INNOVATIVE BEHAVIOR AMONG EMPLOYEES IN A MANUFACTURING COMPANY

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APPROVAL

I/ We hereby declare that I/ We have read and go through this dissertation/ report/ thesis and certify that, this dissertation/ report/ thesis is satisfactory in the sense of scope and quality as a partial fulfilment of the requirement for the award of Bachelor's Degree of Technology Management (Technology Innovation) with Honours

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DECLARATION

I hereby declared that this thesis entitled

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is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree.

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DATE : 21 JUNE 2022

DEDICATION

This research paper is wholeheartedly dedicated

to dear parents

which is my main source of motivation.

They always give us strength when we think of giving up, which continues to provide their moral, spiritual, emotional, and financial support.

To supervisors, family and friends who shared words of advice, encouragement, and support to complete this research project.

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Abstract

Innovation is considered the lever for growth and prosperity in business and the solution to a range of organizational problems, especially when the Covid-19 pandemic is still spreading. Many companies have dissolved because of being unable to achieve sustainable growth in industrial revolutions. The purpose of this study was to investigate the impact of Empowerment Leadership (EL), Workplace Happiness (WPH), and Work Satisfaction (WS) on employees' innovative behavior in the Vietnam context. The research was conducted on 455 employees in different enterprises throughout Vietnam showed that Empowerment Leadership and Work Satisfaction positively affect innovative behaviour. Using principal component analysis (PCA), this study aims to holistically investigate the organizational elements influencing employee innovation and condense the dimensionalities for a better focus on organizational development. The limitations of this research were explored, and suggestions for further research are given. Innovation is considered the lever for growth and prosperity in business and the solution to a range of organizational problems, especially when the Covid-19 pandemic is still spreading. Organizations with effective human resource (HR) strategies lead the way in fostering employee creativity. Even though there is significant literature on controlling innovation culture, some organizations continue to be a barrier to people's growth and innovation at work.

TABLE OF CONTENT

CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter will explain the background of the study. A specific problem and research question were created based on research objectives that have been clearly defined in this chapter. Efficiency in employee innovative behavior is affected by many different factors. The main focus of the study and the contribution of this research will also be discussed. The latest results will demonstrate that expertise and experience have a substantial impact on employee innovative behavior.

1.1 Background of Study

In manufacturing firms that those who seek to lay the groundwork for long- term success are always evolving. In this context, innovation belongs to a new, technologically feasible commodity or procedure that incurs an economic burden (Bertola & Teunissen, 2018). Furthermore, Sltten (2014) stated that all innovation activities may be traced back to employee behavior. Employee innovation at work might take the form of little tweaks or completely original concepts (Axtell et al., 2000). The former are significantly more common and affect staff members from all departments, while the latter are quite uncommon. In light of this, many modern management tenets, such kaizen, continuous improvement, and suggestion programmes, depend heavily on creative work behaviour (De Jong & Den Hartog, 2007; Dörner, 2012). The skill and desire to innovate on an individual level is a needfor workers to demonstrate creative behaviour. Knowledge, skills, as well as personality traits like openness and creativity, are required for this (Del Giudice & Maggioni, 2014; Lawson & Samson, 2001; Parzefall et al., 2008).

The research has examined a range of contextual performance indicators as significant promoters of employee innovative behaviour. These contextual factors may be categorised into four groups based on earlier research: leadership, job, group and network, and organisational level impacts (Axtell et al., 2000; Parzefall et al., 2008). Innovation conduct is considered as an individual's actions aimed toward the emergence, introduction, and implementation of innovative ideas that benefit the business on all levels (Kleysen & Street, 2001). Innovative behavior is defined as employees' aim to generate, introduce, and use new ideas in groups or organizations to improve group and organizational productivity (Yuan & Woodman, 2010). As a result, there seems to be an emphasis placed on employee innovation, which is widely known as a critical aspect of technology acceptance given that we are in the midst of a fundamental upheaval in our lives and ways of working. Innovative conduct necessitates a focus on both idea production and concept execution, as well as the creation of favourable environments and situations for both. It might be stated that individualized consideration is a possible factor that fosters idea production and adoption, then what other circumstances are required?

The prevailing belief is that workers' creative behaviours are always advantageous to improving things and are seen being an important source of an organization's competitive advantage (Anderson et al., 2014; Shin et al., 2017).Consequently, a competing perspective claims that, despite the intention for innovative behaviour to improve performance, innovative activities may take up and use the attention and resources needed for in-role job performance because of the closer relationship between both innovative behaviour and in-role job performance. (Harari et al., 2016).

The COVID-19 epidemic in Malaysia had an impact on the entire world. GDPperformance for 2020 declined by 5.6 percent, compared to an increase of 4.3 percentin 2019. (DOSM, 2020). For the fifth year in a row, growth in the services sector wasnegative, falling by 5.5 percent (6.1 percent) (3.8 percent). The new notion of a declinein the industrial sector has brought about Industry 4.0, which indicates a key feature of personnel developing technological expertise. Several analysts see these changes asushering in a new period of progress, transformation, and opportunity. Manufacturingcompanies compel nations and governments to re-evaluate their approach to manufacturing and

its economic impact. The world's nations are dedicating an increasing amount of money to developing advanced manufacturing capacity by putting a strong emphasis on cutting-edge technological infrastructure and high-quality education. These things are accomplished by making it easier for manufacturing firms to embrace cutting-edge technology, allowing them to stay aheadof the competition, and increasing their financial security.

1.2 Problem Statement

In this era, companies must change their strategy by applying new practices tosurvive and get operate efficiently. As we can see that innovation is the maincomponent of economic development because it is a necessary and powerful tool needed to have in their business. Employee behavior has shown that they just doing their jobs with a lack of potential drivers on innovative behavior.

Firstly, changes in the source of competitive advantage. Organizational innovation is a driving force that enables businesses to thrive in a constantly shifting world (Dedahanov, Rhee, & Yoon, 2017). Also, the source of competitive advantage can be changed due to products that are created and implemented to increase customervalue (Eidizadeh, Salehzadeh, & Esfahani, 2017). Thus, a firm's ability to satisfy customers' current and future demands establishes its competitive edge, and it is the company's understanding and satisfaction of customers' growing wants that fosters andjustifies its continuous connection with customers. Businesses need to gain the trust of their consumers in order to develop a long-term connection (Crosby et al., 1990). Competitors quickly mimic a company's competitiveness in the global marketplace (Dickson, 1992; Ghemawat, 1986). This arises as a problem that is especially relevantsince they are unable to patent their ideas, they provide services to organisations. (Kandampully, 1993).

Furthermore, lack of innovation and creativity. While innovativeness can be thought of as a collection of discriminatory activities, there is a lack of consensus on a consistent and unambiguous definition of innovative behavior. In fact, the literature uses a wide variety of languages, usually combining ingenuity and invention (Patterson & Kerrin, 2016). Similar to what this research suggests, Hammond et al. (2011) divided creative work behaviour into two categories: creativity-oriented behaviour that emphasises the development of fresh ideas, and idea implementation within the workplace. The authors identified four key areas for creativity as being individual variations, motivation, work characteristics, and environmental influences.

Although personality and inventiveness may not be directly correlated, they may interact. Besides that, the working atmosphere. Numerous studies also look at how personal traits and environmental factors combine to influence creative work behaviour (Hammond et al., 2011; Newman et al., 2018; Oldham & Cummings, 1996).Environmental factors can include psychological climate (Schermuly et al., 2013), jobstress (Bani-Melhem et al., 2018) and job demand (Janssen, 2000), perceived coworker support (Bani-Melhem et al., 2018), organizational structure (Dedahanov etal., 2017) and job design (Dorenbosch et al., 2005). It represents the individual's opinion of if the organization provides an appropriate learning environment and creativity, as well as the degree to which it does so. And it is the system's mirror of the individual and the environment that determines the level of innovation of the individual and the organization (Tao Yongmei, 2012).

From the start exploration's lack of innovation can be influenced by the leadership style of the company. This is where employees get less guidance from the company and they did not play a good role for others. This will occur consequences for employees where they are uncertain associated with proposing new ideas and solutions. It shows that management more to mind their own business withoutknowing what employees do. The interaction with employees might give a positive relationship that builds the inspiration for them to generate the idea. Innovative idea generation is frequently a lonely or isolated process, whereas concept implementation is a social process that involves the help and encouragement of others. With these ideas, the company can get to achieve improvements that will enhance business performance and

target. It is complicated to understand how well an employee bringsto the innovation journey since innovative behavior is not divided into two different phases (concept generation and idea implementation). In this study, people who describe themselves as creative are more likely to be able to immerse themselves in acreative process and generate new, original ideas that can be used by an organization.It is unclear how creative personality affects concept execution, which would be a novel addition to this study.

1.3 Research Objective

This study is to aims at addressing the innovative behavior among employees in manufacturing company. Three objectives were set up for achieving goal and to better define which are:

1.3.1 To identify what are the factors impacting innovative behavior among employees in a manufacturing.

1.3.2 To study what is the most significant factors affecting innovative behavior among employees in a manufacturing.

1.4 Research Questions

To get the right data required to achieve the goals, research questions are posed. The purpose of this research was to determine innovative behavior among employees in a manufacturing company. The proposed question to be answered are as follow:

1.4.1 What are the factors impacting innovative behavior among employees in amanufacturing?

1.4.2 What is the most significant factors affecting innovative behavior among employees in a manufacturing?

1.5 Scope of Study

This research is to study the innovative behavior among employees in a manufacturing company. The next goal of this research is to determine how employeeinnovation and leadership empowerment are related. Furthermore, the researcher statethe information about innovative behavior, empowerment leadership, workplace happiness, and work satisfaction. These elements, according to researchers, strongly correlate with the inventive behaviour of industrial personnel.

1.6 Limitation of Study

In every scientific test, limitations were effects over which the researchers hadno control. Limitations were flaws, situations, or influences outside the researcher's control that imposed restrictions on the research process and findings (Baltimore Country Public School, 2014). Because of the limitation, the researcher is unable to get as much information from the respondent, and analyzing innovative behavior among employees in a manufacturing company is difficult. The researcher also needs to identify innovative behavior among employees to become a respondent for this research which that the limitation of this research.

1.7 Significance of Study

The most important for this research is to determine innovative behavior among employees in a manufacturing company. The result of this research can be usedby other companies or businesses where it can help companies to improve their behavior that can drive efficiency. By doing this research, companies able to identifythe innovative behavior among employees in a manufacturing company. Companies need to know the innovative behavior of their employees. It can help companies to always be innovative to increase productivity.

1.8 Summary

This chapter will begin with the introduction and the background of the studyalso followed by the problem statement, research objective, and research question which is the main content. Following that, it talks about the study's parameters and its restrictions. It concluded with an important study that clarifies the significance of thisresearch.

Since this study is aimed to indicate empowering leadership, workplace happiness, and work satisfaction behavior chapter 2 will be elaborated on literature review.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Writing that exhibits knowledge and comprehension of the academic literatureon a particular topic in context is known as a literature review. Since a literature reviewalso provides a critical assessment of the material, it is regarded as a review rather thana report. Also, in these reviews, we will include the content which is a synopsis or thecritic their evaluation. With the literature review, we will have the research topic whichcan help to refine the frame research questions.

2.1 Innovative Behaviour

Ireland et al. (2011), the purpose of constructing a commercial product by innovation or intellectual expression, product development, or the development of a new method. The evolution of innovation performance occurs in a context with currentinnovation structures inside an organization, and the innovation potential develops through intensification of experience and ability flows just at the network level withinan organization. This demonstrates that innovation is just a consequence of entrepreneurship created by a business organization, a public service organization (government), or individuals/groups. Furthermore, Carmeli, Meitar, and Weisberg ascited by Barrand et al. (2012) define the complexity of an organization implementation as three phases: one that recognizes an issue and aims for solutions and new conceptsor accepted ideas, one that attempts to discover solutions and ideas, starts to develop legitimacy and wants support from within or outside the organization, and one that develops a design or model to be tested.

