CHAPTER II

LITERATURE REVIEW

PRODUCTIVITY, LABOUR PERFORMANCE, ABILITY
AND MOTIVATION: A SURVEY OF CONCEPTS,
THEORIES AND PAST RESEARCH FINDINGS

This chapter discusses the concepts on productivity, labour performance, ability and motivation from written sources on the subject. At the same time, well known major theories and past research findings on employees' motivation are also reviewed. The purpose of this chapter is to determine from the literature survey the variables to be included in the analytical framework and the indicators for the measurement of the variables chosen for study.

The chapter is divided into four main topics, namely productivity, labour performance, ability and motivation.

2.1. Productivity

According to Martin (1988), "productivity might be perceived as a results-oriented, outcome measurable phenomenon".¹

Balk (1975) defined productivity as:-

"Productivity = Efficiency + Effectiveness. Or,
Output/Input + Output/Measurement Standard (for output) =
Productivity".2

Prokopenko3 (1989) defined productivity in the public sector as "the efficiency with which resources are consumed in the effective and equitable delivery of human services". In this definition, input, output, outcome and impact are taken into consideration.

Sutermiester4 (1976) and Prokopenko5 (1989) shared the same view that labour is not the only factor that contributes to the productivity of an organization. Other factors such as technology, raw materials, job layout, methods and capital also play significant roles in productivity improvement. However, Sutermiester6 believed that although productivity is influenced by many factors of production, labour performance is still important to an organization. Inspite of using improved technology, productivity can still deteriorate if labour performance is low.

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5 Prokopenko, p.21.
6 Sutermiester, p.10-11
Prokopenko\textsuperscript{7} (1989) also observed that labour is the most important input used in the public services.

2.2. \textbf{Labour Performance}

According to Sutermeister\textsuperscript{8} (1976), an employee's job performance results from his ability and motivation or ability times motivation. An employee needs to have both the ability and motivation to be able to perform well. One without the other will not enable an employee to perform well in his job.

Campbell and Pritchard\textsuperscript{9} (1983) shared the same view as Sutermeister on factors influencing an employee's performance that is:-

\[ \text{Performance} = f(\text{ability} \times \text{motivation}). \]

However, Campbell and Pritchard\textsuperscript{10} (1983) cautioned against taking this equation literally, that is multiplying the measurement of ability by the measurement of motivation in order to predict performance as it will not bring any conclusive results. However, they did not rule out the value of this equation in investigative researches. The researcher agrees that to use the formula to predict performance is of course impossible as the independent variables, namely ability and motivation are not measurable on a ratio scale and can only be measured on a nominal or ordinal scale. Despite its weakness, this formula can still be used as a guide in researches to

\textsuperscript{7} Prokopenko, p.26.
\textsuperscript{8} Sutermeister, p.11.
\textsuperscript{10} Ibid, p.119.
identify the main factors that can influence employees’ job performance in organizations.

Ilgen and Klein (1988) cited Vroom\textsuperscript{11} (1964) on behaviour. According to Vroom, behaviour is said to be “resulting from some multiplicative function of the person’s ability to perform the behaviour in question and his or her motivation to do so”.

The importance of both ability and motivation to an employee’s performance is also supported by Middlemist and Hitt\textsuperscript{12} (1981). They pointed out that the “development of personal skill should complement motivation in order to achieve higher levels of performance”.

2.3. Ability

Vroom\textsuperscript{13} (1964) referred to ability as “those personal characteristics that relate to the capability to perform the behaviours of interest”.

To Campbell and Pritchard\textsuperscript{14} (1983), ability meant aptitude level, skill level and understanding of the task.


\textsuperscript{13} Vroom, quoted by Ilgen and Klein, in Campbell et al, p.145-146.

