MODELLING OF THE ANTECEDENTS OF STAFF SATISFACTION ON TURNOVER INTENTION IN A MALAYSIAN PUBLIC UNIVERSITY

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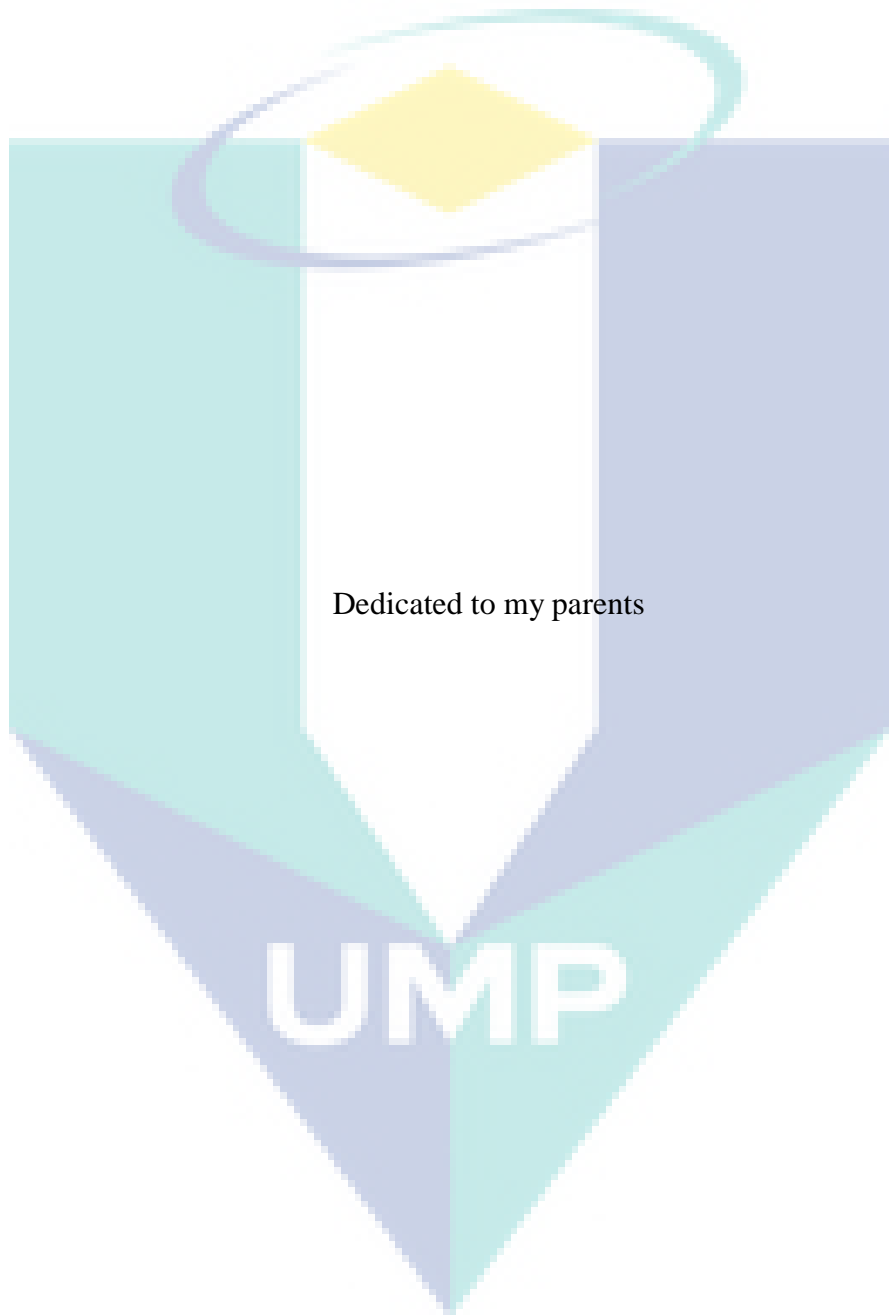# MODELLING OF THE ANTECEDENTS OF STAFF SATISFACTION ON TURNOVER INTENTION IN A MALAYSIAN PUBLIC UNIVERSITY

MOHAMAD HAZEEM BIN MOHMAD SIDIK

Thesis submitted in fulfillment of the requirements

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Dedicated to my parents

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ABSTRACT

Staff is regarded as asset that could take the organisation to greater productivity and performance. Studies on staff satisfaction are of great importance and should be taken seriously as issues of dissatisfaction would raise rippling effects at the workplace and cause turnover in any organisation including higher educational institutions (HEIs). Therefore, the main purpose of this study is to develop a hypothesised model on the impact of predictors for staff satisfaction on turnover intention and to empirically examine the relationships that are hypothesised in the research model that was developed based on literature reviews and related underpinning theories. The study employed a quantitative method using questionnaire that was adopted and adapted from previous study. Structural Equation Modelling (SEM) through Partial Least Squares (PLS) estimation are used for the analysis. A sample of 1042 secondary data from UMP staff was involved in the study that was clusterly sampled for 2015 from 4 consecutive years i.e. 2012, 2013, 2014 and 2015, conveniently. The results revealed that leadership, staff involvement, workload, self-development, working environment and communication are related to the overall satisfaction which has consequential impact on the turnover intention. In conclusion, the predictors under study could determine the staff satisfaction and this leads to their intention to stay or leave the organisation. The findings found a significant relationship between each of the linkages among variables studied on staff satisfaction and turnover intention at $p < 0.05$. This finding could be used for university management to look into possible rooms for improvement in ensuring that staff satisfaction within the university system as this would eventually ensure sustainability and survivality of university.

ABSTRAK

Staf merupakan aset yang boleh membawa organisasi ke tahap yang lebih tinggi dari segi produktiviti dan prestasi. Kajian-kajian kepuasan staf adalah amat penting dan perlu diambil serius kerana isu-isu ketidakpuasan staf akan memberi kesan buruk di tempat kerja dan mengakibatkan staf berhenti daripada kerja dalam mana-mana organisasi termasuklah di institusi pengajian tinggi (IPT). Oleh itu, tujuan utama kajian ini adalah untuk membangunkan model peramal kepuasan staf terhadap niat untuk berhenti kerja dan untuk mengkaji secara empirik hubungan di antara hipotesis-hipotesis di dalam model kajian yang telah dibangunkan berdasarkan ulasan kepustakaan dan teori berkaitan yang menjadi asas model. Kajian ini menggunakan kaedah kuantitatif dengan menggunakan soal selidik yang telah diterima pakai dan disesuaikan daripada kajian sebelumnya. Pemodelan persamaan struktur melalui kaedah kuasa dua terkecil separa digunakan untuk analisis. Sampel kajian terdiri daripada data sekunder yang melibatkan 1042 staf UMP terlibat dalam kajian ini yang dipilih secara kluster pada 2015 daripada data-data empat tahun berterusan iaitu 2012, 2013, 2014 dan 2015 yang dipilih secara persampelan mudah. Keputusan kajian mendedahkan kepimpinan, penglibatan staf, beban tugas, pembangunan diri, persekitaran kerja dan komunikasi berkait rapat dengan kepuasan keseluruhan yang mempunyai kesan berbangkit pada niat staf untuk berhenti daripada kerja. Hasil kajian mendapati terdapat hubungan yang signifikan antara setiap perkaitan antara pembolehubah-pembolehubah yang dikaji terhadap kepuasan staf dan niat untuk berhenti pada $p < 0.05$ masing-masing. Kesimpulannya, pembolehubah-pembolehubah dalam kajian dapat menentukan kepuasan staf dan ini membawa kepada niat mereka untuk terus bekerja atau meninggalkan organisasi. Penemuan ini boleh digunakan untuk pengurusan universiti untuk penambahbaikan dalam memastikan bahawa staf berpuas hati dengan sistem universiti kerana ini akhirnya akan menentukan kelestarian dan kelangsungan universiti.

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LIST OF SYMBOLS

β	Path Coefficient
α	Cronbach Alpha
D	Omission Distance
f^2	The effect size
k	Number of exogenous construct
i	Row element
j	Column element
N	Number of indicator
R^2	Coefficient of Determination
Q^2	Predictive Relevance
t	Statistic result of t-test
p	Significance level
n	Sample size
r	Correlation
<	Is less than
>	Is more than

LIST OF ABBREVIATIONS

AIU   Audit and Integrity Unit

BPA   Academic Management Office

CBSEM   Covariance Based Structural Equation Model

COMM   Communication

EAP   Employees Assistance Program

FKM   Faculty of Mechanical Engineering

FIM   Faculty of Industrial Management

FIST   Faculty of Industrial Sciences and Technology

FKASA   Faculty of Civil Engineering and Earth Resources

FSKKP   Faculty of Computer Systems and Software Engineering

FKKSA   Faculty of Chemical and Natural Resources Engineering

FTEK   Faculty of Engineering Technology

FKEE   Faculty of Electrical and Electronics Engineering

HEI   Higher Education Institute

HR   Human Resource

HRM   Human Resources Management

HTMT   Heterotrait-Monotrait Ratio

IPS   Institute of Postgraduate Studies

JP&I   Research and Innovation Department

JPPH   Properties Development and Management Department

JHKK   Corporate Affairs and Quality Department

JJIM   Department of Industry and Network

JHEAA   Department of Academic Affairs and International

JHEPA   Student Affairs and Alumni Department

KRA   Key Resources Area

LEAD	Leadership
PBMSK	Centre for Modern Languages and Human Sciences
PTMK	Centre for Informational Technology and Communication
PKP	Student Health Department
PLS	Partial Least Square
PIMPIN	Islamic Centre and Human Development
QOW	Quality of Work life
SEM	Structural Equation Model
SI	Staff Involvement
SD	Self-Development
SS	Staff Satisfaction
TI	Turnover Intention
US	United States
UAE	UMP Advanced Education
UMP	Universiti Malaysia Pahang
USIM	Universiti Sains Islam Malaysia
UCU	University and College Union
VCO	Vice Chancellor Office
W/L	Workload
WE	Working Environment