Based on innovative work behaviour, West en Farr(1990, p. 9) said that the deliberate development and deployment of new concepts, methods, products, ortechniques within such a role, group, or company, only intends to greatly benefit the person, group, organization, or wider community. Here, Innovative behaviour is characterised by multi-step procedure where a person

detects a problem, discovers new (original or accepted) approaches to address it, works to improve and garner support for them, and builds an appropriate design or model for their usage benefit ofthe organisation or portions of it. Weisberg, Carmeli, and Meitar (2006, p. 78).

2.2 Empowering Leadership

The empowering leader is a promising method for leaders looking to encourage good employees' attitudes such as cynicism and time theft (Huy 2002; Oreg & Berson 2011) enabling leaders to delegate judgment responsibility to their employees. They also demonstrate trust in employees' skills to accomplish their dutiesindependently (Spreitzer 1995). Empowerment is not the same thing. A leader who tries to inspire their team nevertheless considers the big picture. They continue to try to divide the larger challenge into smaller manageable chores. But, when they assign these jobs to employees, they do not just offer them orders that must be obeyed withoutinquiry. Instead, they describe their goals and show the public the big picture. They explain the key goal to the same teammates so that they know what they are working toward right away.

The empowerment leader will allow expressing themselves in a variety of ways while adhering to conventional procedures, removing the fear of failure inside the role as part of the repercussions of enforced jobs to foster creativity by building team morale. Empowerment leadership is a broad notion that deals with the process of working cooperatively with employees and improving the sense of independence and commitment to followers through such a specific subset of leadership behaviour that includes increasing the quality of work life.

2.3 Workplace Happiness

Gyekye and Haybotallahi (2015) think that workplace happiness can shape thesocial, operational, and psychological components of organizational processes. According to Fisher (2010), the direct employee's ability to deal with his or her employer is always the source of work engagement. As a result, this psychological construct influences employee behaviour and positive attitudes towards to workenvironment, co-workers, and employers Erdogan et al. (2012) confirm that employee contentment with their leadership, work environment, job requirements, job definition,and career advancement can bring to workplace happiness. The authors propose that workplace happiness and also its attitudinal characteristics (job involvement, career satisfaction, and emotional organizational commitment) may improve employee belonging to the institution via the moderating mechanism of properly managing variation within the organization.

2.4 Work Satisfaction

When you are doing your duties or being productive at work, you experience the pleasurable intense response known as "work satisfaction." Job satisfaction surveys are becoming a common practise in most workplaces as leading companies try to quantify this feeling. In the research on psychological work satisfaction, fulfilment has been noted as both an outcome of organisational circumstances and a propensity affected by individual characteristics (Podsakoff et al., 1996). (Judge et al.,2000). Psychologists have spent a lot of attention on this issue, while other sociologically oriented researchers have given it relatively little consideration.

The majority of job satisfaction research depends on organizational conditions. Personal sources have grown in popularity in recent years. According to study, age as well as individual characteristics like negative affectivity and locus of control, as wellas psychological traits, seem to influence job performance. According to surveys, elderpeople a higher level of work satisfaction than younger workers. When this relates to Human Resources Policies and procedures, the job happiness concept, in general, can aid in building a framework for agency work satisfaction.

2.5 Conceptual Research Framework

Theory of Planned Behaviour (TPB) is the most appropriate theory for predicting and explaining social actions (Xiao, 2008) and it can define a person's intention and direction and recognize what behaviours exist (Ajzen, 1991). It will be affected by attitude and subjective norms. These statements are supported by a lot of articles or research on consumer behaviour (Ryan, 1982; Sheppard et al., 1988). Thistheory is focused on empowering leadership, workplace happiness, and work satisfaction that use to identify the determinants of employee's innovative behaviour.

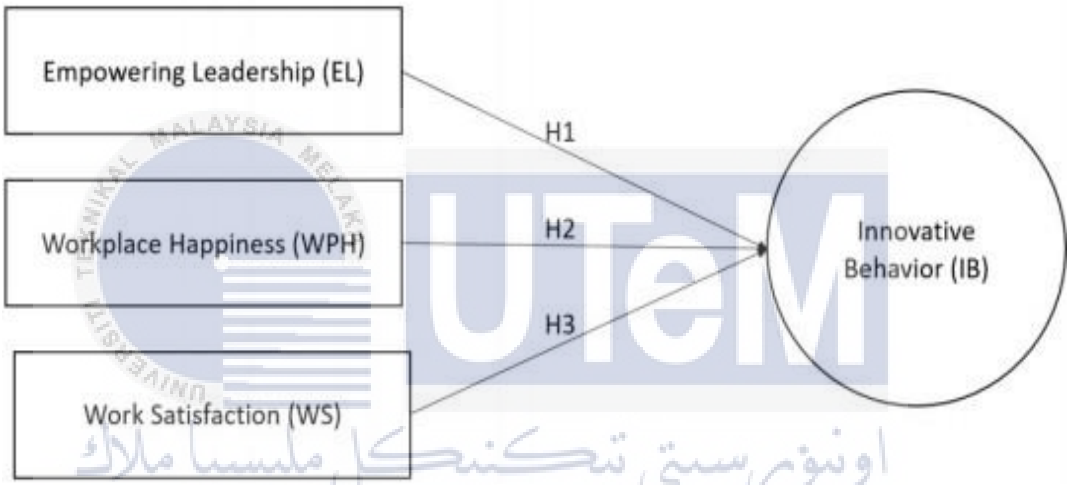

Figure 2.1: Theoretical Framework of Innovative Behavior Among Employees In A Manufacturing Company

2.6 Hypothesis Development

From conceptual framework, hypothesis can be constructed. Besides that, below arethe hypothesis for this research:

Ho: There is no significant relationship between empowering leadership and innovative behavior among employees in a manufacturing company.

H1: There is a significantly positive relationship between empowering leadership and innovative behavior among employees in a manufacturing company.

Ho: There is no significant relationship between workplace happiness and innovativebehavior among employees in a manufacturing company.

H1: There is a significantly positive relationship between workplace happiness and innovative behavior among employees in a manufacturing company.

Ho: There is no significant relationship between work satisfaction and innovativebehavior among employees in a manufacturing company.

H1: There is a significantly positive relationship between work satisfaction andinnovative behavior among employees in a manufacturing company.

2.7 Summary

The author of this chapter finds the related topics and explains briefly the meaning of innovative behavior, empowering leadership, workplace happiness, and follow by work satisfaction. Furthermore, all the studies used in this chapter have provided better insights and understanding of employee innovative behavior by givingthis study a clearer direction. The methods used in this study will be discussed in chapter 3.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This chapter looks at the many research methodologies and approaches that information systems specialists use. The study's research technique and methodologiesare acknowledged and explored. An overview of the research is given at the beginning of the chapter. The use of research methodologies and research procedures in information systems is next covered. There appears to be a lot of effort being made todistinguish between research technique and methodology. This analysis revealed that many researchers were indiscriminately using the phrases "research technique" and "research methods." Because of this, the sections on research methodology and research procedures have each been addressed separately.

In this chapter, Bowling (2002) states that methodology is the whole framework of the research project, including methodologies for sample size and composition, data collection procedures, and data analysis procedures. Methodology, according to Polit and Beck (2004), relates to techniques for gathering, organising, and evaluating data. According to Creswell (2003), methodology is a logical collectionof techniques that work well together and can be used to produce data and conclusionsthat support the research question and the goals of the researcher**.**

3.1 Research Design

A plan for performing a study with the greatest amount of control over variables that can undermine the validity of the results is known as a research design.The purpose of this research is to identify innovative behavior among employees in manufacturing companies. A quantitative explorative research design will be utilized to identify, analyze, and characterize elements connected to the overarching goal of this study. For the purpose of this research, a questionnaire survey will be used to gather data from respondents who can answer the question.

Explanatory study is a strategy that was developed to investigate a phenomenon that has not before been studied or properly explained. Explanatory research is responsible for discovering cause-and-effect linkages, the results of whichform the most in-depth level of knowledge (Fidias G. Arias). The researcher choose explanatory research is to deal with the determination of causes and effects through hypothesis testing. The purpose of this method used in this study is to investigate the innovative behavior among employees in a manufacturing company. Furthermore, anexplanatory research was also used in this study with a structured questionnaire form to collect the data. This approach of the explanatory research is to describe and validatethe attributes and data that can influence innovative behavior among employees in a manufacturing company.

This research is a study about the innovative behavior of staff at Iriichi (Malaysia) Sdn Bhd. Then, this research design is an objective, systematic process with numerical data findings. Thus, the researcher decided that explanatory design willbe used in this research to determine the innovative behavior among employees in a manufacturing company.

The researcher will select the target respondents for this research study who are working in Iriichi (Malaysia) Sdn Bhd. The respondents are chosen as they can provide a piece of accurate information for this research on customer satisfaction towards innovation behavior of employees in manufacturing companies.

This study will involve executive and non-executive employees to get their respondent of survey about the innovative behavior at Iriichi. The survey of this studyare given by random of employees in Iriichi (Malaysia) Sdn Bhd. The data will collectafter the respondent of employees in Iriichi company give feedback on this study survey.

3.2 Methodology Choice

There are two types of research methods that are often being used by researchers for their study which are qualitative and quantitative. Non-monotonic reasoning is directly related to qualitative possibility theory, whereas quantitative possibility is related to probability theory and can be considered as a specific instanceof belief function and other extended probability theories. According to Neuman (2003), asserts that the quantitative approach made use of numerical quantitative data.As opposed to quantitative data, qualitative data is gathered non-numerically via observation, interviews, or written materials.

In this research, the researcher has used a quantitative method where they collect the data using questionnaires that have been distributed to the largest respondents. The target respondents that have been chosen are participants who are working in Iriichi (Malaysia) Sdn Bhd.

There have many researchers using this quantitative method that provide a strong framework for their research (Connell, 2018). Quantitative approaches stress observational data and statistical, mathematical, or numerical analysis of data gathered using polls, questionnaires, and surveys, as well as through modifying pre-existing statistical data using computational tools. Quantitative research focuses on gathering numerical data, generalising it across groups of people, or understanding a particular event. According to Daniel (2016), by using statistical data, researchers can reduce thetime and effort in explain their results. This is because the data that the researcher gets from the respondents can be conducted through SPSS. To get accurate data and information in a short time, the researcher uses the quantitative method because it cansave time.

3.3 Primary Sources

Sources may be divided into two categories: primary sources and secondary sources. Along with first-hand knowledge, primary sources provide raw facts. Examples include things like written transcripts from interviews, statistics, and creative creations. Direct access to the subject of your study is made possible via a primary source. Many additional scholars' ideas and information may be found in secondary sources. Examples include academic books, journal papers, and book reviews. Secondary sources analyze, summarize, or characterise primary sources. In this chapter, the researcher will use primary sources as a method to collect the data. According to Hox & Boeiji (2005), to gather the data required by the researcher for the particular study utilising the particular methodology, primary data must be employed.

The researcher collects data through primary sources by providing a structuredquestionnaire directly to the staff to meet the research objective.

3.4 Research Instrument

In order to achieve the research purpose, the researcher employed a structuredquestionnaire to distribute to the employees, who served as the major data source, to gather data for the study. The questionnaire will design in English and Bahasa Melayuversions which can easily for the respondent to understand clearly and the respondent will not misunderstand the questions. The reason the researcher used both languages,was to make the questionnaire understood by the respondents who might not proficient in the English language. Hence, Bahasa Melayu is used to assist respondents who maynot be able to speak and read in English.