\textsuperscript{14} Campbell and Pritchard, in ed. M.D. Dunnette, p. 65.
According to Sutermeister\textsuperscript{15} (1976), an employee is said to have the ability if he is knowledgeable and possesses the skill to perform the job. Education, experience, training and interest will affect an employee’s level of knowledge, while skill is determined by aptitude and personality as well as by education, experience, training and interest. In the Malaysian public service, the basic qualifications possessed by most clerical staff are basic education such as the Malaysian Certificate of Education (MCE) and the Higher School Certificate (HSC) for the English medium students or the “Sijil Pelajaran Malaysia” (SPM) and the “Sijil Tinggi Pelajaran Malaysia” (STPM) for the Malay medium students. These basic education do not equip the employees with the knowledge and skills which can be applied to their jobs. Job knowledge and skills are normally acquired through working experience, on the job training and in-service training. Basic qualifications may influence the level of mental capability to acquire new knowledge and skills. Interest in the job on the other hand, may drive a person to put in effort to acquire new skills and knowledge related to the job. An employee’s aptitude and personality may influence the types of skills acquired but these two factors are not easy to operationalize.

Martin\textsuperscript{16} (1988) defined education as “the knowledge which one obtains through a process of formal study at the elementary, secondary or post secondary level.” The purpose of school education is “to prepare one to deal with life and to

\textsuperscript{15} Sutermeister, p.11.
\textsuperscript{16} Martin, p.111-112.
formally indoctrinate one to recognize and process purposive, creative and logical abstractions so that they may be used to solve problems”. Training on the other hand “is that process by which the individual is indoctrinated into the system, and is matured in the organization to perform an organizationally specific role which fosters a symbiosis of the employee and the employer”. He also cited Hinrich\textsuperscript{17} (1983) who described training “as any organizationally initiated procedures which are intended to foster learning among organizational members”.

Landy and Trumbo\textsuperscript{18} (1980) pointed out the difference between training and “general education” where “the former was more specific and more practical to the work area”. They also pointed out that “efficient training involved efficiency by the learner, retention of the material learned and transfer of training to the job setting”. Landy\textsuperscript{19} (1985) also defined training as “a set of planned activities by which the organization was able to modify job knowledge and skills, and there must be an appropriate interface if training is to be functional and productive”.

The jobs in the work place are continuously changing with improved technology and job design which require the upgrading of the employees’ skills to cope up with new techniques at work. So training can play an important role in improving the skills of employees\textsuperscript{20}.

\textsuperscript{20} Martin, p.113.
Martin pointed out that although there are some parties who disagree with the view that training could improve work performance, there are many supportive evidences which show that training can be useful to upgrade employees' performance\(^{21}\). Wexley and Latham\(^{22}\) (1981) also supported the idea of training as beneficial to employees as training can push up the employees' "level of self awareness", "motivation to perform a job", "skills in solving problems at work" and "decision making". They also highlighted the importance of imparted suitable knowledge and skills during training sessions which can be adopted by the employees at the work place. Guzzo (1988) cited the findings of Guzzo, Jette and Katzell\(^{23}\) (1985) on training which showed that training is the strongest influence on productivity improvement. Their findings also showed that training is effective on all categories and types of employees.

Middlemist and Hitt\(^{24}\) (1981) suggested that an employer must make sure that applicants for a job to be selected based on the "abilities to perform the required tasks". Selections based on applicants' aptitude, intelligence, and possession of extra skills such as typing skills and the knowledge of using the computers will no doubt

\(^{21}\) Ibid, p.115.

\(^{22}\) K.N. Wexley and G.P. Latham, *Developing and Training Human Resources in Organizations* (Glenview, IL: Scott, Foresmon, 1981), as quoted by Martin, p.117.


\(^{24}\) Middlemist and Hitt, p.144-145.
help in increasing job performance but for those who are already recruited, some job knowledge and skills have to be acquired through working experience and on the job training. Martin\textsuperscript{25} (1988) believed that although the public sector can recruit new employees of high ability through selection procedures based on ability, it has to be able to attract potential employees through offers of attractive remuneration and promotion prospects, and a good organizational climate which can compete with the private sector. However, remuneration in the Malaysian public sector is not decided by the individual organization but by a central agency, that is the Public Service Department. Remuneration given by an organization is similar to the remuneration in other organizations in the public sector for employees in the same category and the remuneration is normally lower than those offered by some organizations in the private sector. Promotion prospects are normally based on job seniority and the availability of higher level posts.