CHAPTER 1

INTRODUCTION

1.1   Background of the Study

With the rapid expansion of current global economy and the speedy evolution of technology and innovation, organisations are facing constant quest for output and profit increments to attain competitive advantage (Musa et al., 2012). There are various factors that affect the attainment of the organisational goals. For the past few years, substantial attention has been given to staff satisfaction as it has impacts on organisational effectiveness and performance (Musa et al., 2012). It has been reported that less than one-third of US population were engaged in their work for the past 15 years (McGregor, 2013). Shockingly, there were only 13 per cent of employees that were engaged throughout the world in 2016 (Mann and Harter, 2016; McGregor, 2013). The aforementioned statistics were raising concern as it were very low and the worst is that the values remained stagnant for the past three years since 2013 (Mann and Harter, 2016; McGregor, 2013). Mann and Harter (2016) pointed out that organisations did not take the employees satisfaction study as important for their improvement. They were in the comfort zone without realising that dissatisfaction issue can be a parasite in their organisation. As such, employees satisfaction is very vital in determining the success of any business (Gregory, 2014).

Job satisfaction can be assumed as one of the main factors in determining staff attitudes and it is also known as the basic inner feeling for them (Mehrad et al., 2015). The staff satisfaction level is also a concept that reflects to the degree of how one needs are fulfilled in the work place (Kusku, 2001). Job satisfaction among staff is vital to the

overall company or organisation in order to achieve company's goal, develop products, provide services and attain competitive advantage (Bellou, 2010). Thus, staff satisfaction has become a vitally essential topic in industries and organisations behaviours. In other words, human workforce itself is the component that becomes the benchmark for an organisation to succeed. In short, every single individual in organisations must experience satisfaction so that they will feel motivated and engaged. According to Oshagbemi (2000), organisations would require a satisfied and happy staff in the workforce to achieve goals. It is also a fact for any organisation in the world to achieve its strategic goals, it will have to depend on the organisation capacity to attract, retain and maintain the competency and satisfaction of its staff into its employment (Adeniji, 2011).

According to Idris (2012), 2.5 million people had committed suicide globally because of work and 60% of them are from Asia. In Japan only, it was reported that there were 10000 cases of death because of work every year. The trend is spreading to other Asian countries and many of them could not think rationally and took suicide as the last resort. Malaysia is also having the same problem as a report from the health ministry shows prevalence cases of depression among adult is 1.8% and one of the contributors is work. Woefully, in Malaysia, this psychological aspect is not taken care seriously. It is concerned that, the depression value would increase if no proper action is taken to tackle this issue.

In addition, extreme work stress would affect employees' health in the form of insomnia, heart attack and high blood pressure (Idris, 2012). The worst case and scenario is death because of work. This happens as the result of work given is too much and becomes a burden to employees. Various studies found that job stress affects staff satisfaction and their overall performance at work (Rehman et al., 2012). When the work is too much to handle, staff have to work overtime to finish the work. Sometimes, they even have to sacrifice their holidays because of unfinished workload. Even though the ideal working hour that is suggested by World Health Organisation (WHO) is 40 hours per week but in Asia, employees work 60 hours per week and there are even people that work 90 hours per week. Blanchflower and Oswald (1999) stated that increase in workload would exert stress on employees that would decrease their

motivation and satisfaction. Figure 1.1 shows an info graphic statistics to depict the seriousness of this matter in three Asian countries.
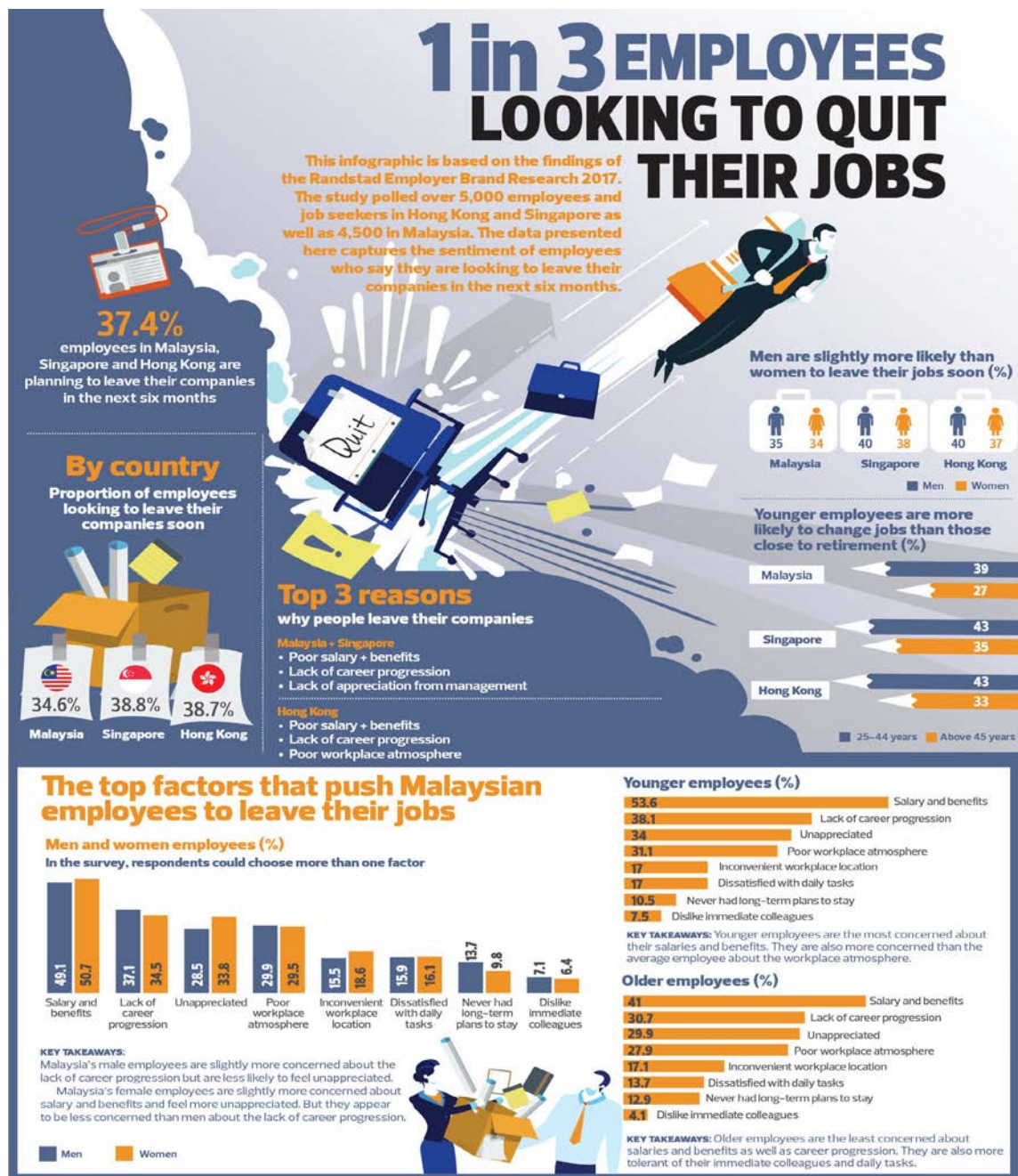
Figure 1.1. Staff Dissatisfaction and Turnover Intention in Asia

Sources: Sue-Ann and Mohd Noor (2017)

The staff satisfaction problems appear to be spreading into our higher education institution context, university staff and workplace health experts saw a steady increase in numbers of staff that are seeking for help caused by mental illness in the past decade and counting with almost half of them show the symptoms of psychological distress because of work (Shaw and Ward, 2014). In another study in 2013 by the University and College Union (UCU) on 14000 university staff; it was found that the level of stress among staff is growing due to variety of factors such as heavy workload, long hour culture and also conflict with management demands (Shaw and Ward, 2014). Therefore, this issue needs to be handled by organisations in order to preserve the organisational well-being.

1.2   Problem Statements

University is one of the entities of higher education institution that encapsulates academic and non-academic staff. All staff plays their roles for the sake of achieving university goals and target. The contribution and responsibility of staff are important as they do the task that is diverse and different. University goal would be obtained if all of the staff successfully plays their roles professionally and with integrity (Mustapha, 2013). For the past few decades, the number of university in Malaysia has increased tremendously since the establishment of University Malaya in October, 1949 (Ahsan and Alam, 2009; Noor, 2011).

