61).

Discussion of Research Question Five

Are there significant correlations between the ratings of the HRD competencies in the three competency groups?

The analysis for this research question leads to the strongest positive correlations between Main Competencies, Sub Competencies 1, and Sub Competencies 2. However, it should be noted that while statistical analysis of the data shows that relationships exist between Main Competencies with other variables, the relationship between Sub Competencies 1 and Sub Competencies 2 is slightly lower compared to the relationship of each to the main competencies. Main competencies consist of ten items that related to Organizational Competencies. It is a combination of several important competencies including interpersonal, analytical, leadership, and business. Organizational Competencies are important as perceived by the Malaysian HRD practitioners because they are the combination of skills, attitudes, knowledge, and behaviors needed by employees to enhance organization performance. Gilley and Maycunich (2000) noted that HRD should help develop new approaches to selection, training, career development, rewards, and performance improvement systems so that organizations will be able to create strategically critical competencies (p. 14). The relationship among competencies groups indicated that competencies in general are transferable among workers, roles, levels, and disciplines.

Discussion of Research Question Six

Are there significant correlations between the three competency groups (Main Competencies, Sub Competencies 1, and Sub Competencies 2) across the seven roles?

This question sought to find answers for how perceptions of importance by Malaysian HRD practitioners differed between competency groups and their roles. It is important in this research to view the competencies based on role categories because the roles of employees are different based on the field. According to Rothwell (2002), WLP practitioners enact seven distinct roles, some WLP practitioners will only performs certain roles in the context of their jobs, and most WLP practitioners will usually perform several roles at the same time (p. 140). Similarly, Rothwell et al. (1999) suggested that changing roles in the field are important as indicators or changing expectations (p. 45). In WLP research, the concepts of roles are progressively changing due to organization development and HRD progress. This progression has been translated into an ASTD 2004 competency model where the function of roles are more defined and become a successful execution factor. Bernthal et al. (2004) remarked that roles are broad areas of responsibility within the WLP profession that require a certain combination if competencies. Understanding the relationship among roles and how they fit into the specific competencies will allow HRD practitioners to focus on the specific competencies they need for their organizations. Rothwell and Sredl (1992) explained that competency studies could help to clarify the range of roles that may be played and that the competencies are associated with successful practice (p. 71).

Additional Findings

In addition to research questions provided in the survey, respondents were allowed to express concerns and recommendations at the end of the survey. Some of the respondents offered their opinions and insights. Interestingly, some respondents emphasized that, other than the 52 competencies listed on the survey, it is useful to have good communication skills not only in English, but also in languages such as Chinese, Japanese, and others. According to these respondents, it is an advantage to the organization if the workers are bilingual or multilingual so that the organization can be more global and diverse in terms of recruitment and expansion. The effective HRD professionals of the future should be proficient in understanding the cultures and speaking the languages representing the diversity of their country and the overseas markets (Du Plessis, Beaver, & Nelp, 2006, p. 45). Marques (2008) argued that when organizations operate on a global scale, some utilize diversity to accommodate customers in the countries where they operate, but they ignore the possibility of having their employees from various geographical areas learn from one another (p. 5).

Additionally, Brock (1999) revealed that the American workforce is also becoming more diverse, with growing shares of both Hispanic and Asian workers, and with less preparation for the jobs that are being created in the new economy (p. 11). This reflects another related suggestion, i.e., that organizations and HRD practitioners should better understand customs, cultures, and languages of the employees. Sherman (2004) argued that culture influences the selection of individuals for particular jobs and locations, which in turn affects the way in which tasks are carried out and decisions are made (p. 95). HRD practitioners are not only accountable for a better understanding of

the organization's culture, but also for a better understanding of the Malaysian culture. Burke (2008) emphasized organization culture by saying culture is "the way we do things around here" and concerns deeply held beliefs, attitudes, and values (p. 23). Additionally, Schein (1985) proposed that there are several cultures operating within an organization; a managerial culture, various occupationally based cultures in functional units, group cultures based on geographical proximity, worker cultures based on shared hierarchical experiences, and so on (p. 7). Clearly, with so many cultures involved in an organization, various competencies are needed to handle different situations. Organization performance is becoming dependent on how organizational change reflects organization culture. HRD practitioners need good communication skills to deliver and educate employees in an organizational culture.

Discussion and Implication

Based on the findings from the research questions, the literature reviewed, and personal experiences, this section discusses implications for practitioners and researchers. The discussion is organized into two sections: the importance of the competencies of WLP, and how competencies contribute to organization performance.

The importance of the competencies of WLP

The findings revealed that Malaysian HRD practitioners perceived that competencies are important to the organization. The findings are similar to what is reported in the literature review (Chen, 2003; Peerapornvitoon, 1999; Yoo, 1999) which identified the significant competencies. In contrast, the perceived importance of competencies is changing based on the respondent demographics and organizational

culture. While much of the literature on organizational performance emphasizes the importance of competencies, there is little evidence that connects competencies with organizational culture. Rather, competencies can lead organizational change and improve overall performance. Rothwell et al. (1999) argued that the challenge for the WLP profession is in assessing the skills and knowledge that WLP practitioners would need in the future (p. 21). It is important to view the research findings or output with content on how employees learn. Rothwell (2002) saw this by saying how important it is to emphasize that competencies are focused on how people learn, not on what they learn (p. 133).

Regarding the learning process, the findings showed that Malaysian HRD practitioners are still far behind others. To keep up with the change, Malaysian HRD practitioners need to be exposed to new challenges and interventions in human resources. Bernthal et al. (2004) listed eight trends that are shaping the future in human resources for WLP professionals; (1) drastic times, drastic measures; (2) blurred lines – life or work?; (3) small world and shrinking; (4) new faces, new expectations; (5) work be nimble, work be quick; (6) security alert!; (7) life and work in the E-lane; and (8) a higher ethical bar. As work environments and demands change, competencies will be adapted to fit those changes. Thus, it is an opportunity for HRD practitioners in Malaysia to study these eight trends in their own organization and identify the competency gap, not only between departments or units but also across other organizations. Once the organization understands the required competencies, HRD practitioners can determine the combination of competencies needed by employees in their organizations.

Competencies contribute to organization performance

The findings also revealed that competencies are a key to aligning human resource development with organization performance. Organizations that operate in highly competitive environments must be flexible and able to react quickly to market changes, such as demand for competent and knowledgeable workers. It is vital for HRD practitioners to allocate time, energy, and resources to plan for the organization development process and implementation of competency in organizations. Cummings and Worley (2005) saw organization development as a process that applies behavioral science knowledge and practices to help organizations build the capacity to change and to achieve greater effectiveness, including increased financial performance and improved quality of work life (p. 1). Additionally, Estep (2008) pointed out that organizational development is a values based approach to systems change in organizations and that it strives to build the capacity to achieve and sustain the new desired state that benefits the organization (p. 21). Thus, an organization development process will help HRD practitioners to the performance of organization by determining the changing process and keeping track of necessary improvements.