2.3. **Motivation**

2.3.1. **Definitions and Concepts**

Middlemist and Hitt\textsuperscript{26} (1981) defined motivation as “the wilful desire to direct one’s behaviour towards goals”. This definition contains three elements which are “wilful desire (person’s choice)”, “behaviour” and “goal-directed (purpose of behaviour)”.

\textsuperscript{25} Martin, p 123-127.
\textsuperscript{26} Middlemist and Hitt, p 136.
Petri (1991) referred to motivation as "the concept we use when we describe the force acting on or within an organism to initiate and direct behaviour."

According to Vroom (1964), "motivation deals with the willingness to invest in those behaviours". By those behaviours he meant "the behaviour of interest."

Mitchell (1982) referred to motivation as "those psychological processes that cause the arousal, direction and persistence of behaviour". When commenting on this definition, Naylor, Pritchard and Ilgen (1980) pointed out that a person has to invest time and effort to achieve a particular behaviour. Time is defined as "time units devoted to performing the behaviour" while effort "represent some amount of energy invested in the behaviour per unit of time." Ilgen and Klein (1988) suggested that it is difficult to measure effort without taking into account the time factor. So they suggested that effort be regarded as "a primary criterion of motivation" and time spent to achieve a certain behaviour is considered as "one indication of effort". Ilgen and Klein concluded from the above concepts that "motivation is concerned with the arousal, direction and persistence of behaviour and that these conditions are reflected in individuals' choices (1) of behaviours and (2) of the amount of effort devoted to the behaviours chosen."

28 Vroom, quoted by Ilgen and Klein, in Campbell et al, p 146.
31 Ilgen and Klein, in Campbell et al, p 146.
32 Ibid, p. 146.
Katzell and Guzzo\textsuperscript{33} (1983), some definitions of the set of behaviours that can affect productivity include absenteeism, turnover and other behaviour at work. Ilgen and Klein\textsuperscript{34} (1988) however, felt that it is more appropriate to focus only on behaviour related to job performance.

The researcher believes that turnover and absenteeism are not necessarily the result of the lack of work motivation among the employees. Turnovers may be due to problems such as the jobs are not in line with the employees' personalities, talents, qualifications and beliefs, personal problems such as family problems, illness, place of work is too far away from family home, or the employees could have received better job offers elsewhere. Martin cited the observations of Zaharia and Baumeister (1978)\textsuperscript{35} in a study on technicians at public residential facilities in the United States of America. According to Zaharia and Baumeister, technicians who left their jobs were "generally younger, better educated, under twenty four years old at job entry, had been on the job less than four months, and in the state less than six years."\textsuperscript{36} Some of the factors identified as the causes of turnovers in the study were personal factors, employees were not satisfied with the management, employees' perception that the job was of "low social status", unsatisfactory wage scales and the need to find a better job elsewhere.\textsuperscript{37}

\textsuperscript{34} Ilgen and Klein, in Campbell et al, p.147.
\textsuperscript{35} E.S. Zaharia and A.A. Baumeister, "Cross-organizational Job Satisfaction of Technician Level Staff Members," American Journal of Mental Deficiency, 1978, 84, 30-35, quoted by Martin, p. 77.
\textsuperscript{36} Ibid, p. 77.
\textsuperscript{37} Ibid, p. 77.
As for absenteeism, the researcher agrees with the opinions of Steers et al.\(^3\) (1996), that there are many possible causes for absenteeism such as the attendance motivation of the employees, barriers which prevent employees to attend work although they are motivated to do so and the influence of societal norms.\(^3\) The attendance motivation is influenced by the absence culture among the employees, organizational policies and practices, and the attitudes, values and goals of the employees. There are also barriers which prevent the employees to go to work such as accidents, illness, family problems and transportation problems. The norms in a society concerning the value of work can also influence the rate of absenteeism in a work place.