In 2013, there were 20 public universities, 25 privates universities and innumerable private institutions of higher education (Mustapha, 2013; Mustapha and Yu Ghee, 2013). Due to the big number of higher education institutions, staff face a lot of problems in their job as the top managements are facing competitive pressure to stand neck to neck with other varsities (Ahsan and Alam, 2009; Kusku, 2001; Marsuki and Kembaren, 2015; Musa et al., 2012). Thus, universities are setting a higher standard, demand, changing in their mission and goal setting to outperform others (Ahsan and Alam, 2009; Houston et al., 2006; Narimawati, 2007; Oshagbemi, 1997).

Inevitably, staff are dragged to involve in this university performance race and therefore staff satisfaction is important and vital in order to achieve university's goal, provide services and attain competitive advantage. This was proven Mafini and Pooe (2013) that concluded staff satisfaction, behaviour and turnover predict the following year's profitability. Staff satisfaction in organisation is important as it would decrease the tendency and probability of turnover and culminate in increasing productivity and profit (Lambert et al., 2001; Medina, 2012). University as a higher education institution (HEI), whether public or private university in their plan for development should not neglect the needs of their staff satisfaction (Adeniji, 2011). Lack of consideration towards the presence of job satisfaction would lead to problems in university and also lead to bad attitudes among staff to express their discontentment. Thus, the awareness and consciousness of university is needed to provide better satisfaction to the staff (Mehrad et al., 2015). This study is conducted in Universiti Malaysia Pahang (UMP) by using a secondary data that focussed on six dimensions i.e. leadership, staff involvement, workload, self-development, working environment and communication. Figure 1.2 shows the percentages analysis of the overall staff satisfaction for three consecutive years in UMP based on the staff perception.
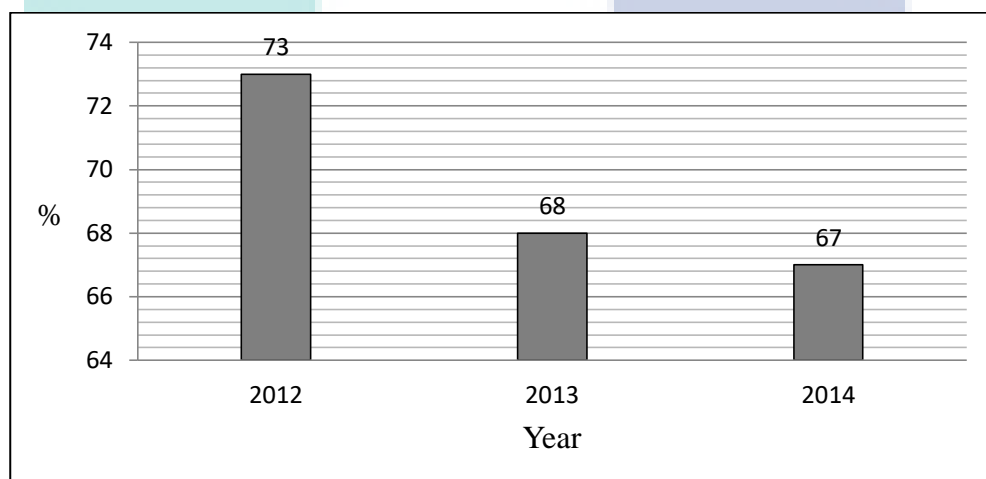
Figure 1.2. UMP Staff Satisfaction Index by Year

Sources: Ibrahim and Burhanuddin (2015)

Figure 1.2 shows that from 2012 to 2014 the satisfaction level of UMP staff decreased based on the six dimensions studied. The percentages decreased significantly from 2012 to 2013. Although the level of staff satisfaction in 2012 did not achieve a satisfactory value, but the level of staff satisfaction was the highest compared to the years after. Thus, this issue should be taken seriously and it is a need for university management to take immediate action to find out what is the cause of staff dissatisfaction and also to improve staff satisfaction especially towards the dimensions and variables that are studied.

In addition, there are various methods that can be used in measuring staff satisfaction. Hence, Table 1.1 shows the summary of the interviews with UMP staff regarding their satisfaction working in UMP. From the staff involvement variable, it can be concluded that staff are in unanimous that they are not satisfied with their involvement in the university where they felt that their involvement were very low. Moreover, it can also be seen that staff are dissatisfied with the heavy workload given to them in the university and university also did not even consider hiring new staff and forcing staff to optimise the heavy workload with the existing understaff. The worse is that supporting staff felt that there is unfair treatment with the workload that is given to them. On a bright side, staff unanimously agreed that overall working environment is good but it cannot be ignored that other variables such as leadership, self-development and communication in the university are affecting the staff satisfaction.

Table 1.1. **Interviews with UMP staff**

	Leadership	Staff involvement	Workload	Self-development	Working environment	Communication	Staff satisfaction
Staff A (Academic staff)	-Lack of leadership in organisation	-Low involvement - Staff involvement do not change anything	- Heavy and keep on increasing - Lack of staff	-Criteria in UMP to getting raise is too high - Unsuitable training program	-Good	-There is gap between top management n staff - No interaction between staff -There should be two-way communication	-Moderate - A lot of academics staff want to search for another job
Staff B (Administrative officer)	- Lack of empathy from leader towards staff	-Managers have high involvement -Lower staff level has low involvement.	- Lack of staff - Heavy workload	-There is a platform for staff to self-develop -No allowance	-Flexible	- Information do not reach to staff - UMP strategic plan did not reach staff	-Moderate
Staff C (Supporting staff)	- Lack of empathy from leader towards staff	-Low involvement as staff didn't join the activities. - Leaders also do not give the chance to staff to involve.	- Unbalance workload between staff - Unfair workload given to the staff (a lot of complaints) - Lack of staff to do a lot of work	-Cannot develop although staff have the qualification -Unfair treatment in getting to a higher position -Training provided is unsuitable - Low budget for outside training. - No platform to develop	- Overall is good - Still need to improve - Staff placement should be revised.	-Low interaction between staff - Info cannot reach lower level staff (only a big event reached the staff) - Leaders rude to staff.	-Very low

Thus, there is a need for this study as it would find out what is the actual issue that leads to low and plummeted staff satisfaction in UMP and suggestions are needed for future improvement. Although staff satisfaction is an area that is studied extensively, but research regarding staff satisfaction in higher education is somewhat limited (Mustapha and Yu Ghee 2013; Khin Wong and Ngee Heng 2009; Machado-Taylor et al. 2011; Santhapparaj et al. 2005; Kusku, 2003). A lot of researches done are focusing in profit-making industry and service organisation (Kusku, 2003).

These are the gaps that were found in this study and there is a need for this research to be executed, to find out what are the factors that lead to staff satisfaction and what is the impact of the staff satisfaction on their turnover intention.

1.3   Research Objectives

The main objective of this study is to determine the salient factors that would result in staff satisfaction in UMP and its impact on staff turnover intention. The specific objectives are therefore listed below:

1. To develop a hypothesised model on the impact of predictors for staff satisfaction on turnover intention based on literature review.
2. To empirically investigate the structural effect of predictors onto staff satisfaction in Universiti Malaysia Pahang.
3. To empirically investigate staff satisfaction effect on turnover intention in Universiti Malaysia Pahang.

1.4   Research Questions

This study attempts to evaluate the factor of staff satisfaction and its impact on their intention to leave. That is staff personal perception on their satisfaction regarding their experience in the workplace and this reflects their overall satisfaction and also their intention to leave. In an effort to understand the dimensions of staff satisfaction constructs (i.e., staff involvement, workload, self-development opportunities, work

environment, perception on leadership, communication) that need to be answered, thus this study would address the following questions:

1. How are the variables related to each other?
2. What are the contributing factors that determine staff satisfaction?
3. Does leadership give a significant impact on staff involvement, workload, self-development, working environment and communication?
4. Does staff involvement, workload, self-development, working environment and communication affect staff satisfaction?
5. Does staff satisfaction affect turnover intention?

1.5   Significance of the Study

The focus of this study is centred on staff in Universiti Malaysia Pahang (UMP). The main objective is to determine the impact of staff satisfaction on turnover intention. The study is vital as it would highlight and focus on the factors that the university staff views for enhancing their satisfaction and their intention to stay. The top management would find the research helpful in improving staff morale and bringing satisfaction to their staff. A staff who attain success in his or her job and whose needs are met in the workplace would be a happy staff that would strive every endeavour to maintain excellence in the university. In addition, the study would recommend adoptable policies and strategies to increase staff satisfaction. This is due to staff satisfaction is one of the main element that falls under UMP Key Resources Area (KRA 4) for branding and positioning. This has become top priority for university management of UMP to look into this matter.

Key Resources Area (KRA): UMP strategic planning was drafted based on four pillars which are academic quality, financial sustainability, socio-economic development and branding and positioning.

1.6 Operational Definitions

This study involves a few key terms that should be understood clearly with specific reference to this study.

Leadership: Refers to how university leaders or management that includes vice chancellor, deputy vice chancellor, assistant vice chancellor, dean, deputy dean and head of department treat their staff at faculty/centre/department level (Khuong and Nguyen, 2015; Yuliarini et al., 2012).

Staff involvement: Refers to staff engagement, commitment, motivation and empowerment in the university program or endeavour (Noordin and Jusoff, 2009).

