THE LEVEL AND EFFECTS OF PARTICIPATION IN DECISION MAKING (PDM) ON EMPLOYEE GROUPS FOR THE MANUFACTURING AND SERVICING SECTORS IN MALAYSIA

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The Level And Effects Of Participation In Decision Making (PDM) On Employee Groups For The Manufacturing And Servicing Sectors in Malaysia

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DECLARATION

I hereby declare that:

(1) This MKMA25106 Research Project is the end result of my own work and that due acknowledgement has been given in the references to all sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutions of learning.

(3) The word count of this research report is 18073 .

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Abstract

Participation in decision making (PDM) is one of the important modern organizational-related factors. PDM is defined as "*the art of sharing decision making with others to achieve organizational objectives"* (Knoop, 1995 as cited in Brenda Scott-Ladd et al., 2006). PDM has become strategically important in modern organizations since its roles of generating positive work outcomes for organization and driving other organizational-related factors or variables. According a series of researches from John L.Cotton et al., 1988; L.A Witt et al., 2000; Ismail Bakan et al., 2004, PDM able to significantly increase the employees' work outcomes, like job satisfaction of employees to their organizations.

There are series of researches related to PDM's variables and outcomes conducted in the Europe and America countries. The researches that related PDM with Malaysia firms are still very limit. This research is to argue that the level and influence of PDM on employee groups in Klang Valley, Malaysia that working in either manufacturing or service industry. The current research also determine how likely the PDM influence both organizational-related issues; jobs satisfactions and organization commitment. The present research will contribute some useful information for the management of Malaysia firms

CHAPTER 1

INTRODUCTION

1.1 General Introduction of the Participation in the Decision Making (PDM)

Participation in decision making (PDM) is one of the important modern organizational-related factors. PDM is defined as "*the art of sharing decision making with others to achieve organizational objectives"* (Knoop, 1995 as cited in Brenda Scott-Ladd et al., 2006). Shlomo Mizrahi (2002) researches that PDM will lead in employers and employees' co-determination rights and increase employees job security, thus employees will have longer-run perspective on firms' decisions.

Series of researches form John L.Cotton et al., (1988), L.A Witt et al., (2000), and Ismail Bakan et al., (2004) also indicate that PDM able to significantly increase the employees' work outcomes, like job satisfaction and commitment of employees to their organizations. Miller and Monge (1986) indicate that PDM satisfies high-order needs of employee, such as a sense of achievement, respect, self-esteem, and voice. Therefore, PDM motivates employees to work harder and significant boost the employees' productivity. As mentioned above, PDM has become strategically important in modern organizations since its roles of generating positive work outcomes for organization and driving other organizational-related factors or variables.

1.2 Problem Statements

Participation in decision making (PDM) is an old research topic since 1950s as there are already long list of researchers conducted to study the implications of PDM, its outcomes, and its relationships with the other variables. The evaluations and researches may refer to John L.Cotton et al., (1988) and L.A Witt et al., (2000). Participation in decision making (PDM) has become a noticeably an important issue in today organizations or corporations due to its capable of increasing the employees' work outcomes, including job satisfaction and commitment of employees to their organizations

Majority of the PDM researches are contributed by the modern countries, especially those where situated in Europe and North America while there are only few researches are originated from South America, Australia and Asia. In Malaysia, research topic related to PDM is still very limited. Therefore, this research is conducted to better understand on the PDM related variables and outcomes in Malaysia environment. The research area is restricted to the employees that work in Klang Valley, Malaysia due to constraint of resources and scale of survey.

The present research project's main objective is used to contribute some useful and adaptable implications for the management of Malaysia firms. The main focus is to measure and identify whether the employee groups' PDM are significant different or not for those working in either manufacturing or servicing sectors. Measuring on employees' PDM by differentiate them into different industry sectors is the area yet to study since it is not publish in the existing journals.

Besides that, this research also survey on the respondents that made up by Malaysia employees to test on the influence of employees' demography to the PDM. The results are then made comparison with the existing researches and journals. By the

way, relationship of PDM with its outcome variables, like job satisfaction and organization commitment will also be examined.

1.3 Research Questions (RQ)

Based on the problem statements, research questions are drafted as following;

(i) What is the difference in term of PDM level between the employees that working in the manufacturing sector (X_1) and servicing sector (X_2)?

(ii) What is the influence of organization size (numbers of employees) on the PDM level?

(iii) What is the influence of genders of employees on the PDM level?

(iv) What is the influence of employee generation in term of age range on the PDM level?

(v) What is the influence of employees' education qualification on the PDM level?

(vi) What is the relationship of PDM with the employees' job satisfaction that working in Klang Valley, Malaysia?

(vii) What is the relationship of PDM with the employees' commitment to their current servicing organization?

1.4 Research Objectives (RO)

The present research's objectives are listed as below:

(i) To investigate whether there is a significant difference in term of PDM level (X_7) between the employees that working in the manufacturing sector (X_1) and servicing sector (X_2).

(ii) To justify whether there is a significant difference of organization size (X_3) in term of employee number over the level of PDM (X_7).

(iii) To justify whether there is a significant difference of employees' gender (X_4) to the level of PDM (X_7).

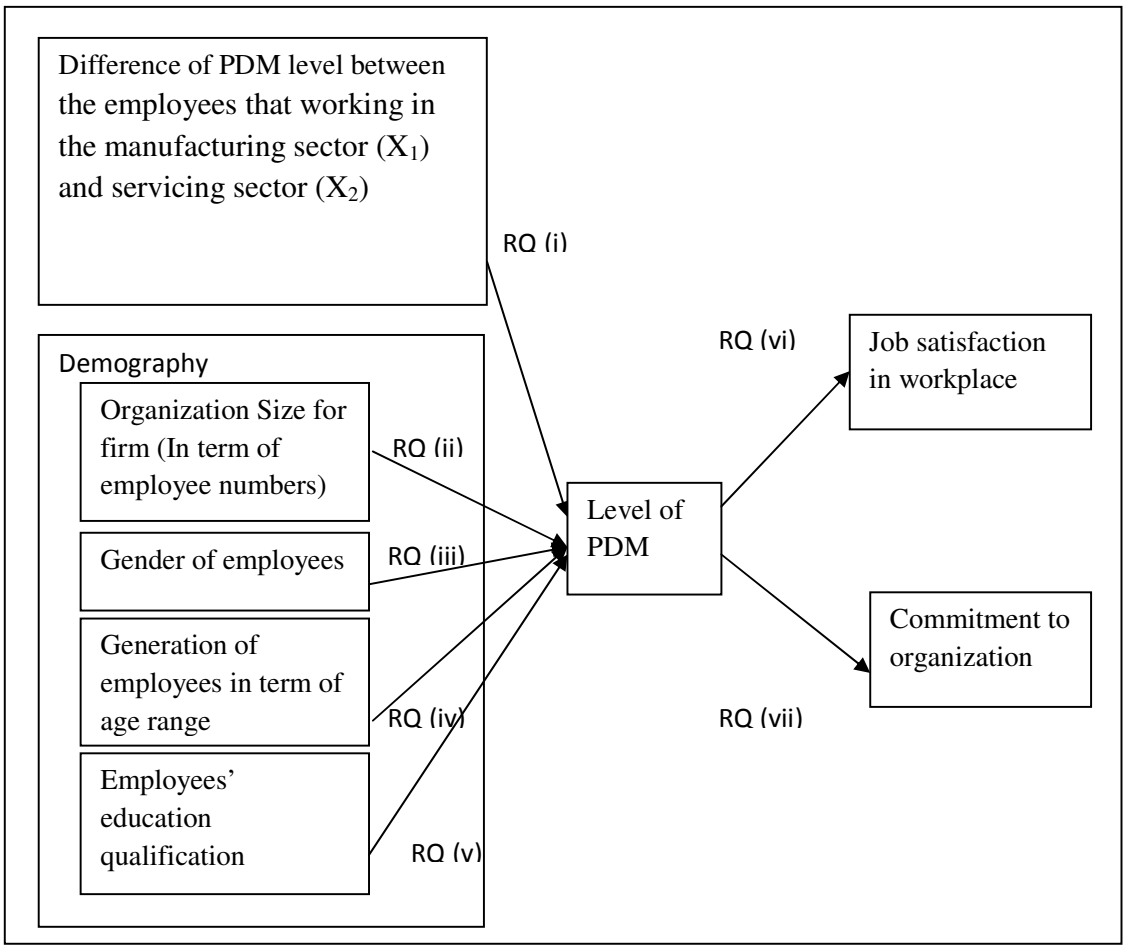
(iv) To justify whether there is a significant difference employee in term of age range (X_5) over the level of PDM (X_7).

(v) To justify the whether there is a significant difference of employees' PDM (X_7) corresponding to their education qualification (X_6)?

(vi) To determine the relationship and effect on the level of PDM (X_7) towards the employees' jobs satisfaction (X_8).

(vii) To determine the relationship and effect on the level of PDM (X_7) towards the employees' commitment to their organization (X_9).

1.5 Conceptual framework



(Source: Developed for research)

Figure 1: Schematic diagram of the framework according to the research questions

1.6 Chapter layout

Chapter 1 is written to make a general introduction of the Participation in the Decision Making (PDM). From there, problem statements are mentioned. Research questions with objectives are also

Chapter 2 contents mainly literature review, summarized with the past researches' studies about PDM. Each and every variable that related to the research topic is discussed. At the end of the literature review, hypotheses are proposed for the research questions. Conceptual framework for this research is also proposed at the end of chapter.

Chapter 3 describes how this research being conducted, and data collection methods that include questionnaire and sampling design. Data collected are proposed to be analyzed with descriptive, inferential and reliability analysis. Hypothesis for each research questions is examined with selected statistic techniques.

Chapter 4 is all about the research results and findings. All the data collected are summarized in the table and sequentially analyzed with the descriptive, inferential and reliability analysis.

Chapter 5 discusses with the results and judges the hypothesis for every research questions. Managerial implications pointed out how the managers make use of the findings from this research. By the way, limitations of this research are discussed and improvements are recommended. Conclusions made for this research project in the end of chapter.

CHAPTER 2

LITERATURE REVIEW

Participation in decision making (PDM) is an old research topic. As early in 1950s, there are already some researchers conducted to study the implications of PDM. Continuous researches and evaluations on PDM from 1950s until today have actually enriched the studies of PDM, its outcomes, and its relationships with the other variables. The present literature review is used to briefly summarize the past researches' studies as well as PDM studies in Malaysia.

2.1 Past researches' studies on PDM

In the early stage, participation in decision making (PDM) is just simply a term yet to develop and research. Initially, "*Coch & French (1948) and Fleishman (1965) studied the PDM and used to measure the individual and small group performance*" (as cited in John et al., 1988). Coming to 1970s, researchers distinguished the PDM studies in term of "more" or "less" participation and treated PDM as a unitary concept. According to L.A.Witt et al. (2000), an earliest journal that written by Baumgartel (1957) already reported that the employees' performance, job satisfaction, and positive attitude are influenced whether their supervisor engaged the PDM or not.

Dachler & Wilpert, (1978) started to define the PDM conceptually and operationally in terms of three properties: formality versus informality, directness versus indirectness, and the degree of access or influence (Brenda Scott-Ladd et al., 2004). "*Locke and Schweiger (1979) contributed to another property, which is in term of contents"* (as cited in John et al., 1988). They reported that different contents resulted in different outcomes of PDM. Few researchers (Sashkin, 1976; Wandersman, 1981; Lawler, 1986) have carried on their studies based on the short-term and long-term participation in decision making (John et al., 1988).

Coming to 1980s, there are already a lot of the researches done on the topic of PDM. Most, but not at all, the researches findings can be classified in terms of five properties: (1) Formal-informal, (2) direct-indirect, (3) level of influence, (4) Content, and (5) short-term versus long-term. From 1980s to 1990s, researchers seem shifting their studies into the research direction of evaluating the outcome of PDM, especially to those important organization related outcomes, such as job satisfaction, organization commitment, and employee involvement.

In 1988, John L. Cotton with a group of researchers made a review of 91 studies and concluded on participation in decision making (PDM) into the six different forms of PDM. The research team examined the influences of six PDM forms to the employees' performance and satisfaction. These forms includes; (1) Participation in work decision, (2) Consultative participation, (3) Short term participation, (4) Informal participation, (5) Employee ownership, and (6) Representative participation. Black and Gregersen (1997) have reviewed the previous researchers' works and classified the PDM into six dimensions, whereas (1) the rationale, (2) form (3) structure (4) decision issues, (5) the level, and (6) the range of participation in the processes (Brenda Scott-Ladd et al., 2004).