According to Beck\(^4\) (1978), "motivation is broadly concerned with the contemporary determinants of choice (direction), persistence, and vigor of goal-directed behaviour". This definition contains some elements of Mitchell's definition above.

Steers and Porter\(^5\) (1991) cited definitions from Atkinson (1964), Jones (1955), Vroom (1964) and Campbell and Pritchard (1976) and identified three common

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"denominators" from the definitions which describe motivation. The three "denominators" are "what energizes human behaviour", "what directs or channels such behaviour" and "how this behaviour is maintained or sustained". The cited definitions are as follows:

"... the contemporary (immediate) influences on the direction, vigor, and persistence of action. (Atkinson, 1964)".42

"...how behaviour gets started, is energized, is sustained, is directed, is stopped, and what kind of subjective reaction is present in the organism while all this is going on. (Jones, 1955)".43

"...a process governing choice made by persons or lower organisms among alternative forms of voluntary activity. (Vroom, 1964)".44

"... Motivation has to do with a set of independent/dependent variable relationships that explain the direction, amplitude, and persistence of an individual's behaviour, holding constant the effects of aptitude, skill, and

understanding of the task, and the constraints operating in the environment.
(Campbell & Pritchard, 1976).45

It is observed that many common words are used in the definitions listed above which means that the definitions of motivation put forward by the various organizational psychologists do not differ greatly from one another.

2.3.2. Theories of Motivation

There are many theories of motivation but only the significant ones which are related to employees' performance will be reviewed in this chapter. Middlemist and Hitt46 (1981) categorized motivation theories into content based (needs) and process based (choice) and this is similar to the categorization made by Campbell and Pritchard47 (1983). Martin48 on the other hand, categorized them into content theories, process theories and other paradigm which is the combination of the two types of theories. This review utilizes Martin's categorization of theories.

Content theories "try to specify the substantive identity of the variables that influence behaviour and less so with the process by which they do it".49 Some of the significant content (needs) theories are those of Maslow's, Herzberg's and Alderfer's.

46 Middlemist and Hitt, p.136-137.
47 Campbell and Pritchard, in ed. M.D. Dunnette, p.65.
48 Martin, p.37.
49 Campbell and Pritchard, in ed. M.D. Dunnette, p.65.
(a) **The Hierarchy of Needs Theory**

Maslow\(^{30}\) (1954) formulated a theory known as the Hierarchy of Needs theory. He suggested that human beings have a set of specific needs to be satisfied. The needs are arranged according to the hierarchy order. According to the theory, the needs at the lowest rank of hierarchy must be satisfied first before the needs at the following ranks are satisfied. The needs specified by the theory beginning with the lowest hierarchy are as follows:-

(i) Physiological needs which are basic needs such as food, air, and water.

(ii) Safety needs such as a secure and safe environment which includes shelter and protection from physical and psychological harm.

(iii) Social needs and the need to belong. These includes the need for affection, affiliation, friendship and love.

(iv) Esteem needs which include the needs for recognition, achievement, status and power.

(v) Self-actualization needs which means the needs to fulfil one’s potential, maximizing the use of one’s skills and ability.

Landy\textsuperscript{51} (1985) observed that this theory was based on the concept that human beings are always having needs to be satisfied. However, empirical researches have failed to support this theory, especially the aspect of the theory that suggested that several needs cannot be strong at the same time.\textsuperscript{52} Inspite of its weaknesses, Middlemist and Hitt\textsuperscript{53} believed that this theory can still be utilized in organizational management.

