RELATIONSHIP BETWEEN DETERMINANTS OF MyCPD (CONTINUOUS PROFESSIONAL DEVELOPMENT) AND EMPLOYEE EFFECTIVENESS AMONG NON ACADEMIC STAFF OF UNIVERSITI SAINS MALAYSIA

BENI WIDARMAN BIN YUS KELANA

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To my beloved wife, son, mother and father.

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ABSTRACT

This study examines the relationship between the determinants of MyCPD (Continuous Professional Development) and employee effectiveness. The determinants in the study are identified as IT infrastructure, human resource, and A cross-sectional survey was conducted using questionnaires which were policy. distributed to non-academic in grades between 41 and 54 at Universiti Sains Malaysia. A total of 135 responses were obtained. Pearson Correlation (Coefficient (r) Value) was used to determine the relationship between the determinants of MyCPD and employee effectiveness. The analysis results show that there is a significant and positive relationship between all the determinants of MyCPD and employee effectiveness. On the other hand, the Multiple Regression analysis results indicates that 55.1 per cent of the variance in employee effectiveness is significantly explained by the determinants of MyCPD. The results also show that human resource and policy are significantly related to employee effectiveness. Human resource is weakly related to employee effectiveness while policy is moderately related.

ABSTRAK

Kajian ini dijalankan adalah bagi mengkaji hubungan diantara penentu kepada MyCPD (Pembangunan Profesional secara berterusan) dan keberkesanan pekerja. Penentu kepada MyCPD di dalam kajian ini adalah terdiri daripada infrastruktur IT, sumber Manusia dan polisi. Satu kajian keratin restas telah dijalankan dengan menggunakan kaedah borang soal selidik untuk diedarkan kepada kakitangan bukan akademik gred 41 sehingga 54 di Universiti Sains Malaysia. Jumlah responden yang memberi maklumbalas adalah seramai 135 orang kakitangan. Analisis Pearson Correlation (nilai Coefficient (r)) telah digunakan bagi menentukan hubungan diantara penentu kepada MyCPD dan keberkesanan pekerja. Hasil analisis yang diperolehi menunjukkan terdapat hubungan signifikan yang positif di antara semua penentu dan keberkesanan pekerja. Di samping itu, keputusan analisis Regresi Berganda pula menunjukkan 55.1 peratus oleh penentu MyCPD terhadap keberkesanan pekerja. Keputusan kajian juga menunjukkan sumber manusia dilihat berada ditahap yang lemah dan polisi berada ditahap sederhana terhadap keberkesanan pekerja namun masih signifikan.

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LIST OF ABBREVIATIONS

ВКР	-	Competency Development and Potential
BOVEA	-	Board of Valuers, Appraisers and Estate Agents
CBT	-	Competency Based Training
CLA	-	Competency Level Assessment
CPD	-	Continuing Professional Development
CUEPACS	-	Congress of Unions of Employees in Public Services
HE	-	Higher Education
IPTA	-	Public Institutions of Higher Learning
JKK	-	Jawatankuasa Kabinet (JKK)
MLE	-	Managed Learning Environment
MyCPD	-	Continuing Professional Development
PhD	-	Doctor of Philosophy
РКР	-	Competency Assessment and Potential
PROSPEK	-	Program Bersepandu Pembangunan Kompetensi
PSD	-	Public Service Department
SBPA	-	Sistem Baru Perkhidmatan Awam
SKT	-	Sasaran Kerja Tahunan
SSM	-	Sistem Saraan Malaysia
TNA	-	Training Need Analysis
USM	-	Universiti Sains Malaysia
VLE	-	Virtual Learning Environment

CHAPTER 1

INTRODUCTION

1.1 Introduction

According to Abdul Karim (1999), government staff assessment system in Malaysia began since the day British colonized the Malay States (Tanah Melayu) in 1896 and it was merely subjected only to the British officers (Ahmad *et al.*, 2007) After independence, the performance evaluation system or systems have been used based on the "Jawatankuasa Kabinet" (JKK) 1976. According to the Public Service Department (PSD) 1976 - 1991 this system was later replaced by the "Sistem Saraan Baru" (SSB) in January 1992 and to adopt performance-based wage system (Ahmad, *et al.*, 2007). Furthermore, this system was implemented to improve employee's performance to meet future needs, but this system was used only for nine years because some weaknesses were detected in the assessment. SSB was creating, hoping to meet the objective of giving promotion and salary increment. This system is focused on methods for the increased salary and promotion rather than merely to produce knowledgeable and skilled staff to date. Effectiveness in terms of employee motivation, professionalism and career development are not clearly setting out the objectives of the system implementation.

After that, on 1st November 2002, the "*Sistem Saraan Malaysia*" (SSM) was introduced to provide Civil Servants with the challenges of globalization (Pekeliling Perkhidmatan, 2010). In addition, the Competency Level Assessment (CLA) was introduced to strengthen the regulator and the system was used until 2010 by the public sector in Malaysia. Figure 1.1 briefly shows the change in the process of the evaluation system for Civil Servants in Malaysian.

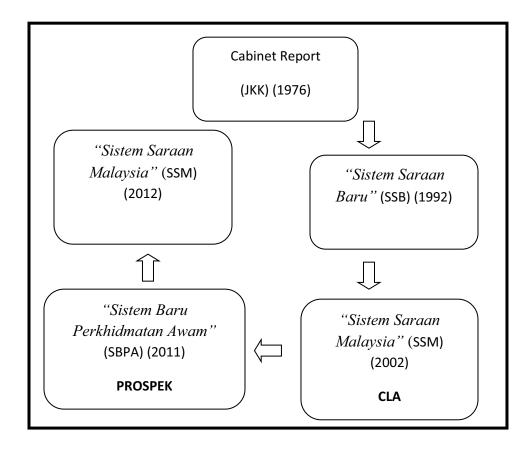


Figure 1.1: Summary of Malaysian Assessment system

Competency Level Assessment (CLA) is a method to evaluate an employee whether in terms of excellence, knowledge, skills and personal characteristics, or vice versa (Pusat Latihan UPSI, 2009). Competency Level Assessment (CLA) consists of two parts: (1) general competencies and (2) specific competencies. General competencies include items that need to be mastered by all public officers, such as personal characteristics, leadership and communication. While on the other hand, specific competence is a competence related to specific job positions for an officer. With this system indirectly CLA has led to the birth of the competent civil servants in what they are doing. Element of motivation, professionalism and career development has been adopted in the implementation of the CLA that spiritual and physical balance among government officials (Pekeliling perkhidmatan, 2010) To support the implementation of the CLA role of information technology, and human resources and policy appears to have played an important role in order to function more effectively (Bernama, 2010). But this system is also disputed by some when it is said is not relevant for some government employees (Bernama, 2010). In addition, government staff competency remains questionable despite CLA system to produce competent staff. Discipline problems and the number of staff have been disciplined mounting also raises questions about the effectiveness of CLA (Bernama, 2012).