Brenda Scott-Ladd et al., (2004) researched that PDM on job characteristics, perceptions of performance, and gains which ultimately lead to commitment and satisfaction. Lois E. Heldenbrand et al., (2007, Pg 23) concluded the Scott-Ladd and

Marshall's 2004 researches that PDM results in better employees feeling and causes positive impacts on task and performance. However, it did not affect job satisfaction because of greater decision-making and autonomy could attribute to increased job demands and work load.

In the most recent researches, Sharan (2009) and Asif Kiyani et al., (2011) had linked the participation in decision making (PDM) to emotional intelligent (EI). The researchers also concluded that emotional intelligent (EI) are vital for employees to practice participation in decision making opportunities to achieve their as well as organizational objectives. Asif Kiyani et al., (2011) gave findings that female employees are highly emotionally competent in their participation in decision making as compared to male employees.

2.2 PDM studies in Malaysia

There is a research conducted by Dr Razali (1996) to investigate the relationship between attitudes of non-management professional staff towards PDM and their organization commitment. The targeted researches employees are those who work in Malaysia Public Works Department (PWD). In the research, Dr Razali (1996) found that there is significant difference between the male and female non-management professional staff regarding to PDM level. There is still lack of research to test the PDM level between the group of employees that work in the different industries or sectors.

2.3 Participation in Decision Making (X_7)

Employees' participate in decision making (PDM) in an organization takes important role in promoting the employees' performance. Brenda Scott-Ladd et al., (2004) gave findings that employees will feel their opinions being emphasized and able to bring out their voices during participating in the decision making. Employees will experience that the feel of empowerment because they have the rights or "power" to influence the result of decision making.

Donde et al., (1998) contended that participation is a construct that not only involvement of how many and different types of peoples, but also how extensively the peoples being involved. Black and Gregersen (1997) have reviewed the previous researchers' works and identified PDM as a multidimensional construct based on the previous researchers' findings. According to Black and Gregersen, employee's performance can be enhanced by providing opportunity to participation in planning, target setting and evaluating results.

2.3.1 The properties of participation in decision making

James E.C. (1991) researched numeral properties of participation in decision making; (i) formal or informal (ii) direct or indirect (iii) contextual boundaries of participation. Level of PDM (X_7) in the present research will be measured through the extent of perceptions of the respondents on the mentioned PDM properties. Present research makes use of the properties (i) formal or informal and (ii) direct or indirect

James E.C. (1991) describes the properties of formal participation is "…*extent to which participation is formalized in terms of established organizational procedures, collective agreement, or legislation."* An informal participatory system operates on the basis of evolving norms and customary practices that are not formally established.

2.4 PDM level for employees that working in the manufacturing sector (X_1) and servicing sector (X_2)

The past researches are mostly conducted on the targeted populations of employees on worker group. Recently, some researchers have swift their researches the populations, like citizens, patients, teacher, youth, third country citizens and etc. Masaji Uyeda (1986) conducted his researches to unique groups, including church pastors, teachers, and nurses.

There is lack of researches or journals to describe and discuss with this employees group that categorized by their working industries. Therefore, this is the main reason this research to test whether there is significant different of PDM level employees that working in the manufacturing sector (X_1) and servicing sector (X_2). The present research may extend the findings and researches over the PDM. All the respondents of questionnaire will be categorized into two groups; based on the organization that they working with. The objective is used to investigate whether there is a significant difference in term of PDM level between the employees that working in the manufacturing sector (X_1) and servicing sector (X_2).

2.5 Organization size (X_3) with PDM

There is a research contended that organization size have no moderating effect between the participation and the outcome. *"The sub-group analysis made by Koopman, Drenth, Bus, Kruyswijk, and Wierdsma (1981) reported that contingency variables, such as group size, organizational climate, age, education, and tenure had no moderating effects on the relationship between participation and the outcome variables"* (as cited in Dr Razali Mat Zin, 1996).

The present research will measure the influence of organization size in term of employee number, X_3 to the degree of PDM in order to verify whether there is significant different of PDM or not regarding to organization size. The mentioned independent variable, X_3 is measured in three organization sizes regarding to the employee numbers for the research companies.

2.6 Relationship of employees' gender (X_4), age range (X_5), and education qualification (X_6) with PDM

Employees' gender gave significant difference level of PDM based on the Dr Razali's 1996 findings. Male non-management professional staff tends to have higher PDM level compared to the female non-management professional staff. In the present researches, relationship between employees' genders (X_4) and PDM will be examined. For the X_5, influence of employees' age range over the level of PDM, there is lack of studies and journal to give the any conclusion. The researches made by Siegel and Ruh (1973) indicate that the correlation between PDM and its outcome were stronger for highly educated individuals.

Based on Lois E. Heldenbrand's 2007 researches, both Bluedorn (1982) and Mohrman et al (1996) did not find a significant relationship between employee education levels and employee satisfaction. The present research is designed to test how significant the employees' education qualifications over PDM and then further test the relationship of PDM and employees satisfaction. From the findings, it able to indicate the indirect influence of employees' education qualifications over the employees' satisfactions.

2.7 Employees' Job satisfaction (X_8)

Locke (1976) defined that job satisfaction is an emotional state which results from the job related experiences of an employee. Locke's described employee satisfaction is then expanded by Luthans (1989) with three specific facets; *(a) emotional response to the work environment, (b) the relationship between employee expectations and outcomes, and (c) satisfaction with pay, working conditions, and work content.*

Brooke et al, (1988) define the job satisfaction as how well a person likes their job*s*. Ostroff (1992) gave findings that "*job satisfied employees are more likely to accept the organization's goals and put in greater works effort to positively influence organizational outcomes*" (as cited in Brenda Scott-Ladd et al., 2006).

Ren (2001) further extend the job satisfaction to employee personality traits, or characteristics, in addition to exogenous conditions that will affect employee satisfaction. The researcher concluded that employee job satisfaction would affect employee behavior and performance while the external or situational factors would affect organizational performance.

2.7.1 Relationship Employees' Job satisfaction (X_8) with PDM

Locke and Schweiger (1979) are well known for their researches in determine that there was a relation between participation in decision-making and employee satisfaction. Marcy Pollock et al, (1987) who make studies a number of researches agreed that most of the researches gave findings that PDM led to the higher job satisfaction. Spreitzer and Kizilos (1997) believed that employee satisfaction was associated with psychological empowerment, which PDM gave certain empowerment of decision making to employees. Scott et al (2003) also found a significant relationship between employee participation and job satisfaction, as well as a strong correlation between satisfaction and voluntary attrition".

However, Lois E. Heldenbrand et al., (2007)'s finding is exactly contrary with all the findings that there was a relation between participation in decision-making and employee satisfaction. Lois E. Heldenbrand et al., (2007) concluded the Scott-Ladd and Marshall's 2004 researches that PDM results in better employees feeling and causes positive impacts on task and performance. However, it did not affect job satisfaction because of greater decision-making and autonomy could attribute to increased job demands and work load.

Job satisfaction (X_8) in the present research will be measured based on the employee respondents in the research companies. The measurements are designed in the Likert scale for employees to rank.

2.8 Organization commitment (X_9)

Vast number of researchers studied the organization commitment (OC) since it has an important place in the study of organizational behavior. According to Buchanan (1974), organization commitment can be simply defined as being a bond between an individual (the employee) and the organization (the employer).

Bateman et.al (1984) defined that organizational commitment in complex way as "*multidimensional in nature, involving an employee's loyalty to the organization, willingness to exert effort on behalf of the organization, degree of goal and value congruency with the organization, and desire to maintain membership*". Three types of organization commitment have been identified; affective commitment, continuance commitment, and normative commitment.

Mowday et al (1979) defined that affective commitment as the emotional attachment, identification, and involvement that an employee has with its organization and goals. Porter et al (1974) further describes employees with affective commitment usually have three characteristic; (1) "belief in and acceptance of the organization's goals and

values, (2) a willingness to focus effort on helping the organization achieve its goal's, and (3) a desire to maintain organizational membership".

Reischerw and Arnon (1985) conceptualities that continuance commitment is the employee's willingness to remain in an organization because of the investment or benefits that the employee has, such as retirement, relationships with other employees, or things that are special to the organization. Employees who share continuance commitment with their employer often make it very difficult for an employee to leave the organization.

Bolon (1993) defined normative commitment as the commitment that *a person believes that they have to the organization or their feeling of obligation to their workplace*. When normative commitment comes to employee's commitment to their place of employment, the employees always feel like they have a moral obligation to the organization.

2.8.1 Relationship organization commitment (X_9) with PDM

Participation in decision making (PDM) can be evaluated in terms of various outcomes. Locke and Schweiger (1979) started to focuses on two important outcomes, productivity and job satisfaction. Some studies measured individual or small group performance, whereas others assessed the employee productivity at the organizational level. Further studies focused on the outcomes, like workplace democratization, reduction of industrial conflict, and employees' involvement in decisions.

Organization commitment is another relatively new organization behavior topic that related to participation in decision making (PDM), compared with job satisfaction. Anyhow, there is lack of research and journal to exam the relationship of organization commitment and PDM. Lio. et al (1995) researches that employees' organizational commitment is significantly correlated to their perceived job security. Through

participating in decision making, employees will perceive higher security on their jobs as well. Therefore, this research is tried to examine the relationship of organization commitment and PDM.

2.9 Summary of the found researches that related to PDM

The following table is summarized with the journal and researches that found to compile and conduct the present research.

Characteristic	Relationship	Researches
Participation in Decision Making (PDM) Researches Coch & French (1948) Baumgartel (1957) Fleishman (1965) Sashkin (1976) Dachler & Wilpert (1978) Wandersman (1981) Griffeth, R.W.(1985) Lawler (1986) John et al., (1988) James E.C. (1991) Black et al.,(1997) Donde et al., (1998) Shlomo Mizrahi (2002) Brenda S.L. et al., (2004) Lois E. H. (2007)	PDM differentiate by industries	
	Organization size, X_3	Koopman et al, (1981) Dr Razali (1996)
	Employees' gender, X_4	Dr Razali (1996)
	Employees' age generation X,Y,Z, X_5	
	Employees' education background, X_6	Bluedorn (1982) Mohrman et al (1996) Lois E. H. (2007)
	Level of PDM ,X_7	Brenda S.L. et al., (2004) Lois E. H. (2007)
	Job satisfaction, X_8	Locke (1976) Locke and Schweiger (1979) Marcy Pollock et al, (1987) Brooke et al, (1988) Ostroff (1992) Scott et al (2003) Brenda S.L. et al, (2006) Lois E. H. (2007)
	Organization Commitment, X_9	Buchanan (1974) Porter et al (1974) Mowday et al, (1979) Bateman et.al (1984) Lawler (1992) Bolon (1993)

(Source: Developed for research)

Table 1: *Summary of studied researches*

2.10 Hypotheses

Based on the research questions and literature review, researcher has built up the hypothesis as following;

H_1: There is no significant difference in term of PDM level between the two group of employees that carry on their job functions in the manufacturing sectors and servicing sectors.

H_2: There is no significant difference in term of PDM related to the organization size

H_3: Male employees show significant difference in PDM compared with female employees