Workload: Refers to overtime work, task that possibly leads to stress, burnout and staff perception on how their work is distributed at the faculties/centres/departments (Mustapha, 2013; Mustapha and Yu Ghee, 2013).

Self-development: Staff continuous improvement in terms of internal and external training, allocation of funds and extra training (Kulkarni, 2013).

Working environment: Refers to physical working environment that includes physical space of the workstation, comfort in workspace, infrastructure, facilities, security and well-being (Jain and Kaur, 2014).

Communication: Communication refers to staff perception on the overall effectiveness of communication at higher level, subordinates and co-workers across various departments/faculties/centres throughout the university (Winska, 2000).

Staff satisfaction: Refers to staff overall perception on their job satisfaction and the respective constructs under study i.e. leadership, staff involvement, workload, self-development, working environment and communication (Raziq and Maulabakhsh, 2015; Mullins, 2007; Adeniji, 2011; Kusku, 2001; Oshagbemi, 2000).

Turnover intention: Staff intention to quit and find a new job with another organisation (Medina, 2012).

1.7   Summary of Chapter

Specifically, this study intends to find out whether staff satisfaction can lead to turnover intention or contrary and shows how top level management can create an environment that could promote job satisfaction and motivation as well as achievement of organisational goals and objectives.

In a nutshell, the main focus of this study is to propose a structural model which is developed based on literature support constructs to study the impact of staff satisfaction on turnover intention. The relationships between factors that contribute to staff satisfaction are the constructs of interest that put forward the view of staff with their workplace experience. In summary, this chapter provides an overview of the study that includes introduction, the background of the study, research objectives, research questions and significance of the study.

This thesis consists of five chapters. The first chapter is an introduction to the study. The second chapter represents the literature review, which would discuss on the constructs that contribute to staff satisfaction and conceptual model that is developed. Chapter three explains the research methodology on what and how are the research design, sampling, instrument, data collection, and statistical technique used for analysis. Chapter four provides full presentation of the data analysis and the modelling. Chapter five covers the summary of the study, discussions of the study, conclusions and suggestions for future research.

CHAPTER 2

LITERATURE REVIEWS

2.1   Introduction

This chapter discusses the predictors of job satisfaction from previous studies and describe how these factors affect the staff satisfaction and its impact on turnover intention at the workplace. In another words, literatures on the relationships among the variables of staff satisfaction such as leadership, staff involvement, workload, self-development, working environment, job satisfaction and turnover intention are discussed thoroughly. A short summary concludes this chapter.

2.2   Human Resource Study

The topic of human resource practices and job satisfaction are no longer new in social science study and both of them are studied extensively (Absar et al., 2010). Human resource (HR) can be classified as the most important asset for any organisations especially for educational institution because they are operating on human intellectual capital (Jain, 2013; Salunke, 2015). The element of human is playing a crucial roles in the successfulness of organisations and it is also realised that the investment in their human resources would release the true value of their organisation (Mullins, 2007). Furthermore, it is also well known that HR practices are closely related to job satisfaction (Ting, 1997). This is supported by a lot of scholars that stated good HR practices would result in high level of job satisfaction which would also increase and improve job (Absar et al., 2010; Steijn, 2005).

It has to be efficient in retaining the employees in the organisation by fostering their loyalty towards the organisation. Therefore, it is the responsibility of HR to help leaders in enhancing staff satisfaction and retention. On a regular basis, HR should create a plan or strategy in providing a set of procedures that would be set up to lessen staff job dissatisfaction (Mallikarjuna, 2012).

Sageer et al. (2012) suggested that Human Resource Management (HRM) should measure the satisfaction of employees in the organisation. There are a lot of ways it can be done such as interview or by developing survey (Rizwan and Mukhtar, 2014). HRM also should guarantee staff anonymity and confidentiality in order to get a very honest answer from them (Michaelson and Stacks, 2014). Thereby, the data can be analysed to check whether the employees satisfaction in the organisation is in a healthy level. The result can also be used by HRM and leaders to detect what is at fault in the organisation and used it for improvement in the near future (Sageer et al., 2012). Secondly, it is also suggested organisation should compare themselves with the other industries which are at average level (Sageer et al., 2012). By doing this method, HRM can improve the satisfaction in the organisation by making the average industries as a benchmark. HRM can learn on what to do in order to increase staff satisfaction in the organisation. Therefore, the level of satisfaction in the organisation has to be higher or at par with the average industries' satisfaction level.

2.3   Staff Satisfaction

Staff satisfaction plays an important role in determining the success of organisations (Rizwan and Mukhtar, 2014). It depicts how satisfied a person is with his or her job (Mallikarjuna, 2012). A lot of studies also found that when staff are satisfied, it would have a positive impact on their morale and motivation (Sageer et al., 2012). Thus, it is crucial to study on staff satisfaction in enhancing organisational performance and competitiveness as staff satisfaction is an important indicator to depict the feeling of staff about their job and it is also as a predictor of behaviour, absenteeism and turnover in organisation (Mustapha, 2013). In contrary, if the staff satisfaction is low, a lot of possibilities may happen such as staff feel ignored and they would feel

demotivated to work (Mustapha, 2013). Thus, this would negatively affect the development and progression of organisation to achieve its goal and objectives. Therefore, it is compulsory to study staff dissatisfaction in organisations so that it can be learned on how to counter staff dissatisfaction or avoiding it.

In addition, Mallikarjuna (2012) listed down a thorough factors of why staff can lose their satisfaction at work; they are as follow: (1) backbiting and negative grapevine between co-workers; (2) conflict with leaders; (3) pay; (4) lack of resource and equipment needed in doing one's job; (5) lack of opportunities to grow (i.e. promotion, training and self-development); (6) do not have chance to participate in decision making; (7) job insecurity; (8) job monotony and boring. But, it is not impossible for organisation to have high satisfaction among its staff (Hamzah et al., 2010). Understanding staff satisfaction is really helping in maintaining high quality output, high performance, lower the turnover rate and would also allay the absenteeism in organisation (Rizwan and Mukhtar, 2014). Therefore, myriad efforts should be done by organisation to improve staff happiness and satisfaction at workplace so that they would work with sincerity, responsibly and with integrity for mutual benefits of both sided (Rizwan and Mukhtar, 2014). Under these circumstances, staff performance would rise to the peak level and organisation should show their readiness to improve the facilities and staff benefits at work (Rizwan and Mukhtar, 2014). By those mentioned, staff would exhibit a strong and high spirit at work in which in return would contribute a lot of benefits to the organisation as this would increase output and stay loyal (Rizwan and Mukhtar, 2014). That is why staff satisfaction is also could be comprehended as a positive emotional state resulting from the appraisal of one's job or job experiences (Islam and Siengthai, 2009).

Other than that, there is a lot of influences from various factors in organisation that are affecting staff satisfaction from all direction either internally or externally (Raziq and Maulabakhsh, 2015). Hence, it is organisation job to make sure that the factors that are affecting their staff are encouraging positive effects towards job satisfaction. Failing to do so would surely exert disastrous negative chain towards organisation. Clark (1997) stated that when staff is dissatisfied with their job, it may because of unsafe working condition, bad relationship with co-worker, get a disrespect treatment from supervisor or also do not has a chance to participate in decision making.

This would make them feel isolated and do not has the motivation to perform well and finally would get fired and causes the organisation to spend a lot of expenses to search for staff replacement (Clark, 1977). This problem would negatively go on and on if organisations do not come up with a solution for this.

In addition, it is also believed that staff satisfaction is based on their perception and knowledge about their job. It is about the way they feel about their job in various elements, and after that they can judge whether they like their job or otherwise (Spector, 1997) as cited in (Adeniji, 2011; Aziri, 2011; Ibrahim et al., 2014; Mansoor and Ali, 2011; Mohammed and Eleswed, 2013; Sageer et al., 2012; Vrinda and Jacob, 2015). In the meantime, Arokiasamy (2013) defined staff satisfaction as the staff who feel rewarded for their effort. This is in line with Kaliski (2007) that defined staff satisfaction as the key constituent that leads to recognition, income, promotion, and the achievement of other goals that lead to a fulfilment of feeling. Spector (1997) as cited in Aziri (2001) listed the crucial features in assessing staff satisfaction. Firstly, organisation should be driven by human values such as staff is treated fairly and with respect. This will rejuvenate their emotional and mental towards satisfaction. Secondly, the behaviour of staff at workplace is dependent with their level of satisfaction. Thus, it can be predicted if staff are satisfied or not based on their behaviour there. Lastly, staff involvement can also be used as an indicator to predict organisation performance and staff satisfaction. Staff that are satisfied would do more activities to boost their performance.

Moreover, The pursuit in identification on the predictors of job satisfaction is an on-going interest in social science study for ages until today (Locke, 1976; Memon et al., 2016; Santhapparaj et al., 2005; Masood et al., 2014). Job satisfaction is vital for every staff to do their job properly and facing challenges in organisation (Hamzah et al., 2010). It is also important for staff motivation and also a booster towards better organisation performance (Raziq and Maulabakhsh, 2015). When staff are happy, contended and having desire to work, these show that they are experiencing satisfaction at work (Sageer et al., 2012). In recent years, the study of job satisfaction has become broader and closely associated with performance of organisation (Mullins, 2007). For instances, in term of job satisfaction among academicians, high job satisfaction would

encourage lecturers to increase the quality of their teaching and they would be on the right track to produce student with high quality (Mustapha, 2013).