Organization development is an ongoing process of revision, re-organizing, and development that should be inherent to every organization. If the organizational development process is used systematically, an organization may be more likely to adapt to a new change and create its own organizational culture consistent with higher performance. Sherman (2004) suggested that organizations develop competencies to provide their employees with a framework that allows them to find opportunities to grow in their current assignment, thereby adding more value to the organization (p. 106).

Limitations of the Study

Several factors might influence and potentially impact the results of this study. Several of these limitations were considered when this study was first conceptualized and were previously mentioned in Chapter 1. Thus, these study results need to be interpreted within these limitations and cannot be generalized. Furthermore, the researcher had no control over the knowledge and expertise of the respondents.

The first limitation for this study is Internet access. Accessing of the web-based survey was voluntary, with no pressure from the researcher, which led to a relatively low response rate. The low response rate revealed that in Malaysia, an online survey is not a practical method for collecting data for several reasons. Contrasting the low response rate with the Internet penetration in Malaysia, one conclusion is that Internet use in Malaysia is still low. According to Internet World Stats (2011), Malaysia has approximately 3.7 million Internet users, with a national Internet penetration rate of 58.8 percent. Additionally, UNstats (2011) revealed that the Internet use in Malaysia in 2010 was 55.3 percent. This is considered low compared to other Asian countries like China and Japan. The second major reason for low internet penetration is that Malaysia has a big digital divide among states. Zaitun and Crump (2005) indicate that Malaysian organizations in the urban areas are constantly upgrading their facilities to keep abreast with new computing developments and also to meet their requirements for more and more sophisticated processing functions; meanwhile rural areas are not constantly upgrading. Similarly, data from the Knowledge-Based Economy Master Plan (2002) reported that affluent states, such as Wilayah Persekutuan Kuala Lumpur, Selangor, and

Pulau Pinang have more Internet subscribers per thousand people than all other states (pp. 151-153).

The second limitation for this study is the changing of the instrument scale structure. Although the scale still used a five-point Likert response, there is an implication of change in the structure. Previous researchers separated the scale for current competencies and future competencies. In this researcher's case, the current and future competencies were combined using one integrated rating scales (Appendix A). Several factors directed this researcher to make this decision. One of the major factors was the length of the previous instrument. In total, respondents for the previous instrument had to answer 156 items on the competencies for current practice, current competencies, and future competencies. By reducing the scale, this researcher reduced the number to 52 items for response. Backor, Golde, and Norman (2007) suggested that the number of items a respondent had to answer in the time-use survey has an adverse effect on the quality of answer they provide, as well as the extent of respondents' survey fatigue at later stages in their survey. Overall, this researcher not only reduced the time needed to answer the survey but also reduced the fatigue effects. Sharp and Frankel (1983) contend that length of survey affects the perceived burden. Another disadvantage of combining this scale was that it is now harder to compare with the previous researchers' data. However, by making these changes, the value also expands. Competency identification across countries becomes very different, especially when combining present and future competencies.

Conclusion

This study supports the idea that competencies are keys for organizational performance. Based on the findings of the study, many conclusions can be drawn. While the research did not reveal many relationships of statistical significance, the practical implications are many. First, the findings suggest that competencies have an implication for the organizational development process. Competencies can improve organizational development and performance when collectively implemented by the organization. Rothwell (1999) remarked that a lack of skills and knowledge contributes to substandard performance in organizations (p. 6). This study provided clarification that competencies need to have a direction and foundation in the workplace. In contrast, the lack of clarity and understanding about competencies makes HRD practitioners unable to determine which competencies are perceived important for the workers in the organization. Carter (2001) argued that for an organization to gauge employee competency, organizations must know whether the knowledge, skills, and abilities are measured accurately (p. 54). The analysis in this study did support some of the findings reported in the literature review regarding competencies needed by the employees in an organization.

Second, this study reported findings that are meaningful for Malaysian organizations. Clearly, the 52 items in the competencies list is too broad. The analysis in the Exploratory Factorial Analysis revealed that only 25 competencies are important in Malaysian organizations. It is an indication of the progression that happens to competencies, and this situation is different across organizations and geographical areas. ASTD has already made a revision to the competencies list in an ASTD 2004 competency study. Researchers (Chen, 2003; Peerapornvitoon, 1999; Yoo, 1999) use the

ASTD competencies model as a benchmark to study competency and have encountered changes over time. In an organizational context, competencies are arguably often perceived to be a process of learning for individuals, knowledge, and support for HRD practitioners, and development for organizational performance. According to Burke (2008), within the organizational context, change is a process that occurs in organizations, and for the most part, is unplanned and gradual.

This study demonstrated that competencies are important in a variety of ways for employees and organizations. Assessing competencies are one of the most effective tools and approaches for the organization's workers to be in the right. Whiddett and Hollyforde (2003) argued that competencies make an important contribution to performance review because they help structure and standardize discussions about how a person goes about doing his or her job (p. 94). Moreover, the competencies focus more on employees and organizational performances. Once the organization has the employees in the right positions and roles, the organization has opportunities to set future career development. Having clearly defined competencies also makes employees more effective and reduces job timelines.

In conclusion, the findings of this study suggest that HRD practitioners could perceive the importance of competencies in regard to employee's development process and organizational performance. Competencies involve an ongoing process that fosters employee skills, attitudes, knowledge, and behavior in organizations. There is no absolute answer regarding which competencies are most needed by employees and organizations. As technology progresses, the demand for new competencies grows, and the need to

revise competencies is already present. Further research is required to see the impact of current competencies and if the competencies from five years ago are still in demand.

Recommendations for Future Studies and Practice

Based on the findings in this study, the following recommendations are suggested for further research in competency studies. First, it is highly recommended that the list of competencies should be practical, manageable, adaptable, well defined, and comprehensive, not only to the HRD practitioners, but also to all level of employees in the organization's context. Bernthal et al. (2004) suggested that not all 52 competencies are appropriate for professionals working in other areas of expertise (p. 84). Additionally, the study should be broader and support others' data and documents with quantitative data. Documents, policies, interviews, observation, non-verbal communication, and other sources should be triangulated and included in the analysis to provide extensive detail and depth. Since this is the first time WLP research was conducted in Malaysia and involved only members of the Federation Manufacturer of Malaysia (FMM), further research on other HRD professional associations, such as the Malaysian Institute of Human Resource Management and Malaysian Employers Federation, is highly recommended to offer more insights. As become apparent during this study, the use of a longitudinal study will help researchers better understand the competencies needed and see the progression pattern of competencies in organizations.

Another recommendation for research is to replicate the same study but use a different research methodology. It is important in the future for employees and organizations to know more about the intervention and implementation of competencies.