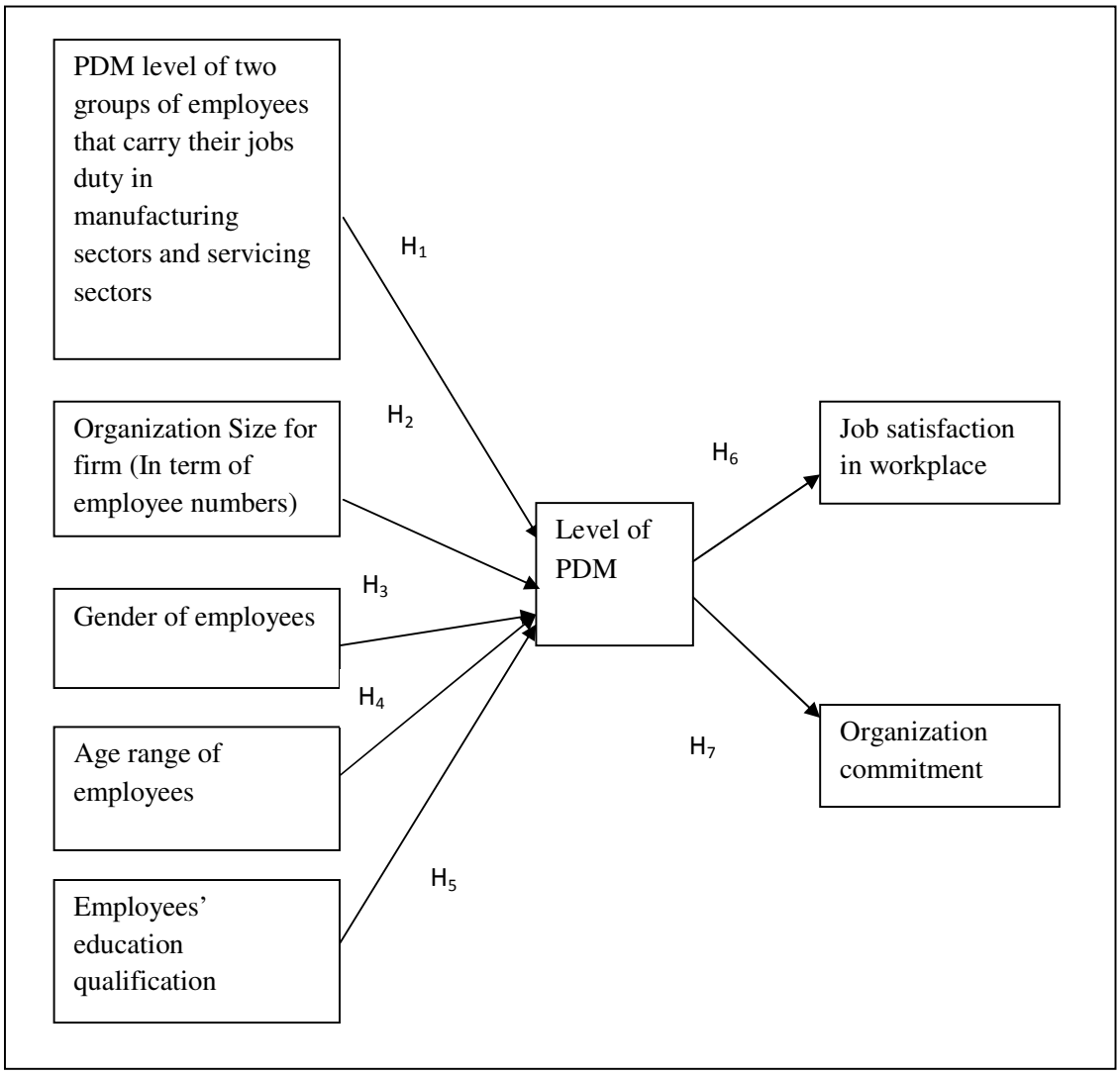
H_4: Senior employees show similar PDM level compared with junior employees

H_5: Employees with higher education qualification show higher level of PDM

H_6: There is a positive relationship between level of PDM and employees' job satisfaction.

H_7: There is a positive relationship between level of PDM and employees' organization commitment.

2.11 Proposed Conceptual Framework



(Source: Developed for research)

Figure 2: Schematic diagram of Conceptual framework for research

2.12 Variables

The present section describes all the variables that utilized in this research. X_1 and X_2 are the independent variables that grouping employees into their belonging industry sectors. X_3 till X_6 are also independent variables that related with respondent's demographic information. X_7, Level of PDM is the main dependent variables for the research. Both X_8, job satisfaction and X_9, Organization Commitment are tested as the outcome variables of X_7, Level of PDM.

X_1: PDM level for group of employee work in manufacturing sector
X_2: PDM level for group of employee work in servicing sector
X_3: Organization size
X_4: Employees' gender
X_5: Employees' age range
X_6: Employees' education qualification
X_7: Level of PDM
X_8: Job satisfaction
X_9: Organization Commitment

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The current chapter is written to present the methodology of the research. Research design and the approach of data collection methods are discussed in the first section. Following sections will concentrate with the questionnaire design and sampling strategy. Selected statistic technique are then discussed for each and separate research questions.

3.2 Research Design

According to Zikmund (2003), research design is a master plan specifying the methods and procedures for collecting and analyzing the needed information. There are two fundamental types of research questions, known as descriptive research and explanatory research. De Vaus (2001) describe that descriptive research is focused on what is going on while explanatory research is concern why is it going on.

The current research is carried on through surveying the employees that work in the Klang Valley, Malaysia. The whole research project is design based on quantitative approach, in order to suit with the unit of analysis in this research, which is individual employee. Inferential analysis is used to explain hypothesis. It explains the cause and effect to enable researcher to draw a conclusion about a population from a sample (Hair and et al, 2003).

3.3 Data collection Methods

The current research is totally makes use of primary data. Primary data are the first hand data that are collected directly from the respondents. According to Zikmund (2003), primary data is specifically collect for completing the research project at hand. Primary data for quantitative research can be collected through survey and interviewer complete questionnaires.

The mentioned data are collected in quantitative form through the self completion and distributed to the target population to complete without a researcher present. Such self-completion reports were considered suitable. Pugh et al., (1968) gave findings that the *informed opinion of organizational insiders may detect more accurately subtle local variations rather than data gathered through documents or external observers* (as cited in Kelvin Daniels et al., 1999). The data will proceed to statistical testing to examine the hypothesis that has advanced from the literatures and past studies.

3.4 Questionnaire design

Basically, the questionnaires survey form is designed to ease the targeted respondent groups to fill up. Therefore, closed-end questions are used and the questionnaires are encouraged to compile in simple English wordings. Sentences must be brief and clear enough since the respondents are included the work floor employees which include multi racial who are not using English as linguistic language. Clear instructions will be given to guide the respondents in each section of the questionnaire survey form.

The questionnaires are designed into four sections; the first section is use to gather data covered the respondents demographic information and their belonging organizations' properties, the second section gathers the data of individual respondents' PDM, third and forth sections are filled up regards the influences of

PDM to its outcome; job satisfaction and job commitment. The sections other than first section required respondents to rate their agreement / disagreement with items upon five-point Likert scales (1=strongly disagree, 3= neutral, 5= strongly agree).

First section used to capture respondents' demographic information. The relevant questions are included designation, gender, race, year of working, belonging industries and etc. Second section is designed to capture the employees' PDM level in their belonging industries. Third section is designed to gathered the PDM's outcome' like job satisfaction and job commitment.

The proposed questionnaire is attached as appendixes 1. A pilot test is conducted to the proposed questionnaire to judge the validity and reliability of the questionnaires. The designed questionnaire will be continued updated if it is not achieving Cronbach's alpha of 0.70 and above.

The questionnaire will be designed and posted to the internet survey tool, which know as survey gizmo for respondents to fill up. If there is short of number of respondent at the end, hardcopy pieces of the questionnaires will be distributed.

3.4.1 Measurement Scales

Measurement is a process whereby values are assigned to properties of people, places, items, or events. A scale is a continuous spectrum or series of categories to represent usually in quantitatively. From there, Zikmund (2003) define measurement scale as *any series of items that are arranged progressively according to value or magnitude, into which an item can be placed according to its quantification and reflect the characteristics of the items being measured*.

Four level of measurement scales are commonly distinguished, which has known as nominal scale, ordinal scale, interval scale and ratio scale. In this research, nominal scale, and ordinal scale will be used to measure the research questionnaire.

The lowest measurement level from a statistical point of view is a nominal scale. A nominal scale is simply some placing of data into categories, without any order or structure. The nominal scale that measured in this research is mostly related respondents' demographic information, like gender, and education qualifications.

The simplest ordinal scale is a ranking. The researchers usually ask respondent to rank objects or alternative according to magnitudes, in example most flavors to least flavor, strongly agree to strongly disagree, and etc. There is no objective distance between any two points on the subjective scale. The ordinal scale that measured in this research is mostly related respondents' age, and preference.

Likert Scale is also an ordinal scale. It enables respondents to select their level of preference. Burns et al (2008) state a likert item is simply a statement which the respondent is asked to evaluate according to any kind of subjective or objective criteria. Allen et al (2007) describe likert scaling is a bipolar scaling method, measuring either positive or negative response to a statement.

Five points Likert Scale is the most common and widely used in research questionnaires. This research project also made use of five point likert scale for respondents to rate. The respondents select from the five alternative options: strongly disagree, disagree, neutral, agree and strongly agree for each statements.

3.5 Sampling Design

According to Zikmund (2003), sampling involves any procedure that uses a small number of items or a portion of a population in order to make a conclusion with regards of the population. Following sections will discuss on the target population, sample size, and sampling technique for this piece of research.

3.5.1 Target Population

Target population is the specific, complete groups that are relevant to the research project. This research project targeted populations are those employees who fulfilling few criteria; the respondents must be Malaysian, and worked in either manufacturing or servicing sectors, and their servicing firms must be located in the Klang Valley, Malaysia. The mentioned Klang Valley is an area in Malaysia comprising Kuala Lumpur (federal capital) and its adjoining satellite cities and towns in the state of Selangor. The main reason that the Klang Valley is chosen because of these places are the key states with strong economic development.

3.5.2 Sample Size

Sample size refers to the number of respondents to be included in the survey. According to Roscoe (1975), an appropriate sample sizes for most of the research should be larger than 30 and less than 500. Considering the constraints in term of costs and time, this research have been taken 127 success respondents out of 153 online filled questionnaires.

Referring to Malaysia ethnicity ratio 2011, 67.4% of the populations are Bumiputra, following by 24.6% are Chinese, 7.3% are Indian and 0.7% are those minority ethnicity group (Department of Statistic, 2011). In order to match with the Malaysia races, questionnaires collected will be take account of 55% to Malay, 25% to Chinese

and 10% to Indian and 10% to other races. Also, the questionnaires are distributed evenly in percentage of 50 to male employee and another 50 percent to female employees.

3.5.3 Sampling Technique

The sampling technique chosen to conduct this research project is convenience sampling technique that fall under the category of non-probability sampling. According Zikmund (2003), convenience sampling ensures the obtainment of a large number of respondents to complete in quick and economical manner. This is because convenience sampling assures that selecting samples that are already available to participate in the study and who can provide the required information.

3.6 Data analysis

In present topic, few data analysis methods will be discussed. The data collected from respondents are processed, filtered, and then converted into the quantitative data. After that, the quantitative data will be present into a more interpretive form by using several types of data analysis techniques. The analysis result use to ease researcher to further understand about the data and justify the hypothesis. All the analyses are processed by SPSS 17. By using the SPSS computer software program, it enables the researchers to calculate and interpret the quantitative data by a more systematic ways. The types of analysis methods will be used in conducting this research include the descriptive analysis, inferential analysis, and reliability analysis.

3.6.1 Descriptive analysis

Descriptive statistics are used to summarize and present the information about a population or quantitative descriptions in a manageable form. It simply describes what is or what the data shows Descriptive statistics are effectively in simplifying large amounts of data in a sensible way. The distribution can be presented in the form of bar chart, pie chart, line chart and others in order to be easier to analyze those figures by the researcher.

For examples, in a study involving human subjects, there is common a table constructed to give the overall sample size, sample sizes in important subgroups, and demographic information of respondents, such as the average age, rationale gender, the proportion of subjects of each sex, and much etc.

In this research study, tables are used to analyze the respondent's demographic and general data separately. The demographic information of respondent would be presented through table frequency distribution. According to Zikmund (2003), the frequency distribution is a set of data organized by summarizing the number of times a particular value of a variable occurs.

3.6.2 Inferential analysis

Distinct with descriptive analysis, inferential analysis use statistical way to reach conclusions that extend beyond the immediate data alone. Inferential statistics are commonly used to compare the average performance of two or more groups on a single measure to see if there is a difference.

Whenever comparison made to the average performance between two groups and above, statistic techniques like t-test or ANOVA should be considered in order to get the presentable results. For example, t-test able to calculate and compare the mean and standard deviation of the exam marks for two group of student population. If it is required to compare more than two group of population, ANOVA will be the suitable statistic method.

3.6.3 Reliability analysis

Reliability is the degree to which "*a measurement is free of random or unstable error" or "supplies consistent results* (Cooper & Schindler, 2003, p. 238). Therefore, consistency of survey must be achieved in order to get good measurement for the result. There are few ways recommended by Cooper & Schindler (2003) to improve reliability, including standardizing the conditions under which the measurement occurs; using well-trained and supervised investigators, and improve the internal consistency of the measurement instrument.

Therefore, reliability test is used to ensure the questionnaire drafted able to measure the variables. The reliability test is connected to the correlation among the items in the survey and the number of items. Reliability is measurable by Cronbach's Alpha or Coefficient Alpha (Hair et al., 2003). Refer to table 2, higher coefficient range means stronger of correlation and resulted in higher reliability of the research results.

For this research's purpose, a minimum value of reliability is setting at 0.70 of alpha coefficient. 0.70 of alpha coefficient indicates that the instrument produces 70% consistencies in the scores.

Alpha Coefficient Range	Strength of Association
Less than 0.6	Poor
0.6-0.7	Moderate
0.7-0.8	Good
0.8-0.9	Very Good
0.9 and above	Excellent

Table 2: Alpha Coefficient Range

(Source: Adapted from Hair, J.F., Babin, B., Money, A.H., & Samouel, P. (2003)

3.7 Significance of Study

The main purpose of conducting this research project is to determine the variables that influencing employees' PDM in their organization. Secondly, it is used to investigate and understand the relationship of PDM with its outcome variables (job satisfaction, organization commitment).