On the other hand, to meet the researcher's requirements and objective, the researcher has adapted some of the questionnaires to suit this research study context. The questionnaires will distribute through the web such as the post as online questionnaires and face-to-face distribution directly to the target respondent by hand.Participants in

online surveys just click a link to access the survey. The survey approach was chosen by the researcher because it would enable them to get precise data and information while also shortening the time required for data analysis.Researchers collected data from a sample survey where participants had to reply to specific questions in order to make some generalisations about the community (Kate, Belinda, Vivienne & John, 2013).

Questionnaire	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree

3.5 Pilot Test

A pilot test will be conducted among 30 respondents that consists of working people to complete this pilot test. The researcher carried out the pilot test to verify thereliability and validity of the questionnaire. The questionnaire is designed in English and Bahasa Melayu where the respondent able to understand clearly. Pilot test are important to the researcher for them to improve the quality and efficiency of major studies. According to Saunders et al. (2012), the pilot test used to the friend or familyis better. Furthermore, a pilot test might supply the researcher with a questionnaire suggestion or a tester's perspective. Moreover, pilot test also provide the researcher with all the information that they want to calculate the sample size as well as able to evaluate all the aspect of key studies (In, 2017).

3.6 Research Location

This research has been conducted in Penang because Penang is the one of developed states and has a high living standard. Additionally, the researcher may acquire a satisfactory response from personnel outside of these districts and the state of Penang, giving the researcher additional opportunities to gather and evaluate data from the targeted respondents in Melaka.

In order to conduct some research and study on employee innovation, the researcher has chosen the Iriichi (Malaysia) Sdn Bhd organization. The term "innovative behavior" refers to a broad notion that encompasses all of an organization's employees' actions as they go through the innovation process, with thegoal of achieving new products and services. This study will improve the innovativeness of employees in order to help company productivity and effectiveness.

3.7 Population and Sampling

Iriichi (Malaysia) Sdn Bhd, Penang which consists of 500 employees. The 217respondents are chosen for the research area to answer the survey. It states that 217 samples are enough to represent the data of this survey.

The research study focuses on innovative behavior among employees inmanufacturing companies employees that work in Iriichi (Malaysia) Sdn Bhd have been chosen as targeted respondents, consisting of working people. Hence the questionnaire will be designed for targeted respondents in Penang.

3.8 Sampling Technique

The researcher may employ probability sampling to ensure that every component of a population mean is included in the sample. It is possible to thoroughly examine probability samples to assess the likelihood and potential for bias and inaccuracy. During this research, a simple random sampling method was used as probability sampling. Tashakkori & Teddie (2003) stated probability sampling technique is selecting a huge number of samples from the population and sampling randomly. According to Taherdoost (2016), there are six steps in the sampling methodthat the researcher must go through to get all the answers to the questions. The first step in the sampling method is researcher need to clarify and define the target population where the researcher needs to know about the number of workers in the particular place. Next is researcher must select a sampling frame followed by choosinga sampling technique where the sampling technique is divided

by two which is probability and non-probability technique. Following that, the researcher must choose a suitable sample size, gather the necessary information, and then evaluate theresponse rate.

Probability sampling strategies were used in this study. The five main procedures or strategies used in probability sampling, often known as random sampling, are simple random sampling, systematic sampling, stratified random sampling, cluster sampling, and multi-stage sampling (Kothari, 2004). The researcher randomly distribute the questionnaires to the targeted respondents.

There were two screening questions before respondents answered the main questionnaire. Simple random sampling was selected as a sampling technique for thisresearch meaning that each individual had the opportunity to be chosen and random numbers can ensure without bias (Saunders et al., 2012). In this research, 200respondents were selected randomly to participate and answer the questionnaire survey.

3.8.1 Krejcie and Morgan Sampling Method

It is possible to estimate an appropriate sample size by utilizing the Krejcie andMorgan approach (Krejcie & Morgan, 1970). Moreover, to make choosing a sample size for a limited population simpler. Krejcie and Morgan-style sampling techniques may aid in removing bias from the selection process (Blogger, 2017). Samples can also be gathered more quickly and at a lower cost or effort. Hence, the sample researchis 217 which refer on the list of sample size in Krejcie and Morgan table.

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

It shows that this study has selected population is 217 which is the value is near N=500. It is estimated that if the population is 500, 217 responses must be collected in order to attain a 100% response rate, according to Krejcie and Morgan (1970). The study's flaws can only be solved with more precise and high-quality data.

3.9 Questionnaire Design

According to Bird (2009), questionnaires are popular tools that a researcher uses because they are easy to gain information about public knowledge and perceptionof certain issues. In this study, the researcher divided the questionnaires into three parts, A, B, and C, which describe the respondents' backgrounds in terms of demographics and are organised by the kind of closed-ended question often employed in questionnaires and survey research. 5 Point Likert Scale forms five points in ranking which one to five Strongly disagree (1), disagree (2), agree (3), neutral (4), agree (4), and strongly agree (5).

3.10 Data Collection

The researcher must build a Google Forms survey and distribute it to the participants in order to perform the study's survey. A respondent researcher is 217 people who give feedback and answer. The data will be collect in a few months which targeting respondent is 217. The questionnaire of survey must be easy to understand in order to give a good feedback from respondent. With this knowledge, the study areable to improve the survey's content validity by reallocating statements to different domains or modifying, rewording, or deleting statements.

3.11 Data Analysis Method

The variables of central tendency and dispersion were compared and described using descriptive analysis. According to Saunders et al., (2012), descriptive statistics may be used to determine the trend center, which includes the mode, median, and dispersion, which describes how data values are dispersed at the trend center. The demographic features of the target respondents are often described using frequency and percentage in descriptive analysis.

Information from the survey will be examined in this research using SPSS version 27. The advantages of utilizing SPSS include superior data management, a variety of options, and improved output organization. The data is being analyzed usinga few different methods, including descriptive, regression analysis, and Pearsoncorrelation.

3.11.1 Pearson Correlation Coefficient Analysis

There are several more types of correlation coefficients than the Pearson correlation coefficient that may be discovered in the statistical literature. An effectivestatistical formula for assessing the strength and link between several variables. To avoid confusion, the Pearson R test is commonly referred to as the formula in the statistical community. Two variables are being tested statistically (Jessica McCallister,2015).

The following hypothesis was put to the test using the Pearson correlation test:

H1: There is a significant relationship between empowering leadership and innovativebehavior among employees in a manufacturing company.

H2: There is a significant relationship between workplace happiness and innovativebehavior among employees in a manufacturing company.

H3: There is a significant relationship between work satisfaction and innovativebehavior among employees in a manufacturing company.

3.11.2 Multiple Regression Analysis

When two or more independent variables and one continuous dependentvariable are combined, multiple regression analysis is used to explain the connection. Discovering how much the independent variables effect a dependent variable can be done using this strategy (Statistics Solutions, 2018). Researchers can use it to find outhow many independent factors are linked to a single dependent variable. For example, after researchers have discovered how these independent and dependent factorsinteract, they may utilize this information to generate much more powerful and accurate forecasts about why things happen as they do (Higgins, 2005). The value of a dependent variable is predicted using a multiple linear regression analysis. Acollection of p explanatory variables, and Y (x1, x2, …., xn).

To analyse linear correlations between independent and dependent variables, T-tests are performed. An assumption can be tested for generalizability using a T-test, whichcan be used as a hypothesis testing technique (Kenton, T-Test Definition, 2019). To accept or reject the null hypothesis, there is an

accepted or rejected p-value or significance threshold (Bryman & Cramer, 2011). To ascertain how independent factors affect dependent variables in a regression analysis, an ANOVA test is frequently used (ANOVA, 2019).

Multiple Linear Regression: $Y = a + b1X1 + b3X3 + \ldots + bnXn + e$

Where Y = Dependent Variable (DV) X = Independent Variable (IV)

a = Intercept

b = Slope

c = Residual

3.12 Summary

The researcher outlines the approach utilized to conduct the research and the strategy used to acquire data information in this study. The quantitative questionnairewas chosen since it allows the researcher to save time when collecting data. Additionally, In order to get data, the researcher employed both primary and secondary sources. The main source consisted of questionnaires that were sent to the target respondents in order to elicit replies based on their viewpoints, and the results were then analysed using SPSS. The researcher examined published journals and books utilising secondary sources to understand more about the inventive behaviour of staffmembers in a manufacturing organisation. The research technique is essential for the researcher to obtain an overarching foundation for conducting this investigation.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.0 Introduction

The results of the questionnaire-based survey would be discussed in this chapter. The Statistical Package for Social Sciences (SPSS) programme was used to analyse the collected data. Using the reliability test, descriptive statistics, Pearson correlation, and multiple regression analysis, the data collection's findings weregenerated. The questionnaire was distributed to 217 respondents to learn more about the inventiveness shown by workers in a manufacturing business in Penang, Malaysia.The primary goal of data analysis is to test hypotheses to see if they are correct. The statistical package for social sciences (SPSS) programme was used to analyse the data that had been collected. The data collection results were obtained using a variety of methods, including reliability testing, multiple regression analysis, descriptive statistics, and Pearson correlation. The result of this study was analyzed presented and interpreted in this chapter. The pilot test is conducted initially prior to the researcher distributing the questionnaire, to guarantee its validity to the 384 respondents based on the sample size. This chapter contains data analysis such as descriptive statistics, Pearson correlation, reliability analysis, and multiple regression analysis. SPSS Statistics 27 was used by the researcher to analyze the data.

4.1 Pilot Test

Pilot testing is a sort of software testing that verifies a system component or the full system under real-time operating conditions. The Pilot Test is used to assess the feasibility, duration, cost, risk, and performance of a research project. A potential problem has also been identified during the pilot test. The questionnaire of this study consists of 16 questions that have been studied in the reliability test. The questionnaire was shared with 30 respondents at Iriichi Company, Penang for a reliability test. The average time taken for this questionnaire is about 5 minutes. The findings of the pilot test are displayed in the table below after being analyzed with SPSS.

Variables	Cronbach's Alpha	Number of Items
Independent Variables		
1. Empowering Leadership	0.835	4
2. Workplace Happiness	0.800	4
3. Workplace Satisfaction	0.867	4
Dependent Variables		
1. Innovative Behaviour	0.827	4
Overall	0.942	16

Table 4.1 Results of Pilot Test

The table above shows the reliability of the pilot test that have done through SPSS. All the variables got above 0.8. The variables with a value of 0.80 will be considered a very good level in Pilot Test. This variable shows that it can be acceptable questions that respondents understand and are clear when they answer the survey. Based on the result above, the Cronbach Alpha value for independent variables is Empowering Leadership (0.835), Workplace Happiness (0.800), and Workplace Satisfaction (0.867). Then, dependent variables got 0.827 for Innovative Behaviour. Overall the Reliability Test can be valid for

a value above 0.80. The results can be concluded that every independent variable and dependent variable's values are more than 0.80 and the total Cronbach's Alpha value with 16 items is 0.942 which describesall the questionnaire is related and valid.

4.2 Respondent Rate

The total number of the respondent that needed to collect is 217. The survey was distributed through Google Forms and all the questions have set up as 'required'to ensure that respondents did not leave any questions before submitting. The questionnaire was completely answered by respondents are 217 which reach a 100% respond rate. The table below will present and summarize the rate of response based on all of the data obtained via Google Forms.

	Number of Responses	Percentage (%)
Total Responses that Completed	217	100
Total	217	100

Table 4.2 Rate of Responses that Completed

4.3 Descriptive Statistic Analysis

The primary characteristics of the data in a research are described using descriptive analysis. It might be used to logically simplify a lot of data. Each descriptive statistic condenses a large amount of information into a brief description. The frequency of certain values or ranges of values for a variable is summed up in the distribution. Inferential statistics are also used in the descriptive analysis to assess thelikelihood that a difference between groups exists. This section will discuss the demographic data of the respondents and experience employees' behaviour in amanufacturing company.