The current list of perceived competencies can be used as a benchmark to study in greater depth. Research can focus on describing the list of competencies and preparing manuals or instructions as guidelines for HRD practitioners in an organization. The list of competencies should be up-dated from time to time. It also can serve as a guide to lead future researchers to better understanding the relationship between other major factors related to competencies, including organizational change, organizational culture, organizational learning, leadership, and career management.

It is recommended that Malaysian HRD practitioners develop and enhance interpersonal competencies based on their culture and organizational needs. Competencies needed in Malaysia might differ from other countries based on the demographic and cultural characteristics. The 25 competency items that include organizational competencies, thinking competencies, and application competencies could be applied to an analysis of the human resource process in organizations. The findings showed how Malaysian HRD practitioners perceived interpersonal competencies to be important to employees and organizations. Additionally, the findings suggest that the competencies should be a flexible guide to the organization's needs. Feedback is needed from the HRD practitioners in order to improve the items and content of the competency model. By giving this input, HRD practitioners can shape the outcome to be more in line with the needs of organizations in Malaysia.

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APPENDICES

Appendix A: Instrument (English)

This is a survey to determine the perceived important of Human Resource Development competencies to the on-job success of the professional practitioner at various levels within organizations.

Please indicate your responses by checking or filling in the blank the most correct answer as appropriate.

Which one of the following best describe your human resource development discipline?

- | | |
|---|--|
| <input type="radio"/> Training | <input type="radio"/> Career Development |
| <input type="radio"/> Organization Development | <input type="radio"/> Generalist |
| <input type="radio"/> Management Development | <input type="radio"/> Other (Please indicate) <input type="text"/> |
| <input type="radio"/> Human Resource Management | |

Which one of the following best describes your current level?

- ☐ Executive - Vice president or higher, or officer of the company
- ☐ Manager - Manages large project or large permanent groups
- ☐ Supervisor - Manages a department or groups
- ☐ Entry - Manages self or occasional small groups or teams
- ☐ Private Consultant - Works independently or is self-employed
- ☐ Other (Please indicate)

How many years of professional experience do you have in HR field?

- | | |
|--|--|
| <input type="radio"/> Less than 1 year | <input type="radio"/> 11 - 15 years |
| <input type="radio"/> 1 - 5 years | <input type="radio"/> 16 - 20 years |
| <input type="radio"/> 6 - 10 years | <input type="radio"/> more than 20 years |

Which one of the following best describes the highest level of education completed?

- | | |
|---|--|
| <input type="radio"/> Diploma / Certificate | <input type="radio"/> Doctoral |
| <input type="radio"/> Bachelors | <input type="radio"/> Other (Please indicate) <input type="text"/> |
| <input type="radio"/> Masters | |

How old will you be this calendar year?

- ☐ 25 and under ☐ 26 to 35 years ☐ 36 to 45 years
☐ 46 to 55 years ☐ 56 to 65 years ☐ over 65

What is your gender?

Male

Female

Which one of the following best describes your organization's primary type of business?

- ☐ Manufacturing (Please indicate)
☐ Non-Manufacturing (Please indicate)

Which one of the following best describe the number of full-time employees in your entire organization?

- ☐ less than 100 ☐ 200 - 299 ☐ 400 - 499
☐ 100 - 199 ☐ 300 - 399 ☐ 500 or more

Which one of the following best describes the type of your organization?

- ☐ Local company (invest only in Malaysia)
☐ International company (invest in less than ten countries including Malaysia)
☐ Global company (invest in ten or more countries including Malaysia)

Please indicate the type of education/training you received to prepare for your position. (Check all that apply).

- ☐ Independent Self-Directed Learning
 ☐ Peer or Supervisor Mentor-ship
☐ External Formal Professional Development Programs
 ☐ Academic Degree Programs
☐ In-house Formal Professional Development Programs
 ☐ Other (Please indicate)

Please indicate the type of education/training you received to prepare for your position. (Check all that apply).

Least Effective

Most Effective

1

5

Independent Self-Directed Learning	
External Formal Professional Development Programs	
In-house Formal Professional Development Programs	
Peer or Supervisor Mentorship	
Academic Degree Programs	
Other <input type="text"/>	

Which of the following best describes your roles?

- ☐ Plans, organizes, schedules, and lead the work of individual and groups to attain desired results; facilitates the strategic plan; ensures that Workplace Learning and Performance is aligned with organizational needs and plans; and ensures that the administrative requirements of the function are accomplished.
- ☐ Conducts troubleshooting to isolate the cause(s) of human performance gaps or identifies areas in which human performance can be improved.
- ☐ Selects appropriate workplace learning and performance and non-workplace learning and performance interventions to address root cause(s) of human performance gaps.
- ☐ Designs and/or develops Workplace Learning and Performance interventions that help to address the specific root cause(s) of human performance gaps and that effectively.
- ☐ Ensures that desired interventions are appropriately and effectively implemented to address the specific root cause(s) of human performance gap in a manner that effectively complements other Workplace Learning Performance or non-Workplace Learning and Performance interventions targeted at achieving similar results.
- ☐ Ensures that interventions are implemented in ways consistent with desired results and that they help individuals and groups achieve results.
- ☐ Assess the impact of interventions and follows up on changes made, actions taken and results achieved in order to provide participants and stakeholders with information about how well interventions are being implemented.

Please rate how important you consider each of the following workplace learning and performance competencies for an individual at your current level, and at the next higher level to that which you currently hold. Please use the following rating scale for your responses

1. Less important now, Less important in 5 years
2. More important now, Less important in 5 years
3. Equivalent Important for now and in 5 years
4. Less important now, More important in 5 years
5. More important now, More important in 5 years

Competencies

	How important?				
	Less important now, Less important in 5 years	More important now, Less important in 5 years	Equivalent Important for now and in 5 years	Less important now, More important in 5 years	More important now, More important in 5 years
1. Performance Gap Analysis: performing "front-end analysis" by comparing actual and ideal performance levels in the work place. Identifying opportunities and strategies for performance improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Survey Design and Development: creating survey approaches that use open-ended (essay) and closed style questions (multiple choice and Likert items) for collecting data. Preparing instruments in written, verbal, or electronic format.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Analytical Thinking: clarifying complex issues by breaking them down into meaningful components and synthesizing related items.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Competency Identification: identifying the skills, knowledge and attitudes that are required to perform work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Questioning: collecting data via pertinent questions asked during surveys, interviews, and focus groups for the purpose of performance analysis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Workplace Performance, Learning Strategies, and Intervention Evaluation: continually evaluating and improving interventions before and during implementation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Standard Identification: determining what constitutes success for individuals, organization or processes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Model Building: Conceptualizing and developing theoretical and practical frameworks that describe complex data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Facilitation: Helping others to discover new insights.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Performance Theory: Recognizing the implication, outcomes, and consequences of performance interventions, to distinguish between activities and results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate how important you consider each of the following workplace learning and performance competencies for an individual at your current level, and at the next higher level to that which you currently hold. Please use the following rating scale for your responses