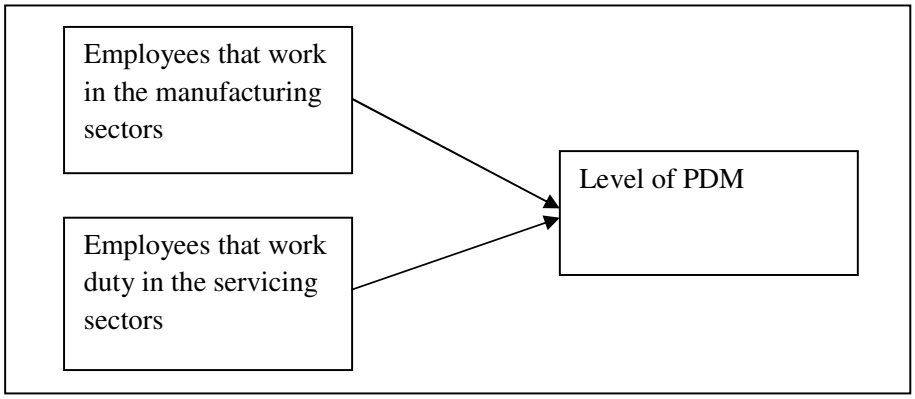
3.8 Selected statistic technique for each testing

The statistical techniques are employed to analysis the data, including t-test, ANOVA, and simple regression. T-tests are used to test the differences of PDM level between the employees that working in the manufacturing and servicing sectors, which mentioned in H_0 and gender of employees against PDM level that mention in H_2.

The ANOVA technique is used to test the hypotheses H_1, H_3, and H_4 which are primarily concern with the demography; like organization size (X_3), employee age (X_5), and education background (X_6). The remaining hypotheses, H_5 is to determine the relationship of PDM (X_7) with job satisfaction (X_8) while H_6 is to determine the relationship of PDM (X_7) with the organization commitment (X_9). Simple linear regression technique is applied to both hypotheses, H_5 and H_6.

Scale measurement that designed in the second and third sections for respondents to rate their agreement / disagreement with items upon five-point Likert scales (1=strongly disagree, 3= neutral, 5= strongly agree).

3.8.1 Independent sample t-test for H_1



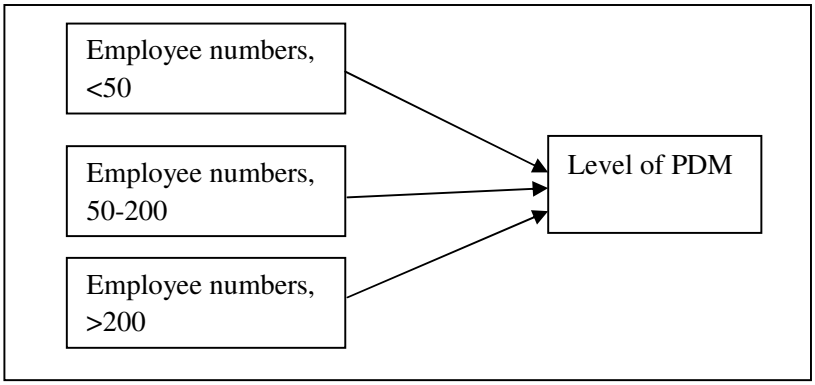
(Source: Developed for research)

Figure 3: t-test for Hypothesis, H_1

Independent sample t-test is selected to identify whether there is *significant difference* of PDM level between the two groups of employees that working in the manufacturing sectors and servicing sectors. From the results of independent sample t-test, it is able to compare two employee groups' PDM mean, then H_1 will be able to justify.

H_1: *There is no significant difference in term of PDM level between the two groups of employees that working in the manufacturing sectors and servicing sectors.*

3.8.2 One way ANOVA for H_2, Organization size



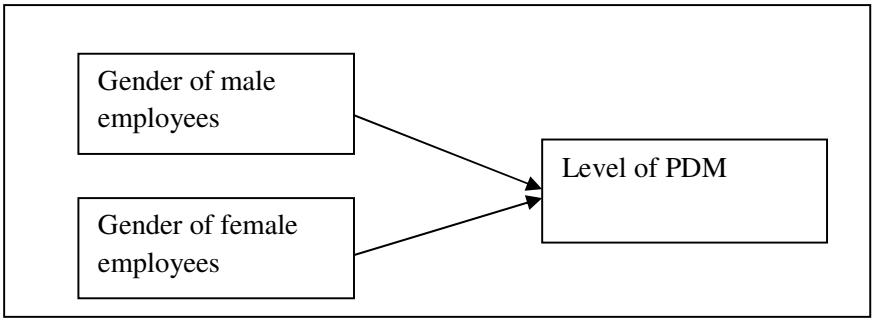
(Source: Developed for research)

Figure 4: One way ANOVA for Hypothesis, H_2

One way ANOVA is selected to test on the collected data. One way ANOVA output indicates the means of different organization sizes' PDM. Also, significant value is used to justify whether there is *significant difference* in term of PDM regarding to organization sizes. From the result of ANOVA, hypothesis H_2 will be able to test.

H_2: There is no significant difference in term of PDM related to the organization size

3.8.3 Independent sample t-test for H_3, gender of employees



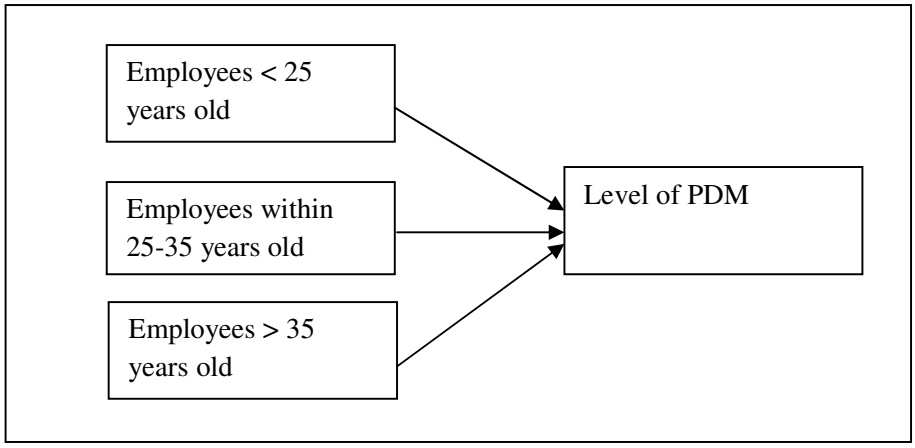
(Source: Developed for research)

Figure 5: t-test for Hypothesis, H_3

Independent sample t-test is used to identify whether there is *significant difference* between the male and female employees in term of PDM level. In the t-test outcomes, both male and female groups' PDM means are indicated, and significant value able to identify whether it is significant different or not. From the results of independence t-test, hypothesis H_3 will be able to test and judge.

$H_{3:}$ Male employees show significant difference in PDM compared with female employees

3.8.4 One way ANOVA for H_4, Age range of employees



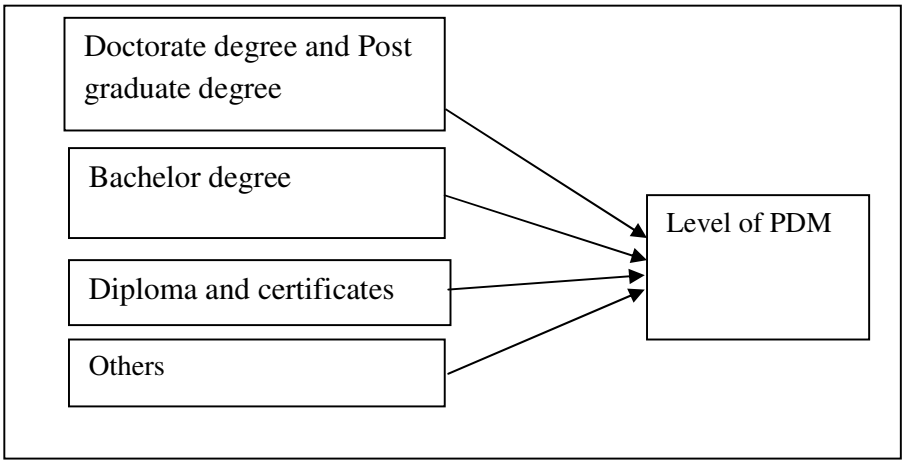
(Source: Developed for research)

Figure 6: One way ANOVA for Hypothesis, H_4

The employees have been categorized into three group of age range. Therefore, one way ANOVA is adapted to test on the collected data. In the testing result, mean of different age groups' PDM will be indicated. Significant value able to justify whether there is *significant difference* in term of PDM regarding to the three age groups. From the result of ANOVA, hypothesis H_4 will be able to test.

H_4: Senior employees show similar PDM level compared with junior employees

3.8.5 One way ANOVA for H_5, employees' education qualification



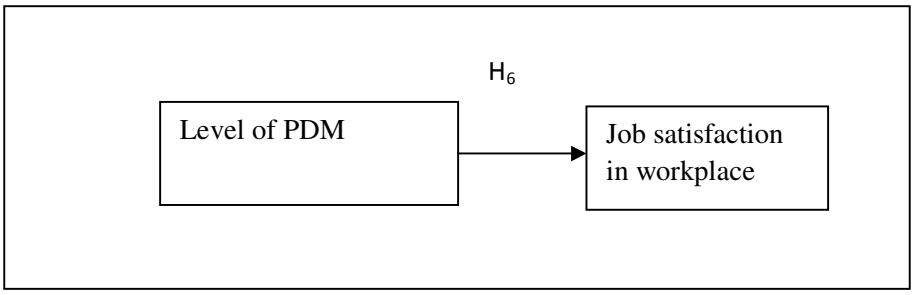
(Source: Developed for research)

Figure 7: One way ANOVA for Hypothesis, H_5

One way ANOVA is selected to test on the sample groups' PDM mean because employees are categorized into four groups based on their education qualifications. One way ANOVA output is able to identify whether there is ***significant difference*** of employees PDM level corresponding to their education qualifications. With comparison the PDM mean and significant value, ANOVA will be able to judge hypothesis, H_5.

H_5: Employees with higher education qualification show higher level of PDM

3.8.6 Simple linear Regression for H_6, Job satisfaction



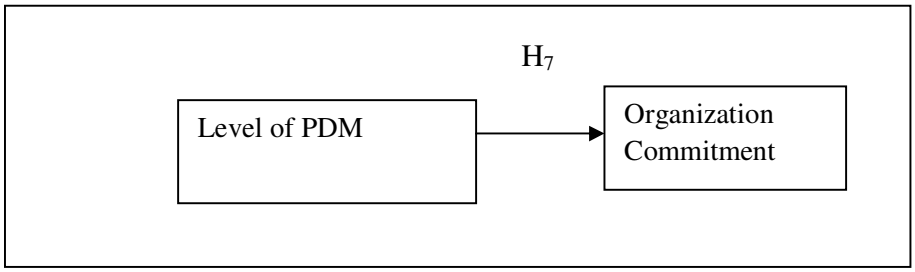
(Source: Developed for research)

Figure 8: Simple linear regression for Hypothesis, H_6

Simple linear regression is selected to test the relationship of level of PDM with the outcome of job satisfaction. The simple linear regression is able to measure and test the *H_6*.

H_6: There is a positive relationship between level of PDM and employees' job satisfaction.

3.8.7 Simple linear Regression for H_7, Organization Commitment



(Source: Developed for research)

Figure 9: Simple linear regression for Hypothesis, H_7

Simple linear regression is used to test the relationship of level of PDM with the outcome variable, organization commitment. The simple linear regression output is able to justify and prove the hypothesis, *H_7*.

H_7: There is a positive relationship between level of PDM and employees' organization commitment.

CHAPTER 4

RESEARCH RESULT AND FINDING

4.1 Introduction

In chapter 4, researcher will report all the survey results and interpret the data using the selected statistical analysis scale. All testing results were generated from the output of SPSS 17 computation analysis software. Descriptive analysis is summarized in the section 4.1 while the inferential analysis for each and separate research question are presented in the section 4.2. Furthermore, reliability test will be presented at the end of this chapter.

4.2 Reliability analysis

Following section reports the result of reliability test of this research. Both table 3, 4 and 5 summarized with the Cronbach's Alpha Coefficient, α of the survey. The reliability test examined 3 dimensions, including participation in decision making (PDM), job satisfaction, and organization commitment. From the reliability testing, Cronbach's Alpha of participation in decision making is 0.896, job satisfaction is 0.909, and organization commitment is 0.787.

All the 3 dimensions achieved a Cronbach's Alpha Coefficient of at least 0.70. Refer to table 2 in chapter 3, the Cronbach's Alpha Coefficient within 0.70-0.80 has good association, 0.80-0.90 gave very good association, while 0.90 and above is excellent

association. Therefore, it can be said that this research gave a highly reliable result of survey.