After that, the new rating system called the "*Program Bersepandu Pembangunan Kompetensi*" (PROSPEK) was introduced in line with government's decision to implement the "*Sistem Baru Perkhidmatan Awam*" (SBPA) to replace the "*Sistem Saraan Malaysia*" (SSM) previously. Competency-based human resource management remains the preferred government of Malaysia to produce high performance official towards improving public sector service delivery excellence in Malaysia (Alias, 2007).

With the existence of PROSPEK system, the continuing competency management system was created as a mechanism of competence development and overall potential (Pusat Latihan USM, 2009). PROSPEK will be implemented during the officer's career that would lead to the Continuing Professional Development (CPD). In addition, the implementation is in line with the PROSPEK Policy Public Sector Human Resource Training, where the officers first entered public service through the transformation process of the mind. Next the officer will apply the basic competencies that are common (generic) and specific (functional) through training programs such as courses, mentoring / coaching, training road map, seminars, and workshops and so on (Surat pekeliling perkhidmatan, 2011).

PROSPEK involve elements and competency development and assessment of potential officers. The assessment is intended to identify the competencies and the potential for officers to assume the higher grade is based on the competency of officers in the discharge current. Officers, who passed the assessment, will then be developed to ensure they are competent and have potential to perform the duties of a higher grade. In addition, the Government has set several objectives to further strengthen the implementation of PROSPEK to produce a better quality in humanity capital and competitive global. The following are objectives set out in PROSPEK:

- a) to evaluate the competency level and identify the potentials of officers;
- b) to develop competence and potential in a grade of officers;
- c) to enhance personal development and career advancement opportunities for officers; and
- d) to produce high-performing officers.

The PROSPEK system includes Competency Assessment and Potential (PKP) and / or Competency Development and Potential (BKP). Furthermore, officers have to go through PROSPEK and beyond the standards set out before we consider to put the officers in a higher grade as well as a priority in the development and career development in accordance with the respective schemes of service. Implementations of PROSPEK are depicted in Figure 1.2 below:

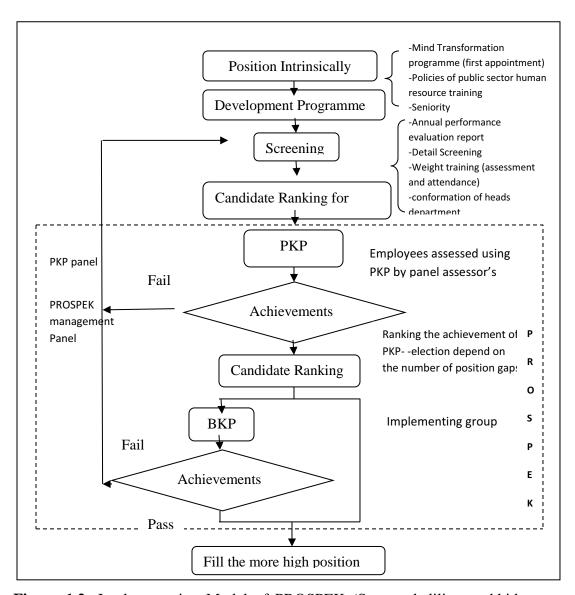


Figure 1.2: Implementation Model of PROSPEK (Surat pekeliling perkhidmatan, 2011)

Competency Evaluation and Potential (PKP) is designed to identify officers' potentials that have successfully passed the initial screening for the purpose of promotion. Assessment is made in the dimensions of knowledge and skills which are based on the suitability of the scheme of service. Other than that, items from the dimensions of the attitude and potentials can be used by all schemes in the civil service scheme in Malaysia. Officers will be assessed through the PKP ordered by ranking. The head of service in arranging the PKP performance ranking may take into account, the areas of expertise needed to fill vacancies. Subject to a vacancy in

the office, the officer being considered for the BKP or the acting / promotion is the officer in overall ranking. After officers evaluated a total of three (3) times by PKP and still not being considered for the BKP or the acting / promotion, the Head of Service must inform the officer in order to improve the competency and potential. Head of Service can review the PKP officer for the next promotion if the officer is found has attained the level of competency and potential for higher positions.

While the Competency Development and Potential (BKP) is intended to develop competencies and potential officers to attain a higher grade. BKP following officers are officers who have passed the initial screening and evaluation through the PKP. Evaluation in the BKP can be implemented through various methods of assessment appropriate to the higher grade will be held. BKP can be implemented through the Competency Development and Potential (BKP). In addition, the BKP can be implemented through existing programs such as Continuous Professional Development (CPD), Competency Based Training (CBT) and other programs are modified to include the potential development of modules for BKP. BKP is a specific method of competence development and the potential for PROSPEK. BKP performed centrally in a certain period through a variety of activities based on the development and evaluation of competency requirements and job grade.

However, the PROSPEK performance was canceled when SPBA was removed after protests from civil servants when there arises the issue of seniority and salary increases disproportionately grade level 54 and below (Bernama, 2012). SSM system has been adopted with some improvements of up to 2013 but the government has not issued any evaluation system to replace the CLA and address the issue of PROSPEK for government employees who are not competent and not quality.

This research focus on MyCPD approach implementation in Universiti Sains Malaysia (USM) since 2009 approach that been adopted from the Competency Level Assessment (CLA) and the Integrated Program Potential and Competence (PROSPEK). Therefore, the study was conducted to looked at the MyCPD implementation to produce high quality employees partically on Non Academic staff at USM

1.2 Background of Study

Continuous Professional Development (CPD) has become a burning issue among civil servants in Malaysia especially in Public Institutions of Higher Learning (IPTA) (Bernama, 2012). This is because, the President of the Congress of Unions of Employees in Public Services (CUEPACS), Datuk Omar Osman, has expressed its intention to repeal the civil servants Competency Level Assessment (CLA), which was used for this to a new system of Integrated Competency Development Programme or PROSPEK as, announced by the government beginning July 1, 2010.