1. Less important now, Less important in 5 years
2. More important now, Less important in 5 years
3. Equivalent Important for now and in 5 years
4. Less important now, More important in 5 years
5. More important now, More important in 5 years

Competencies

	How Important?				
	Less important now, Less important in 5 years	More important now, Less important in 5 years	Equivalent Important for now and in 5 years	Less important now, More important in 5 years	More important now, More important in 5 years
11. Intervention Monitoring: Tracking and coordinating interventions to assure consistency in implementation and alignment with organization strategies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Analyzing Performance Data: Interpreting performance improvement data and determining the effect of interventions on customers, suppliers, and employees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Intervention Selection: Selecting performance improvement strategies that address the root cause(s) of performance gaps - rather than treating the symptoms or side effects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Organization Development Theory and Application: Understanding the theories, techniques, and appropriate application of organization development interventions, as they are used for performance improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Training Theory and Application: Understanding the theories, techniques, and appropriate application of training interventions, as they are used for performance improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Staff Selection Theory and Application: Understanding the theories, techniques, and appropriate application of staff selection interventions, as they are used for performance improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Reward system theory and Application: Understanding the theories, techniques, and appropriate application of reward system interventions, as they are used for performance improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Career Development Theory and Application: Understanding the theories, techniques, and appropriate application of career development interventions, as they are used for performance improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Knowledge Management: Developing and implementing systems for creating, managing and distributing knowledge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Diversity Awareness: Assessing the impact and appropriateness of interventions on individuals, groups, and organizations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate how important you consider each of the following workplace learning and performance competencies for an individual at your current level, and at the next higher level to that which you currently hold. Please use the following rating scale for your responses

1. Less important now, Less important in 5 years
2. More important now, Less important in 5 years
3. Equivalent Important for now and in 5 years
4. Less important now, More important in 5 years
5. More important now, More important in 5 years

Competencies

	How Important?				
	Less important now, Less important in 5 years	More important now, Less important in 5 years	Equivalent Important for now and in 5 years	Less important now, More important in 5 years	More important now, More important in 5 years
21. Ethics Modeling: Modeling exemplary ethical behavior and understanding the implications of this responsibility.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Leadership: Leading, influencing, and coaching others to help them achieve desired results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Industry Awareness: Understanding the current and future climate of your company's industry and formulating strategies that respond to that climate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Buy-in/Advocacy: Building ownership and support for workplace initiatives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Social Awareness: Seeing organizations as dynamic, political, economic, and social systems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Visioning: Seeing the possibilities of "what can be" and inspiring a shared sense of purpose within the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Adult Learning: Understanding how adults learn and how they use knowledge, skills, and attitudes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Interpersonal Relationship Building: Effectively interacting with others in order to produce meaningful outcomes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Feedback: Providing performance information to the appropriate people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Process Consultation: Using a monitoring and feedback method to continually improve the productivity of work groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate how important you consider each of the following workplace learning and performance competencies for an individual at your current level, and at the next higher level to that which you currently hold. Please use the following rating scale for your responses

1. Less important now, Less important in 5 years
2. More important now, Less important in 5 years
3. Equivalent Important for now and in 5 years
4. Less important now, More important in 5 years
5. More important now, More important in 5 years

Competencies

	How important?				
	Less important now, Less important in 5 years	More important now, Less important in 5 years	Equivalent Important for now and in 5 years	Less important now, More important in 5 years	More important now, More important in 5 years
31. Group Dynamics: Assessing how groups of people function and evolve, as they seek to meet the needs of the members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Communication Networks: Understanding the various methods through which communication is achieved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Knowledge Capital: Measuring knowledge capital and determining its value to the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Coping Skills: Dealing with ambiguity and stress resulting from conflicting information and goals. Also, helping others deal with ambiguity and stress.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Consulting: Understanding the results that stakeholders desire from a process and providing insight into how they can best use their resources to achieve goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Communication: Applying effective verbal, non-verbal, and written communication methods to achieve desired results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Technological Literacy: Understanding and appropriately applying existing, new or emerging technology.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Computer Mediated Communication: Understanding the implication of current and evolving computer-based electronic communication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Distance Education: Understanding the evolving trends in technology-supported delivery methods, and the implications of separating instructors and learners in time and in location.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Electronic Performance Support Systems: Understanding current and evolving performance-support systems and their appropriate applications.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

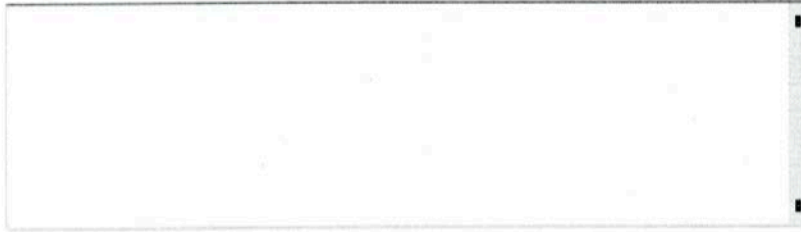
Please rate how important you consider each of the following workplace learning and performance competencies for an individual at your current level, and at the next higher level to that which you currently hold. Please use the following rating scale for your responses

1. Less important now, Less important in 5 years
2. More important now, Less important in 5 years
3. Equivalent Important for now and in 5 years
4. Less important now, More important in 5 years
5. More important now, More important in 5 years

Competencies

	Important for Now				
	Less important now, Less important in 5 years	More important now, Less important in 5 years	Equivalent Important for now and in 5 years	Less important now, More important in 5 years	More important now, More important in 5 years
41. Cost/Benefit Analysis: Accurately assessing the relative value of performance improvement interventions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Project Management: Planning, organizing, and monitoring work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Evaluation of Result Against Organizational Goals: Assessing how well workplace performance, learning strategies, and result match organizational goals and strategic intent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Ability To See the "Big Picture": Identifying trends and patterns that are outside the normal paradigm of the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Goal Implementation: Ensuring that goals are converted into efficient actions. Also, getting results despite conflicting priorities, lack of resource, or ambiguity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. Identification of Critical Business Issues: Determining key business issues and force for change, and applying that knowledge to performance improvement strategies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Work Environment Analysis: Examining the work environment for issues or characteristics that affect human performance. Also, understanding characteristics of a high-performance workplace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Business Knowledge: Demonstrating awareness of business functions and how business decisions affect financial and non-financial work results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Systems Thinking: Recognizing the inter-relationship among events by determining the driving forces that connect seemingly isolated incidents within the organization. Also, taking a holistic view of performance problems in order to find the root causes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. Quality Implications: Identifying the relationship and implication among quality programs and performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Negotiating/Contracting: Organizing, preparing, monitoring, and evaluating work performed by vendors and consultants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Outsourcing Management: Ability to identify and select specialized resources outside of the organization. Also, identifying, selecting, and managing technical specification for these specialized resources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any competencies Malaysian practitioners should have except for above competencies, please list here (e.g. Creativity, Problem Solving, Foreign Language etc.)