In addition, researchers throughout the world have different meaning and definition of job satisfaction but it is typically views as positive things that happen at workplace (Kusku, 2001). Job satisfaction is a huge concept because it encapsulates a lot of factor regarding staff feelings about their job (Chahal et al., 2013). In addition, job satisfaction can be defined as the accumulation of factors that create the feeling of satisfaction (Masood et al., 2014). It is a combination of feelings individual has about his or her job that is affected by internal and external factors (Masood et al., 2014). It is also known as positive and negative feelings that staff have about their job (Masood et al., 2014). Job satisfaction is vital in organisation as it would improve productivity and performance (Amazt and Idris, 2011; Cole and Cole, 2005; Oshagbemi, 2000). The term of job satisfaction refers to the attitude and feeling people have about their work. Job satisfaction is also indicated by positive and favourable attitudes toward the job and job dissatisfaction is the negative and unfavourable attitudes regarding the job (Armstrong, 2006).

Besides, job satisfaction is also the positive feeling staff feel about their job based from their evaluation on the job characteristics (Robbins and Judge, 2013). There are also scholars that defined job satisfaction by constructing theory regarding it such as Maslow theory of needs (Maslow, 1970), Herzberg two-factor model (Ball, 2003; Yusoff et al., 2013) and expectancy theory of motivation (Lunenburg, 2011). They had a lot of differing notions and overviews regarding job satisfaction but the essence is the same which is on how to instil and encourage staff to be satisfied with their job. That is why it can be said that job satisfaction concept is complex (Aziri, 2011) and there are a lot of definitions for it (Kalleberg, 1977; Mullins, 2007).

In addition, it can be stated that what ones' perceived regarding the nature of their job can also be comprehended as job satisfaction (Mallikarjuna, 2012; Mudor and Phadett, 2011). The job's natures can be divided into broad dimensions and scopes such as superior-subordinate relationship, physical environment quality and the level of fulfilment at work. Meanwhile, Hoppock (1935) as cited in Aziri (2011), Cleare (2013), Mohammed and Eleswed (2013) and Tio (2014) defined job satisfaction as any

combination of psychological, physiological and environmental circumstances that cause a person truthfully to say "I am satisfied with my job". It may also be recognised as the individual's perception and evaluation of the overall work environment (Lin and Lin, 2011; Mafini and Pooe, 2013; Schneider and Snyder, 1975; Sempane et al., 2002). Lu et al. (2005) defined job satisfaction as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job. The level of job satisfaction of staff reflects the level of how much their expectation about the job is fulfilled (Narimawati, 2007; Rizwan and Mukhtar, 2014). Wan Ahmad and Abdurahman (2015), in their study found out that there are four main reasons to attain job satisfaction which are relationship between co-worker (Manger and Eikeland, 1990; Zabarauskaite, 2012), career development, salary (Küskü, 2003; Volkwein et al., 1998) and job scope.
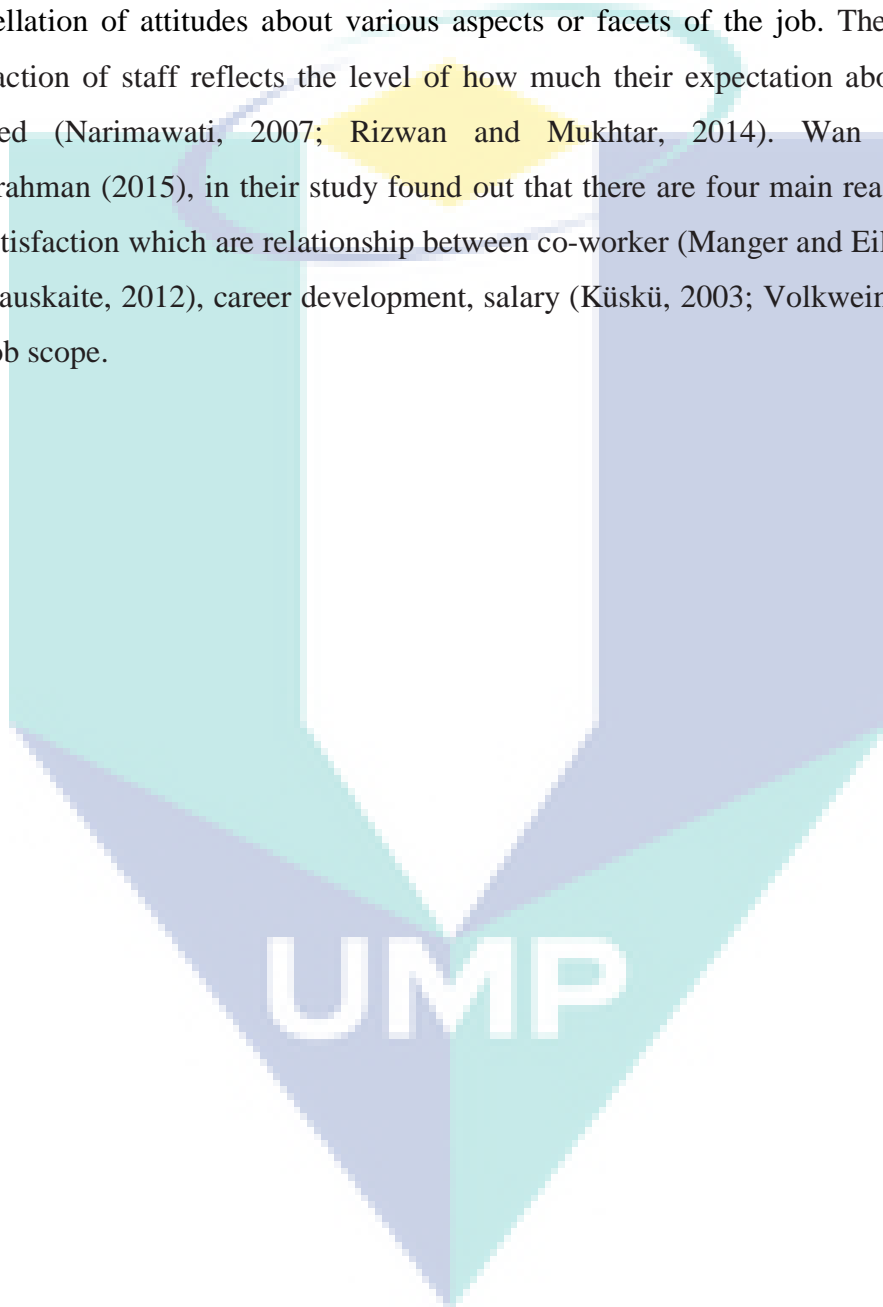
2.4 Previous Studies on the Determinants of Staff Satisfaction

Table 2.1 presents the constructs or predictors for staff satisfaction that have been studied by various researchers. This implied that the variables are of important to be studied in measuring their impact on staff satisfaction in organisations.

Table 2.1. **Constructs of staff satisfaction**

Constructs	Implications	Authors
Leadership	Leadership is the ability of leaders to influence a group of people toward the achievement of a vision or goals. It is also responsible in motivating staff to do a good job and encouraging them towards better organisational performance. It is essential for leaders to provide satisfaction for their staff for the sake of company success.	Payne and Hauty (1955), Chahal et al. (2013), Mcmullen and Group (2013), Kumari (2011), Jawahar (2006), Kim (1984), Wińska (2010), Kulkarni (2013), Arokiasamy (2013), Witt and Nye (1992), Gregory (2014), Mullin (2007), Crainer (1995), Yuliarini et al. (2012), Vlosky and Aguilar (2009), Branham (2005), Kaye and Jordan-Evan (1999), Kreisman (2002), Zabarauskaite (2012), Memon et al. (2016), Egan et al. (2004), Sundaray (2011), Volkwein et al. (1998), Lin and Lin (2011), Mustapha (2013), Ali (2012), Thomas (2000), Winston and Patterson (2006), Sharma and Jain (2013), Northouse (2007).
Staff involvement	Staff involvement is the commitment, engagement, motivation and empowerment of staff towards the organisation. It is also can be explained by staff willingness to put more effort to company. Staff tend to give their all to the organisation that put their interest in decision making process.	Mcmullen and Group (2013), Kumari, (2011), Vlosky and Aguilar (2009), Shahnawaz and Juyal (2006), Harter et al. (2002), Silverthorne (2004), Hamzah et al. (2010), Sundaray (2011), Mullins (2007), Porter et al. (1973), Harmon et al. (2003), Nordin and jusoff (2009), Mallikajuna (2012), Brownell (1982), Kim (2002), Ladd and Marshall (2004), Hashim and Mahmood (2011), Raziq and Maulabakhsh (2015), Gregory (2014), William (2006), Koslowsky and Krausz (2002), Silverthorne (2004), Narimawati (2007), Irawanto (2015), Rego and Pina (2008), Medina (2012), Kalleberg (1977), Cotton et al. (1988), Wilkinson (1998), Mills and Friesen (2001), Lashley (1995).

Table 2.1 continued.