(b) **The Two Factor Theory**

This theory was formulated by Herzberg\textsuperscript{54} (1959, 1966). In this theory, there are two set of factors important to a person’s needs which are the motivators and the hygiene factors. The motivators are factors related to job satisfaction while the hygiene factors are related to job dissatisfaction. Hygiene factors are those related to the environmental aspects of the job and include pay, security, general working condition, company policies, and relationships with bosses and peers. Motivators on the other hand, are related to the nature of jobs such as achievement, recognition, responsibility, advancement, the work itself and the potential for personal growth. Unlike Maslow’s theory, there are no hierarchical arranged needs to be satisfied according to their importance to human beings. Herzberg also focused on rewards and outcome of performances that could satisfy an employee’s

\begin{itemize}
\item Middlemist and Hitt, p.139.
\item Ibid, p. 139.
\end{itemize}
needs. However, this theory too has not been supported by empirical tests.\textsuperscript{35}

Inspite of that, Middlemist and Hitt suggested that this concept can still be useful in organizational behaviour research.\textsuperscript{36}

(c) **The ERG Theory**

Under this theory formulated by Alderfer\textsuperscript{57} (1969), 1972), there are three needs to be satisfied by a human being. These needs are existence, relatedness and growth. Existence needs are physical needs such as hunger and thirst, and also material needs such as pay and physical work environment. Related needs are needs for relationships with others such as family members, superiors and friends. Growth needs are needs to be "productive and creative which means to be able to utilize a person's "potential" and to have "continued personal development."

The needs in ERG theory are not arranged in a hierarchial order as in Maslow's theory. So it is not necessary that the existence needs are to be satisfied first before the other needs. However, this theory stressed that an unsatisfied need can become stronger and a need that has been satisfied can still continue to be a motivator. Unlike Maslow's theory of needs, researches have been able to support the ERG theory, especially on the three

\textsuperscript{55} Martin, p.38 and Middlemist and Hitt, p.144.
\textsuperscript{56} Middlemist and Hitt, p.144
classification of needs and how a satisfied need will never stop to become a motivator.\textsuperscript{58}

**Process theories** are theories that attempt to explain the variables and processes that result in the choice, effort and persistence of behaviour.\textsuperscript{59} Some of the important process theories are those of Tolman, Skinner, Festinger, Georgopolous et al., Vroom, and Porter and Lawler.

(a) **The Purposive Behaviour Theory**

This theory of Tolman\textsuperscript{60} (1932) is based on the area of experimental psychology. To Tolman, behaviour was considered as "molar" ("an act of behaviour that had distinctive properties of its own"), "goal-directed", took into account environmental issues such as "path-goal", and pursued the "principle of least effort". He also believed that behaviour could be acquired through the learning process and performance could be controlled by rewards and punishment. Martin believed that this theory can be used in organizations.\textsuperscript{61}

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\textsuperscript{58} Middlemist and Hitt, p.140.
\textsuperscript{59} Campbell and Pritchard in e.d. M.D. Dunnette, p.65.
\textsuperscript{61} Martin, p. 42-43.
\end{flushleft}
(b) The Operant Conditioning Concept

B.F. Skinner\textsuperscript{62} (1953) suggested that there are two types of behaviour and they are "respondent" and "operant". Respondent is a behavioral respond caused by some known stimuli whereas operant is a behavioural respond not caused by any stimulus. An operant can become stronger when it is followed by the presentation of a reinforcer.\textsuperscript{63} Hilgard and Bower\textsuperscript{64} (1966) observed that rewards could increase operants' strength while punishment could not weaken their strength. This concept can also be called reinforcement concept. It is the most acceptable concept, has many applications and is widely used in many organizations\textsuperscript{65}.

(c) The Theory of Cognitive Dissonance

This theory of Festinger\textsuperscript{66} (1957) stipulated that when individuals are having a difference of opinion over a subject, tension will tend to result among the individuals. In the end, they will try to overcome their differences in order to eliminate the tension. Martin pointed out that this theory can be useful in organizations.\textsuperscript{67}

\textsuperscript{65} Martin, p.45.
\textsuperscript{67} Martin, p.42-43.
(d) **Instrumentality Theories**

There are several theorists involved in this theory. Georgopolous, Mahoney and Jones\(^68\) (1957) created the path-goal theory which suggests that a worker’s performance at work is based on his perception of whether work effort could result in the achievement of more personal goals.