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	127	100.0
	Excluded[a]	0	.0
	Total	127	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.896	.896	5

(Source: Developed for research)

Table 3: Reliability test on PDM

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	127	100.0
	Excluded[a]	0	.0
	Total	127	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.909	.911	14

(Source: Developed for research)

Table 4: Reliability test on Job Satisfaction

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	127	100.0
	Excluded[a]	0	.0
	Total	127	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.787	.800	15

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
47.5748	47.770	6.91160	15

(Source: Developed for research)

Table 5: Reliability test on Organization Commitment

4.3 Descriptive analysis

Although 151 sets of online questionnaires have been filled up but only 127 sets are completed or valid, the rest of questionnaires had been filtered out due to the reason of incompleteness and irrelevant of respondent.

Following sections overview the several respondents' demographic information, including gender, age, race, education qualification, as well as the industries sector they working. Furthermore, this section provides a description of the respondents, who are also employees' PDM, job satisfaction, and organization commitment.

4.3.1 Frequency of Respondent Based on the industries they working

		Industries of respondent belong to	Frequency	Percentage	Cumulative
Valid respondents	1	Manufacturing Industry	64	50.39%	127
	2	Servicing Industry	63	49.61%	
Source: Developed for research					

Table 6: Respondents differentiate by industry

Based on table 6, there are 64 respondents (50.39%) are originated from the manufacturing industry while there rest 63 respondents (49.61%) are working in the servicing industry. The numbers show there are almost equal of respondents who serve for both industries.

4.3.2 Frequency of Respondent Based on the organization size in term of employee numbers

		Employee numbers	Frequency	Percentage	Cumulative
Valid respondents	1	Less than 50	38	29.92%	127
	2	51-200	46	36.22%	
	3	More than 200	43	33.86%	
Source: Developed for research					

Table 7: Respondents' organization size

Table 7 summarized the frequency of respondent based on the organization size. The organization size is measured in employee numbers, and categorized into 3 groups. The table indicates there are 38 respondents (29.92%) work for the organization with less than 50 employees, 46 respondents (36.22%) work for the organization with employee number between 51 to 200 staffs, and the rest 43 respondents (33.86%) work for the organization with more than 200 employees.

4.3.3 Frequency of Respondent Based on Gender Group

		Gender	Frequency	Percentage	Cumulative
Valid respondents	1	Male	66	51.97%	127
	2	Female	61	48.03%	
Source: Developed for research					

Table 8: Respondents' Gender Group

Table 8 summarized the respondent's gender. According to table 5, there are 66 males (51.97%) and 61 females (48.03%) respondents to participate with the research survey. The number of males and females respondent are almost equal which good for the statistic testing.

4.3.4 Frequency of Respondent Based on Age Group

		Age group	Frequency	Percentage	Cumulative
Valid respondents	1	Below 25	40	31.50%	127
	2	25-35	58	45.67%	
	3	Older than 35	29	22.83%	
Source: Developed for research					

Table 9: Respondents' age group

Based on the table 9, 40 valid respondents (31.50%) are below 25 years old, 58 respondents (45.67%) are within 25 to 35 years old, and 29 respondents (22.83%) are older than 35 years old. Both age group between 25-35 years old and age group below 25 years old are actively participated in the research survey. The possible reason may due to both the younger generation groups are more familiar with the surveys that conducted through online.

4.3.5 Frequency of Respondent Based on ethnicity

		Ethnicity	Frequency	Percentage	Cumulative
Valid respondents	1	Malay	67	52.76%	127
	2	Chinese	45	35.43%	
	3	Indian	8	6.30%	
	4	Others	7	5.51%	
Source: Developed for research					

Table 10: Respondents' ethnicity

Based on table 10, there are 67 Malay (52.76%), 45 Chinese (35.43%), 8 Indian (6.30%), and others (5.51%) made up this survey profile. Referring to Malaysia ethnicity ratio, 67.4% of the populations are Bumiputra, follow by 24.6% are Chinese, 7.3% are Indian and 0.7% are those minority ethnicity group (Department of Statistic, 2011).

Combining both the Malay and other groups, this survey is able to get a total of 58.27% bumiputra respondents, which more close to the Malaysia ethnicity ratio

2011. Anyhow, Chinese respondents are slightly more than normal Malaysia ethnicity ratio.

4.3.6 Frequency of Respondent Based on education qualification

		Education Qualification	Frequency	Percentage	Cumulative
Valid respondents	1	Doctorate degree and Post Graduate Degree	19	14.96%	127
	2	Undergraduate Degree	55	43.31%	
	3	Diploma certificates	39	30.71%	
	4	Others	14	11.02%	
Source: Developed for research					

Table 11: Respondents' education qualification

Table 11 categorized the respondent according to their highest education qualifications. Based on table 8, 55 respondents (43.31%) with undergraduate degree formed the largest group. Following by 39 respondents (30.71%) who with minimal education qualification of diploma and certificates.

4.3.7 Level of Participation in Decision Making

	Statements	Strong Agree	Agree	Neutral	Disagree	Strong Disagree	Total
1	In general how much say or influence do you have on you perform your job?	5	33	38	46	5	127
2	To what extent are you able to decide how to do your job?	7	18	41	53	8	127
3	In general how much say or influence do you have on what goes on in your work group?	4	20	46	47	10	127
4	In general how much say or influence do you have on decisions which affect your jobs?	6	20	50	42	9	127
5	My supervisors are receptive and listens to my idea and suggestions	5	20	42	51	9	127
Source: Developed for research							

Table 12: Respondents' level of PDM

Table 12 describes the survey results that indicate the respondents' PDM in their organization. Five point likert scale is used to collect the respondents feedback on the statement that related to the PDM. Obviously, there are more chose neutral with the statement. The figures in the table are required statistic testing for further interpretation.

4.3.8 Job Satisfaction

	Statements	Strong Agree	Agree	Neutral	Disagree	Strong Disagree	Total
1	I am satisfied with the information I received from my supervisor about my job performance	1	16	38	64	8	127
2	I receive enough information from my supervisor about my job performance	1	17	41	62	6	127
3	I receive enough feedback from my supervisor on how well I'm doing	3	18	38	61	7	127
4	There is enough opportunity in my job to find out how I am doing	2	24	44	49	8	127
5	I am satisfied with the variety of activities my job offers	2	15	43	57	10	127
6	I am satisfied with the freedom I have to do what I want on my job	2	16	42	45	22	127
7	I am satisfied with the opportunities my job provides me to interact with others	0	15	40	61	11	127
8	There is enough variety in my jobs	0	24	40	54	9	127
9	I have enough freedom to do what I want in my job	5	24	40	47	11	127
10	My job has enough opportunity for independent thought and action	3	23	37	52	12	127
11	I am satisfied with the opportunities my job gives me to complete tasks from beginning to end	1	20	44	52	10	127
12	My job has enough opportunity to complete that work i start	2	15	46	56	8	127
13	I am satisfied with the pay I receive for my job	8	23	50	42	4	127
14	I am satisfied with the security my job provides me	5	17	48	53	4	127

(Source: Developed for research)

Table 13: Respondents' job satisfaction

Table 13 summarized the survey results that indicate the respondents' job satisfaction in their organization. Five point Likert scale is used to collect the respondents'

feedback on the statement that related to the job satisfaction. The figures in the table are required statistic testing for further interpretation.

4.3.9 Organization Commitment

	Statements	Strong Agree	Agree	Neutral	Disagree	Strong Disagree	Total
1	I am willing to put in a great deal of effort beyond that normal expected in order to help this organization be successful	1	5	37	70	14	127
2	I talk up this organization to my friends as a great organization to work for.	6	17	51	46	7	127
3	I would accept almost any type of job assignment in order to keep working for this organization	4	19	46	53	5	127
4	I find that my values and the organization's values are very similar	6	23	46	45	7	127
5	I am proud to tell others that I am part of this organization	7	16	40	53	11	127
6	The organization really inspires that very best in the way of job performance	4	19	52	47	5	127
7	I am extremely glad that I chose this organization to work for over others I was considering at the time I joined	3	16	43	53	12	127
8	I really care about the fate of this organization	2	16	50	42	17	127
9	For me, this is the best of all possible organization for which to work	13	20	46	38	10	127
10	I feel little loyalty to this organization*	5	25	48	42	7	127
11	I could just as well be working for a different organization as long as the type of work was similar*	2	22	53	47	3	127
12	It would take very little change in my present circumstances to cause me to leave this organization*	3	29	59	31	5	127

13	There's not too much to be gained by sticking with this organization indefinitely.*	6	24	59	37	1	127
14	Often, I find it difficult to agree with this organization's policies on important matters relating to its employees*	7	28	49	36	7	127
15	Deciding to work for this organization was a definite mistake on my part*	16	38	42	28	3	127

(Source: Developed for research)

Table 14: Respondents' organization commitment

Table 14 describes the survey results that indicate the respondents' organization commitment. Five point likert scale is used to collect the respondents feedback on the statement that related to their organization commitment. The figures in the table are required statistic testing for further interpretation.

4.4 Inferential Analysis

4.4.1 Independent sample t-test for H_1

Independent sample t-test is used to identify whether there is **significant difference** of PDM between the two groups of employees that working in the manufacturing sectors and servicing sectors. From the result of independent t-test, H_1 will be able to test and judge.

T-Test

[DataSet0]

Group Statistics

	Employees	N	Mean	Std. Deviation	Std. Error Mean
PDM	Employees of manufacturing sector	64	3.0844	.74901	.09363
	Employees of servicing sector	63	3.1556	.61847	.07792

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PDM	Equal variances assumed	2.719	.102	-.583	125	.561	-.07118	.12199	-.31262	.17026
	Equal variances not assumed			-.584	121.343	.560	-.07118	.12181	-.31233	.16997

(Source: Developed for research)

Table 15: T-test result for H_1

There are two tests concerns based on the table 15, *T-test result for H_1*. First test is Levene's Test for equality of variances, which known as a test that determines if the two conditions have about the same or different amounts of variability between scores. F value of Levene's Test is 2.719, and the value in the Sig. column is 0.102. Significant value greater than 0.05 means that the variability between employees that work in manufacturing and servicing sectors are about the same. It means that the variability in the two different sectors employees is not significantly different.

The second test indicated in the table 15 is named t-test for equality of means which is the most important result. The result indicates the means for the two group employees' PDM that working for manufacturing and servicing industries were either significantly different or relatively the same. The key value is referred to the Sig (2-Tailed) in the table 15. According to the result, the significant value is 0.561 which is greater than 0.05. It can be concluded that there is no statistically significant difference between employees' PDM that work in manufacturing or servicing sectors.

4.4.2 One way ANOVA for H_2, organization size

One way ANOVA is used to identify whether there is **significant difference** between the organization sizes in term of employee number over PDM level. From the result of ANOVA, H_2 will be able to test.

Descriptives

PDM

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
						Lower Bound	Upper Bound			
Less than 50 employees		38	3.0316	.89868	.14579	2.7362	3.3270	1.00	5.00	
50-200 employees		46	3.4000	.67987	.10024	3.1981	3.6019	1.60	4.60	
More than 200 employees		43	3.2698	.82217	.12538	3.0167	3.5228	1.60	5.00	
Total		127	3.2457	.80640	.07156	3.1041	3.3873	1.00	5.00	
Model	Fixed Effects			.79855	.07086	3.1054	3.3859			
	Random Effects				.10642	2.7878	3.7036			.01880

(Source: Developed for research)

Table 16: One way ANOVA output descriptives table for H_2

The table 16 from the ANOVA output describes the information of statistic; there are 38 respondents work for the organization less than 50 employees with statically PDM mean 3.0316, 46 respondents work for organization of 50-200 employees with static PDM mean 3.4000 while 43 respondents are work for organization more than 200 employees and their PDM mean is 3.2698.