Thank you for your participation. If you have any further question, please do not hesitate to contact me at kahirol@hotmail.com

Appendix B: Instrument (Bahasa Malaysia)

Ini adalah tinjauan pendapat untuk menentukan persepsi tentang kepentingan kompetensi Pembangunan Sumber Manusia di tempat kerja kepada kejayaan-tugas dari pengamal profesional di pelbagai peringkat dalam organisasi.

Sila tanda pilihan anda dengan menyemak atau mengisi jawapan yang paling sesuai.

Yang manakah daripada berikut paling tepat menggambarkan skop kerja dan disiplin sumber manusia anda?

- | | |
|---|--|
| <input type="radio"/> Latihan | <input type="radio"/> Pembangunan Kerjaya |
| <input type="radio"/> Pembangunan Organisasi | <input type="radio"/> Umum |
| <input type="radio"/> Pembangunan Pengurusan | <input type="radio"/> Lain-lain (Sila nyatakan) <input type="text"/> |
| <input type="radio"/> Pengurusan Sumber Manusia | |

Yang manakah daripada berikut paling tepat menggambarkan jawatan anda?

- ☐ Eksekutif - Naib Presiden atau lebih tinggi, atau pegawai syarikat
- ☐ Pengurus - Mengurus projek besar atau kelompok yang besar
- ☐ Supervisor - Mengurus suatu jabatan atau kumpulan
- ☐ Entry - Mengurus diri sendiri, sesekali dalam kumpulan atau pasukan
- ☐ Perunding Swasta - Bekerja secara sendiri atau swasta
- ☐ Lain-lain (Sila nyatakan)

Berapa tahunkah pengalaman profesional yang anda miliki dalam bidang Sumber Manusia?

- | | |
|---|---|
| <input type="radio"/> Kurang dari 1 tahun | <input type="radio"/> 11 - 15 tahun |
| <input type="radio"/> 1 - 5 tahun | <input type="radio"/> 16 - 20 tahun |
| <input type="radio"/> 6 - 10 tahun | <input type="radio"/> lebih dari 20 tahun |

Yang manakah daripada berikut paling tepat menggambarkan tahap pendidikan tertinggi anda?

- | | |
|---------------------------------------|--|
| <input type="radio"/> Diploma / Sijil | <input type="radio"/> Doktor Falsafah |
| <input type="radio"/> Ijazah | <input type="radio"/> Lain-lain (Sila nyatakan) <input type="text"/> |
| <input type="radio"/> Sarjana | |

Berapakah umur anda pada tahun ini?

- ☐ 25 dan ke bawah ☐ 26-35 tahun ☐ 36-45 tahun
☐ 46-55 tahun ☐ 56-65 tahun ☐ melebihi 65

Apakah jantina anda?

Lelaki

Perempuan

Yang manakah daripada berikut paling sesuai merujuk kepada jenis perniagaan utama organisasi anda?

- ☐ Pembuatan (Sila nyatakan) ☐ Lain-lain (Sila nyatakan)

Yang manakah daripada berikut paling tepat menggambarkan jumlah pekerja sepenuh masa di keseluruhan organisasi anda?

- ☐ kurang dari 100 ☐ 200-299 ☐ 400-499
☐ 100-199 ☐ 300-399 ☐ 500 atau lebih

Pernyataan manakah daripada berikut paling tepat mengenai jenis organisasi anda?

- ☐ Syarikat tempatan (hanya melabur di Malaysia)
☐ Syarikat Antarabangsa (melabur kurang dari sepuluh buah negara termasuk Malaysia)
☐ Syarikat Global (melabur dalam sepuluh atau lebih banyak negara termasuk Malaysia)

Sila nyatakan jenis pendidikan / latihan yang anda lalui sebagai persediaan menjawab jawatan anda anda. (Tanda semua yang berkenaan).

- ☐ Pembelajaran secara sendiri
 ☐ Pembimbing Rakan Sebaya atau Penyelia Sebagai Mentor
☐ Program Pembangunan Profesional Formal di Luar
 ☐ Program Sarjana Akademik
☐ Program Pembangunan Professional Secara Dalaman
 ☐ Lain-lain

Sebutkan jenis pendidikan / latihan yang anda terima untuk mempersiapkan kedudukan anda. (Tanda semua yang berkenaan).

	Paling Berkesan	Kurang Berkesan
	0	5
Pembelajaran secara Sendiri		
Program Pembangunan Profesional Formal di Luar		
Program Pembangunan Profesional Formal secara Dalaman		
Pembimbing Rakan Sebaya atau Penyelia sebagai Mentor		
Program Sarjana Akademik		
Lain-lain <input type="text"/>		

Manakah daripada yang berikut ini menjelaskan peranan anda dengan tepat?

- ☐ Merancang, menyusun, menjadualkan, dan memimpin kerja individu dan kumpulan untuk mencapai keputusan yang dikehendaki; memudahkan rancangan strategik; memastikan bahawa pembelajaran ditempat kerja dan Prestasi selaras dengan keperluan organisasi dan perancangan, dan memastikan bahawa keperluan pentadbiran fungsi yang dicapai.
- ☐ Melakukan penyelesaian masalah untuk mengasingkan penyebab jurang prestasi manusia atau mengenalpasti lokasi di mana prestasi manusia dapat dipertingkatkan.
- ☐ Memilih tempat kerja pembelajaran yang tepat dan prestasi dan pembelajaran bukan tempat kerja dan prestasi campuran untuk mengatasi penyebab utama jurang prestasi manusia.
- ☐ Rekabentuk dan / atau mengembangkan intervensi pembelajaran ditempat kerja dan Prestasi yang membantu untuk mengatasi penyebab khusus jurang prestasi manusia dan yang berkesan.
- ☐ Memastikan bahawa intervensi yang dikehendaki secara tepat dan berkesan dilaksanakan untuk mengatasi penyebab khusus dari jurang prestasi manusia dalam cara yang berkesan melengkapi prestasi pembelajaran ditempat kerja yang lain dan bukan pembelajaran ditempat kerja dan campuran Prestasi disasarkan untuk mencapai keputusan yang sama.
- ☐ Memastikan bahawa campuran dilaksanakan dengan cara yang konsisten dengan keputusan yang dikehendaki dan bahawa mereka membantu individu dan kumpulan mencapai keputusan.
- ☐ Menilai kesan campuran dan mengambil tindakan lanjut terhadap perubahan yang dibuat, tindakan yang diambil dan keputusan yang dicapai dalam rangka untuk memberikan peserta dan stakeholder maklumat bagaimana campuran yang sedang dilaksanakan.