Vroom\(^69\) (1964) created the Valence-Instrumentality-Expectancy theory or VIE theory. Under this theory, *valence* was described as “the attractiveness or non-attractiveness of a given object in one’s work environment”\(^70\). The object mentioned included salary and recognition. *Expectancy* was referred to as the “perceived relationship between a given degree of effort expenditure and a given level of performance”\(^71\). *Instrumentality* means the question of whether possessing an outcome can be a means to getting another outcome, for example, whether high performance will be rewarded by higher pay\(^72\).

Porter and Lawler\(^73\) (1968) created a model called the Porter-Lawler Model. The model consisted of nine components and they are:-

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70 Vroom, quoted by Martin, p.40.

71 Vroom, quoted by Campbell and Pritchard, in ed. M.D. Dunnette, p. 75.

72 Ibid, p. 75.

(i) Different individuals perceive the value of rewards differently.

(ii) Employees perceive that they should be rewarded equal to their work effort.

(iii) Effort consists of two components which are energy expenditure and performance.

(iv) Different individuals possess different "abilities and traits" and these "set the upper limit of performance".

(v) An individual's opinion of what is successful job performance is an important role perception.

(vi) Performance is defined as "the overall level of individual's accomplishment on the job".

(vii) There are two types of rewards and they are intrinsic and extrinsic rewards.

(viii) "Perceived equitable reward" depends on the individual's perception of whether the reward received is "fair".

(ix) Satisfaction is defined as "the comparison between what the employees' felt was an equitable reward and the one which was actually received".

Instrumentality theories were considered by Martin to be better than some of the other theories but they were still in the developmental stage\textsuperscript{74}.

\textsuperscript{74} Martin, p.43.
The principles in these theories can be applied in organization because they are easy to understand\textsuperscript{75}.

Other relevant theories referred to by Martin are combinations of both the process and content concepts. Some of those theories are those of McClelland, Adams, Locke and Ryan.

(a) The Need Achievement Theory

According to David McClelland\textsuperscript{76} (1961, 1966), there are three needs important to humans and they are the needs for achievement, affiliation and power. The need for achievement means the desire to be productive and be able to achieve desirable goals. The need for affiliation is "the desire for positive relationships with others", while the need for power means "the desire for influence". These needs can be influenced by the individual's cultural background or they can be acquired through the learning process. The three needs are considered important to an individual but the need for achievement is the most important for an organization to be effective. It is recognized however, that not all individuals have a need for achievement.

According to Middlemist and Hitt\textsuperscript{77} (1981), the concept of need achievement cannot explain the job motivation of every individual. So the

\textsuperscript{75} Ibid, p.43.
\textsuperscript{77} Middlemist and Hitt, p.141.
use of the concept must be combined with other concepts of motivation in order to obtain a better understanding of individuals.

(b) **The Equity Theories**

J.S. Adams\(^{78}\) (1965) stated in this theory that an equity situation will be reached when workers have the perception that the reward they received were equal to those of other workers for the same effort. Middlemist and Hitt pointed out that although this theory is useful but it can only explain certain aspects of human behaviour\(^{79}\).

(c) **Goal-Setting Theory**

According to Locke\(^{80}\) (1968, 1970), individuals who set higher goals will also be able to achieve higher performance.

Ryan\(^{81}\) (1970) believed that a human being will continue to behave in a certain manner until their goals are achieved. To achieve a high level of performance, the goals need to be set at the intermediate level of difficulty.

Both Locke and Ryan included the concept of feedback into their theory. Martin however, pointed out that goal-setting approach is more


\(^{79}\) Middlemist and Hitt, p 149.


suitable to be applied on managerial and professional employees and not on low level employees\(^82\).