ANOVA

PDM

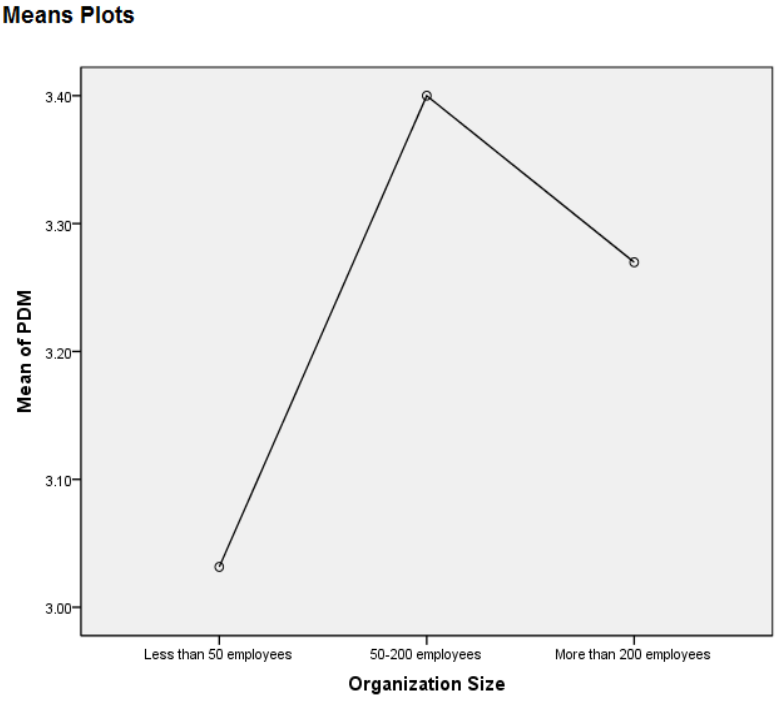
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.862	2	1.431	2.244	.110
Within Groups	79.073	124	.638		
Total	81.935	126			

(Source: Developed for research)

Table 17: One way ANOVA output for H_2

The table 17 is generated from the one way ANOVA output. ANOVA table is the key table since it shows whether the overall *F* ratio for the ANOVA is significant or not. The *F* indicates that *F* test. The 2 and 124 are the two degrees of freedom values (*df*) for the between groups "effect" and the within-groups "error," respectively. The 2.244 is the obtained *F* ratio, and the $p > 0.01$ is the probability of obtaining that *F* ratio by chance alone.

Refer to the result, *F* ratio is $F(2, 124) = 2.244$ which is not significant . Results indicate $p = 0.110$ at the 0.05 alpha level. Because of $p > 0.01$, the measured three organization sizes are not significant difference against the PDM. Since $p > \alpha$, the hypothesis H_2, is accepted that all 3 organization size means are equal. It is concluded that 3 groups' means are not significantly different from the others against the PDM level.



(Source: Developed for research)

Figure 10: Mean plots of three different organizations size over PDM level

Although 3 groups' means are not significantly different from the others against the PDM level, the organization that have more employees in number shows slightly higher mean than those organization with less employees . It is a possible that bigger firm in term of staff number need to facilitate more PDM, which is an important management tools.

4.4.3 Independent sample t-test for H_3, gender of employees

Independent sample t-test is used to identify whether there is **significant difference** between the male and female employees with the level of PDM. From the results of independence t-test, H_3 will be able to test and judge.

➔ **T-Test**

Group Statistics

	Gender Employee	N	Mean	Std. Deviation	Std. Error Mean
PDM	Male	66	3.1455	.86686	.10670
	Female	61	3.3541	.72700	.09308

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PDM	Equal variances assumed	2.185	.142	-1.463	125	.146	-.20864	.14258	-.49083	.07354
	Equal variances not assumed			-1.474	123.863	.143	-.20864	.14160	-.48891	.07162

(Source: Developed for research)

Table 18: T-test results for H_3

From the table 18 independent sample test (Levene's Test for Equality of Variances), F value is 2.185 and the value in the Sig. column is 0.142. Significant value is greater than 0.05 means that the variability between male and female employees are about the same. It means that the variability in the two different sectors employees is not significantly different.

T-test for Equality of Means is vital to indicate the means for the two groups were significantly different or relatively the same. According to the result, the significant value (2-Tailed) is 0.146 which is greater than 0.05. It can conclude that there is not statistically significant difference between male and females groups' PDM.

4.4.4 One way ANOVA for H_4, Age group of employees

One way ANOVA is to identify whether there is **significant difference** among 3 different age groups of employee. From the result of ANOVA, *H_4* will be able to test.

Oneway

Descriptives

PDM

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
					Lower Bound	Upper Bound			
Employees younger than 25 years old	40	2.8750	.85177	.13468	2.6026	3.1474	1.40	5.00	
Employees 25-35 years old	58	3.4138	.76947	.10104	3.2115	3.6161	1.00	5.00	
Employees older than 35 years old	29	3.4207	.65103	.12089	3.1731	3.6683	2.00	5.00	
Total	127	3.2457	.80640	.07156	3.1041	3.3873	1.00	5.00	
Model Fixed Effects			.77205	.06851	3.1101	3.3813			
Random Effects				.18692	2.4414	4.0499			.08404

(Source: Developed for research)

Table 19: Descriptive table of ANOVA output

The descriptive table from the ANOVA output describes the 3 employee age groups' means, standard deviation on the dependent variable (PDM). Based on the table 16, employees younger than 25 years old have lowest PDM mean. Employee age within 25 to 35 years old, and employees age older than 35 years old have significantly higher PDM mean compared with employees younger than 25 years old.

ANOVA

PDM

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.024	2	4.012	6.730	.002
Within Groups	73.912	124	.596		
Total	81.935	126			

(Source: Developed for research)

Table 20: ANOVA table for H_4

The ANOVA table which is the key table shows whether the overall *F* ratio for the ANOVA is significant. The *F* indicates that *F* test. The 2 and 124 are the two degrees of freedom values (*df*) for the between groups "effect" and the within-groups "error," respectively. The 6.730 is the obtained *F* ratio, and the $p > 0.01$ is the probability of obtaining that *F* ratio by chance alone.

Refer to the result, $F(2, 124) = 6.730$. *F* ratio is significant. Result shows that $p = 0.002$ at the 0.05 alpha level. Because of $p < 0.01$, the employees with different age range are significant difference with each other over the PDM mean. Review the testing results, the hypothesis H_4 is rejected since $p < \alpha$. It is conclude that there three age groups are significant difference with each other over the PDM mean.

4.4.5 One way ANOVA for H_5, employees' education qualification

One way ANOVA is used to identify whether there is **significant difference** between employees' education qualifications against level of PDM level. From the result of ANOVA, H_4 will be able to test.

Oneway

Descriptives

PDM

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
						Lower Bound	Upper Bound			
Dr & Master Degree		19	3.3579	.72901	.16725	3.0065	3.7093	2.00	4.60	
Bachelor's Degree		55	3.4800	.73696	.09937	3.2808	3.6792	1.00	5.00	
Diploma & certificates		39	3.0000	.88139	.14113	2.7143	3.2857	1.40	4.60	
Others		14	2.8571	.66762	.17843	2.4717	3.2426	1.60	3.80	
Total		127	3.2457	.80640	.07156	3.1041	3.3873	1.00	5.00	
Model	Fixed Effects			.77674	.06892	3.1092	3.3821			
	Random Effects				.16221	2.7294	3.7619			.06815

(Source: Developed for research)

Table 21: Descriptives table of ANOVA output for hypothesis, H_5

The descriptive table from the ANOVA output describes the means, standard deviation of employee groups with different education qualification on the dependent variable (PDM). Based on the table 21, employees group with higher education level indicate relatively high PDM mean in work space compared to those employees education background with Diploma certificates and lower qualification.

ANOVA

PDM

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.727	3	2.576	4.269	.007
Within Groups	74.209	123	.603		
Total	81.935	126			

(Source: Developed for research)

Table 22: ANOVA table for hypothesis, H_5

The ***F*** indicates that *F* test. The **3** and **123** are the two degrees of freedom values (*df*) for the between groups "effect" and the within-groups "error," respectively. The **4.269** is the obtained *F* ratio, and the ***p* > 0.01** is the probability of obtaining that *F* ratio by chance alone.

Refer to the result, $F(3, 123) = 4.269$. *F* ratio is significant. Result shows that $p = 0.007$ at the 0.05 alpha level. Because of $p < 0.01$, the 4 groups with different education level are significant difference with each other over the PDM. Review the testing results, the hypothesis H_5 is accepted since $p < \alpha$. It is conclude that groups with different education level are significant difference with each other over the PDM.

4.4.6 Simple linear Regression for H_6, Job satisfaction

Simple linear regression is used to test the relationship of PDM level with the outcome of job satisfaction. Following are the output of the simple linear regression and used to measure and test the *H_6*.

Regression

[DataSet1] F:\SPSS data\Question 6.sav

Descriptive Statistics

	Mean	Std. Deviation	N
JobSactisfaction	3.3813	.60349	127
PDM	3.2457	.80640	127

Correlations

		Job Sactisfaction	PDM
Pearson Correlation	JobSactisfaction	1.000	.449
	PDM	.449	1.000
Sig. (1-tailed)	JobSactisfaction	.	.000
	PDM	.000	.
N	JobSactisfaction	127	127
	PDM	127	127

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	PDM[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: JobSactisfaction

(Source: Developed for research)

Table 23: Output of simple linear regression for H_6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.449[a]	.201	.195	.54154	.201	31.478	1	125	.000

a. Predictors: (Constant), PDM

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.231	1	9.231	31.478	.000[a]
	Residual	36.658	125	.293		
	Total	45.889	126			

a. Predictors: (Constant), PDM
b. Dependent Variable: JobSactisfaction

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.292	.200		11.457	.000	1.896	2.688					
	PDM	.336	.060	.449	5.611	.000	.217	.454	.449	.449	.449	1.000	1.000

a. Dependent Variable: JobSactisfaction

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PDM
1	1	1.971	1.000	.01	.01
	2	.029	8.204	.99	.99

a. Dependent Variable: JobSactisfaction

(Source: Developed for research)

Table 23 Output of simple linear regression (Continued)

Table 23 indicates the correlation between Job Satisfaction and PDM is 0.449 and model summary indicates the adjusted R square 0.195 (19.5%), which means that 19.5% of job satisfaction has been explained by PDM level.

Table ANOVA[b] interpreted the result of table 23 were meaningful and the model is highly significant and accepted because the p-value of F ratio is less than 0.05. Thus, it can be explained the PDM in the regression model can be used to predict towards the job satisfaction.

From the table coefficients[a], the (PDM) is making a statistically significant contribution to the equation ($p<0.05$). Furthermore, coefficients values (0.336) indicate a positive contribution of PDM towards job satisfaction. Therefore, the relationship can be explained by following simple regression equation:

$$\text{Job satisfaction} = 2.292 + 0.336(\text{PDM})$$

4.4.7 Simple linear Regression for H_7, Organization Commitment

Lastly, simple linear regression is used to test the relationship of level of PDM with the outcome of organization commitment. The testing result is as below;

Regression

```
[DataSet1] F:\SPSS data\Question 7.sav
```

Descriptive Statistics

	Mean	Std. Deviation	N
OrganizationCommitment	3.1717	.46078	127
PDM	3.2457	.80640	127

Correlations

		Organization Commitment	PDM
Pearson Correlation	OrganizationCommitment	1.000	.385
	PDM	.385	1.000
Sig. (1-tailed)	OrganizationCommitment	.	.000
	PDM	.000	.
N	OrganizationCommitment	127	127
	PDM	127	127

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.385[a]	.148	.142	.42693	.148	21.771	1	125	.000

a. Predictors: (Constant), PDM

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.968	1	3.968	21.771	.000[a]
	Residual	22.783	125	.182		
	Total	26.752	126			

a. Predictors: (Constant), PDM
b. Dependent Variable: OrganizationCommitment

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.457	.158		15.583	.000	2.145	2.769					
	PDM	.220	.047	.385	4.666	.000	.127	.313	.385	.385	.385	1.000	1.000

a. Dependent Variable: OrganizationCommitment

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PDM
1	1	1.971	1.000	.01	.01
	2	.029	8.204	.99	.99

a. Dependent Variable: OrganizationCommitment

(Source: Developed for research)

Table 24 Output of simple linear regression for H_7

Table 24 indicates the correlation between "organization commitment" and level of PDM is 0.385. In table 24, model summary indicates the adjusted R square 0.142 (14.2%), which means that 14.2% of organization commitment has been explained by PDM.

Table ANOVA[b] interpreted the result of table 24 were meaningful and the model is highly significant and accepted because the p-value of F ratio is less than 0.05. Thus, can be explained the PDM in the regression model can be used to predict towards the organization commitment.

From the table coefficients[a], the PDM is making a statistically significant contribution to the equation ($p<0.05$). Furthermore, coefficients values (0.220) indicate a positive contribution of PDM towards organization commitment. Therefore, the relationship can be explained by following simple regression equation:

$$\text{Organization Commitment} = 1.971 + 0.220\ (\text{PDM})$$

CHAPTER 5

DISCUSSIONS AND CONCLUSION

Chapter 5 is written to discuss and give findings with the survey statistic results. Each research questions' testing outcome is discussed in the section 5.1. Managerial implications in the section 5.2 are compiled to discuss how to make use of the findings in the present research. Section 5.3 is written with the limitations that encountered during carrying the present research. Also, there are some improvements recommended for future research in the section 5.4. Lastly, there is a conclusion to end up this chapter.

5.1 Analysis on the testing results and examined hypotheses

In the following section, each and every statistic testing will be analyzed and examined with the hypothesis.