Sila nilai kepentingan anda dalam mempertimbangkan pembelajaran ditempat kerja dan kecekapan prestasi bagi seorang individu pada tahap anda sekarang, dan pada tahap yang lebih tinggi. Sila menggunakan skala penilaian berikut untuk menilai tanggapan anda.

1. Kurang penting sekarang, kurang penting dalam 5 tahun
2. Lebih penting sekarang, kurang penting dalam 5 tahun
3. Sama penting untuk sekarang dan dalam 5 tahun
4. Kurang penting sekarang, lebih penting dalam 5 tahun
5. Lebih penting sekarang, lebih penting dalam 5 tahun

Kompetensi

	Berapa penting?				
	Kurang penting sekarang, Kurang penting dalam 5 tahun	Lebih penting sekarang, Kurang penting dalam 5 tahun	Sama Penting untuk sekarang dan dalam 5 tahun	Kurang penting sekarang, lebih penting dalam 5 tahun	Lebih penting sekarang, lebih penting dalam 5 tahun
1. Analisis Jurang Prestasi: Melakukan "front-end analisis" dengan membandingkan tahap prestasi di tempat kerja dengan yang ideal. Mengenal pasti peluang dan strategi untuk meningkatkan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Pembinaan dan Merekabentuk Tinjauan: Mencipta pendekatan tinjauan yang menggunakan soalan open-ended (esei) dan soalan tertutup (pilihan pelbagai dan item Likert) untuk mengumpul data. Menyediakan instrumen dalam format bertulis, lisan, atau elektronik.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Berfikir Analitis: Menjelaskan isu-isu kompleks dengan mencerakinkan kepada komponen-komponen yang bermakna dan membuat sintesis perkara-perkara yang berkaitan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Mengenal pasti Kompetensi: Mengenal pasti pengetahuan, kemahiran dan sikap yang diperlukan untuk melakukan kerja.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Bertanya: Mengumpul data melalui soalan-soalan yang berkaitan semasa tinjauan, temubual, dan kumpulan tumpuan bagi tujuan analisis prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Prestasi tempat kerja, Strategi Pembelajaran, dan Penilaian Intervensi: Berterusan menilai dan menambahbaik intervensi sebelum dan semasa pelaksanaannya.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Standard Pengenalan: Menentukan faktor-faktor kejayaan individu, organisasi atau proses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Pembinaan Model : Membina konsep dan kerangka teori serta kerangka praktikal untuk menerangkan data yang kompleks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Memudahcara: Membantu orang lain untuk mendapatkan penemuan/ pengetahuan baru.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Teori Prestasi: Mengenal implikasi, hasil, dan kesan dari prestasi intervensi untuk membezakan antara aktiviti dan hasil.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Sila nilai kepentingan anda dalam mempertimbangkan pembelajaran ditempat kerja dan kecekapan prestasi bagi seorang individu pada tahap anda sekarang, dan pada tahap yang lebih tinggi. Sila menggunakan skala penilaian berikut untuk menilai tanggapan anda.

1. Kurang penting sekarang, Kurang penting dalam 5 tahun
2. Lebih penting sekarang, Kurang penting dalam 5 tahun
3. Setara Penting untuk sekarang dan dalam 5 tahun
4. Kurang penting sekarang, lebih penting dalam 5 tahun
5. Lebih penting sekarang, lebih penting dalam 5 tahun

Kompetensi

	Bagaimana Penting?				
	Kurang penting sekarang, Kurang penting dalam 5 tahun	Lebih penting sekarang, Kurang penting dalam 5 tahun	Sama Penting untuk sekarang dan dalam 5 tahun	Kurang penting sekarang, lebih penting dalam 5 tahun	Lebih penting sekarang, lebih penting dalam 5 tahun
11. Pengawasan Intervensi : Penjejakan dan penyelarasan intervensi untuk memastikan keseragaman dalam pelaksanaan serta selaras dengan strategi organisasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Menganalisis Data Prestasi : Memperbaiki dan mentafsir data prestasi untuk mengenalpasti kesan intervensi kepada pelanggan, pembekal, dan pekerja.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Intervensi Pemilihan : Memilih strategi peningkatan prestasi yang dapat menyelesaikan jurang prestasi - daripada mengenalpasti gejala atau kesan sampingan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Pembangunan Teori Organisasi dan Aplikasi : Memahami teori, teknik, dan aplikasi yang sesuai campur tangan pembangunan organisasi, seperti yang biasa digunakan untuk penambahbaikan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Latihan Teori dan Aplikasi : Memahami teori, teknik, dan aplikasi yang sesuai campur tangan latihan, seperti yang biasa digunakan untuk pembaikan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Teori dan Aplikasi Pemilihan Staf : Memahami teori, teknik, dan aplikasi yang sesuai untuk memilih kakitangan, seperti yang biasa digunakan untuk penambahbaikan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Teori dan Aplikasi Sistem Ganjaran : Memahami teori, teknik, dan aplikasi yang sesuai dalam intervensi sistem ganjaran, seperti yang biasa digunakan untuk penambahbaikan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Teori dan Aplikasi Pembangunan Kerjaya : Memahami teori, teknik, dan aplikasi yang sesuai digunakan untuk pembangunan kerjaya, seperti yang biasa digunakan untuk penambahbaikan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Pengurusan Pengetahuan : Mengembangkan dan melaksanakan sistem untuk membuat, mengurus dan menyebarkan pengetahuan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Kesedaran Kepelbagaian : Menilai kesan dan kesesuaian campur tangan pada individu, kumpulan, dan organisasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Sila nilai kepentingan anda dalam mempertimbangkan pembelajaran ditempat kerja dan kecekapan prestasi bagi seorang individu pada tahap anda sekarang, dan pada tahap yang lebih tinggi. Sila menggunakan skala penilaian berikut untuk menilai tanggapan anda.

1. Kurang penting sekarang, Kurang penting dalam 5 tahun
2. Lebih penting sekarang, Kurang penting dalam 5 tahun
3. Sama Penting untuk sekarang dan dalam 5 tahun
4. Kurang penting sekarang, lebih penting dalam 5 tahun
5. Lebih penting sekarang, lebih penting dalam 5 tahun