Constructs	Implications	Authors
Workload	Workload is the intensity of job assignments given at workplace and a source of stress for employees. Stress is a mental or emotional tension from having too much work to be done in short period of time.	Mustapha and Yu Ghee (2013), Rehman et al. (2012), Beehr and Newman (1978); Al-Aameri (2003), Shah et al. (2011), Mullins (2007), Memon et al. (2016), Branham (2005), Mansor and Ali (2011), Jain (2013), Mustapha (2013), Ahsan and Alam (2009).
Self-development	Training is a learning experience that develops staff behaviour in the sense of increased productivity. Training is concerned with the staff improvement and gradation of skill which will enhance job performance. Training and development play a vital role in increasing the effectiveness of workforce which make them to be well-prepared for the job.	Faisal Azeem et al (2013), Kulkarni (2013), Chahal et al. (2013), Kreisman (2002), Arokiasamy (2013), Grawitch et al. (2007), Bellou (2010); Mcmullen and Group (2013), Kulkarni (2013), Luthans (2011), Mullins (2007), Mallikarjuna (2012), Memon et al. (2016), Salunke (2015), Igbaria and Greehaus (1992), Sundaray (2011), Kalleberg (1972), Gregory (2014), Wan ahmad and Abdurahman (2015), Koslowsky and Krausz (2002).
Working environment	Staff who have a good feeling with their working environment will enjoy their work and will be more satisfied rather than those who do not. Work environment is divides into two elements which are physical environment (noise, infrastructure and amenities) and mental environment (fatigue, boredom, monotony).	Sempane et al. (2002), Chandrasekar (2011), Jain and Kaur (2014), Chahal et al. (2013), Raziq and Maulabakhsh (2015), Mullins (2007), Salunke (2015), Sundaray (2011), Egan et al. (2004), Rizwan and mukhtar (2014), Kalleberg (1977), Porter et al. (1973), Kaye and Jordan-Evans (1999), Robbins and Judge (2013), Branham (2005), Gregory (2014), Mcmullen and Group (2013).

Table 2.1 continued.

Constructs	Implications	Authors
Communication	Communication is the exchange of thoughts, messages or information, as by speech, signals, writing, behaviour or interpersonal rapport. Communication is an important element and the main pulse in human life. Human being needs to communicate to express their thoughts and feelings to anyone. There are six function of communication in organisation which are to tell, to control, to merge, to manage, to persuade and to socialise.	Winska (2000), Amos et al. (2005), Byrne and Lemay (2006), Robbins and judge (2013), Kamasak and Bulutlar (2008), Tugimin et al. (2011), Saari and Judge (2004), Boove and Thill (2000), Kaye and Jordan-Evans (1999), Gregory (2014), Branham (2005), Rizwan and Mukhtar (2014).
Job satisfaction	Job satisfaction is the accumulation of factor that creates the feeling of satisfaction with the job. Job satisfaction can be defined as the accumulation of factors that create the feeling of satisfaction. It is a combination of feelings individual has about his or her job that is affected by internal and external factors. It is also known as positive and negative feelings that employees have about their job.	Chahal et al. (2013), Amazt and Idris (2011), Cole and Cole (2005), Armstrong (2006), Islam and Siengthai (2009), Hoppock (1935), Mafini and pooe (2013), Schneider and Snyder (1975), Lu et al. (2005), Robbins and Judge (2013), Mullins (2005), Kaliski (2007), Arokiasamy (2013), Statt (2004), Yusoff et al. (2013), Kaliski (2007), Lunenburg (2011), Sirota and Mischkind (2006), Medina (2012), Rizwan and Mukhtar (2014), Mallikarjuna (2012), Locke (1976), Memon et al. (2016), Santhapparaj et al. (2005), Hamzah et al. (2010), Raziq and Maulabakhsh (2015), Sageer et al. (2012), Mullins (2007), Mustapha (2013), Adeniji (2011), Cockburn and Haydn (2004), Kusku (2001), Masood et al. (2014), Oshagbemi (2000), Ball (2003), Yusoff et al. (2013), Aziri (2011), Kalleberg (1977), Mehrad et al. (2015), Kulkarni (2013), Memon et al. (2016), Wan Ahmad and Abdurahman (2015), Cleare (2013).

Table 2.1 continued.

Constructs	Implications	Authors
		Mohammed and Eleswed (2013), Tio (2014), Lin and Lin (2011), Mafini and Pooe (2013), Sempane et al. (2002), Lu et al. (2005), Clark (1997), Michaelson and Stacks (2014), Zabarauskaite (2012), Ibrahim et al. (2014), Mansoor and Ali (2011), Vrinda and Jacob (2015), Statt (2004), Yusoff et al. (2013), Volkwein et al. (1998), Narimawati (2007), Manger and Eikland (1990), Kusku (2003), Egan et al. (2004), Adkins and Caldwell (2004), Silverthorne (2004).
Turnover intention	Staff with high satisfaction tends to be loyal and remains in the organisation. Meanwhile, employee that is dissatisfied is more prone to quit. It is the determination of any organisation to fulfil the needs of their employees to create more efficient workforce.	Medina (2012), Long et al. (2012), Noordin and Zainuddin (2015), Porter et al. (1973), Jain (2013), Lambert et al. (2001), Mustapha (2013), Kusku (2001), Kaye and Jordan-Evans (1999), Narimawati (2007), Jurini (2013), Silverthorne (2004), Egan et al. (2004), Gregory and Shaw (2001).

Figure 2.1 below shows the Venn diagram depicting the variables understudy. It is describing that variable i.e. leadership, staff involvement, working environment, communication, self-development and workload are the determinants of staff satisfaction.
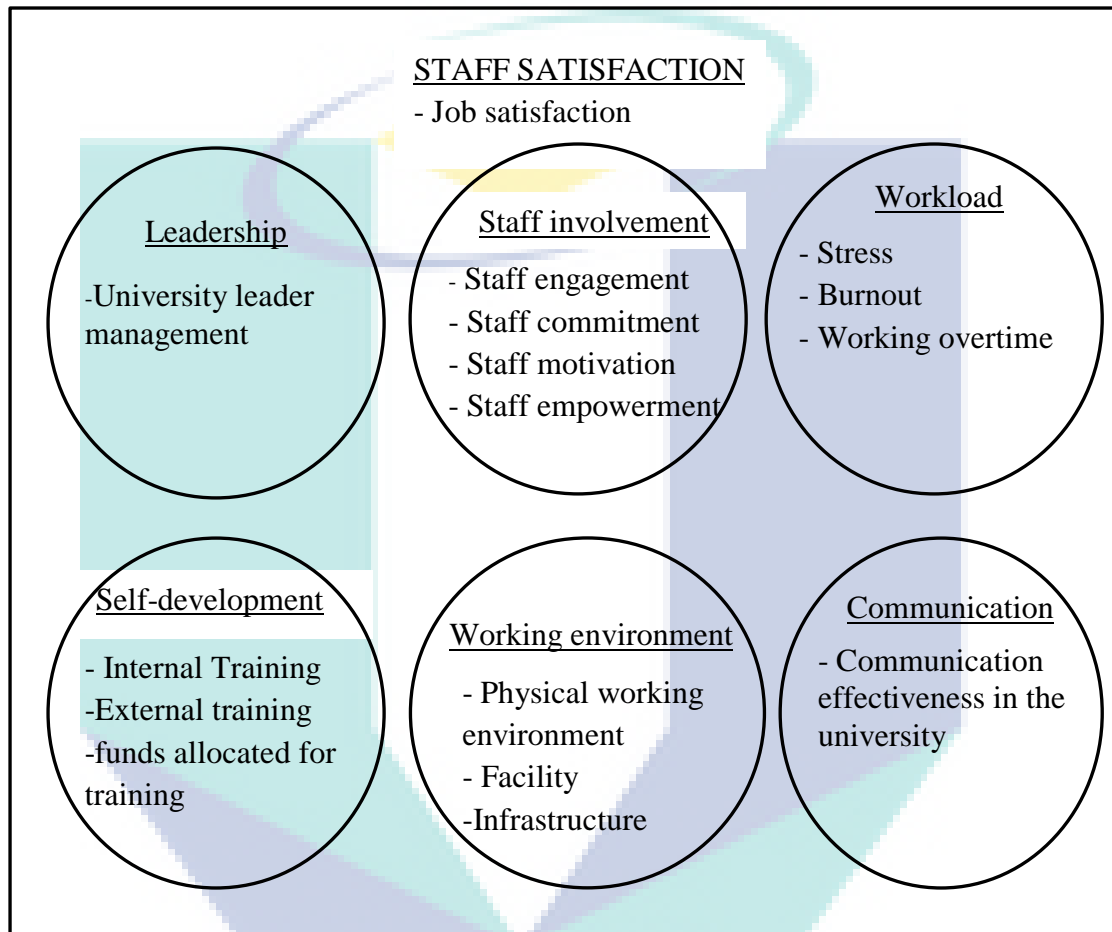
Figure 2.1. Venn diagram of staff satisfaction

2.5 Underpinning Theories

This chapter provides the theories that are related to the constructs of this research. These theories are then discussed and used to underpin the conceptual model for this research. Based on conceptual model, several hypotheses are derived to form a model for this study.

2.5.1 Herzberg's Two-Factor Theory

Herzberg's Two-Factor theory is used to support this study. This theory derived from Abraham Maslow's hierarchy of needs. There are two factors that were proposed by Herzberg which would motivate staff. The factors are hygiene factors (extrinsic factors) and motivation factors (intrinsic factors). The hygiene factors is the lower needs of staff and this will not motivate them but only prevent them from being dissatisfied. To motivate staff, organisations should focus on higher level needs which are intrinsic or motivation factors (Robbins and Judge, 2013).