5.1.1 No significant different of PDM level for employees that served in manufacturing and servicing sectors

The first research question is used to find out the difference in term of PDM level between the employees that working in the manufacturing sector (X_1) and servicing sector (X_2). The main objective is used to investigate whether PDM level (X_7) of employees are same or significant different, by grouping them either working in manufacturing sector (X_1) or servicing sector (X_2).

The hypothesis is designed as following:

H_0 - There is no significant difference in term of PDM level between the two group of employees that carry on their job functions in the manufacturing sectors and servicing sectors.

According to the results presented in chapter 4.2.1, statistic result accepted the hypothesis *H_0*. It means there is no significant difference in term of PDM level on employees, regardless they work in the manufacturing or servicing industries.

Up to the current research project, none of referable literature gave findings that PDM of employees will be significant different based on the different industry sectors their served. With the carried survey and statistic result, PDM of employees seem not influence by the variety of industry sectors of their serving.

5.1.2 No significant different of organization size in term of PDM level

The second research question is drafted to research that what is the influence of organization size (numbers of employees) on the PDM level. The main objective is to justify whether there is a significant difference in term of PDM level (X_7) in the small, medium to large organization size (X_3). The hypothesis is mentioned as following;

H_1: There is no significant difference in term of PDM related to the organization size.

Survey and statistic result accepted the hypothesis *H_1,* it means there is no significant difference in term of PDM level related to the organization size. The statistic result matched with the research made by Koopman, Drenth, Bus, Kruyswijk, and Wierdsma (1981). The stated research reported that "*contingency variables, such as group size…… had no moderating effects on the relationship between participation and the outcome variables*".

In the current research, statistic result proves that employees show not significantly different in PDM level if related to the number of employees in the organization. Anyhow, the organization with more employees in numbers shows slightly higher mean than those organization with less employees. It is a possible that bigger firm in term of staff number need to facilitate more PDM, which is an important human resource management tools.

5.1.3 No significant difference of employees' gender (X_4) over the level of PDM (X_7)

Today organizations are usually served together by both male and female employees. The third research question is to investigate that whether there is significant difference of employees' gender (X_4) over the level of PDM (X_7) in Malaysia companies. The hypothesis is described as below;

H_2: Male employees show significant different in PDM compared with female employees

According to the statistic result in chapter 4.3.3, the hypothesis is rejected because of the significant value is 0.146 which is greater than 0.05. It can conclude that there is not statistically significant difference between Malaysian male and female employee's PDM in the research companies.

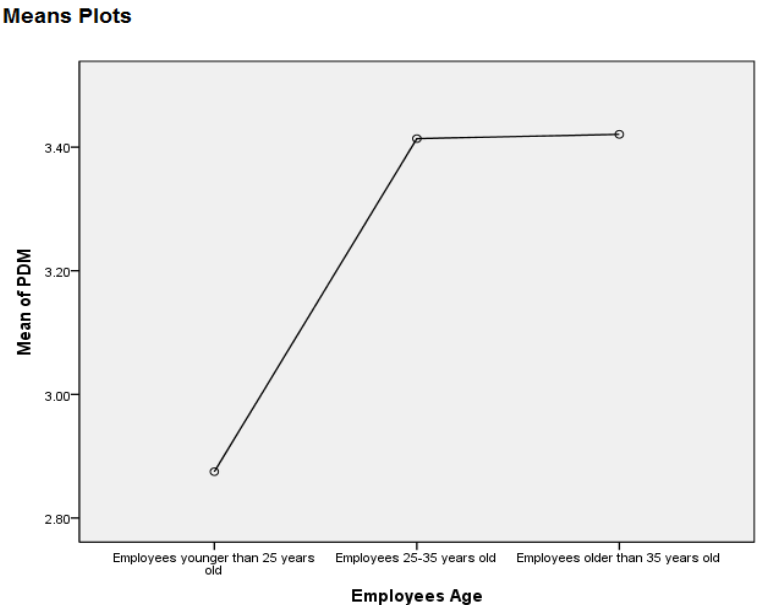
The present statistic outcome is confronted with Dr Razali's 1996 findings that male staff tends to have higher PDM level compared to the female staff. Dr Razali's research was conducted against the non-management professional level staffs while the present research is conducted on all level of employees in the Malaysia companies.

5.1.4 Senior employees got higher PDM than junior employees

The forth research question is designed to research that what is the influence of employees' age generation over the PDM level. The main objective is to justify whether there is a significant difference employees' generation in term of age range (X_5) over the level of PDM (X_7). The hypothesis is stated as below;

H_3: Senior employees show similar PDM level compared with junior employees

Refer to the result in chapter 4.3.4, p =0.002 at the 0.05 alpha level. Because of $p <$ 0.01, the groups with different age range are significant difference with each other over the PDM. Therefore, **the null hypothesis, H_3 is rejected since $p < \alpha$.** It is conclude that there generation groups are significant difference with each other over the PDM.



(Source: Developed for research)

Figure 11: Mean plots of PDM level of 3 age groups

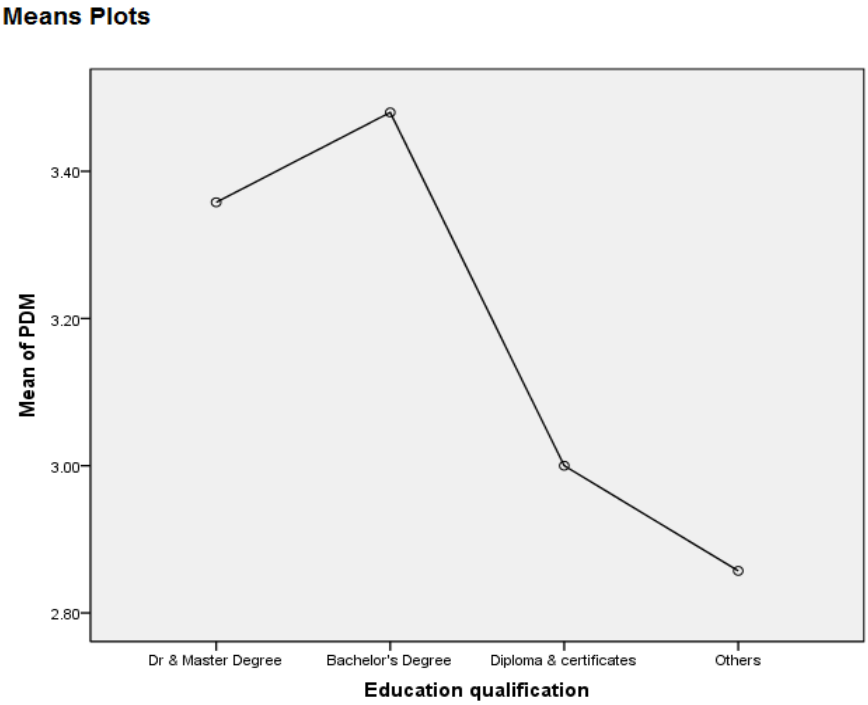
From the chart, it is significant that age group 1 (employees <25 years old) has lower mean of PDM compared to the age group 2 and 3 which employees ≥25 years old. The age group 3 (employees ≥35 years old) have the highest mean of PDM. The phenomenon is possible due to the several reasons. Employees <25 years old are considered as junior employees who normally just hired by organization for few years. Their job position and experience may difficult for them to participate in the decision making. In comparison, employees that older than 25 years olds are significantly practice more in decision making. The possibility is that they already have higher maturity, experiences and initiatives in the organization to participate in certain decision making.

5.1.5 Higher educated employee prefer to participate in decision making

The fifth research question is proposed to research that what is the influence of employees' education qualification over the PDM level. The main objective is to justify whether the employees' education background (X_6) influence the level of PDM (X_7). The hypothesis is as below;

H_4: Employees with higher education qualification show higher level of PDM

Refer to the result in chapter 4.3.5, p =0.007 at the 0.05 alpha level. Because of $p <$ 0.01, the 4 groups with different education level are significant difference with each other over the PDM. Review the testing results, **the null hypothesis, H_4 is accepted since $p < \alpha$.** It is conclude that groups with different education level are significant difference with each other over the PDM.



(Source: Developed for research)

Figure 12: Mean plots of PDM level of 4 different education qualification groups

From the chart, it is significant that group with higher education qualification have higher mean of participation in decision making. The testing result is confronted with the researches *made by Koopman, Drenth, Bus, Kruyswijk, and Wierdsma (1981) that reported contingency variables, such as education had no moderating effects on the relationship between participation and the outcome variables"*

Base on Lois E. Heldenbrand's 2007 researches, both Bluedorn (1982) and Mohrman et al (1996) did not find a significant relationship between employee education levels and employee satisfaction. In present research, group with higher educated level normally practice higher PDM level. And following section in present research, it shows employees with higher PDM level will also have higher jobs satisfaction. Indirectly, education qualification will be one of the factors that influence PDM level as well as job satisfaction.

5.1.6 PDM show strong correlation with job satisfaction

The sixth research question is used to find out the relationship of the job satisfaction with PDM. The hypothesis is described as below;

H_5: There is a positive relationship between level of PDM and employees' job satisfaction.

Refer to the result in chapter 4.3.6, the correlation of job satisfaction with level of PDM is 0.449 which is a significant and positive relationship positive relationship. Positive relationship indicates more participation in decision making will led higher job satisfaction to Malaysia employees.

This result is matched with the Locke and Schweiger's (1979), Scott, Bishop, and Chen (2003) and Locke and Schweiger (1979) findings. They found a significant relationship between employee participation and job satisfaction, as well as a strong correlation between satisfaction and voluntary attrition. Miller & Monge (1986)'s meta analysis support strongly the argument that decision-making participation improves significantly to job satisfaction.

Anyhow, the present result is contrary with Lois E. Heldenbrand et al., (2007, Pg 23) who concluded the Scott-Ladd and Marshall's 2004 researches that PDM did not affect job satisfaction because of greater decision-making and autonomy could attribute to increased job demands and work load.

5.1.7 PDM correlated with organization commitment

The seventh research question is used to find out the relationship of the organization commitment with PDM. The hypothesis is described as below;

H_6: There is a positive relationship between level of PDM and employees' organization commitment.

Refer to the result in chapter 4.3.7, the correlation between organization commitment and PDM is 0.385 which is considered as significant and is a positive relationship. It means that highly practical of PDM will lead to higher employees' organization commitment.

5.2 Managerial Implications

The present research is very resourceful for the Malaysia modern organization since its research findings are generated from the Malaysia employees that work in the Klang Valley. Malaysia organization leader or managerial may refer to present research to understand or adapt the PDM in their organization.

Lately, Malaysia organizations especially the companies and firms face on the issue of how to increase and maintain the employees' job satisfaction and commitment, in order to minimize the manpower turnover rate in their organization. The term of participation in decision making (PDM) is one of the key to drive the higher jobs satisfaction and organization commitment among the employees.

In the present research, those employees who show higher PDM level tend to have higher job satisfaction and commitment as well. It shows how importance that the management of company should create the company culture that encourage

employees to participate in the decisions making which relevant to their positions or job tasks.

Present research has got the statistical results that senior staffs and employees with higher education qualification tend to have higher level of participate in decision making. It is not surprising that senior staffs who know well about their jobs usually contribute more decision for their organizations. In most organizations, senior staffs have advantages compare with the junior staffs to participate in decision making due to experiences and job position.

Besides that, research statistic that those employees who have higher academic qualifications like degree, master and PHD also more desire to participate in decision making. It is possible that those higher educated able to think independently and also acknowledge the importance of participating in decision making.

The present research also statistic some factors that not significantly increase PDM level, such as industry sectors, organization size, and gender It means that leaders or management can engage PDM in their organization regardless they are servicing in manufacturing or servicing industries. At the same time, organization sizes in term of employees' number and employees' gender did not appear to have significant difference in PDM level.

5.3 Limitations of the present research

The present research has been conducted under certain constraints that reduce the quality of research. The limitations are described as following;

(i) Access to information and resources

As discussed in the early part, participation in decision making (PDM) is widely studied internationally. There are a lot of researches and findings kept in the online

journal format but some of it are not free to access or need to pay. The present research is compiled using free journals and ignored those pay required journals. This is the most serious factor that reduces the quality of present research.

(ii) Constraints in respondent numbers, random of sampling, language conducted

The sample size for the present research is not large enough. There are 151 pieces of questionnaires collected while only 127 pieces are fully filled. Usually, the research with more respondents will be more precise if there are more questionnaires done.

To get a huge sample size is a big issue since the researcher only manages to use the online questionnaires system which incurs less cost and expenses. There will be good if research able to conduct the questionnaires in papers for those respondents.

