

MALAYSIAN HUMAN RESOURCE DEVELOPMENT PRACTITIONERS COMPETENCIES IN MANUFACTURING AND NON-MANUFACTURING SECTOR: AN APPLICATION OF THE COMPETENCY MODEL

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Human resource management have become a vital issue to organizations in Malaysia ever since the changing of workforce pattern. As a result, competencies of employees become the main resources of an organization in obtaining a competitive advantage. To ensure human resource development contribute to competent workers and reduce the competency gap between the manufacturing and non-manufacturing sector needs, it is important to analyze the perceptions of current human resource development professionals in regards to employee competency level. The intent of this paper is to examine the competencies perceived important by human resource practitioners in manufacturing and non-manufacturing sector for workforce in Malaysia. This study is quantitative in nature and using web-based survey as an instrument. Data were analyzed using inferential statistic. The findings of the study show that human resource practitioners in the manufacturing and the non-manufacturing sectors believed that competent employees are essential for organization performance.

Keywords: Competencies, Human resource, Organization performance, Competency model

1. INTRODUCTION

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. Competency of worker is closely associated with the objectives to be achieved by an organization (Lindgren & Henfridsson, 2002). Therefore, the demand for the supply of competent workers is increasing. Parallel with this, Malaysia began to emphasize effective education and preparation to fulfil the workplace requirements. To become more competitive in global market, organizations need to train and provide workers with new and broader set of skills to meet the challenges of workplace. The change in the organization occurred due to globalization and a better understanding of how competent workers can reduce the organization operation costs. Salleh, Sulaiman, and Talib (2010) stated globalization has created various opportunities for sharing knowledge, technology,

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social value, and behavioural norms and promoting development for employee and organizations. Thus, human resource practices have become an essential issue in Malaysian organizations because of the needs of the changing workforce and the development process of workers (Salleh & Sulaiman, 2012). Therefore, it has become important for workers to develop and improve their competencies, skills, and abilities in systematic ways.

According to Loogma (2004), a worker needs the combination of knowledge, skills, and other work-related competency to work effectively and fulfil the requirements of jobs and organizations target. Competency of a worker allows them to plan their role in supporting and contributing to the development of a successful organization (Krajcovicova, Caganova, & Cambal, 2012). The same situation happen is in Malaysia, forcing organization to shift from the current practices in human resources especially for training and development, to become more aware of trends in workforce competencies towards the positive outcome and economic impacts. The new trend is to transform workers knowledge, expertise and skills to prepare them to be more competent workers and better suited to the workforce. Workers with a high level of competencies and commitment are more demanding and remain working with the organization (Bentein et al., 2005).

Today, organizations demand more than just hard skills or technical skills from the workers. Organizations are shifting to look for workers who are capable of performing multi-tasking and various roles. HR practitioners facing challenge in recruiting competent workers with vast experience so that they can cut short on training. Additionally, HR's are probing for opportunities for self-development to expand their horizons. Therefore, HR practitioners in organization are developing profiling of their employees such as competencies. Competency profiling is one of the process through which principal accountabilities of one's competencies and critical outputs could be obtained. Competencies are combination of skills, knowledge, attitudes, and behaviors of worker required for effective performance of a real-world task or activity in workplace. Competencies are realistic and observable behaviors that relate to organization goals. In other words, worker's skills need to fulfill the responsibilities of job.

Competencies of workers are the key resources of an organization in obtain a competitive advantage. Machines and equipment's do not yield organization productivity, 'human capital' that runs an organization and produces value from existing capital. Any organizations can have the same strategy, business models, products and services however competent effective and workers represent a sustainable source of differentiation. The demand for effective and competent workers continuously increases in organizations because a dynamic global workplace and increasing foreign competition has compelled organizations to become more effective and flexible in response to the rapidly changing environment. However, most of employees are terminated from their organization because of

their attitude, and not because issues that related with skills and knowledge. More important, the result of training is improved daily performance from workers and a development initiative that is driving the organization in the direction of organization vision. Competencies are sets of knowledge, attitudes and skills related to each other to allow an individual carrying out various activities of an employment. Competency is the result of using knowledge and skill appropriately (Cave & McKeown, 1993). Therefore, it will increase employees in return. 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.