Hygiene factors (extrinsic factors) are less contributing to staff motivation need, but without it dissatisfaction would arise. These factors create an environment that is favourable for employees to work in it such as working environment and supervision. When all the external factors is fulfilled, employees remain neutral neither satisfied nor dissatisfied (Yusoff et al., 2013).

Motivation factor (intrinsic factor) is the actual factors that would contribute to staff motivation. This factor is known as a job that provide meaning to staff that intrinsically satisfy them such as achievement, recognition, work itself, responsibility, advancement or opportunity for growth (Robbins and Judge, 2013).

These two factors are interdependent with each other in order to motivate staff. Extrinsic factors eliminate job dissatisfaction but providing perfect external factors would not provide job satisfaction. On the other hand, intrinsic factors would increase staff satisfaction and lead to increase in productivity and performance. In addition,

failing to provide sufficient intrinsic factors would only neutralise their feeling (Yusoff et al., 2013).

2.5.2   Maslow's Hierarchy of Needs

This theory is also used to develop a conceptual framework for this research. 'Needs' theory is used to identify the internal factor that can motivate staff. Maslow believed that staff have motivation factors that are not related to rewards (McLeod, 2007).

Maslow (1943, 1954) stated that needs are arranged in hierarchical order, when the lower need is satisfied, a person would seek to fulfil another one and so on. Hierarchy of needs are divided into two which are basic needs or deficiency (e.g. physiological, safety, social and esteem) and growth needs (self-actualization).

The deficiency or basic needs have the priority and have to be fulfilled first before going up the hierarchy. The lower needs are a must for staff, without it the dissatisfaction would increase. Once the basic needs have been satisfied, one can step up the hierarchy to reach the self-actualization which is the highest level in the hierarchy pyramid (McLeod, 2007).

Table 2.2 shows the Maslow's Hierarchy of Needs which arranges the needs in Maslow theory from the basic needs to higher needs.

Table 2.2. **Maslow's Hierarchy of Needs**

Needs	Job
Self-actualisation	training, advancement, growth, creativity
Esteem	recognition, high status, responsibility
Social	cowokers, supervisors, subordinates, team
Safety	work safety, job security, insurance and work environment
Physiological	salary and stable employment

Sources: Beck (2014)

2.5.3 Expectancy Theory of Motivation

Expectancy Theory of Motivation can be defined as a theory that says the strength of a tendency to act in a certain way depends on the strength of an expectation that the act will be followed by a given outcome and on the attractiveness of that outcome to the individual (Robbins and Judge, 2013). In elaboration, this theory is a cognitive process where people believe that there is a relationship between the efforts they put at work, the performance they achieve from the effort, and the rewards they receive from their hard work. Simply said, staff will be motivated if they believe that their strong effort will lead to good performance and good performance will lead to desired rewards (Lunenburg, 2011). The model of expectancy theory is shown in Figure 2.2.
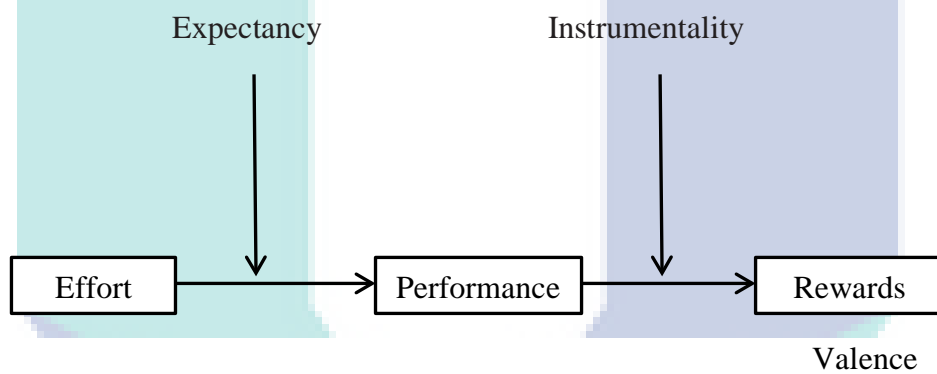
Figure 2.2. Basic expectancy model

Source: Lunenburg (2011)

a)   Expectancy

Expectancy is the estimation staff had on the probability that putting effort would result in good performance. Expectancy is based on probabilities and range between 0 to 1. If staff see that their effort does not lead to desired performance level, the expectancy will be 0. In contrary, if staff are certain about certain task, the expectancy value will be 1. Typically, the value lies between these two extremes (Lunenburg, 2011).

b)   Instrumentality

Instrumentality is an individual's estimate of probability of their good task performance would lead to many work outcomes. Same with expectancy the probability ranges from 0 to 1. If staff see that good performance rating would lead to increase in their wages, the instrumentality has a value of 1 and if they see that their good performance lead to nothing, the value will be 0 (Lunenburg, 2011).

c)   Valence

Valence can be defined as the strength of staff preference for a particular reward. Thus increase in salary, promotion, peer acceptance, recognition by supervisor or any others might have more or less value to individual at the workplace. Valence can either be positive or negative and has a range from -1 to +1. If the rewards cannot attract staff attention the valence is 0. If the rewards given are exactly as what staff expected they will get, the valence is 1 (Lunenburg, 2011).

Vroom (1964) as cited in Lunenburg (2011) suggested that motivation, expectancy, instrumentality and valence are related by the equation :

$$\text{Motivation} = \text{Expectancy} \times \text{Instrumentality} \times \text{Valence}$$
$$\quad (M) \qquad\qquad (E) \qquad\qquad (I) \qquad\qquad (V)$$

This means that when expectancy, instrumentality and valence are all high the motivation would be at higher level too. It also applies if one of the factors is zero, thus the overall level of motivation is zero. Therefore, these three aspects are important to increase employees' motivation.

2.5.4   Conceptual Model

This study aims to develop a conceptual model based on the motivational theories as stated in the literature review and to investigate the impact of several variables on staff satisfaction towards turnover intention.

Figure 2.3 shows the relationship between constructs in determining staff satisfaction and its impact on turnover intention. It consists of relationship between the factors that contribute to staff satisfaction. The variables are leadership, staff involvement, workload, self-development, working environment, and communication. These factors are exogenous constructs and treated as independent variables. The staff satisfaction and turnover intention are endogenous constructs and treated as dependent variables.
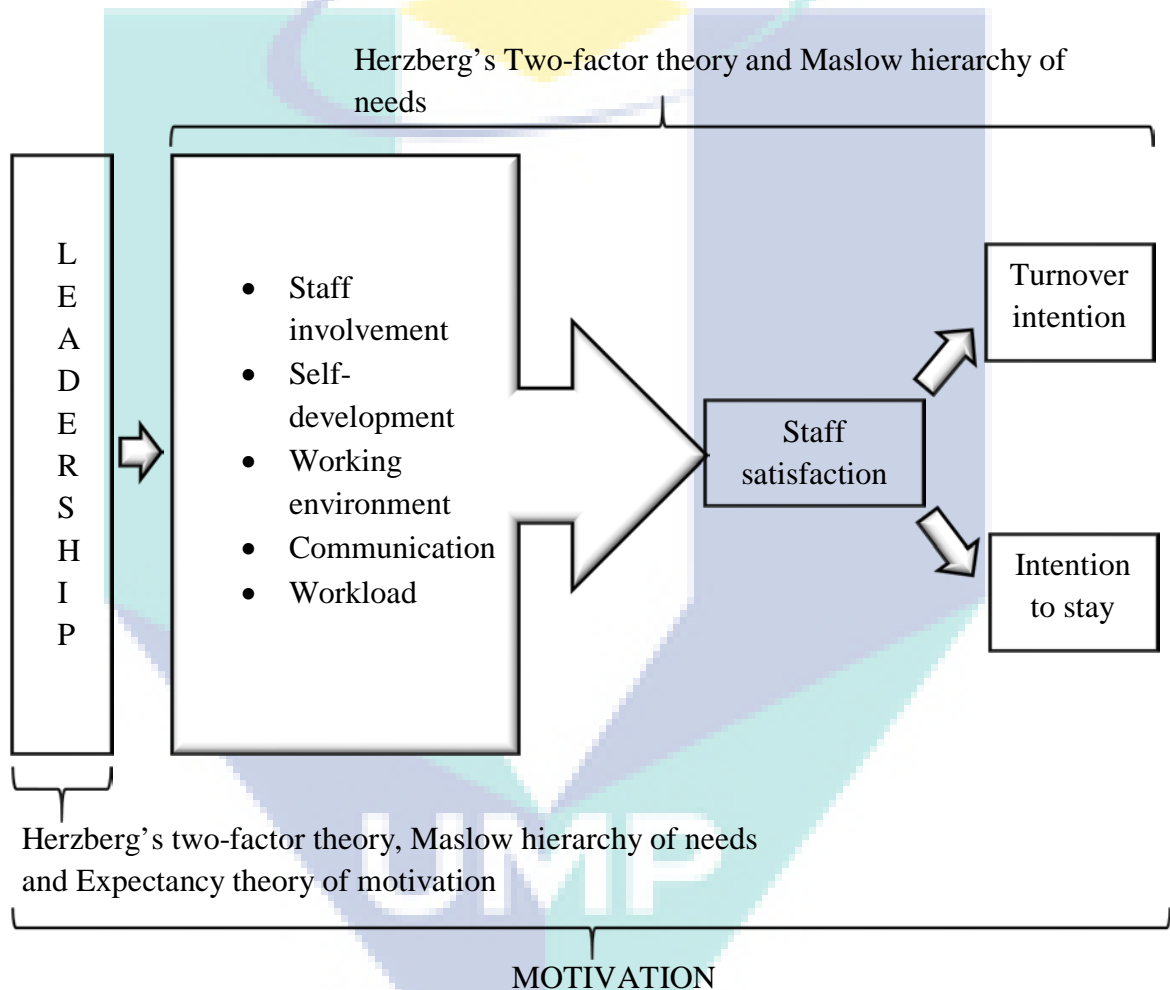
Figure 2.3. Conceptual Framework

Figure 2.3 shows the conceptual model developed based on the theories that have been studied. The conceptual model is developed by using the theories of motivation chosen from Herzberg's two-factor theory, Maslow's Hierarchy of Needs, and Vroom's expectancy theory of motivation.