Petri\(^83\) (1981) believed that there was no special theory that could explain all the aspects on human motivation. Martin\(^84\) (1988) shared the same opinion as Petri and suggested that organizations can select the most suitable parts of one or more theories that are relevant to their purpose.

Steers and Porter\(^85\) (1991) pointed out the importance of a conceptual framework to evaluate the usefulness of motivation theories in analyzing the factors in organizations and to determine whether they are related to job motivation and performance. He suggested the utilization of the conceptual framework after Porter and Miles\(^86\) (1974) for this purpose. This framework postulates that since motivation is a complex phenomenon, it has to be understood by acknowledging the important factors that could explain motivational processes. There are three important variables found in job situations that could influence motivational processes. These variables are individual characteristics, job characteristics, and work environment characteristics. The framework also suggests that the interactive effects among the three variables mentioned must also be considered in order to understand the motivational processes.

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\(^82\) Martin, p. 44.
\(^83\) Petri, p. 22.
\(^84\) Martin, p. 42 - 43.
\(^85\) Steers and Porter, p. 19
The individual characteristics consist of three major components and they are (1) interest, (2) attitudes; which could be attitude towards self, job or aspects of the work situation, and (3) needs; which could be security needs, social needs or achievement needs.

Some of the job characteristics components that could influence motivation and job performance are (1) types of intrinsic rewards (2) degree of autonomy (3) amount of direct performance feedback and (4) degree of variety in tasks.

The work environment characteristics components could be divided into two categories: (1) immediate work environment and (2) organizationwide actions. Immediate work environment factors include the influence of peers on employees’ job effort and the influence of supervisors and leadership styles on the employees’ job performance. Organizationwide actions factors are those that are common in an organization and are also determined by the organization which include (1) systemwide rewards such as fringe benefits, (2) individual rewards such as the salary system and allocation of status, and (3) organizational climate such as quality of communication, perceptions on rewards and punishment, and interdepartmental cooperation.
Steers and Porter reviewed the major theories of motivation using the suggested conceptual framework.\textsuperscript{87} They concluded that each of the theories explained some aspects of the motivational process in the work place. The need theories of Maslow, McCleland and the others focused on the individual characteristics factor, namely the influence of personal needs on job performance. Reinforcement theory emphasized the work environment characteristic factors with focus on the influence of work groups, supervisors and reward practices on work behaviour. The cognitive based models which include the equity theory, expectancy/valence theory and social learning theory emphasized person-environment interactions. Equity theory for example, focused on the relationship between individual characteristics (attitude towards inputs and outcomes, accepting feelings of inequity and so on) and work environment characteristics (such as systemwide reward practices). Expectancy/valence theory related to the individual characteristics (different in needs, valences on outcome, and perception on rewards), job characteristics (job attributes as an intrinsic reward) and work environment (influence of reward structures on job performance).

Steers and Porter\textsuperscript{88} (1991) also reviewed some major findings relating to the three major variables in the conceptual framework. The conclusion derived from the findings are several individual characteristics factors could influence job performance. Individuals with higher achievement needs performed better in their jobs and those with strong negative attitude toward their organization were not

\textsuperscript{87} Steers and Porter, p.577-579.
\textsuperscript{88} Ibid, p.575-576
active in their work place. With regards to job characteristics factors, Steers and Porter pointed out that several studies have shown that the nature of jobs could affect job performance. Employees performed better when there were more varieties, autonomy and responsibilities in their job. Evidences also showed that individuals varied in their needs for high achievement and enriched jobs. From research on work environment, factors such as group influences, leadership styles and organizational climate have impacts on employees' job performance and significant influence on job motivation.

2.4. Past Research Findings

Martin⁸⁹ (1988) carried out a pilot study in a human service organization (place of organization not mentioned) on eleven factors which could influence employees' productivity. A survey was carried out on twenty seven professional employees and the respondents were asked to state which items they believed would influence motivation towards better productivity. Fifty percent and above of the respondents believed that the factors were higher salary, more feedback, recognition, and better promotional opportunities. There is a possibility that these factors can only motivate middle and high level employees and not lower level employees. This is because the study was conducted on professionals.