To ensure that competent workers contribute to organizations and lessen the competency gap between the manufacturing and non-manufacturing needs, it is important 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, 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.

2. DEFINITION OF COMPETENCIES

Competency has an important role as a forceful factor to achieve work values. This role includes a variety of personal traits such as knowledge, skills, values, motives and enthusiasm of worker. According to Lee (2009), competency is a group of related knowledge, skills, abilities, and behavior patterns that affect a major part of a worker's job. While Sandberg (2000) argued that competence is closely related to the life of a worker with experience of work being daily activities. Another researcher, Boyatzis (2008) defines competency as an individual's capacity or ability of behavior organized around an underlying construct or intent. Competencies that need to be owned by the workers of which are competence in planning, decision-making, communication, cooperation, influence, relationships with others, commercial awareness and analyzing information. Competencies not only important for individual efforts nevertheless also for work functions that require team work in organization. Additionally, Liu *et al.* (2014) describes competency is the knowledge owned by an employee or skills that are demonstrated by the behavior in the workplace. It can be concluded that competence is the ability owned by an employee in the use of basic skills or various other skills. The individual's competencies are demonstrated in everyday tasks, jobs, roles, functions, and duties in an organization. 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.

Organizations require higher competency levels of knowledge and skills that respond to the specific requirements within professional practices (Sauber, McSurely, & Tummala, 2008). 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. Salleh and Sulaiman (2015) claimed competency can be used as a benchmark or a measurement tool to ensure quality job output or job performance indicator. 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. Conversely, the human resource development are more concerned with developing highly soft skills competences that are required in workplace or particular occupations or job roles (Stasz, 1997). Human resource development is an integrated use of training and development, organization development, and career development to improve individual, group, and organizational effectiveness (McLagan, 1989). This definition is consistent with Smith (2004) which states that human resource development is concerned with strengthen workers knowledge, skills, and capability as individuals, or as a team member, and in organizations. Human resources are the most valuable resources in order to achieve organizational goals by efforts and coordinating and utilization of other components of the organization (Ansari & Ghafari, 2014). Human resource development enhances performance through the integration of practice areas including: training and development, career development, and organization development.

The transition terminology from human resource development to Workplace Learning and Performance (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. The shift of focus from HRD to WLP occurs since organizations are increasingly emphasizing more knowledgeable workers and higher performance. WLP replaced Human Performance Improvement (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, Sanders, and Soper (1999), remarks that the purpose of WLP is to improved individual and organizational performance with the integrated use of learning and other interventions. Details the change in terms of the use from HRD to WLP explained in Table 1.

TABLE 1: CHANGE IN MAJOR TERMS IN THE WORKPLACE LEARNING AND PERFORMANCE PARADIGM (ASTD, 1994)

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

Since competencies have been one of the major components applied in evaluating worker's performance in real world work environments, Malaysia needs to contemplate to strengthening workers' competencies as individual and in organization. To achieve this, organization can adopt and adapt the competencies model concept from the ASTD Model for Workplace Learning and Performance by Rothwell, Sanders, and Soper (1999). For this study, the ASTD competency model was chosen because this model has been used and tested outside of the United States (Yang, 1994; Yoo, 1999; Chen, 2003; Salleh, 2012). This model concept is one of the ways to evaluate and ensure that human resource qualities in Malaysia are enhanced and improved.

3. METHODOLOGY

This cross-sectional study employed a web-based survey name Qualtrics to collect the data. 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). A survey as research instrument was determined as an appropriate approach for gathering data and information about the variables in this study. The target population for this study was limited to those who are involved in human resource. The participants were drawn from various human resource development or human resource management related associates in Malaysia. The

Federation of Malaysia Manufacturer (FMM) is a private sector economic organization in Malaysia. FMM has been recognized as a leading voice of the industry including manufacturing and non-manufacturing in Malaysia. Therefore, the mailing list consisting of member names of the organizations in Malaysia was obtained from the FMM website. Based on the population, a sample size was determined based on various factors including the pilot study, response rate, and calculation.