4.3.1 Demographic Profile

Respondents' demographic profiles were gathered by requesting them to complete Section A of the questionnaire. Gender, age group, working experience, highest educational level, race and position were among the demographic variables gathered from respondents.

Variable	Description	Number	Percentage (%)
Gender	Male	106	48.8
	Female	111	51.2
Age	18-25	80	36.9
	26-30	53	24.4
	31-35	28	12.9
	36-40	46	21.2
	41>	10	4.6
Race	Malay	112	51.6
	Indian	34	15.7
	Chinese	66	30.4
	Afghanistan	1	0.5
	Iban	1	0.5
	Pakistani	1	0.5
	Belgian	1	0.5
	Thai	1	0.5
Educational Level	SPM	25	11.5
	Certificate	12	5.5
	STPM/Matriculation/Diploma/Asasi	39	18.0
	Degree	83	38.2
	MASTER	44	20.3
	PHD	14	6.5
Position	Executive	58	26.7
	Non-Executive	159	73.3

Year of Working Experience	1-5	104	47.9
	6-10	54	24.9
	11-15	45	20.7
	16-20	11	5.1
	21>	3	1.4
Are you an innovative worker	Yes	193	88.9
	No	24	11.1

4.3.2 Gender

Gender
Jantina

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	106	48.8	48.8	48.8
	2	111	51.2	51.2	100.0
	Total	217	100.0	100.0	

Table 4.4 has shown Descriptive Analysis (Gender)(Source: SPSS Output)

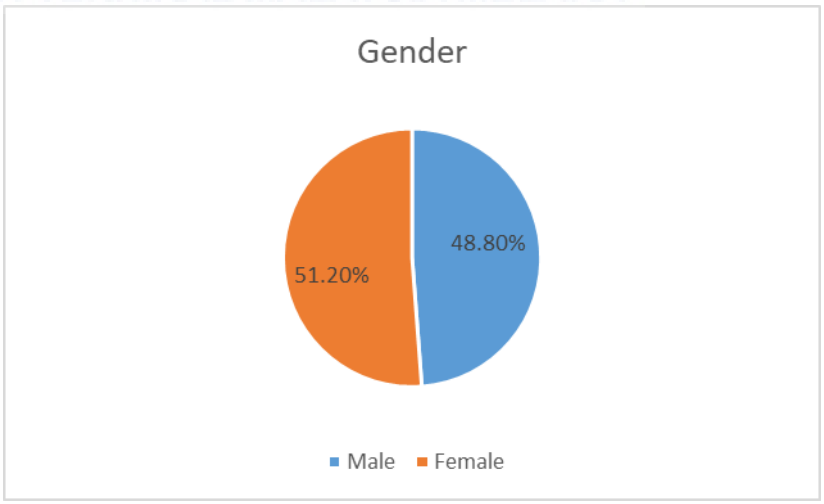

Figure 4.1 Gender of Respondents

Figure above shown the percentage of gender that answered through Google Form that has been distributed. Female has lead the pie chart with 51.20% for 111 respondents while male 48.80% for 106 respondents that answered the questionnaire.

4.3.3 Age Group

Age Umur					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	80	36.9	36.9	36.9
	2	53	24.4	24.4	61.3
	3	28	12.9	12.9	74.2
	4	46	21.2	21.2	95.4
	5	10	4.6	4.6	100.0
	Total	217	100.0	100.0	

Table 4.5: Descriptive Statistics (Ages) (SPSS Output)

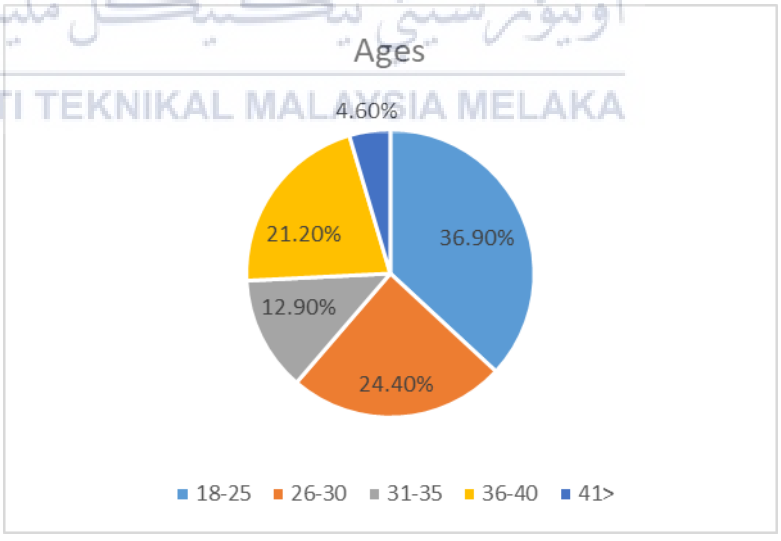

Figure 4.2 Ages of Respondents

The table above represents the percentage ages of 217 respondents. It showsthat nearly half of the age respondents are 18-25 years old which includes 80 respondents at 36.90%. Then, 26-30 years old which percentage of 24.4% includes 53 respondents. Next, 28 respondents at 31-35 years old (12.9%) answered this questionnaire. Another 21.20% of the respondents, which is 46 of them are 36-40 yearsold while 10 of the 217 respondents are in the age of 41 years old and above at 4.60%. Since the survey was conducted online and younger individuals use the internet moreoften than older people do, younger people made up the majority of the respondents. Since the survey was conducted online and younger individuals use the internet moreoften than older people do, younger people made up the majority of the respondents.

4.3.4 Race

Race
Bangsa

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	112	51.6	51.6	51.6
	2	34	15.7	15.7	67.3
	3	66	30.4	30.4	97.7
	4	1	.5	.5	98.2
	5	1	.5	.5	98.6
	6	1	.5	.5	99.1
	7	1	.5	.5	99.5
	8	1	.5	.5	100.0
	Total	217	100.0	100.0	

Table 4.6: Descriptive Statistics (Race) (SPSS Output)

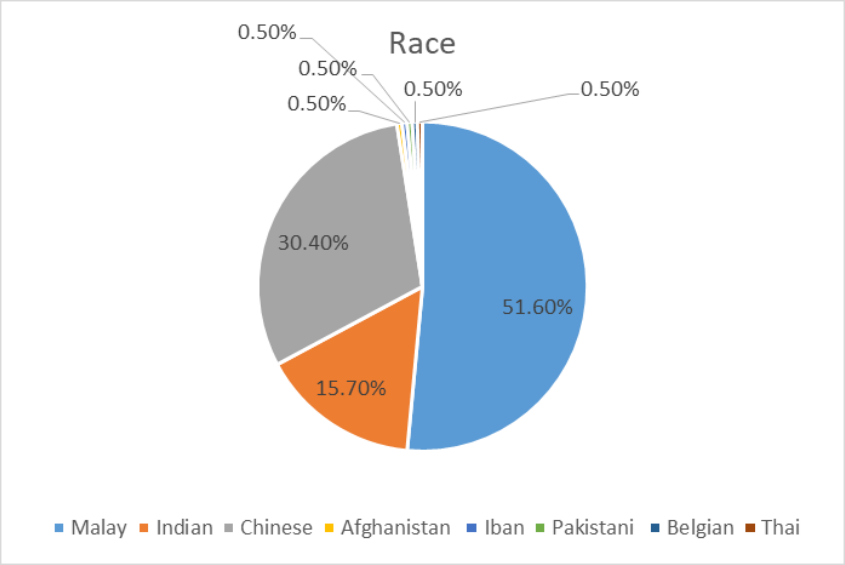

Figure 4.3 Race of Respondents

The percentage of Malay race is shown 51.6% which is 112 respondents has answered. Next, race for Indian about 15.7% which is 34 respondents while Chinese got 30.4% at 66 respondents also Iban with 1 respondent at 0.5%. There are several respondents from another countries that work at manufacturing company which is Afghanistan, Pakistani, Belgian, Thai that get 1 respondent with percentage 0.5%.

4.3.5 Educational Level

Educational Level Taraf Pendidikan					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	25	11.5	11.5	11.5
	2	12	5.5	5.5	17.1
	3	39	18.0	18.0	35.0
	4	83	38.2	38.2	73.3
	5	44	20.3	20.3	93.5
	6	14	6.5	6.5	100.0
	Total	217	100.0	100.0	

Table 4.7: Descriptive Statistics (Educational Level) (SPSS Output)

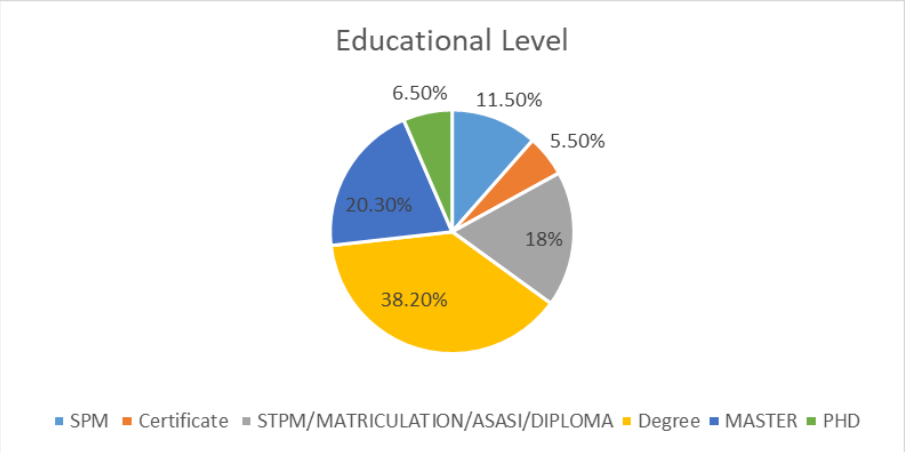

Figure 4.4 Educational Level of Respondents

The pie chart above shown the percentage of educational level of respondents. The highest percentages of educational level is Degree with 38.2% of 83 respondents while 44 respondents with 20.3% had marked their level at Master. Next, STPM/Matriculation/Diploma/Asasi has stated with 39 respondents at 18% percentages of educational level. 25 respondents with 11.5% has marked their level atSPM while PHD get 6.5% with 14 respondents. Lastly, 12 respondents with 5.5% for Certificate. This may due to the questionnaire is distributed at executive department and then non-executive.

4.3.6 Position

Position Jawatan					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	58	26.7	26.7	26.7
	2	159	73.3	73.3	100.0
	Total	217	100.0	100.0	

Figure 4.8: Descriptive Statistics (Position) (SPSS Output)

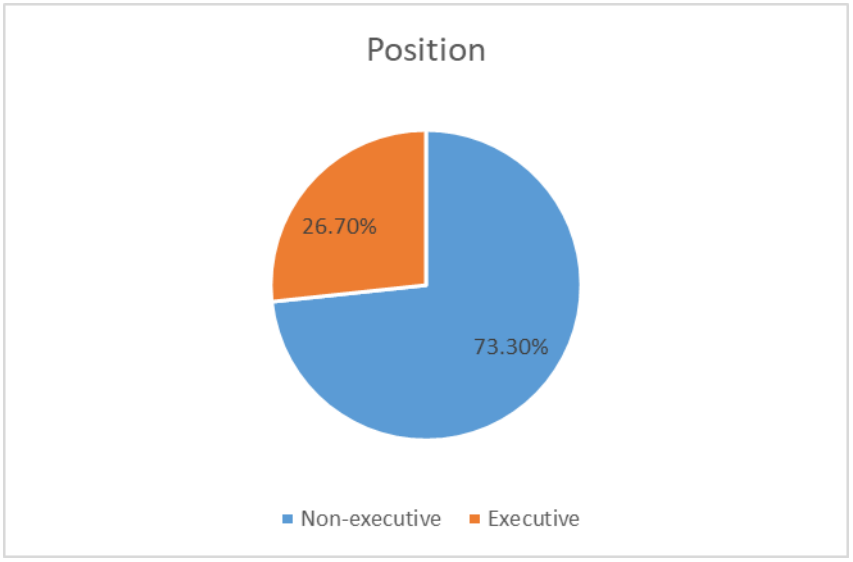

Figure 4.5 Position of Respondents

The percentage of position in a manufacturing company is shown at the table above. 159 respondents has answered the questionnaire with 73.3% which is thehighest percentage for non-executive data. Next, they choose for executive position at 26.7% with 58 respondents. As we can see that, non-executive employees of Iriichi Sdn. Bhd has got the majority of respondents to complete this survey.