Kompetensi

	Bagaimana Penting?				
	Kurang penting sekarang, Kurang penting dalam 5 tahun	Lebih penting sekarang, Kurang penting dalam 5 tahun	Sama Penting untuk sekarang dan dalam 5 tahun	Kurang penting sekarang, lebih penting dalam 5 tahun	Lebih penting sekarang, lebih penting dalam 5 tahun
21. Model Etika: Model perilaku etika teladan dan memahami implikasi dari tanggung jawab tersebut.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Kepimpinan: Memimpin, mempengaruhi, dan melatih mereka mencapai keputusan yang dikehendaki.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Kesedaran Industri: Memahami keadaan semasa dan masa depan organisasi anda dan merumuskan strategi yang mampu meramal perubahan tersebut.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Buy-in/Advocacy: Membangun pemilikan dan inisiatif sokongan di tempat kerja.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Kepekaan Sosial: Melihat organisasi sebagai sistem politik, ekonomi, dan sosial yang dinamik.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Visi: Melihat kemungkinan "apa yang boleh" dan menyemai perasaan diperlukan dalam organisasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Pembelajaran Dewasa: Memahami bagaimana orang dewasa belajar dan bagaimana mereka menggunakan pengetahuan, kemahiran, dan sikap.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Pembangunan Hubungan Interpersonal: Berinteraksi secara berkesan dengan orang lain dalam menghasilkan keputusan yang bermakna.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Komen: Menyediakan maklumat prestasi untuk orang-orang yang berkaitan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Perundingan Proses : Menggunakan pemantauan dan maklumbalas sebagai satu alat untuk terus meningkatkan produktiviti kumpulan kerja.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Sila nilai kepentingan anda dalam mempertimbangkan pembelajaran ditempat kerja dan kecekapan prestasi bagi seorang individu pada tahap anda sekarang, dan pada tahap yang lebih tinggi. Sila menggunakan skala penilaian berikut untuk menilai tanggapan anda.

1. Kurang penting sekarang, Kurang penting dalam 5 tahun
2. Lebih penting sekarang, Kurang penting dalam 5 tahun
3. Sama Penting untuk sekarang dan dalam 5 tahun
4. Kurang penting sekarang, lebih penting dalam 5 tahun
5. Lebih penting sekarang, lebih penting dalam 5 tahun

Kompetensi

	Bagaimana Penting?				
	Kurang penting sekarang, Kurang penting dalam 5 tahun	Lebih penting sekarang, Kurang penting dalam 5 tahun	Sama Penting untuk sekarang dan dalam 5 tahun	Kurang penting sekarang, lebih penting dalam 5 tahun	Lebih penting sekarang, lebih penting dalam 5 tahun
31. Kelompok Dinamik: Mengkaji bagaimana kumpulan berfungsi dan berkembang, dalam usaha untuk memenuhi keperluan ahli kumpulan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Rangkaian Komunikasi: Memahami pelbagai kaedah komunikasi yang berkesan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Pengetahuan Modal: Mengukur pengetahuan modal dalam menentukan nilai organisasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Mengatasi Kemahiran: Menghadapi kekaburan dan stres akibat maklumat yang saling bertentangan dan tujuan. Juga, menolong orang lain mengatasi kekaburan dan stres.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Perundingan: Memahami keputusan yang stakeholder inginkan dari proses dan memberikan maklumat tentang bagaimana menggunakan sumber daya mereka untuk mencapai matlamat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Komunikasi: Menerapkan keberkesanan komunikasi verbal, non-verbal, dan penulisan untuk mencapai keputusan yang dikehendaki.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Kemahiran Teknologi: Memahami dan menggunakan dengan tepat teknologi sedia ada dan teknologi baru.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Komputer Mediated Komunikasi: Memahami implikasi komunikasi elektronik dan perkembangan komputer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Pendidikan Jarak Jauh: Memahami trend yang berkembang dalam kaedah sokongan teknologi, dan implikasi yang memisahkan pengajar dan pelatih dalam waktu dan lokasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Sistem Pendukung Prestasi Elektronik: Memahami dan yang sedang berkembang-sokongan sistem prestasi dan aplikasi yang sesuai mereka.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

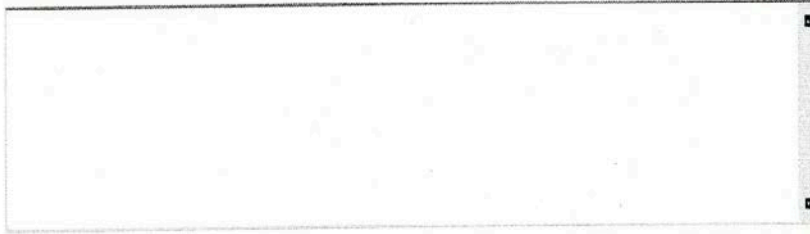
Sila nilai kepentingan anda dalam mempertimbangkan pembelajaran ditempat kerja dan kecekapan prestasi bagi seorang individu pada tahap anda sekarang, dan pada tahap yang lebih tinggi. Sila menggunakan skala penilaian berikut untuk menilai tanggapan anda.

1. Kurang penting sekarang, Kurang penting dalam 5 tahun
2. Lebih penting sekarang, Kurang penting dalam 5 tahun
3. Sama Penting untuk sekarang dan dalam 5 tahun
4. Kurang penting sekarang, lebih penting dalam 5 tahun
5. Lebih penting sekarang, lebih penting dalam 5 tahun

Kompetensi

	Penting untuk Sekarang				
	Kurang penting sekarang, Kurang penting dalam 5 tahun	Lebih penting sekarang, Kurang penting dalam 5 tahun	Sama Penting untuk sekarang dan dalam 5 tahun	Kurang penting sekarang, lebih penting dalam 5 tahun	Lebih penting sekarang, lebih penting dalam 5 tahun
41. Kos / Manfaat Analisis: Tepat mengukur nilai relatif dari campur tangan peningkatan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Pengurusan Projek: Perancangan, pengorganisasian, dan pemantauan kerja.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Keputusan Penilaian Terhadap Organisasi Objektif: Menilai seberapa baik prestasi di tempat kerja, strategi pembelajaran, dan hasil sesuai dengan tujuan organisasi dan tujuan strategik.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Kemampuan Untuk Lihat "Big Picture": Mengidentifikasi kecenderungan dan pola yang berada di luar paradigma organisasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Tujuan Pelaksanaan: Memastikan bahawa tujuan diterjemahkan kepada tindakan cekap. Selain itu, walaupun keutamaan mendapatkan keputusan yang bertentangan, kurangnya sumber daya, atau kekaburan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. Pengenalan Masalah Pemiagaan Yang Kritikal: Tentukan isu-isu pemiagaan utama dan berlaku untuk perubahan, dan melaksanakan pengetahuan itu untuk strategi peningkatan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Analisis Persekitaran Kerja: Meneliti persekitaran kerja untuk masalah atau ciri-ciri yang mempengaruhi prestasi manusia. Selain itu, pemahaman ciri-ciri dari tempat kerja berprestasi tinggi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Pengetahuan Pemiagaan: Menunjukkan kesedaran fungsi pemiagaan dan bagaimana keputusan pemiagaan yang mempengaruhi hasil kerja kewangan dan bukan kewangan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Sistem Berfikir: Mengakui hubungan antara peristiwa dengan menentukan kekuatan pendorong yang berkaitan nampak terpencil insiden dalam organisasi. Selain itu, mengambil pandangan menyeluruh dari masalah prestasi dalam rangka untuk mencari punca utama.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. Implikasi Kualiti: Mengenalpasti hubungan dan implikasi antara program kualiti dan prestasi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Perundingan / Perjanjian: Pengorganisasian, menyiapkan, pemantauan, dan penilaian pekerjaan yang dilakukan oleh penjual dan perunding.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Pengurusan Outsourcing: Kemampuan untuk mengenal pasti dan memilih sumber khusus di luar organisasi. Selain itu, mengenalpasti, memilih, dan menguruskan spesifikasi teknikal untuk sumber khusus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Jika anda mempunyai kompetensi lain yang diamalkan di Malaysia selain kompetensi yang telah dinyatakan di atas, sila senaraikan di sini (contoh: Kreativiti, Menyelesaikan Masalah, Bahasa Asing dan lain-lain)

A large empty rectangular box with a thin black border, intended for the user to list additional competencies. It is positioned below the instruction text.