The implementation of Evaluation system as CLA and PROSPEK are the CPD approaches to enhance the effectiveness of employee motivation, professionalism and career development (Bernama, 2010). However, the implementation of the appraisal system is always questioned by the public and government employees as they were not able to produce a quality workforce (Bernama, 2012).

Therefore, Universiti Sains Malaysia (USM) has taken the initiative to become one of the first Public Institution of Higher Learning to implement the system-oriented "Continuous Professional Development" (CPD), known as "MyCPD" conducted by the Training Unit, Department of the Registrar, Universiti Sains Malaysia (Pusat Latihan USM,2009). The new system is implemented to enhance the CLA system itself. Universiti Sains Malaysia (USM) has implemented this system for four years and has been used by academic and non academic staffs at USM (Pusat Latihan USM, 2009).

The previous studies conducted by previous researchers, have discussed the factors determinants of CPD implementation and effectiveness employees involved in CPD activities. IT infrastructure, Human Resource and policy are important determinants which roles in the effectiveness implementation of CPD to ensuring Employees effectiveness can be achieved. vital, the study was conducted on MyCPD at USM travel system in order to know the extent of the role of determinant of MyCPD such as IT infrastructure, Human Resource and policies to improve the Employees' effectiveness (Motivation, Professionalism and Career Development) at USM.

According to Turbitt (*et al.* 2009). Based on previous studies, Sufficient IT infrastructure is a factor contributing to the successful implementation of CPD activities and employee effectiveness. He stated that the development of Internet and mobile technology has increased the Motivation and involvement of people involved in CPD. This is because, IT Infrastructure is one factors influenced CPD activities are more targeted to those who are working who need more flexible learning methods and does not interfere with their work time.

Support from human resources is also crucial in the success of the CPD activities as without their support CPD cannot achieve its objectives to produce competent (Professionalism) employee. (Gilley, *et al.* 2002). While smith (2004) stated Resource Human Development (HRD) is a tool for planning the career development to be more systematic with support from all levels in organization.

Policy enforced by the government or organization whether public or private sector is crucial in determinants of CPD and employee effectiveness. This is because

with the support of a policy or policies of the CPD program activities will be given priority and compulsory for all parties involved. Addition, CPD to ensure each of its employee always have the latest skills and knowledge to the level of efficiency and safety in handling task especially in Professional field (Kennie, 1998). Based on finding of research shows the policy is predictors of employee effectiveness

The issue of government employees is not a competent that is often raised due to ineffective evaluation system can be overcome if the result of the study is to be carried out to identify the main factors that contribute to the MyCPD effectiveness at the university in creating a quality workforce.

1.3 Statement of Problem

According to John (2002), employee involvement in activities Continuing Professional Development (CPD) has influenced employee motivation and closely linked to the role of IT Infrastucture as capable of increasing community involvement and interest of CPD activities. However, Gilley et al (2002), tells of Human Resource is the key determinant in increasing employee motivation as Human Resource is the prime mover in making CPD activities can meet the desire among Employees. This statement is also supported by Yager (2005) by stating the good cooperation between all parties to be able to support efforts towards the implementation of an effective CPD. While Turbitt et al. (2009), tells of the role of IT Intrastructure still important in making more flexible CPD learning activities that could draw Employees involved in CPD.

Kennie (1998), in a study also stated that the policy as a key factor in ensuring the implementation of the CPD always achieved. Statement by Kennie (1998) has been supported by previous studies carried out by the Institute for Learning (2009) showing the Policy as the most decisive factor affecting the effectiveness of the implementation of the CPD and indirectly increase the effectiveness of employees in the sector, especially in learning for making learning system more systematic than other factors. Based on previous research took visible differences in the results of study to determine the employees' effectiveness. This is because as studies conducted by previous researchers are in different organizations there may be differences from the problems in the implementation of the CPD and the differences of the implementation of the factors determining the employees' effectiveness of the implementation of the factors determining the employees' effectiveness also varies based on different demographic (Ahmad, 2010).

CPD effectiveness against employees involved in CPD activities have different levels of effectiveness depending on the method of execution performed by an organization (Schostaka, 2010). This is because, according to Firedman et al. (2005), the effectiveness of the most significant employee when involved in CPD activities is motivation, which can increase the level of job satisfaction and more disciplined. This statement is also supported by the study of William (2009), which states that CPD is able to increase the level of interest in work among employee. But according Ahmed (2010), tells of Professionalism level employee will increase when engaged with CPD. This is because, with the standard approach Professionalism CPD will ensure an employee is always to be in a set. Meanwhile, Ling-Yu Wen study and Chen Li-Chen (2010) also stated that the CPD could help in career development. Therefore, the employee effectiveness approaches also have different findings from year to year between the researchers. Different gap is also reflected in the individual perception of the goodness of their CPD activities.

While in terms of the relationship between the determinants of MyCPD and employee effectiveness also observed in previous studies although not explicitly stated. Turbitt *et al.*, (2009), have indicated that, with the support of IT Infrastucture able to increase community interest and motivation to participate in CPD activities. In addition, Ahmed (2010) tells of good cooperation at all levels within the organization able to assist in increasing their knowledge and skills (Professionalism) among Employee. This is because; the sharing of knowledge and skills will occur if there is a working relationship between employees in the organization. Therefore, the study of the relationship between the determinants of MyCPD and employee effectiveness should be made to see clearly if there is a relationship between variables.

In concluded the research gap composed of the level of employee effectiveness and determinants of MyCPD and measure the relationship between variables. This gap has used to develop the research question in this study.

1.4 Purpose of Study

The purpose of this study is to evaluate employees' effectiveness among staff at Universiti Sains Malaysia, known as the "MyCPD". In addition, this study also identifies the determinants to enhance effectiveness of MyCPD implementation and its relationship with Employees effectiveness in enhancing the performance of public employees in the USM. If the MyCPD approach adopted by Universiti Sains Malaysia is working and have impacted on their employees' performance, therefore the outcome of this research will help the government particularly the Public Institutions of Higher Learning (IPTA) to be more confident in their decision to implement similar approaches to that implemented by USM to replace their exiting employees' performance system.