4.3.7 Year of Working Experience

Year of working experience Tahun pengalaman bekerja					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	104	47.9	47.9	47.9
	2	54	24.9	24.9	72.8
	3	45	20.7	20.7	93.5
	4	11	5.1	5.1	98.6
	5	3	1.4	1.4	100.0
	Total	217	100.0	100.0	

Table 4.9: Descriptive Statistics (Year of Working Experience) (SPSS Output)

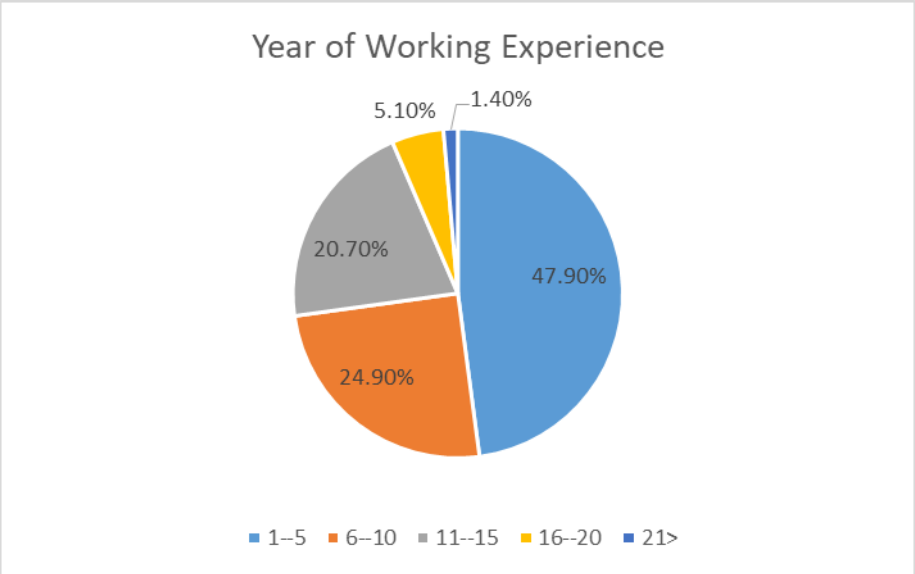

Figure 4.6 Year of Working Experience

The pie chart shown the result of how many years of their working experience.The highest percentage is 47.9% which has 104 respondents with 1-5 years of working in manufacturing company. Then, 24.9% that have 54 respondents with 6-10 years in this industry. After that, 11-15 years of working experience and this 45 respondent with 20.7% might be senior in Iriichi Company. For 16-20 years, has been slightly decline which is 5.1% with 11 respondents. Lastly, 21 and above years get only 3 respondents with 1.4%.

4.3.8 Are you an Innovative Worker?

Are you an innovative worker? Adakah anda seorang pekerja yang inovatif?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	193	88.9	88.9	88.9
	2	24	11.1	11.1	100.0
	Total	217	100.0	100.0	

Table 4.10: Descriptive Statistics (Are you an Innovative Worker?) (SPSS Output)

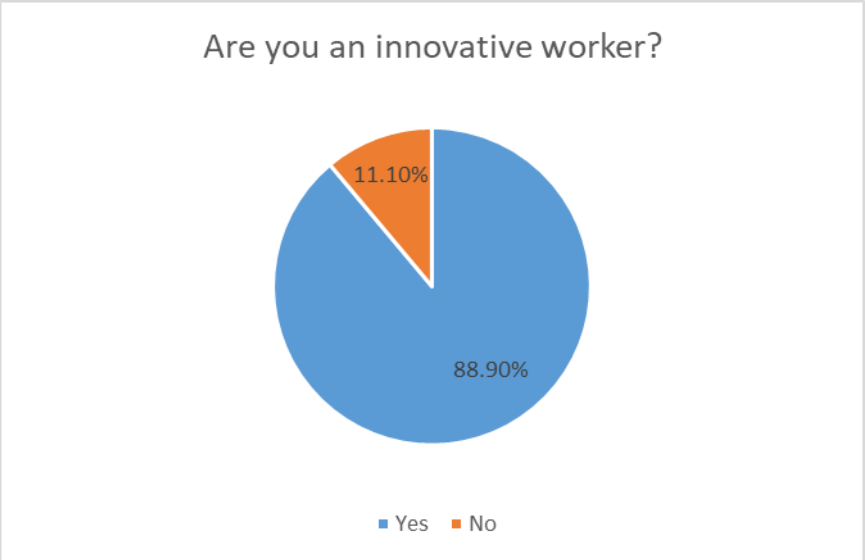

Figure 4.7 Are you an Innovative Behaviour

The pie chart above is divided into two parts to answer the questionnaire are you an innovative worker? Majority respondents choose yes as the answer with 193 respondents and percentages 88.9%. Next, 24 respondents is choosing no with percentages 11.1%. Overall the respondents think that they are an innovative worker to their company.

4.4 Descriptive Statistics for Variables

The variable descriptive statistic evaluates and evaluates respondents' perspectives on the variables in the conceptual framework. A 5-point Likert scale ranging from 1: Strongly disagree, 2: Disagree, 3: Neutral, 4: Agree, and 5: Strongly agree was used as an assessment in this study. The low mean score falls between the ranges of 1.0 and 2.33, 2.34 and 3.67, and 3.68 and 5.0, respectively, whereas the moderate and high mean scores fall within these ranges. The statistics for each variable, as well as the proportion of respondents who finished the results of the survey, which used a 5-point Likert scale, are shown in the following table.

4.4.1 Innovative Behaviour

	I look for opportunities to improve things.	I consider innovative behaviour is a opportunities.	I create newideas.	I put effort in the development of new things.
N valid	217	217	217	217
Missing	0	0	0	0
Mean	3.86	3.77	3.71	3.69
Std. Deviation	0.793	0.939	0.840	0.823

Table 4.11: Statistic of Dependent Variable

This table 4.11 shown that all the N valid data is 217 and no data has been missing. So according respondent perspective, all of the statements in this variable, which represents the sub-variable management attitude, had mean values ranging from 3.73 to 4.08.

As we can see the dependable variable consist 4 questions which encourage 217 respondents to give their feedback and opinion about the research topic.The percentage of respondents that responded to the survey using a 5-point Likert scale is shown below.

Statement	Scale (%)				
	1	2	3	4	5
I look for opportunities to improve things.	0.5	5.1	21.2	54.4	18.9
I consider innovative behaviour is a opportunities.	3.2	0.9	35.9	35.5	24.4
I create new ideas.	0.5	5.1	35.5	40.6	18.4
I put effort in the development of new things.	0.5	6.5	31.8	46.1	15.2

Table 4.12: Descriptive Statistic of Innovation Behaviour

There are the result percentages of Innovation Behaviour which is the dependent variable. 217 of the total respondents which got the highest percentages at 54.4% agree with the statement ‘I look for opportunities to improve things’. Then, respondents choose neutral answers with 21.2% and 18.9% strongly agreeing with this questionnaire. Next, for disagree, the scale gets 5.1% which consists of 11 respondents, and the scale of strongly disagree gets 0.5 which represents 1 respondent.

After that, ‘I consider innovative behavior is an opportunity’ gets the majorityneutral with 35.9% consisting of 78 respondents while agree get 35.5% 77 respondentschoose the scale. The third highest percentage strongly agrees with 24.4% having 53 respondents. As many as 7 respondents have chosen to strongly disagree 3.2% while disagree only get 0.9%.

Other than that, most of the respondents agree with the statement ‘I create newideas’ with a percentage of 40.6% which is 88 respondents. Then, the neutral scale get35.5% with 77 respondents answered. 18.4% strongly agree has stood with 40 respondents that support their opinion. The lowest percentage is 0.5% which is only 1respondent intends to choose strongly disagree while disagree gets 5.1% with 11 respondents.

Last but not least, the sub-variable that they conduct innovative behavior among manufacturing companies shows that 46.1% agree with this statement. Then, 31.8% of respondents choose neutral as their answer ‘I put the effort in the development of new things’. Next, strongly agree 15.2% consists of 33 respondents meanwhile 6.5% (14 respondents) disagree, and strongly disagree 0.5% (1 respondent).

4.4.2 Empowering Leadership

	My leader talks with me about his/her own and my goals.	My leaders planning of his/her work is visible to me.	My leader shows me how I can improve my way of working.	My leader guides me in how I can do my work in the best way.
N valid	217	217	217	217
Missing	0	0	0	0
Mean	3.87	3.73	3.95	4.08
Std. Deviation	0.888	0.858	0.815	0.939

Table 4.13: Statistic of Independent Variable 1

This table 4.13 shown that all the N valid data is 217 and no data has been missing. So according respondent perspective, all of the statements in this variable, which represents the sub-variable management attitude, had mean values ranging from 3.73 to 4.08.

As we can see the independent variable 1 consist 4 questions which encourage 217 respondents to give their feedback and opinion about the research topic.The percentage of respondents that responded to the survey using a 5-point Likert scale is shown below.

Statement	Scale (%)				
	1	2	3	4	5
My leader talks with me about his/her own and my goals.	3.7	3.7	13.4	60.4	18.9
My leaders planning of his/her work is visible to me.	0	4.1	41.5	31.8	22.6
My leader shows me how I can improve my way of working.	0.5	6	14.7	55.3	23.5
My leader guides me in how I can do my work in the best way.	0.9	4.6	20.7	32.7	41

Table 4.14: Statistic of Empowering Leadership

Based on table 4.14 above shown that 60.4% agree that their leader talks withthem about his/her own and employee goals which makes this became majority choice.Then, as many as 41 respondents with a percentage of 18.9% strongly agree with this statement. Next, for neutral scale got 13.4% with 29 respondents while disagreeing and strongly disagreeing both of them get 3.7%.

Secondly, ‘my leader planning of his/her is visible to me’ get the highest percentages at neutral which is 41.5% with 90 respondents while agree gets 31.8% with 69 respondents. Then, for strongly agree to get 22.6% which is 49 respondents that their leader is transparent with the workers. Next, 4.1% choose to disagree as theiranswer while strongly agree to get 0% which strongly disagree with this sub-variable.

Thirdly, the findings indicate that the majority of respondents choose to agree 55.3%, and 120 respondents strongly agree to get 23.5% with 51 respondents. But some of the respondents are neutral 14.7% with 32 respondents and disagree 6% that their leader did not give ways for them to improve. For, strongly disagree only get 0.5% with 1 respondent.

Lastly, respondents strongly agree that ‘my leader guides me in how I can do my work in the best way’ get 41% of 89 respondents while agree scale gets 32.7% 71respondents. Then, 20.7% are from the neutral scale which is 45 respondents choose it. Some of the respondents disagree which gets 4.6% with 10 respondents meanwhilestrongly disagree gets 0.9% 2 respondents.

4.4.3 Workplace Happiness

	I like the people I work with.	I like doing the things I do at work.	The people I work with cooperates as a team.	I have a safe workplace.
N valid	217	217	217	217
Missing	0	0	0	0
Mean	3.71	4.06	4.03	3.92
Std. Deviation	0.915	0.918	0.957	0.899

Table 4.15: Statistic of Independent Variable 2

This table 4.15 shown that all the N valid data is 217 and no data has been missing. So according respondent perspective, all of the statements in this variable, which represents the sub-variable management attitude, had mean values ranging from 3.71 to 4.06.