Major of the questionnaires are done by those respondents who is in the researcher's friends list. Only a partial of the questionnaire are generated from those who considered really neutral or beyond the researcher's friend list. This practice is affected the random sampling for research and may reduce the accuracy of the research outcome.

The questionnaire is written in English which is not the main linguistic for some of the respondents. They may find that the questionnaire is difficult to understand and just simply answer. This also reduces the accuracy of the results testing.

(iii) Support from organizations

The research is conducted without getting the support from organizations. During conduct the present research, researcher found that it is hard to get supports from organization to study on their inner human resource issue.

Organizations' management, especially companies and firms consider it is a risk to disclose their employees' actual feedbacks to the outside researcher. It may affect the companies' image if their employees give the negative respondent to the researches.

5.4 Proposed improvements for the future research

After completing the present research, there are some improvements proposed for the coming researches on the same topic.

(i) Widen the respondents' scope

The present research is conducted on the Malaysians that working in the Klang Valley only and exclude those who work outside the Klang Valley. Future research may extend the targeted respondents to whole Malaysia to compare with the result of present research. The proposed research is believed more representatives for the Malaysian in the similar research topic.

(ii) Differential the organization types in GLC, local private company and MMC

Most of Malaysians work for the government link companies (GLC), local private companies (Sdn Bhd/ Bhd), and Multinational companies (MMC or Ltd). It will be useful information for company management if future researcher able to conduct a research project to find out the difference of employees' PDM among the mentioned three companies.

(iii) Extend the researches to link the PDM with the other organization behavior variables

In the present research, the PDM is linked with the outcome of job satisfaction and organization commitment. In the future research, researcher may add in the other human resource variables. The human resource variables could be jobs motivation, employee intention to leave, and etc.

5.5 Conclusions

As a conclusion, researcher found that Malaysia employees that served in either manufacturing or servicing industry has no significant difference in term of their level of participation in decision making (PDM). At the same time, organization size and employees' gender make no influence to the PDM level. Based on the testing, variables that make influence to the employees' PDM are their age range and education qualifications. It is concluded older employees and higher educated employees tend to give higher PDM level in their work places.

Based on this research, it also concluded that both job satisfaction and organization commitment are highly related with the PDM. Higher PDM level can positively drive both employees' job satisfaction and organization commitment. This is important information for Malaysia company management. It is because employees with higher job satisfaction will perform better and more productive in the work place. And, employee with higher organization commitment tends to stay with the companies and able to reduce the employees' turnover rate.

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Appendix A

QUESTIONNAIRE (SAMPLE)

Section 1: Company Information

Company Location	1	Kuala Lumpur & Selangor State	
	2	Malaysia state other than Kuala Lumpur & Selangor state	
	3	Foreign country	
Industry of company belong to	1	Manufacturing Industry	
	2	Servicing Industry	
	3	Others	
No of company employees	1	Less than 50	
	2	51-200	
	3	More than 200	

Section 2: Respondents Demography

Gender	1	Male	
	2	Female	
Age	1	Below 25	
	2	25-35	
	3	36-45	
	4	46-55	
	5	Above 55	
Ethnicity	1	Malay	
	2	Chinese	
	3	Indian	
	4	Others	
Highest Education Qualification	1	Doctorate degree	

	2	Master's Degree	
	3	Bachelor's Degree	
	4	Diploma certificates	
	5	Others	
Current Position	1	Upper Management	
	2	Management	
	3	Executive	
	4	Non-executive	
	5	Others	
Year of working in current organization	1	Less than 1 year	
	2	1-3 years	
	3	4-6 years	
	4	7-10 years	
	5	Above 10 years	

Section 3: PDM (Dow Scott, James W.B, Ming X.C, 2003)

	Statements	1	2	3	4	5
1	In general how much say or influence do you have on you perform your job?					
2	To what extent are you able to decide how to do your job?					
3	In general how much say or influence do you have on what goes on in your work group?					
4	In general how much say or influence do you have on decisions which affect your jobs?					
5	My supervisors are receptive and listens to my idea and suggestions					

1 = Little or no influence

2 = Some influence

3 = Quite a bit of influence

4 = A great deal of influence

5 = A very great deal of influence

Job satisfaction (Wood, Chunko, and Hunt 1986)

	Statements	1	2	3	4	5
1	I am satisfied with the information I received from my supervisor about my job performace					
2	I receive enough information from my supervisor about my job performance					
3	I receive enough feedback from my supervisor on how erll I'm doing					
4	There is enough opportunity in my job to find out how I am doing					
5	I am satisfied with the variety of activities my job offers					
6	I am satisfied with the freedom I have to do what I want on my job					
7	I am satisfied with the opportunities my job provides me to interact with others					
8	There is enough variety in my jobs					
9	I have enough freedom to do what I want in my job					
10	My job has enough opportunity for independent thought and action					
11	I am satisfied with the opportunities my job gives me to complete tasks from beginning to end					
12	My job has enough opportunity to complete that work i start					
13	I am satisfied with the pay I receive for my job					
14	I am satisfied with the security my job provides me					

Organization commitment (Mowday, Steer, and Porter 1979)

	Statements	1	2	3	4	5
1	I am willing to put in a great deal of effort beyond that normal expected in order to help this organization be successful					
2	I talk up this organization to my friends as a great organization to work for.					
3	I would accept almost any type of job assignment in order to keep working for this organization					
4	I find that my values and the organization's values are very similar					
5	I am proud to tell others that I am part of this organization					
6	The organization really inspires that very best in the way of job performance					
7	I am extremely glad that I chose this organization to work for over others I was considering at the time I joined					
8	I really care about the fate of this organization					
9	For me, this is the best of all possible organization for which to work					
10	I feel little loyalty to this organization*					
11	I could just as well be working for a different organization as long as the type of work was similar*					
12	It would take very little change in my present circumstances to cause me to leave this organization*					
13	There's not too much to be gained by sticking with this organization indefinitely.*					
14	Often, I find it difficult to agree with this organization's policies on important matters relating to its employees*					
15	Deciding to work for this organization was a definite mistake on my part*					

Appendix B

Appendix B1 Reliability Analysis on Participation In Decision Making

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	127	100.0
	Excluded[a]	0	.0
	Total	127	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.896	.896	5

Item Statistics

	Mean	Std. Deviation	N
1. In general how much say or influence do you have on you perform your job?	3.1024	.96638	127
2. To what extent are you able to decide how to do your job?	3.2913	.97680	127
3. In general how much say or influence do you have on what goes on in your work group?	3.3071	.93869	127
4. In general how much say or influence do you have on decisions which affect your jobs?	3.2205	.95878	127
5. My supervisors are receptive and listens to my idea and suggestions.	3.3071	.95545	127

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.246	3.102	3.307	.205	1.066	.008	5
Item Variances	.920	.881	.954	.073	1.083	.001	5
Inter-Item Correlations	.633	.497	.727	.229	1.461	.005	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. In general how much say or influence do you have on you perform your job?	13.1260	10.460	.778	.614	.866
2. To what extent are you able to decide how to do your job?	12.9370	10.409	.777	.607	.866
3. In general how much say or influence do you have on what goes on in your work group?	12.9213	10.581	.785	.643	.865
4. In general how much say or influence do you have on decisions which affect your jobs?	13.0079	10.659	.747	.602	.873
5. My supervisors are receptive and listens to my idea and suggestions.	12.9213	11.264	.636	.421	.897

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
16.2283	16.257	4.03199	5

Appendix B2 Reliability Analysis on Job Satisfaction

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	127	100.0
	Excluded[a]	0	.0
	Total	127	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.909	.911	14

Item Statistics

	Mean	Std. Deviation	N
1. I am satisfied with the information I received from my supervisor about my job performace	3.4882	.82487	127
2. I receive enough information from my supervisor about my job performance	3.4331	.81251	127
3. I receive enough feedback from my supervisor on how well I'm doing	3.4016	.88425	127
4. There is enough opportunity in my job to find out how I am doing	3.2913	.90071	127
5. I am satisfied with the variety of activities my job offers	3.4567	.86149	127
6. I am satisfied with the freedom I have to do what I want on my job	3.5433	.97391	127
7. I am satisfied with the opportunities my job provides me to interact with others	3.5354	.81450	127
8. There is enough variety in my jobs	3.3780	.87223	127
9. I have enough freedom to do what I want in my job	3.2756	.99743	127
10. My job has enough opportunity for independent thought and action	3.3701	.96612	127
11. I am satisfied with the opportunities my job gives me to complete tasks from beginning to end	3.3937	.87430	127
12. My job has enough opportunity to complete that work i start	3.4173	.83989	127
13. I am satisfied with the pay I receive for my job	3.0866	.94301	127
14. I am satisfied with the security my job provides me	3.2677	.87694	127

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. I am satisfied with the information I received from my supervisor about my job performace	43.8504	61.890	.679	.683	.901
2. I receive enough information from my supervisor about my job performance	43.9055	61.991	.683	.691	.901
3. I receive enough feedback from my supervisor on how well I'm doing	43.9370	61.329	.670	.626	.901
4. There is enough opportunity in my job to find out how I am doing	44.0472	60.093	.750	.673	.898
5. I am satisfied with the variety of activities my job offers	43.8819	61.375	.687	.629	.900
6. I am satisfied with the freedom I have to do what I want on my job	43.7953	61.783	.565	.538	.905
7. I am satisfied with the opportunities my job provides me to interact with others	43.8031	62.651	.626	.468	.903
8. There is enough variety in my jobs	43.9606	62.610	.581	.423	.904
9. I have enough freedom to do what I want in my job	44.0630	61.012	.602	.598	.904
10. My job has enough opportunity for independent thought and action	43.9685	59.475	.737	.662	.898
11. I am satisfied with the opportunities my job gives me to complete tasks from beginning to end	43.9449	61.148	.693	.616	.900
12. My job has enough opportunity to complete that work i start	43.9213	61.454	.701	.673	.900
13. I am satisfied with the pay I receive for my job	44.2520	65.349	.338	.350	.914
14. I am satisfied with the security my job provides me	44.0709	65.558	.356	.355	.913

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
47.3386	71.384	8.44893	14

Appendix B3 Reliability Analysis on Organization Commitment

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	127	100.0
	Excluded[a]	0	.0
	Total	127	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.787	.800	15

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
47.5748	47.770	6.91160	15

Item Statistics

	Mean	Std. Deviation	N
1. I am willing to put in a great deal of effort beyond that normal expected in order to help this organization be successful	3.7165	.74427	127
2. I talk up this organization to my friends as a great organization to work for	3.2441	.92339	127
3. I would accept almost any type of job assignment in order to keep working for this organization	3.2835	.88100	127
4. I find that my values and the organization's values are very similiar	3.1890	.95728	127
5. I am proud to tell others that I am part of this organization	3.3543	.99624	127
6. The organization really inspires that very best in the way of job performance	3.2362	.86792	127
7. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined	3.4331	.91366	127
8. I really care about the fate of this organization	3.4409	.93141	127
9. For me, this is the best of all possible organization for which to work	2.9055	1.08696	127
10. I feel little loyalty to this organization	2.8346	.94082	127
11. I could just as well be working for a different organization as long as the type of work was similar	2.7874	.81289	127
12. It would take very little change in my present circumstances to cause me to leave this organization	2.9528	.85318	127
13. There's not too much to be gained by sticking with this organization indefinitely	2.9764	.84011	127
14. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees	2.9370	.97385	127
15. Deciding to work for this organization was a definite mistake on my part	3.2835	1.02274	127

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. I am willing to put in a great deal of effort beyond that normal expected in order to help this organization be successful	43.8583	44.742	.249	.350	.785
2. I talk up this organization to my friends as a great organization to work for	44.3307	39.620	.628	.594	.755
3. I would accept almost any type of job assignment in order to keep working for this organization	44.2913	41.399	.494	.469	.767
4. I find that my values and the organization's values are very similiar	44.3858	39.064	.651	.711	.752
5. I am proud to tell others that I am part of this organization	44.2205	37.856	.728	.740	.744
6. The organization really inspires that very best in the way of job performance	44.3386	39.654	.674	.711	.752
7. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined	44.1417	39.250	.671	.675	.751
8. I really care about the fate of this organization	44.1339	40.482	.542	.598	.762
9. For me, this is the best of all possible organization for which to work	44.6693	57.541	-.664	.616	.861
10. I feel little loyalty to this organization	44.7402	45.813	.084	.295	.799
11. I could just as well be working for a different organization as long as the type of work was similar	44.7874	43.788	.309	.405	.781
12. It would take very little change in my present circumstances to cause me to leave this organization	44.6220	42.586	.400	.372	.774
13. There's not too much to be gained by sticking with this organization indefinitely	44.5984	40.655	.598	.464	.759
14. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees	44.6378	40.963	.470	.461	.768
15. Deciding to work for this organization was a definite mistake on my part	44.2913	40.303	.494	.448	.765