1.5 Research Question

Based on the actual purpose several research questions are developed:

- i. What is the level of Employees effectiveness?
- ii. What is the level of determinants of MyCPD that influence the employee effectiveness?
- iii. Is there any relationship between the determinants of MyCPD and employee effectiveness?
- iv. Which determinants of MyCPD are predictors of employee effectiveness?

1.6 Objectives of the Study

The findings obtained will help the Malaysian government in particularly the Public Service Department (PSD) in making the right decisions in implementing CPD to replace the Competency Level Assessment (CLA) and strengthening the existing implementation of the PROSPEK pipeline. If the study shows the system implemented by the USM (MyCPD) is effective and able to increase the competence of civil servants to a level that is targeted, therefore this approach can be extended to all public sectors throughout the country. Here are four research objectives set by the researchers to achieve the main goal of the study.

- i. To measure the level of employee effectiveness.
- ii. To measure the level determinants of MyCPD that influence employee effectiveness.

- iii. To examine the relationship between the determinants of MyCPD and employee effectiveness.
- iv. To identify which determinants of MyCPD are predictors of employee effectiveness?

1.7 The Signification of Study

The researchers believe this study could indirectly help the parties who involved in increasing the effectiveness of MyCPD implementation and employee effectiveness. Specific benefits are analyzed as below:

i. Professionals' of the Non Academic.

Professionals of non-academic will recognize the importance of continuous learning to improve their skills and knowledge to remain relevant to current needs.

ii. The Organizer of CPD programs

This study is also expected to help organizers of CPD in order to provide quality programs in line with the current needs of CPD approach that could provide high impact on individuals.

iii. The Public Institutions of Higher Learning

Development and Human Capital Management can formulate a strategic development of quality human capital and global nature of current policy in line with the Malaysian government aspiration to achieve the characteristics of world-class human capital (EPU, 2011). In addition, the university can produce many in-house expertises's that can contribute to development of the university and government.

iv. Government departments

Department of Public Service can develop a more comprehensive policy to strengthen the implementation of PROSPEK that can deal with some of the disputed issues of competency possessed by civil servants in Malaysia.

v. Relevant theory of CPD

Make Lifelong Learning and Andragogy theory remains relevant as an important theory in the learning process especially to adults consisting of civil servants of 18 years up to the age of 60.

1.8 Scope of Study

Purpose and objectives of the study are focused on the issue of the use, effectiveness, level of skills and knowledge required to render competent employee via a MyCPD for personal development among the Non Academic employee in grade 41 Until 54 (590 Employee) at Universiti Sains Malaysia, Penang. The respondents consisted of 233 non-academic staff grade 41 until grade 54 from various Schemes of service and departments, faculty and across University Sains Malaysia (USM).

There are several constraints that may be encountered during the study. They are:

- i. The study only focused on one Public Institutions of Higher Learning (IPTA), although there are a number of Public Institutions of Higher Learning and other government agencies that have implemented this approach of CPD in their Institution.
- Sample of respondents only focused on non-academic categories of civil servants grade 41 until grade 54 from a variety of schemes of service at the University Sains Malaysia (USM), Penang.

1.10 Conceptual definition

The conceptual definition is very important to define the detail constructs of the research topics that will be carried out by the researcher. Several important concepts are defined:

1.10.1 Continuing Professional Development (CPD)

CPD is part of a long-term learning (Lifelong Learning) on the class or professionals (Alias, 2007). CPD is an educational activity that helps in maintaining, developing or raise your knowledge, problem solving, technical expertise or level of professional standards in achieving better performance (Merwe, *et.al*, 2008). CPD is

a systematic method to maintain the improvement and expansion of knowledge and individual skills required by professionals in their daily tasks (Ayati & Mustaffa, 2004). CPD also involves informal activities such as courses, seminars or workshops (Atherton, 2011). CPD needed when competition and developments in the rapidly growing information technology and all professionals should be in line with the current situation to stay competitive in the job market.

CPD can also be defined as a process in which professionals can improve and update their skills and knowledge from time to time (Sanders,*et al*, 1992). In addition, "CPD is the process of implementation of activities better than anything available from early education, the additional benefits referred to issues related to professional formation and one source where professionals can maintain expertise" (Todd, 1987)

CPD is also an activity or program which aims to improve the professionalism of the individual with the latest knowledge, skills and ability to assist in individual career development and further meet the needs of organizations and individuals based on current development(Wall & Ahmed, 2007).

Institute for Learning (IFL) is defined Continuing Professional Development (CPD) as a preserve, improve and expand the knowledge and skills in specific subjects through teaching and training. CPD also indirectly have a positive impact on teaching practices and the experience of students (Institute for Learning, 2009).

1.10.2 Effectiveness

Core definition of "Effectiveness" is the extent to which an activity fulfills the purpose or function (Harvey, 2012). While in the context of education

"effectiveness" was defined as the measurement between the goals set and progress was made. This is because, in the quality of education will be higher if the judgments are made on the desired outcome and not just focus on the achievements obtained (Fraser, 1994).

According to Hasan and Tibbits (2000), effectiveness can be defined as "Doing the right thing" is a matter of rules and procedures are implemented according to set and achieve goals set. While according to the definition of UNESCO (2007), effectiveness in the context of education is the achievement of educational goals to be accompanied by quality assurance and accreditation of each implementation of the goals should be in accordance with established procedures. In addition, the effectiveness also involves an assessment of the two elements of input and output, such as effectiveness of the institutions provide to students (input) and academic achievement (output) should be taken into account and not just focus on one element only to ensure effective learning process (Hasan & Tibbits ,2000).

1.10.3 Employee Effectiveness

Employees can be defined as "a person employed for wages or salary, an employee is a person who works in the service of another person under an express or implied contract of hire, under which the employer has the right to control the details of work performance (Kamus Dwibahasa, 2010).