As we can see the independent variable 1 consist 4 questions which encourage 217 respondents to give their feedback and opinion about the research topic.The chart below displays the proportion of survey participants that used a 5-point Likert scale to reply.

Statement	Scale (%)				
	1	2	3	4	5
I like the people I work with.	2.3	8.3	21.7	51.6	16.1
I like doing the things I do at work.	1.8	4.6	14.3	44.2	35
The people I work with cooperates as a team.	3.2	5.1	9.7	49.8	32.3
I have a safe workplace.	1.8	2.8	25.3	41.9	28.1

Table 4.16: Statistic of Workplace Happiness

The results for ‘I like the people I work with, has shown in the table above. The highest scale of data is 51.6% with 112 respondents while strongly agree has slightly different which is 16.1% with 35 respondents. Next, on a neutral scale, the percentage of this sub-variable is 21.7% which is 47 respondents. Disagree get 8.3% with 18 respondents and strongly disagree gets 2.3% which is 5 respondents.

Other than that, the sub-variable ‘I like doing things I do at work’ get the highest percentage which is 44.2% of 96 respondents while 35% strongly agree reached 76 respondents. At the same time, the neutral scale gets 14.3% which is 31 respondents have answered the questionnaire. Then, some of the 217 respondents choose 4.6% to disagree which consists of 10 respondents while strongly disagree get 1.8% with 4 respondents.

Furthermore, the majority of the respondents ‘the people I work with cooperateas a team’ agree with the statement which is 49.8% with 108 respondents while strongly agree to get 32.3% with 70 respondents. Then, for the neutral scale get 9.7% with 21 respondents that choose to answer it. Next, 5.1% of 11 respondents strongly disagree get 3.2% which has 7 respondents.

Last but not least, the result shows that agree has got the highest percentage which is 41.9% with 91 respondents while strongly agree has slightly decreased to 28.1% with 61 respondents. Next, respondents who choose neutral has got 25.3% which is 55 respondents. For choosing to disagree that their workplace is safe got 2.8%consists 6 respondents follows by strongly disagree 1.8% equivalent to 4 respondents.

4.4.4 Work Satisfaction

	My supervisor treats me with dignity and respect.	I feel I am being paid a fair amount forthe work I do.	My performance evaluation provides me with meaningful information about my performance.	I know how my agency measures its success.
N valid	217	217	217	217
Missing	0	0	0	0
Mean	4.02	3.83	3.92	3.89
Std. Deviation	0.900	0.981	0.902	0.919

Table 4.17: Statistic of Independent Variable 3

This table 4.15 shown that all the N valid data is 217 and no data has been missing. So according respondent perspective, all of the statements in this variable, which represents the sub-variable management attitude, had mean values ranging from 3.71 to 4.06.

As we can see the independent variable 1 consist 4 questions which encourage 217 respondents to give their feedback and opinion about the research topic.The percentage of respondents that responded to the survey using a 5-point Likert scale is shown below.

Statement	Scale (%)				
	1	2	3	4	5
My supervisor treats me with dignity and respect.	3.2	2.3	17.1	49.3	28.1
I feel I am being paid a fair amount for the work I do.	1.8	10.6	29	34.1	24.4
My performance evaluation provides me with meaningful information about my performance.	2.8	5.1	15.7	56.2	20.3
I know how my agency measures its success.	0.9	6	34.1	30.9	28.1

Table 4.18: Statistic of Work Satisfaction

Based on the results above show that 'my supervisor treats me with dignity andrespect', got agree as respondents choice which is 49.3% of 107 respondents. Then, strongly agree got 28.1% with 61 respondents while neutral 17.1% with 37 respondents. Some of the respondents disagree that their supervisor did not treat themnicely with a percentage of 2.3% with 5 respondents meanwhile strongly disagree got3.2% which is 7 respondents.

Furthermore, the second sub-variable shows that agreement has the highest percentage with 34.1% at 74 respondents while strongly agree got 24.4% at 53 respondents. Then, the neutral scale got the second highest which is 29% with 63 respondents. Disagree, respondents choose 10.6% (23) meanwhile strongly disagree only get 1.8% with 4 respondents.

Other than that, the third sub-variable showed that agree got 56.2% as much as122 respondents, while strongly agree on percentages 20.3% with 44 respondents. Next, neutral has some respondents choose it as much as 15.7% with 34 respondents. Lastly, there have some of the respondents said that performance evaluation did not provide meaningful information with percentages 5.1% (11), and strongly disagree 2.8% (6).

Lastly, the majority of the respondents which are 34.1% (74 respondents) choose neutral while agree got slightly differently which is 30.9% (67 respondents) know their agency measures its success. Another 28.1% (61 respondents) are from strongly agree with this sub-variable. Then, it has some respondents disagree which is6% (13 respondents), and strongly disagree 0.9% (2 respondents).

4.5 Research Validity

To determine whether the research is measuring the things that it is supposed to, research validity must be examined (Phelan & Wren, 2005). The connection between the elements in this research is checked for validity using Pearson Correlation. It is also to study how well the results among the study participants represent true findings among similar individuals outside the study.

4.5.1 Pearson Correlation

The test statistic known as Pearson's Correlation coefficient is used to assess the statistical association or relationship between two continuous variables. Because it is based on the method of covariance, it is regarded as the greatest way to gauge therelationship between relevant variables. It provides details on the strength of the correlation or association as well as the direction of the link. Between -1 and 1, the Pearson correlation coefficient will range in value. The closer a R value is to 1, the stronger the correlation; similarity, a R number closer to -1 indicates a stronger correlation while a R value of 0 indicates no correlation.

R value	Relationship
0.70 or higher	Very Strong Positive Relationship
+0.40 to +0.69	Strong Positive Relationship
+0.30 to +0.39	Moderate Positive Relationship
+0.20 to +0.29	Weak Positive Relationship
+0.01 to +0.19	No or Negligible Relationship
0	No Relationship
-0.01 to -0.19	No or Negligible Relationship
-0.20 to -0.29	Weak Negative Relationship
-0.30 to -0.39	Moderate Negative Relationship
-0.40 to -0.69	Strong Negative Relationship
-0.70 or higher	Very Strong Negative Relationship

Table 4.19 Relationship interpreted through R value (Glen, 2020)

Correlations

		Empowering Leadership	Workplace Happiness	Work Satisfaction	Innovative Behaviour
Empowering Leadership	Pearson Correlation	1	.664**	.406**	.393**
	Sig. (2-tailed)		.000	.000	.000
	N	217	217	217	217
Workplace Happiness	Pearson Correlation	.664**	1	.317**	.428**
	Sig. (2-tailed)	.000		.000	.000
	N	217	217	217	217
Work Satisfaction	Pearson Correlation	.406**	.317**	1	.441**
	Sig. (2-tailed)	.000	.000		.000
	N	217	217	217	217
Innovative Behaviour	Pearson Correlation	.393**	.428**	.441**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	217	217	217	217

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.20Pearson Correlation Results between Variables

(Source: SPSS Output)

Table 4.20 shows the results of Pearson Correlation analysis using SPSS. Based on the table above, all of the variables, both dependent and independent, have a substantial link with one another as the significant output between the variables is 0.000.

This is because statistical significance might be considered when the p-value is 0.05 or lower (Jaadi, 2019). For independent variables included empowering leadership, workplace happiness, and work satisfaction with the dependent variable which is innovation behavior. Table 4.20 shows that a moderately favourable association exists relationship between the dependent and independent variables whenthe R-value is 0.3 or higher. The association between empowering leadership, workplace happiness, and job satisfaction and inventive behaviour may be inferred tobe fairly significant, with a range of 0.30 to 0.39 and 0.40 to 0.69 and a Sig. (2-tailed) of 0.000. Furthermore, the Pearson Correlation analysis had shown 0.428 for workplace happiness (independent variable) with innovative behavior (dependent variable). It moderates a positive significant relationship based on table 4.20 and it isSig. (2-tailed) between both variables are 0.000 as well.

4.6 Research Reliability Test

The survey has to be completed by 217 respondents in order to analyse the study's dependability. However, 217 people responded to the entire questionnaire, which was filled out. There are 4 questions about employee innovative behaviour in amanufacturing company, and there are 12 questions about the independent variables empowering leadership, workplace happiness and work satisfaction. The following chart illustrates how Cronbach's Alpha level of consistency is used to determine the degree of reliability of this study:

Cronbach ‘s Alpha	Internal Consistency
$0.5 > \alpha$	Unacceptable
$0.6 > \alpha \geq 0.5$	Poor
$0.7 > \alpha \geq 0.6$	Questionable
$0.8 > \alpha \geq 0.7$	Acceptable
$0.9 > \alpha \geq 0.8$	Good
$\alpha \geq 0.9$	Excellent

Table 4.21 Cronbach’s Alpha Level Consistency

The table below shows the results of Cronbach’s Alpha:

Variables	Cronbach’s Alpha	Number of Items
Independent Variables		
1. Empowering Leadership	0.604	4
2. Workplace Happiness	0.732	4
3. Work Satisfaction	0.655	4
Dependent Variables		
1. Innovative Behaviour	0.849	4
Overall	0.855	16

Table 4.22 Reliability Statistics
(Source: SPSS Output)

Reliability Statistics	
Cronbach's Alpha	N of Items
.855	16

Table 4.23 Reliability Statistic of Actual Survey

The reliability tests are displayed in Table 4.18 above after being analyzed withSPSS. When it surpasses 0.60, Cronbach's Alpha value is regarded as legitimate. Thereliability test for empowering leadership turns out to be Cronbach's Alpha value of 0.604 which is in the range of quite reliable to Cronbach's Alpha Level Consistency. Secondly, workplace happiness has got 0.732 of Cronbach's Alpha which is considered to be good. Then, Cronbach's Alpha values for work satisfaction are 0.655which is quite good to accept. For the dependent variable innovative behavior towards employees in a manufacturing company gain 0.855 Cronbach's Alpha value which isat the acceptable condition. To summarize, the reliability test for the 2 variables is good which is got 0.70 and above also others become quite good since Cronbach's Alpha is above 0.60.

For the overall Reliability test, this research obtained 0.855 which means its internal consistency is Good according to Cronbach's Alpha Level Consistency table as shown in Table 4.21. Hence, this research can be concluded as highly reliable basedon this reliability test.

4.7 Multiple Regression Analysis

In this research, multiple regression analysis is used in conjunction with multiple linear regression to find the linear connection between the dependent and independent variables (Kenton, 2020). It is employed when they wish forecasting a variable's value in light of the differences between two or more other values variables.The overall fit (variance explained) of the model and the relative contributions of each predictor to the overall variance explained can both be assessed using multiple regression.

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	.539[a]	.290	.280	.59875	.290	29.051	3	213	.000
a. Predictors: (Constant), Empowering Leadership, Workplace Happiness, Work Satisfaction									

Table 4.24 Multiple Linear Regression (Source: SPSS Output)

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.245	3	10.415	29.051	.000[b]
	Residual	76.361	213	.359		
	Total	107.607	216			
a. Dependent Variable: Innovative Behaviour						
b. Predictors: (Constant), Empowering Leadership, Work Happiness, Workplace Satisfaction						

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.911	.317		2.878	.004
	Empowering Leadership	.098	.096	.082	1.021	.308
	Workplace Happiness	.279	.080	.272	3.512	.001
	Work Satisfaction	.349	.069	.321	5.077	.001
a. Dependent Variable: Innovative Behaviour						

Table 4.24 Multiple Linear Regression (Source: SPSS Output)

Based on the model summary, the Coefficient for Multiple Determination R Square is 0.290. It explained that the dependent variable which is innovative behavior was 29% related to other independent variables including empowering leadership, workplace happiness, and work satisfaction. Another 71% (100% - 29%) of innovativebehavior among employees in a manufacturing company is going to be influenced byother factors.