⁸⁹ Martin, p.102.
Lee\textsuperscript{90} (1994) carried out a research on the level of motivation among employees of all categories who were working in Pos Malaysia Bhd. by using Herzberg’s Motivation-Hygiene Theory. The findings showed that the respondents perceived responsibilities, work itself, relationship with subordinates, relationship with peers, job security, and work conditions as the most important factors that could influence their motivation towards better job performance. Lee’s research indicated three similar factors that motivated both executives and non-executives towards better job performance, namely responsibilities, the work itself and relationship with subordinates.\textsuperscript{91}

Zulkifli bin Hamzah\textsuperscript{92} (1995) conducted a research on the job motivation level of professional officers in the Public Works Department, Malaysia and the factors influencing their motivation. According to his findings, the factors which have significant relationship with the employees’ motivation level were service schemes, recognition, career advancement opportunities, types or pattern of jobs, work security, relationship with peers, supervision and relationship with supervisors, policies or management pattern in organization, working environment and facilities at the work place. However, this research did not include lower level employees and these motivating factors identified did not necessarily apply to them.


\textsuperscript{91} Ibid, p. 151.

Wong\textsuperscript{93} (1996) utilized Maslow’s Hierarchy of Needs theory in his research on the motivation level of employees in the Ministry of Defence, Malaysia. His findings showed that the overall motivation level of the respondents depended on their security needs and the provision of social and self-actualization needs. Among the army officers, provision of self-actualization needs are important but among the other army ranks, provision of esteem and social needs are significant. The civilians stressed importance on the provision of self-actualization needs and education level.

The common factors influencing job motivation in the above research findings of Martin, Lee and Zulkifli were recognition, better promotional opportunities, the type and pattern of jobs, work security, and relationships with peers. These factors were similar to some of the factors contained in the conceptional framework after Porter and Miles (1974), which Steers and Porter utilized in analysing motivation theories and the significance of various variables in influencing job motivation. From research findings by Wong, it could be concluded that among lower level employees, esteem and social needs were important.

From the theories and research findings mentioned above, it can be concluded that there are many factors that could influence an employees’s motivation. However, it is not possible to include all the factors in this research because of its limited scope. One of the factors excluded in this research is the

physical working environment and facilities as the researcher believes that the physical environment and facilities in most government offices in Malaysia are good enough so as not to affect the employees' work motivation negatively. The researcher's belief is in line with Sutermeister's\textsuperscript{94} (1976) opinion that the physical condition in most work places today are good enough in terms of facilities such as temperature, ventilation, rest period, coffee breaks and lighting so much so that the employees have taken the physical environment in their work places for granted. So according to Sutermeister, the physical environment in work places have little or no influence at all on the employees' work motivation. Sutermeister also referred to the Hawthorne plant studies carried out by the Committee on Work in Industry of the National Research Council at the Hawthorne (Chicago) Works of the Western Electric Company in the 1920's, which showed no relationship between physical environment conditions and the employee's job performance\textsuperscript{95}.

Although the research findings of Zulkifli\textsuperscript{96} indicated the existence of the relationship between physical environment conditions and the employees' work motivation but the findings did not show that the majority of the employees in the research were not satisfied with the physical environment and facilities in their work place. In fact, more respondents in the research were happy with the physical conditions and facilities in their work place. Lee's findings\textsuperscript{97} indicated that the majority of the respondents in his research perceived that their satisfaction with

\textsuperscript{94} Sutermeister, p. 55-56
\textsuperscript{96} Zulkifli bin Hamzah, p. 199.
\textsuperscript{97} Lee, p. 145 and 176.
their working physical environment have motivated them in their w

could imply that the majority of the respondents in the research were happy with
their physical environment at work.