Gilley (2002) has stated that "Employees' Effectiveness" Employees' should have the values "Work Talent" which consists of three main elements of good communication skills, inspirational thoughts and "Self Fulfilled," in which these elements could substantive contribution to achieving employees' and organizational goals. With the three elements will affect the level of motivation, knowledge and skills of the individual (Gilley, 2002)

1.10.3.1 Motivation

Motivation can be termed as a process that can create, control and maintain certain behavior (Carlson *et al.*, 2009). In addition, the motivation is the phenomena that affect the behavior of an individual, the strength retention behavior and conduct. Motivation are of two types of "Intrinsic Motivation" and "Extrinsic Motivation. "Intrinsic Motivation" refers to the motivation that is driven by the interests that exist within the individual and not depend on external pressure, for example, all actions and work performed on yourself or voluntary requirements. However, "Extrinsic Motivation" is encouragement from external factors such as monetary rewards, grades, coercion and threats of punishment to motivate an individual (Carlson *et al.*, 2009).

While James (1998), motivation is defined as the process of initiating, driving and maintaining goal-oriented behaviour. Motivation is what causes us to act, whether they have a glass of water to quench his thirst or reading books to gain knowledge. It involves aspects of biological, emotional, social and cognitive forces that activate behaviour. In everyday usage, the term motivation is often used to describe why someone doing something (James, 1998).

1.10.3.2 Professionalism

Professionalism is termed as the person paid to carry out a set of specific tasks (Gilbert, 1998). While in some cultures the term used to describe the professional status of some groups of people who have the education and higher wages and are often involved in creative work, intellectual and challenging. In addition, the professional is also subject to a code of ethics that has been set to maintain the quality of services provided (Gilbert, 1998).

In addition, professionals can also be defined as a person with specific expertise that can produce high quality work along with the work practices in accordance with professional ethical standards (Beeghley, 2004). Careers as doctors, engineers, accountants, scientists and architects are an example of a professional career that it is today.

1.10.3.3 Career Development

Definition of career development is different in that more emphasis should be given to individuals to organizations. Some see the concept as a continuous process by the individual in self-development stages and related to the tasks and themes, issues its own (Desimone, et al., 2002). In addition, (Sluis & Poell, 2003) also described the development of a career as a professional process that evolved through work-related learning involving an individual or organization.

(Gilley *et al.*, 2002) stipulates that the career development of a process that requires individuals and organizations create a partnership to improve knowledge, skills, competencies and attitudes needed for current work assignments and their future. In addition, career development is a method of connecting with the performance and career goals related to individual interests, skills needs of the organization (Edwin L & Herr, 2001)

1.10.4 Determinants

Determinants are generally termed as determining the cause of the nature or elements of a matter (Kamus Dwibahasa, 2010).

1.10.4.1 IT Infrastructure

Termed as the basic physical infrastructure and organizational structures needed to mobilize the community or enterprise (Compact Oxford English Dictionary Online, 2012). In addition, a structured set of elements that provides a framework that supports the development of the whole structure (Sullivan *et al.*, 2003). Infrastructure consists of two of "Hard Infrastructure" which refers to the physical network that helps a country to modern industrial activities (Kumar, 2005). Meanwhile, "Soft Infrastructure" refers to all financial institutions needed to sustain the economy, health, cultural, social, standards of a country (Niskanen *et al.*, 1991)

The term usually refers to the infrastructure of technical structures that support the community, such as roads, water supply, sewerage, electricity grids, telecommunications, etc., and can be defined as "physical components of each system to provide essential commodities and services to enable, maintain or improve the living conditions of the society (Fulmer and Jeffrey, 2009)

While, IT infrastructure is categorized as "Soft Infrastructure" which is under the Telecommunications Infrastructure group that includes the provision of internet connectivity through on-line and the web search engine (Fulmer and Jeffrey, 2009)

1.10.4.2 Human Resource

Human capital is the set of individuals to form labor organizations, business sector or the economy. "Human capital" is sometimes used synonymous with human resources, even though human capital usually refers to a more narrow view, that is, individual knowledge is produced and can contribute to an organization. In addition, human resources used in other terms such as "energy work", "talent", "labor" and "person" (Elwood *et al.*, 1996).

While Tracey (2004) termed as the human resources staff role in managing an organization and also work to deal with people as customers. Human resource is an asset to any organization other than the financial resources and property available in the organization.

1.10.4.3 Policy

Termed a principle of policy or rules to guide decisions and achieve rational goals (Anderson, 2005). In addition, the policy also referred to as the procedures or protocols can assist in making the subjective and objective results.

Policy may also be termed a "statement of intention" or commitment "by this, decision makers will be responsible for decisions made based on the policies that they legislate. Policies can also refer to important decision-making process in an organization such as the results of the determination of spending priorities of the organization will be influenced by monetary policy set by the management organization (Althaus *et al.*, 2007)

1.10.5 Civil Servants

"Officer" / Civil Servants means an officer in the Civil Service of the Federal and State Civil Service, including those appointed on a temporary or outboard (General Order, 2007)

1.11 Operational Definition

Operational definition to explains the actual implementation of the CPD. The operational definition can be illustrated with actual conditions. The following are some of the operational definition:

1.11.1 Continuing Professional Development (CPD)

Universiti Sains Malaysia is among the Public Institutions of Higher Learning (IPTA) in Malaysia; the first has implemented a "Continuing Professional Development (CPD)" and is known as MyCPD. MyCPD started when USM asked to head the proposed format of CPD (Continuous Professional Development) as an alternative method to enhance the method of implementation of the CLA. This follows from the Workshop on Strengthening the CLA with the Ministry of Higher Learning which was held at the Impiana Hotel, Kuala Lumpur. The workshop was attended by all representatives of universities and community colleges as well as representatives from the PSD. MyCPD approach has involved the whole civil service will be through a new element-based CLA is through Training Assessment (PBL) and Competency Assessment. Through MyCPD, the definition has been expanded training through formalized training and the ability to informal evaluations after the training objectives of the department heads. MyCPD method involves assignments, presentations and interviews; in the evaluation of test methods conducted than ever before. Some courses have been designed in line with the fitness and competencybased staff of the Social Services sector includes the scheme S (Library, Youth & Sports and Islamic Affairs), scheme B (Talent & Art) and the DG scheme (Safety and Civil Defense). Overall, MyCPD shaped course involves specialized courses according to the grade of general competencies CPD for academic and non academic staff in accordance with the scheme (Training Center, 2009) in short what is the operation definition of CPD.