The F value is 29.051 and the significance value according to the AnovaTable is 0.000. It can make the result significant when the F value is large, the significance value is small (Glen, 2020). It may be inferred that there is a statisticallysignificant association between the independent variables, empowering leadership, workplace happiness, and job satisfaction, and the dependent variable, creative conduct, because the significance value is smaller than the alpha threshold of 0.05.

The following shows the standard Multiple Linear Regression Equation:$\hat{y} = b0 + b1x1 + b2x2 + \ldots + bp\text{-}1xp\text{-}1 + bpxp$

By implementing the equation above, the linear equation below was developed basedon the Beta coefficients in Table 4.24:

Innovative Behaviour = 0.911+0.098EL+0.279WPH+0.349WS

The previous equation demonstrates the link between the independent variables of empowering leadership, workplace happiness, and job satisfaction and the dependent variable of creative conduct. According to the coefficient Beta, work satisfaction got the highest contribution towards innovative behavior in a manufacturing company than other independent variables. The reason for this is that when the value of the coefficient is higher, the independent variable's contribution will be greater.

4.8 Hypothesis Testing

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.911	.317		2.878	.004
	Empowering Leadership	.098	.096	.082	1.021	.308
	Workplace Happiness	.279	.080	.272	3.512	.001
	Work Satisfaction	.349	.069	.321	5.077	.001
a. Dependent Variable: Innovative Behaviour						

Table 4.25 Multiple Linear Regression (Source: SPSS Output)

This hypothesis part are done with referring the p-value (significance value) inthe table 4.25. When significant value is less than 0.05, the null hypothesis will be accepted. Meanwhile, if significant value is more than 0.05 the null hypothesis will berejected.

For example;

p < 0.05, accept alternative hypothesis p > 0.05, reject alternative hypothesis

Empowering Leadership: p-value = 0.308

H0: There is no significant relationship between empowering leadership and innovative behaviour.

H1: There is a significant relationship between empowering leadership and innovative behavior

The result has shown that Beta value is 0.082 and t-value is 1.021 at significance level of 0.308 which means larger than 0.05. This had proven shows empowered leadership and inventive behaviour are significantly correlated. Also,t-value is 1.021 which is smaller than others. Since the p-value is more than 0.05,the alternative hypothesis H1 is rejected while the null hypothesis H0 is accepted.

Workplace Happiness: p-value = 0.001

H0: There is no significant relationship between workplace happiness and innovative behaviour.

H2: There is a significant relationship between workplace happiness and innovative behaviour.

Based on the p-value of workplace happiness in the table 4.25 got 0.001 which is below 0.05. This shown that there is significant relationship between workplacehappiness and innovative behaviour. Therefore, the H2 is accepted while the null hypothesis H0 is rejected.

Work Satisfaction: p-value = 0.001

H0: There is no significant relationship between work satisfaction and innovative behaviour.

H3: There is a significant relationship between work satisfaction and innovative behaviour.

According to the p-value of work satisfaction in the table 4.25 show that 0.000value which is less than 0.05. Since the p-value is so little, it is clear that there is astrong, significant association between it and the dependent variable. Thus, hypothesis H3 is accepted while the null hypothesis H0 being rejected.

Hypothesis	Result
H1: There is no significant relationship between empowering leadership and innovative behaviour.	Rejected / Not Supported
H2: There is a significant relationship between workplace happiness and innovative behaviour.	Accepted / Supported
H3: There is a significant relationship between work satisfaction and innovative behaviour.	Accepted / Supported

4.9 Summary

This chapter shows the analysis result of the research which is included reliability analysis, descriptive analysis, Pearson's analysis, regression analysis and hypothesis testing. The data was collected from 217 respondents and analysed by using SPSS 27 version. The result consists of all hypothesis that required less than 0.05 significant value will be consider acceptable.

The next chapter 5 will summarizeabout the overall analysis that has been analyse which is discussion and limitation of this study.

CHAPTER 5

DISCUSSION, IMPLICATION AND CONCLUSION

5.0 Introduction

This chapter will go into more detail on the conclusions and results that were looked at in Chapter 4. The argument is introduced with a description of the data and conclusions from the descriptive statistical analysis. Scale measurement is the subject of the next part, which is then followed by a description of the goals and hypotheses. This chapter also highlights the implications of this findings and makes recommendations for additional research. The results of this investigation are presented in the final section of this chapter.

5.1 Descriptive Statistic Analysis Summary

The descriptive analysis has been done by analyzing the data collected from respondents in Section A and Section B. 386 respondents in Malaysia have completeda total of 386 replies. It shows that nearly half of the age respondents are 18-25 years old which includes 80 respondents at 36.90%. Then, 26-30 years old which percentage of 24.4% includes 53 respondents. Next, 28 respondents at 31-35 years old (12.9%) answered this questionnaire. Another 21.20% of the respondents, which is 46 of themare 36-40 years old while 10 of the 217 respondents are in the age of 41 years old andabove at 4.60%.

The percentage of Malay race is shown to 51.6% which is 112 respondents answered. Next, race for Indians is about 15.7% which is 34 respondents while Chinese got 30.4% 66 respondents also Iban with 1 respondent at 0.5%. There are several respondents from other countries that work at manufacturing company whichis Afghanistan, Pakistani, Belgian, and Thai get 1 respondent with a percentage of

0.5%. The highest percentage of educational level is Degree with 38.2% of 83respondents while 44 respondents with 20.3% had marked their level at Master. Furthermore, STPM/Matriculation/Diploma/Asasi has stated with 39 respondents at 18% percentages of educational level. 25 respondents with 11.5% have marked their level at SPM while PHD gets 6.5% with 14 respondents. Lastly, 12 respondents with5.5% for Certificate.

The percentage of positions in a manufacturing company is shown in the tableabove. 159 respondents answered the questionnaire with 73.3% which is the highestpercentage for non-executive data. Next, they choose the executive position at 26.7%with 58 respondents. Other than that, the highest percentage is 47.9% which has 104 respondents with 1-5 years of working in a manufacturing company. Then, 24.9% have54 respondents with 6-10 years in this industry. After that, 11-15 years of working experience and this 45 respondents with 20.7% might be seniors in Iriichi Company. For 16-20 years, has been a slight decline which is 5.1% with 11 respondents. Lastly,21 and above years get only 3 respondents with 1.4%. Besides that, the majority of respondents choose yes as the answer 193 respondents, and a percentage of 88.9%. Next, 24 respondents are choosing no with a percentage of 11.1%. Overall the respondents think that they are innovative workers in their company.

5.2 Scale of Measurement

5.2.1 Research Validity

Using Pearson Correlation, the research validity for this study is determined. The nextstep is to assess the validity of the relationship between the dependent variable, innovative behaviour, and the independent variables, empowering leadership, workplace happiness, and work satisfaction. Work satisfaction scored 0.441 which is the highest Pearson Correlation compared with other independent variables. Moreover, workplace happiness got 0.428 followed by

empowering leadership got 0.393 which is the lowest score of Pearson Correlation.

Other than that, empowered leadership showed a somewhat favourable association with the dependent variable whereas workplace happiness and job satisfaction had a strong positive link. The significant value of workplace happiness and work satisfaction is 0.001 which is less than 0.05 that can be a substantial association exists, it was determined rather than an independent variable, empowering leadership got 0.308 which is no significant relationship between the dependent variable.

5.2.2 Research Reliability

A reliability test was first carried out during a pilot test to ascertain the questionnaire's dependability. The data gathered from the 217 respondents was then subjected to a reliability test in order to determine the validity of this study. The Cronbach's Alpha Value for empowering leadership, workplace happiness and work satisfaction are 0.604, 0.732 and 0.655 respectively. For overall Cronbach's Alpha Value output is 0.855. The study may be deemed to be very dependable since the Cronbach's Alpha score is greater than 0.80.

5.3 Discussion

5.3.1 General Objective 1: To identify what are the factors impacting innovative behaviour among employees in a manufacturing.

The main objective of this research is to determine the factors that affect innovative behavior among employees in manufacturing. This research figured out a few factors impacting innovative behavior among employees in manufacturing after referring to the previous research by other researchers and the Theory of Planned Behaviour (TPB). The factors included empowering leadership, workplace happiness,

and work satisfaction. Multiple Regression Analysis was utilized to analyze the data, and the findings were used to support the hypothesis. Thus, the results shown that workplace happiness and work satisfaction have a significant relationship with innovation behavior as the p-value through Multiple Regression Analysis are 0.001 which is lower than 0.05. But, the outcome of Multiple Regression Analysis revealedthat the p-value for empowering leadership is more than 0.05 which is 0.308. It is proven that empowering leadership has no significant relationship with innovative behavior.

Last but not least, this study figured out that the factors that impact innovative behavior among employees in manufacturing are workplace happiness and work satisfaction. The factors of workplace happiness have been proved by (Sonam & Vivek, 2019) which is when workers are satisfied at work, they are more likely to havepositive outcomes will be the factor that impacts innovative behaviour among employees in a manufacturing company. The factor of work satisfaction has been proved by (Podsakoff et al., 1996). In the study on psychological job satisfaction, satisfaction has been identified as both a product of organizational conditions and a tendency influenced by individual factors (Judge et al., 2000).

5.3.2 General Objective 2: To study what is the most significant factors affecting innovative behavior among employees in a manufacturing.

The most important component among the three factors empowering leadership, workplace happiness, and work satisfaction is also determined once the impacting innovative behavior among employees in manufacturing is identified. According to the Pearson Correlation, empowering leadership, workplace happiness and work satisfaction are 0.393, 0.428 and 0.441 respectively. Work satisfaction are having a strong positive relationship with innovative behavior. The beta value of

worksatisfaction is 0.349 which is the highest among the factors. Also, the lowest beta valueof empowering leadership is 0.098 which is the lowest and prove that it has no significant between innovative behavior among employees.

Then, the p-value of work satisfaction and workplace happiness is the lowest also proved in Multiple Regression Analysis. The p-value is 0.001 which is less than 0.05 which proves it has a significant relationship with innovative behavior. While, the p-value of empowering leadership is 0.308 which is more than 0.05 and will be rejected. Then, both work satisfaction and workplace happiness have shown that theyhave the strongest relationship with innovative behavior among employees.

In a nutshell, workplace happiness and work satisfaction are the most significant factor that affects innovative behavior among employees in a manufacturing company. Workplace happiness and work satisfaction can be any reason that will influence innovative behavior among employees in a manufacturing company. Gyekye and Haybotallahi (2015) think that workplace happiness can shapethe social, operational, and psychological components of organizational processes. Also, Kahai et al. (2003), who found no direct relationship between employees' creativeness and their leadership, we did not find a direct relationship between transformational leadership and innovative work behaviour as observed by other researchers (Abbas et al., 2012; Reuvers et al., 2008).

5.3.3 Specific Objective 1: To find out the relationship between empowering leadership and innovative behaviour among employees in a manufacturing company.

This study established a link between these two factors by demonstrating how empowering leadership related to innovative behaviour. This has been figured out byreferring to Multiple Regression Analysis which is p-value of empowering

leadership 0.308 that more than 0.05 and explain that the researcher need to reject hypothesis. Itis important to note that while some leadership behaviours may be universallydesirable, the way they are promoted may be different in different cultures (Dickson et al., 2012).

5.3.4 Specific Objective 2: To find out the relationship between workplace happiness and innovative behaviour among employees in a manufacturing company.