Terima kasih atas penyertaan anda. Jika anda mempunyai pertanyaan lebih lanjut, jangan ragu untuk menghubungi saya di kahiro1@hotmail.com

Appendix C: Permission from Author

New | Reply Reply all Forward | Delete Junk Sweep ▼ Mark as ▼

Re: [Back to messages](#) |
rothwellandassociates.com: Request for
Copyright Permission on WLP
Questionnaire

William J. Rothwell
To Kahirol Mohd Salleh

14/9/2010
Reply ☐

Dear Mr. Salleh:

Feel free to use the instruments that were used in the
study. But please also get permission from ASTD.

Bill R.

Appendix D: Permission from ASTD

New | Reply Reply all Forward | Delete Junk Sweep ▼ Mark as ▼

RE: Request for Permission

[Back to messages](#) |

Cat Russo ASTD
To 'Kahiro! Mohd Salleh'

5/11/2010
Reply ☐

Dear Kahiro!,

ASTD would be pleased to grant you permission for the usage of this material in your Doctoral Thesis without fee so long as the thesis will not be used for any products or derivative products that will be sold and the dissertation housed in the University's collection only. Translation rights are not included, even for a fee. Otherwise, you will need to obtain permission through Copyright Clearance Center for use of the material and that organization too, will not grant permission for open-ended translation rights.

Please let me know if you need further assistance.

Regards,

Cat

Cat Russo
Authorized ASTD Licensing Agent
RussoRights, LLC
astd@russorights.com
+1.571.332.9279 (Tel)
+1.703.683.9591 (Fax)

Appendix E: Permission from Colorado State University IRB

DATE: May 26, 2011

TO: Gene Gloeckner, Education
Kahirol Mohd Salleh, Education



FROM: Janell Barker, IRB Administrator
Research Integrity & Compliance Review Office

TITLE: Human Resource Development Practitioners' Perspective on Competencies: An Application of American Society for Training and Development (ASTD) Workplace Learning and Performance (WLP)

IRB ID: 070-12H

Review Date: May 26, 2011

The Institutional Review Board (IRB) Administrator has reviewed this project and has declared the study exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b)(2): Research involving the use of educational tests,....survey procedures, interview procedures or observation of public behavior, unless: a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects.

The IRB determination of exemption means that:

- **You do not need to submit an application for annual continuing review.**
- **You must carry out the research as proposed in the Exempt application**, including obtaining and documenting (signed) informed consent if stated in your application or if required by the IRB.
- **Any modification of this research should be submitted to the IRB through an email to the IRB Administrator, prior to implementing any changes**, to determine if the project still meets the Federal criteria for exemption. If it is determined that exemption is no longer warranted, then an IRB proposal will need to be submitted and approved before proceeding with data collection.
- **Please notify the IRB if any problems or complaints of the research occur.**

Please note that you must submit all research involving human participants for review by the IRB. **Only the IRB may make the determination of exemption**, even if you conduct a similar study in the future.

Appendix F: Consent Letter

Human Resource Development Practitioners' Perspectives on Competencies: An Application of American Society for Training and Development (ASTD) Workplace Learning and Performance (WLP) Competency Model in Malaysia

You are invited to be in a research study to identify Human Resource Development (HRD) practitioners' perceptions of necessary competencies needed by HRD practitioners, based on the American Society for Training and Development (ASTD) models for Workplace Learning and Performance (WLP) in Malaysia. Your organization was randomly selected from Federation of Malaysian Manufacturer (FMM) list. Please read through the following information. This study is being conducted by Dr. Gene Gloeckner and Kahirol Mohd Salleh, a doctoral student in the School of Education at Colorado State University, Fort Collins, Colorado, USA.

Background Information: The purpose of this research is to identify Malaysian HRD practitioners' perceptions of necessary competencies needed by HRD practitioners in the organizations, based on the ASTD models for Workplace Learning and Performance. It is to assess the perceptions of HRD professionals in organizations regarding the impact and challenge of competencies for human resources development in organizational contexts. It will help HRD professionals to see the relevance of competencies to the world of work, improving the training and development programs, and influencing the future career choices and decisions of future education. Through this study also, the gap between current and future of HRD competencies in Malaysia will be analyzed. It is hoped that through this research, issues, challenges and recommendations put forward will further enhance better understanding for HRD professionals and the organizations.

Procedures: If you agree to be in this study, we will ask you to do the following: check the box below indicating you understand and agree with the information provided in this consent form and that you wish to take the survey; and, complete the survey asking you about your perception on competencies (approximately 30 minutes).

☒ Yes, I agree to be in this study

Risks and Benefits of Being in the Study: This study has minimal risks. It is not possible to identify all potential risks in a survey procedure, but the researchers have taken reasonable safeguards to minimize any known and potential, but unknown, risks. There are no direct benefits to you for participating. However, it is hoped that this study will offer benefits to HR practitioners and organization through what it reveals about the factors evident in competencies, for currents and future within organization environments.

Confidentiality: Your responses, information and the records of this study will be kept private. All data will be processed by Qualtrics, the survey provider; no identification information will be provided to the researchers or be linked to your name or email by the survey provider. In any report we might publish, no information will include any information that will make it possible to identify an individual participant or specific organization.

Voluntary Nature of the Study: Your participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future employment, and will not be shared individually with your organization. If you decide to participate, you are free to withdraw at any time without affecting these relationships. If at any point you feel that you would like to withdraw from the study, simply close the survey and exit from the URL.

Contacts and Questions: The researchers conducting this study are Dr. Gene Gloeckner and Kahirol Mohd Salleh. You may ask any questions you have now. If you have questions later, you may contact Kahirol Mohd Salleh at: kahirol@lamar.colostate.edu. You may also contact the Research Integrity and Compliance Review Office at Colorado State University: Janell Barker, Human Research Administrator, (970) 491-1655. You may print this form to keep for your records.

This consent document was approved by the Colorado State University Institutional Review Board for the Protection of Human Subjects on (date).

Human Subjects#: (number)

DO NOT PUT YOUR NAME ON ANY PART OF THE SURVEY! Thank you!