1.11.2 Employee Effectiveness

With the implementation of the Universiti Sains Malaysia MyCPD USM) has affected Employees have been identified by a researcher, which comprises three main elements:

1.11.2.1 Motivation

With the implementation of MyCPD activity was seen by researchers as one element that can influence the Employees in terms of increasing motivation among public employees at USM, Penang. This is because, according to William (2009), with the employee involvement in learning activities that will enhance their knowledge and skills and in turn provide a morale and confidence of staff in the task better. Therefore, the objectives of implementation undertaken by the unit MyCPD USM Training are seen not only to improve knowledge and skills but also able to assure its employees to perform tasks better. This can be seen through the implementation USMku Gemilang moral values that can produce human capital with a good personality.

1.11.2.2 Professionalism

MyCPD implementation is seen as a step to improve the professional level civil servants in the university so that the quality of human capital is always on par with employees in the global market. This can be seen through the implementation of the adopted MyCPD two elements of learning general training and specialized training, general training where greater attention to the current general knowledge and specific training consists of learning related to the scope of expertise. Through a balance of both these elements so staff can keep a professional level with the times.

1.11.2.3 Career Development

USM also make MyCPD as a medium measure of the performance of staff in the process of career development. This is because, with the MyCPD then the system will become more systematic career development when there is proper planning career paths, each employee who works in the university. Requirements and training courses adapted to the professional level can be maintained in order to produce employees who are employability. The determination of salary and promotion can also be done with justice when MyCPD serve as a benchmark for determining the entitlement of an employee.

1.11.3 Determinants

To enhance the effectiveness of MyCPD, the factors must play their role to support the implementation MyCPD activities undertaken by the Training Unit of the university. Therefore, the following factor shall be taken into account to support MyCPD at Universiti Sains Malaysia.

1.11.3.1 IT Infrastructure

Provision of infrastructure facilities particularly the internet has facilitated the learning activities at Universiti Sains Malaysia for example, on-line learning activities (E-learning). Through online learning activities are also the constraints of time and location can also be overcome if the USM staff in other branches of learning activities without the need to follow in the exact location. In addition, with the software such as Microsoft (Word, PowerPoint and Excel) has also facilitated the provision of learning materials that can be shared with others online (Blog, E-learning and website). As a result, the participation rate of learning activities on the rise as online learning approach is seen as a very flexible approach.

1.11.3.2 Human Resource

Support the activities of staff at Universiti Sains Malaysia MyCPD also seen as vital for ensuring the implementation MyCPD achieve its objectives. At Universiti Sains Malaysia Each department, faculty, divisions and units responsible for planning and designing the structure of the training required by personnel under their responsibility. Therefore, each party is responsible and plays an important role in ensuring effective implementation MyCPD. Meanwhile, USM Training Unit's role in carrying out its MyCPD based on input given to them by the departments, faculties, divisions and units of the university.

1.11.3.3 Policy

Universiti Sains Malaysia (USM) has set a clear policy to ensure the implementation MyCPD achieve set objectives. In which, human resource management has determined that the conditions for promotion and salary of each employee to undergo testing and evaluation of performance in the MyCPD system. Therefore, each employee must be able to attend to each activity MyCPD set to qualify for the promotion and salary and indirectly help in the development process of their career.

1.11.4 Civil Servants of Universiti Sains Malaysia (USM)

Civil servants at the Universiti Sains Malaysia consist of various schemes such as Job and Grade issued in the circular number 4 of 2002. There are five levels of office is in the Universiti Sains Malaysia, the first of the Top Management Group of the University or the Main Committee of the Public Sector (Premier) consisting of JUSA A, B and C. JUSA Next, Group A, the Management and Professional group (Grade Position 41 to 54), group B is called the support group I (Grade 27 to Grade Position 40). Next Group C is a support group II (Gred17 up to Grade 26) and the last group is the group D (Grade 1 to Grade 16). Grade this post is in categorize to a number of office schemes such as Scheme A (Engineer), Scheme S (social), Scheme IC (Security and Civil Defense), N Scheme (Administrative Support) and others.

REFERENCE

- A.Health Canada (2010). Advancing Innovation and Excellence in Pharmacy Practice. Canada, Canadian Council on Continuing Education in Pharmacy and Canadian Pharmacists Association.
- Ahmad ,R. , Ismail, A. , Ismail,W.K.W. (2007). "Sistem penilaian prestasi sektor awam di Malaysia: Pemikiran semula terhadap peranan dan tanggungjawab pegawai penilai prestasi." Jurnal kemanusiaan 10 (peranan dan tanggungjawab pegawai penilai prestasi), pp. 80-89.
- Ahmed, D. H. S. (2010). "Continuous Professional Development for Health Workforcein Sudan: The Current Situation and Future perspective " Sudanese Journal of Public Health 5(3).
- Alias Radam, & Ismail, M.M., (2004). Competitiveness of the Malaysian Food Processing Industry. Universiti Putra Malaysia Press, Serdang.
- Alias, M. N. B. (2007). Keperluan Program Pembangunan Profesional (CPD) Terhadap Profesional Juruukur Di Malaysia, Universiti Teknologi Malaysia.
- Allen, Elaine, Seaman & Christopher (2007). "Likert Scales and Data Analyses". Quality Progress 2007, 64-65.
- Althaus, Catherine; Bridgman, Peter & Davis, Glyn (2007). *The Australian Policy Handbook* (4th ed.). Sydney: Allen & Unwin.
- Anderson, C. (2005) What's the Difference Between Policies and Procedures?, *Bizmanualz*,

- Anubama, R., Mansor, N.N.A., Idris, N. (2011). "Line Managers' Role in Continuous Professional Development And Human Resources." International Journal of Social Sciences And Humanity Studies 3.
- Atherton, J. S. (2011) *Learning and Teaching; Learning curves*.Retrieved 3 May 2012 http://www.learningandteaching.info/learning/learning_curve.htm
- Ayati & Mustafa, (2004). "Satisfaction of Construction Project Managers With Current Continuing Professional Development."
- Bashir, M., Tanveer Afzal, M., Azeem, M., (2008). "Reliability and Validity of Qualitative and Operational Research Paradigm." Pakistan Journal of Statistics and Operation Research 4(1).
- Beeghley, L. (2004). *The structure of social stratification in the United States*. Boston: Allyn & Bacon.
- Bernama (2010). "Kakitangan Awam Perlu Ubah Sikap Negatif Demi Manfaat Rakyat." Retrieved 15 October, 2011.
- Bernama (2011). "PROSPEK Pengganti PTK Berkuatkuasa 1 Julai." Retrieved 6.02.2012.
- Bernama , (2012). "CUEPACS tubuh jawatankuasa bertindak bagi menambah baik SBPA." Retrieved 5.02.2012.
- Carlson, N.R. & Heth, C.D.(2009).Psychology the Science of Behaviour.Toronto:Pearson Education Canada
- Caroline Daly, *et al.* (2009). Continuing Professional Development in ICT for teachers, WLE Centre, Institute of Education, University of London century. London: Kogan Page.