Furthermore, workplace happiness is also another factors that said to beinfluence by innovative behaviour among employees in a manufacturing company. According to Multiple Regression Analysis the alternative hypothesis had been accepted as the p-value is 0.001 which is less than 0.05. It is clear that there is a positive association between workplace satisfaction and inventive behaviour among workers in a manufacturing setting since the alternative hypothesis may be accepted given the low p-value obtained. Employees tend to be more creative and innovative whenever they are in a state of peace or happiness, which leads to a positive organizational impact (Le Thi Thu, Phan Thi Ha, Dr. Nguyen Thi, 2021).

5.3.5 Specific Objective 3: To find out the relationship between work satisfaction and innovative behaviour among employees in a manufacturing company.

Other than that, work satisfaction is another thing this study suggests. However, it has been shown that there is positive correlation between work satisfactionand innovative behaviour among employees in a manufacturing company. The p-valueof work satisfaction is 0.001 according to the results gained in thorough Multiple Regression Analysis. The statement can be accept the null hypothesis since 0.001 is less than 0.05. In the study on psychological job satisfaction, satisfaction has been identified as both a product of organizational conditions

(Podsakoff et al., 1996) and a tendency influenced by individual factors (Judge et al., 2000).

5.4 Implication of Research

There are many potential applications for this research in terms of developing strategy plans. The innovative behaviour among employees in a manufacturing company are strongly encouraged to refer to the study's criteria in order to develop tactics that will help them draw in innovation and development of the employees behaviour. The findings in this research had suggested that the workplace happiness is going to impact the innovative behaviour among employees in a manufacturing company which is Iriichi Sdn. Bhd. It included all elements of work that foster positive, joyful, and contented feelings, which provide gratifying and delightful work.It has been discovered and strongly implied that contented workers are much more productive, generate creative ideas, save time, and increase efficacy by developing new working ways. Then, Employees are happier at work when they see their workingenvironment as pleasant and entertaining.

5.5 Limitation and Recommendation

It's critical to consider the study's limitations when evaluating our results. To cope with environmental unpredictability, workers reportedly need to go above and beyond their normal job practices. Employee innovation is described as "the development, promotion, and implementation of new ideas in goods and processes," as opposed to "creativity," which simply emphasizes the production of original, worthwhile ideas. The authors made the argument that creative activity in the workplace should be seen as complex Idea generation, idea promotion, and concept realisation are the three different behavioural activities that make up this activity. Idea generation, the creation of original and practical concepts across all disciplines, is where individual creativity starts.

The recommendation is Iriichi organizational policies that encourage, educate, and help workers and managers improve their

leadership. The training process should promote innovation, ideas for launching new goods, markets, management tools, and application methods; emphasize the development of open, harmonious relationship systems between superiors and subordinates, competency practice, and employee motivation. Only workers in common industries may be surveyed by the author; all possible vocations cannot be included. In addition, Iriichi Company, which is in Penang, receives the majority of the answers. Then, it is not enough to represent all workers across all sectors. Other than that, from an Iriichi employee's point of view, receiving praise in front of a large group of co-workers will make them feel at ease, content, and fulfilled, which will encourage them to provide more to the company. When a subordinate or employee receives praise for achieving a certain objective or meeting the standards established by a leader or superior, they become pleased with their work. Lastly, find out other variables from the past research which is psychological capital and work characteristics.

5.6 Conclusion

In conclusion, this research will provide evidence to be better understand the influence innovative behaviour among employees in a manufacturing company of Iriichi Sdn Bhd. This study was conducted using the TPB framework which is TheoryPlanned Behaviour. These findings imply that workplace happiness and work satisfaction simultaneously contribute towards the achievement of employees innovative behaviour. This is consistent with Carmeli and Spreitzer (2006) their claimthat creative workplace behaviour by workers has become the fundamental pillar for achieving peak performance in a company. These two elements also contributesignificantly to boosting organisational competitiveness, despite certain drawbacks ofeach.

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APPENDIX

APPENDIX 1: GANTT CHART FOR FINAL YEAR PROJECT 1

Activities	WEEK															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Search topic for FYP																
Modification and confirmation of research topic																
Identify research objectives and research questions																
Identify problem statement and background of study																
Find information for literature review																
Completed for chapter 1																
Completed for chapter 2																
Completed for chapter 3																
Revised report before presentation																
Viva Presentation for FYP 1																
Correction of FYP 1																
Submission of FYP 1																

APPENDIX 2: GANTT CHART FOR FINAL YEAR PROJECT 2

Activities	**WEEK**															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Questionnaire Development																
FYP Talk																
Collect Data																
Analyse Data																
Completed Chapter 4																
Completed Chapter 5																
Revised report before presentation																
Presentation FYP 2																
Correction of FYP 2																
Submission of FYP 2																

FACULTY OF TECHNOLOGY MANAGEMENT AND TECHNOPRENEURSHIP

Questionnaire: Innovative Behaviour among Employees in a Manufacturing Company

Dear valued respondents,

My name is Nuramirah Athirah Binti Asanudin, I am a final year undergraduate student from University Teknikal Malaysia Melaka (UTeM). As I mentioned before,I am currently conducting my final year project to "**Innovative Behaviour among Employees in a Manufacturing Company**".

There are TWO (3) section in this survey in this survey which is Section A, Section B, and Section C. Kindly answer ALL questions. Your response to each question in this questionnaire will only be analyzed in aggregate forms. All information will be treated with strict confidentiality and shall only be used for the purpose of this academic research. The survey will take approximately 5-10 minutes. Your participation is very much appreciated.

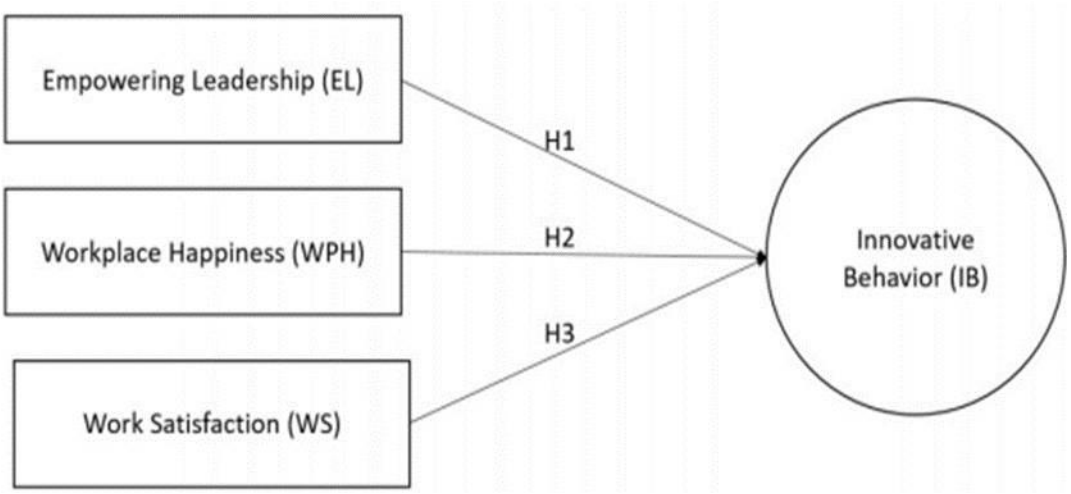
Thank you in advance for your kind assistance.

NURAMIRAH ATHIRAH BINTI ASANUDIN

Bachelor of Technology Management (Innovation Technology)

Email:

RESEARCH FRAMEWORK



QUESTIONNAIRE

SECTION A: DEMOGRAPHIC

1. GENDER / JANTINA

☐ Male/ lelaki ☐ Female/Perempuan

2. AGE / UMUR

☐ 18-25

☐ 26-30

☐ 31-35

☐ 36-40

☐ 41>

3. RACE / BANGSA

☐ Malay / Melayu

☐ Indian / India

☐ Chinese / Cina

☐ Others: _____

4. EDUCATIONAL LEVEL / TARAF PENDIDIKAN

SPM

☐ Certificate / Sijil

☐ STPM / MATRIKULASI / DIPLOMA / ASASI

☐ Degree / Ijazah

☐ MASTER

☐ PHD

☐ Others: _____

5. POSITION / JAWATAN

☐ Executive / Eksekutif

☐ Non-Executive / Bukan Eksekutif

6. YEAR OF WORKING EXPERIENCE / TAHUN PENGALAMAN BEKERJA

☐ 1-5
☐ 6-10
☐ 11-15
☐ 16-20
☐ 21>

7. ARE YOU AN INNOVATIVE WORKER?

☐ YES / YA
☐ NO / TIDAK

SECTION B: INNOVATIVE BEHAVIOUR

Instruction: Please specify your agreement or disagreement on the following statements by indicating your appropriate responses based on the following scale. Arahan: Sila nyatakan sama ada anda setuju atau tidak setuju dengan pernyataan di bawah dan menunjukkan tindak balas anda berdasarkan skala tersebut.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Sangat Tidak Bersetuju	Tidak Bersetuju	Neutral	Bersetuju	Sangat Berstuju

	1	2	3	4	5
I look for opportunities to improve things. *Saya mencari peluang untuk memperbaiki keadaan.*					
I consider innovative behaviour is a opportunities. *Saya menganggap tingkah laku inovatif adalah satu peluang.*					
I create new ideas. *Saya mencipta idea baru.*					
I put effort in the development of new things. *Saya berusaha dalam pembangunan perkara baru.*					

SECTION B: EMPOWERING LEADERSHIP

Instruction: Please specify your agreement or disagreement on the following statements by indicating your appropriate responses based on the following scale. Arahan: Sila nyatakan sama ada anda setuju atau tidak setuju dengan pernyataan di bawah dan menunjukkan tindak balas anda berdasarkan skala tersebut.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Sangat Tidak Bersetuju	Tidak Bersetuju	Neutral	Bersetuju	Sangat Berstuju

EMPOWERING LEADERSHIP	1	2	3	4	5
My leader talks with me about his/her own and my goals. *Pemimpin saya bercakap dengan saya tentang matlamatnya dan matlamat saya.*					
My leaders planning of his/her work is visible to me. *Pemimpin saya yang merancang kerjanya dapat dilihat oleh saya.*					
My leader shows me how I can improve my way of working. *Pemimpin saya menunjukkan kepada saya bagaimana saya boleh memperbaiki cara saya bekerja.*					
My leader guides me in how I can do my work in the best way. *Pemimpin saya membimbing saya bagaimana saya boleh melakukan kerja saya dengan cara yang terbaik.*					

WORKPLACE HAPPINESS	1	2	3	4	5
I like the people I work with. *Saya suka dengan orang yang saya bekerja.*					
I like doing the things I do at work. *Saya suka melakukan perkara yang saya lakukan di tempat kerja.* The people I work with cooperate as a team. *Orang yang bekerja dengan saya bekerjasama sebagai satu pasukan.*					
I have a safe workplace. *Saya mempunyai tempat kerja yang selamat.*					

SECTION C: WORK SATISFACTION

Instruction: Please specify your agreement or disagreement on the following statements by indicating your appropriate responses based on the following scale. Arahan: Sila nyatakan sama ada anda setuju atau tidak setuju dengan pernyataan di bawah dan menunjukkan tindak balas anda berdasarkan skala tersebut.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Sangat Tidak Bersetuju	Tidak Bersetuju	Neutral	Bersetuju	Sangat Berstuju

WORK SATISFACTION	1	2	3	4	5
My supervisor treats me with dignity and respect. *Penyelia saya melayan saya dengan bermaruah dan hormat.*					
I feel I am being paid a fair amount for the work I do.					

Saya rasa saya dibayar dengan jumlah yang berpatutan untuk kerja yang saya lakukan.					
My performance evaluation provides me with meaningful information about my performance. *Penilaian prestasi saya memberikan saya maklumat yang bermakna tentang prestasi saya.*					
I know how my agency measures its success. *Saya tahu bagaimana agensi saya mengukur kejayaannya.*					