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. The latest survey instrument used was based on a WLP competency list from the ASTD Model of Workplace Learning and Performance developed by Rothwell, Sanders, and Soper (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 survey instrument consists of a total of 52 questionnaires. The instruments used a five-point Likert scale to evaluate self-reported expertise and to answer the questions. As described by Wood (2002) 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. 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.

To test the validity and reliability, pilot study was conducted to test the online delivery system and gather feedback on the instruments used. A small number of random samples of HRD practitioners ($n = 30$) were used as a sample. 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. 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. Descriptive analysis was used to analyze the pilot study results. The Cronbach's Alpha (α) coefficients were used to check for the internal consistency of the instrument. 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). The raw data were coded using statistical software. A codebook was used to transfer the information into the software. Independent t-tests were used to see the gap of competencies of HRD practitioners in Manufacturing and Non-manufacturing.

4. RESEARCH FINDINGS

The respondents for this study are almost equally balanced between manufacturing (56.3%) and non-manufacturing (43.8%). 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. An Independent t-test was used to investigate the difference between each competency, competency groups, and roles.

Data for the t-test are presented in Table 2. 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.

TABLE 2: INDEPENDENT T-TEST RESULTS OF COMPETENCIES BETWEEN MANUFACTURING AND NON-MANUFACTURING BY ITEMS OF EACH COMPETENCY

Category and/or Competency	Rank*	Manufac- turing		Non- Manufac- turing		Mean Diff.	t	p	d**
		M	SD	M	SD				
By Each Competency									
<i>Top 5 Items</i>									
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
<i>Bottom 5 Items</i>									
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

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

**d e" 1.00 ; Much larger than typical

> .80; Larger or larger than typical

> .50; Medium or typical

> .20; Small or smaller than typical

Table 3 shows the 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 3: INDEPENDENT T-TEST RESULTS OF COMPETENCIES BETWEEN MANUFACTURING AND NONMANUFACTURING BY COMPETENCY GROUP.

Category and/or Competency	Rank*	Manufac- turing		Non- Manufac- turing		Mean Diff.	t	p	d**
		M	SD	M	SD				
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

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

** $d \geq 1.00$; Much larger than typical

> .80; Larger or larger than typical

> .50; Medium or typical

> .20; Small or smaller than typical

Table 4 shows the t-test result by competency groups revealed that manufacturing sector was not significantly different from the non-manufacturing

TABLE 4: INDEPENDENT T-TEST RESULTS OF COMPETENCIES BETWEEN MANUFACTURING AND NONMANUFACTURING BY ROLES.

Category and/or Competency	Rank*	Manufac- turing		Non- Manufac- turing		Mean Diff.	t	p	d**
		M	SD	M	SD				
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
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

** $d \geq 1.00$; Much larger than typical

> .80; Larger or larger than typical

> .50; Medium or typical

> .20; Small or smaller than typical

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.

5. DISCUSSIONS AND CONCLUSIONS

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, Sanders, and Soper (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.

The findings for *competency identification* as one of the important competencies show similarities with the literature review. Rothwell, Sanders, and Soper (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 workers are essential for organization performance and development. Salleh, Sulaiman, and Gloeckner (2015) claimed organization development is an ongoing process of revision, re-organizing, and development that should be inherent to every organization. Organizations should hire and develop future workers based on the competencies needed and follow a specific model. In doing that, the future worker 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).

This study confirmed that competencies are important in a variety of ways for workers and organizations. Thus, assessing competencies become one of the effective tools and approaches for the organization's workers especially for HR practitioners. In conclusion, the study found competencies are more focus on workers and organizational performances. Once the organization has the employees in the right positions and roles, the organization has opportunities to set future career development and succession planning. Having clearly defined competencies also makes workers more effective and competitive in the workplace.

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