- Compact Oxford English Dictionary Online. (2012), Infrastructure, http://www.askoxford.com/concise_oed/infrastructure(accessed January 11, 2012)
- David Megginson and Vivien Whitaker (2007). "A free sample from Continuing Professional Development." <u>CIPD</u>.
- Desimone, R. L., Werner, J. M., & Harris, D. M. (2002). "Human resource development 3rd ed." Mason, OH: South-Western.
- Edwin,L. & Herr, (2001). "Career development and its practice: A historical perspective." The Career Development Quarterly, 49 (3): 196-211.
- Elwood F. Holton II, James W. Trott, Jr., 1996, Trends Toward a Closer Integration of Vocational Education and Human Resources Development, Journal of Vocational and Technical Education, Vol. 12, No. 2, p7
- EPU, (2011). Membangun dan Mengekalkan Modal Insan Bertaraf Dunia. U. P. E. (EPU), Rancangan Malaysia Kesepuluh.
- Fitzpatrick, S. (2002). Continuing Professional Development Too Much Like Hard Work?, Institute of Clinical Research.
- Fraser, M., 1994, 'Quality in higher education: an international perspective' in Green,
 D. (Ed.), 1994, What is Quality in Higher Education? pp. 101–111
 (Buckingham, Open University press and Society for Research into Higher Education).
- Friedman, A. and Phillips, M. (2004) Continuing Professional Development: developing a vision. *Journal of Education and Work*, Vol. 17 No. 3, pp. 361– 76
- Fulmer, Jeffrey (2009). "What in the world is infrastructure?". *PEI Infrastructure Investor* (July/August): 30–32.
- Ghafar, M.N. (1998). Penyelidikan Pendidikan, Penerbitan Universiti Teknologi Malaysia. Journal Artikel.

- Gilbert, D. (1998). *The American class structure: In an age of growing inequality*. Belmont, CA: Wadsworth Press.
- Gilley,W.,Eggland,&Gilley (2002). Principles Of Human Resource Development, New York: Basic Books.
- Harney, A. (2012). "Benefit of CPD." Retrieved 12/02/2012, 2012.
- Hartree (1984). "Malcom Knowles' Theory of andragogy: A Critique" ,International Journal of lifelong Education.
- Hasan, H. and Tibbits, H. (2000) Strategic management of electronic commerce: an adaptation of the balanced scorecard, *Internet Research*, 10(5).
- Health Canada (2010). Advancing Innovation and Excellence in Pharmacy Practice.Canada, Canadian Council on Continuing Education in Pharmacy and Canadian Pharmacists Association.
- Health Canada, (2010). Advancing Innovation and Excellence in Pharmacy Practice. Canada, Canadian Council on Continuing Education in Pharmacy and Canadian Pharmacists Association.
- Ilhaamie, (2008). Amalan pengurusan sumber manusia berteraskan kompetensi dan kualiti perkhidmatan dalam organisasi awam di malaysia: saling bergantungan tugasan sebagai kepentingan . Pulau Pinang.
- Institute for Learning (2009). "guidelines for your continuing professional development (CPD)." Retrieved 8/09/2011, 2011, from www.ifl.ac.uk.
- Institute for Learning (2009). "guidelines for your continuing professional development (CPD)." Retrieved 8/09/2011, 2011, from www.ifl.ac.uk.
- James, L. (1998). Understanding Employee Motivation. N/A June 1998, Vol. 36
- John L.A.H. (2002). "Improving continuing professional development in the use of ICT." Journal of Computer Assisted Learning.

- John, A.H.L. (2002). "Improving continuing professional development in the use of ICT." Journal of Computer Assisted Learning.
- Julie Pallant (2005). SPSS Survival Manual (A step by step guide to data analysis using SPSS for window (Version 12). Second Edition .Open University Press
- Kamus Dwibahasa, (2010) ,Oxford Fajar Sdn Bhd. (008974-T) ,ISBN 983-45036-9-7.
- Kennie, T.J.M. (1998). "THE GROWING IMPORTANCE OF CPD." Continuing Professional Development(4).
- Kumar, D. (2005) Associate Consultant Infrastructure in India The ICFAI Journal of Infrastructure MBA REVIEW
- Longworth, N. (2003). Lifelong learning in action: Transforming education in the 21st
- MacCarrick (2010) G. A practical guide to using the World Federation for Medical Education (WFME) standards. WFME 2: educationalprogram. Irish Journal of Medical Science 2010.
- Mahoney (2000). Exploring strategic maturity in HRD -rhetoric, aspiration or reality? *Journal of European Industrial Training*, 24 (5), 281-290.
- McPhee, A.D, Forde, C., Mcmahon, M., Patrick, F. (2006), Professional Development reflection and enquiry london SAGE publication Pvt Ltd.
- Medical Board of Australia (2010). "Continuing professional development registration standard."
- Megginson, D., & Whitaker, V. (2007). "A free sample from Continuing Professional Development." CIPD.

- Merriam, Sharran B.; Caffarella, Rosemary; Baumgartner, Lisa (2007). Learning in Adulthood: A Comprehensive Guide (3rd ed.). San Francisco: Jossey-Bass. ISBN 0787975885. LCCN 2006-19145.
- Merwe, V., Merwe, V.D., Alta. (2008). "Online Continuing Professional Development: tensions impacting on the reflective use of a mathematicsfriendly forum environment " South African Computer 42.
- Milne, J., (1999) Centre for CBL in Land Use and Environmental Sciences, Aberdeen University. Retrieved 17/09/2011, 2011, from http://www.icbl.hw.ac.uk/ltdi/cookbook/info_questionnaires/index.html
- J., Milne, (1999)Questionnaires: Advantages and Disadvantages, CBL Centre for in Land Use and Environmental Sciences. Aberdeen University. Retrieved 23/09/2011, 2011, from
- Niskanen, William, A (1991). The soft infrastructure of a market Economy Gato Journal *Cato Journal*, vol. 11, no. 2 (fall 1991).
- Pashler, H. M. ,Rohrer, D.& Bjork, R. (2009). "Learning styles: Concepts and evidence." Psychological Science in the Public Interest 9: 105–119.
- Pekeliling Perkhidamatan, (2010). pemansuhan Penilaian Tahap Kecekapan (PTK), pekeliling perkhidmatan JPA. 13
- Pekeliling Perkhidmatan (2010). pemansuhan Penilaian Tahap Kecekapan (PTK), pekeliling perkhidmatan JPA. 13.
- Peter Scale, Jo Pickering, et al., (2011). Continuing Professional Development in lifelong Learning sector, McGraw Hill Education.open University Press.
- Pusat Latihan UPSI (2009). "Sistem Pembangunan Profesional berterusan ". Retrieved 7 September, 2011, from <u>http://bsm.upsi.edu.my</u>

- Pusat Latihan USM (2009). "Continuing Professional Development (myCPD) ". Retrieved 14September, 2011, from http://ulatihan.usm.my/v2/.
- Revelle, W., Zinbarg, R. (2009) "Coefficients Alpha, Beta, Omega, and the glb: Comments on Sijtsma", *Psychometrika*, 74(1), 145–154.
- Roger A. Boothroyd,Paul E. Greenbaum,Wei Wang,Krista Kutash,Robert M. Friedman, (2011). "Development of a Measure to Assess the Implementation of Children's Systems of Care: The Systems of Care Implementation Survey (SOCIS)." The Journal of Behavioral Health Services And Research.
- Sadler et al. (2000). "Learning preferences and cognitive style: some implications for continuing professional development. ." Management Learning 31: 239–256.
- Sakaran, U. & Bougie, R. (2010). Research Method for Business : A skill-Building Approach. Fifth Edition, New Delhi, John Wiley & Sons,Inc.
- Sakaran, U. (2007). Research Method for Business : A skill-Building Approach. Thirt Edition New Delhi, John Wiley & Sons,Inc.
- Sanders, S.,E., Allinson C. W,Hsyes, J. (1992). "Continuing Professional Development Q & A, The Valuer and Land Economist."
- Schostaka, J. (2010). "Effectiveness of Continuous Professional Development." General Medical coucil.
- Skill for Care (2010). "A practical guide to implementing continuing professional development in the adult social care workforce called "Keeping up the Good Work"." 7/02/2012.
- Sluis, V.D, & Poell, R. (2003). "The impact on career development of learning opportunities and learning behavior at work." Human Resource Development Quarterly 14 (2): 159-180.

- Smith, L. (2004). "Continuing Professional development and Workplace Learning 7: Human Resource development- a tool for achieving organizational change." Library management 25(3): 148-151.
- Smith,S.E., Allinson C. W, Hsyes, J. (2000). "Learning preferences and cognitive style: some implicationsfor continuing professional development. ." Management Learning 31: 239–256.
- Sulaiman Shamsuri (2004). "Research Method for the Social Science: Made Simple" DSS Publishing, Klang.
- Sullivan, arthur; Steven M. Sheffrin (2003). Economics: Principles in action. Upper Saddle River, New Jersey 07458: Pearson Prentice Hall. pp. 474. ISBN 0-13-063085-3.
- Surat Pekeliling Perkhidmatan, (2008). Pengubahsuaian Penilaian Tahap Kecekapan. Bil 19.
- Surat pekeliling perkhidmatan, (2011). Program Bersepadu Potensi Dan Kompetensi (PROSPEK). JPA.
- Tey Lee Choo, Wong Sook Lee & Ng Ai Ling. (2011). A Case Study on Opportunities of continuous Professional development (CPD) among academic staffs of Universiti Teknologi Malaysia (UTM) Skudai.
- The Social Informatics Research Unit (2003). Managed Learning Environment Activity in Further and Higher Education in the UK, University of Brighton.

Todd, F. (1987). "Planning Continuing Professional Development" New South
Tracey,W. R. (2004) The Human Resources Glossary: thirt edition, St. Lucie Press,
2004 – 824

- Turbitt, P.,Donnelly,U., (2009). "Educating the Educators Online." International Conference on Mobile, Hybrid, and On-line Learning.
- Vlasceanu, L., Grunberg, L., and Parlea, D., (2007), Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions (Bucharest, UNESCO-CEPES) Revised and updated edition. ISBN 92-9069-186-7. http://www.cepes.ro/publications/pdf/Glossary_2nd.pdf, accessed 29 Disember 2011.
- Wall, J., & Ahmed, V. (2007). "lesson learned from A case Study in Deploying Blended Learning Continuing Prfessional Development." Engineering, Contruction and Architectural Management 15 No.2: 185-202.
- Wen Ling Yu & Chen Li Chen, (2010). "The Factors Influencing the Contribution of Continuing Education toward Workforces' Professional Development and Human Capital Investment." Fourth International Conference on Genetic and Evolutionary Computing.
- Wen Ling-Yu and Chen Li-Chen (2010). The Factors Influencing the Contribution of Continuing Education toward Workforces' Professional Development and Human Capital Investment, Department. of Bussiness. Education., Nat. Changhua University. of Educ., Changhua, Taiwan
- Williams, S. (2009). "CPD and the Discourse of Professionalism in Public Relations Practice." Asia Pacific Public Relations Journal.
- Wong Wai Kee, Chua Siew Siang, et al. (2007). Implementation of Continuing Professional Development (CPD) On Community Pharmacists Department of Pharmacy, Faculty of Medicine, University Malaya.
- www.advancedpractice.scot.nhs.uk, (2010) Get Going Together:An Induction Tool for Health and Social Care Integrated Services)." Retrieved 18/03/2011.
- Yager, R. E. (2005). exemplary Science: Best Practices in Professional Development, National Science Teachers Association.

Young Wan Ha, Yun-Cheol Na, Jung-Ju Seo , Soo-Na Kim,Robert J. Linhardt , Yeong Shik Kima, (2006), Qualitative and quantitative determination of ten major saponins in Platycodi Radix by high performance liquid chromatography with evaporative light scattering detection and mass spectrometry, Journal of Chromatography A, 1135 (2006) 27–35.