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According to the motivation theories, leadership is among the most important aspect in determining staff satisfaction. According to two-factors theory, recognition from management or leader will motivate staff (Ball, 2003; Yusoff et al., 2013). A motivated staff is a satisfied staff as motivation factor is also called satisfier (Ball, 2003). In Maslow's hierarchy of needs leadership is located in a high order in the pyramid (Maslow, 1943). Expectancy theory of motivation also highlights the importance of rewards such as increase in salary, promotion, peer acceptance, recognition from supervisor which can be recognised as a good leadership (Lunenburg, 2011).

These theories also emphasise on staff involvement and self-development in determining staff satisfaction. Two-factor theory stated that intrinsic factors such as achievement, responsibility, advancement or opportunity for growth will satisfy staff (Ball, 2003; Robbins and Judge, 2013). Meanwhile, in Maslow's Hierarchy of Needs the highest level of hierarchy is the self-actualisation needs which encapsulate training, advancement and growth. Maslow theory found that training and development is the best method to motivate and satisfy staff (Maslow, 1943, 1954, 1970; McLeod, 2007). Staff involvement can be seen as one of the essential element in expectancy theory. Staff that think their effort can make a difference in workplace tend to be motivated (Lunenburg, 2011; Robbins and Judge, 2013).

In two-factor theory by Herzberg, working environment is classified as hygiene factor which is the basic need in organisation. Working environment is an important construct to determine staff satisfaction and motivation. Although it cannot motivate staff, yet, without it staff will never satisfy as it is the basic need or a pillar in determining staff satisfaction and motivation (Robbins and Judge, 2013; Yusoff et al., 2013). This is also supported by Maslow's Hierarchy of Needs which stated that one of the basic needs is the safety needs which is the working environment and work safety (Maslow, 1943, 1954, 1970; McLeod, 2007).

2.5.5 Hypothesis Development

The leadership of an organisation should instil the culture that makes staff feels valued and useful (Vlosky and Aguilar, 2009). This is because the relationship of top management with the staff is among the primary determinant in nurturing job satisfaction. In some decision making, the management should include staff and avoid making decision alone without asking their opinion (Amazt and Idris, 2011). In addition, it is important for staff to participate in discussion with supervisor and colleagues in which it will increase their effort and motivation in workplace (Irawanto, 2015). In an analysis done by Lin and Lin (2011), it was found that there is an influence of job satisfaction as the intervening factor between staff commitment and superior-subordinates relationship. They also found that when the relationship between the leader and subordinate are higher, the level of job satisfaction would also be high. Straiter (2005) and Liang-Chieh et al. (2010) found that the trust between leader and staff has an effect on job satisfaction. They added that, the leader-subordinates relationship is reflecting upon staff confidence level, trustfulness and how much respect they had towards leaders. Therefore, based on the arguments presented above, the following hypotheses are to be tested:

H1: There is positive impact of leadership on staff involvement.

Organisation should take the daily workload for staff into consideration. Workload which is appropriate for staff would increase their satisfaction and inordinate workload would lead to job dissatisfaction, stress and burnout (Mustapha and Yu Ghee, 2013). Other than that, Judge and Colquitt (2004) focused on organisation justice towards staff stress and found negative and significant relationship between them. It was pointed out by Amazt and Idris (2011) that working condition of lecturers, their personal growth as an individual, relationship with management, management supervision and leadership are the factors that can be considered as a motivation for staff to receive from management to excel in their job and performance. In addition, staff that perceive their leaders ignore the needs for their self-development as important will be dissatisfied and they were also not proud to be associated with the leaders (Hashim and Mahmood, 2011). Kumari (2011) pointed out that healthy working environment would develop a healthy relationship between superiors and staff. In

addition, staff are very concerned about their relationship with the top management and it was found out that the friendlier the environment with the leader would increase their satisfaction. Other than that, it was also found that the relationship with co-worker did not contribute much to job satisfaction but relationship with top management turn out to be the main contributing factor to their job satisfaction and performance (Raziq and Maulabakhsh, 2015). Therefore, based on the arguments presented above, the following hypotheses are to be tested:

H2: There is significant impact of leadership on workload.

H3: There is positive impact of leadership on self-development.

H4: There is positive impact of leadership on working environment.

According to Kumari (2011), leadership includes motivating staff to do a good job and guiding them for organisational excellence. Leaders should always communicate with staff as it is a must for them to achieve organisational vision. Madlock (2008) also emphasised the significant of communication has on leadership. Madlock also provided an association between communication, leadership and staff job and communication satisfaction. It was found that there is significant link between the superior's communication with staff and staff job satisfaction and it is also the greatest predictor of staff job satisfaction. In addition, Winska (2010) showed that staff satisfaction is predicted and moderated by effective communication by the leader and Winska also emphasised that positive communication staff had with their manager would affect positively on their job satisfaction. Kumari (2011) stated that negative relationship between superior-subordinate would have negative impact to organisation.

Meanwhile, staff that have positive interaction with their leaders normally would be more satisfied. In a research by Tugimin et al. (2011), most respondents in the study feel a lot more satisfied from their communication with the leaders as compared to their communication with co-workers. In addition, two-ways communication between leaders and subordinate is better in instilling job satisfaction rather than one-way communication which is only in the form of order. Moreover, in every organisation, leaders are playing important role in management such as directing and coordinating employees. Thus, communication between both sides have to be in the most efficient manner to direct or discuss to avoid misunderstanding or conflict

(Robbins and Judge, 2013). In addition, lack of communication in organisation can be among the determinant of job dissatisfaction (Gregory, 2014). It can also be added that this phenomena is happening because leaders fail to connect with employees personally or professionally (Branham, 2005). In these regards, the following hypothesis is to be tested:

H5: There is positive impact of leadership on communication.

Organisational commitment is closely related to staff satisfaction. Thus, to develop employees that are committed, organisation should nurture job satisfaction in the workplace (Chahal et al., 2013). It is proven that job satisfaction emerges from staff commitment (Mustapha and Yu Ghee, 2013). It was found that there is positive and significant correlation between employee satisfaction on engagement (Lin and Lin, 2011) and business outcomes (Harter et al., 2002; Medina, 2012). This is proven in a research where the result shows that more satisfied employees are more engaged as compared to less satisfied employees (Medina, 2012). Other than that, empirical study also found that employees commitment is a requirement for job satisfaction (Donovan et al., 2004; Lin and Lin, 2011).

Moreover, it was pointed out that job satisfaction is closely related to the need for autonomy and the more employees involve in organisation, the more employees may satisfied with their job (Volkwein et al., 1998). Mcmullen and Group (2013) stated that employees that are connected with organisation goals would feel motivated as they are involved in something important (Hong et al., 2012; Volkwein et al., 1998). Only motivated employees can become a satisfied employees (Sundaray, 2011). Thus, they should participate in decision making process that leads to their satisfaction and motivation (Amazt and Idris, 2011; Black and Gregersen, 1997; Sam Hong et al., 2012; Irawanto, 2015; Kumari, 2011; Ladd and Marshall, 2004; Raziq and Maulabakhsh, 2015; Vlosky and Aguilar, 2009). In addition, if staff well-being is well taken care, employees would feel they belong there and would give unconditional commitment to organisation (Arokiasamy, 2013). In a survey at Virginia University, it was found out that commitment has a strong statistical impact to job satisfaction in overall (Rexrode et al., 2011). In addition, staff participation or involvement also can be considered as a

main element in the determination of high job satisfaction level (Harmon et al., 2003; Mullins, 2007; Zainuddin and Isa, 2011).

Other than that, Intrinsic factors such as the feeling of accomplishment, challenge, creativity and autonomy in workplace would influence one's satisfaction in organisation (Volkwein et al., 1998). Also, job satisfaction is affecting staff behaviour, performance and it is also predictors whether staff are leaving or staying in their employment (Lin and Lin, 2011). Donovan et al. (2004) was doing a research based on restaurants in the United States and found out that job satisfaction has an effect on staff organisational commitment. The higher the level of employee commitment in organisation, the higher will be their job satisfaction (Lin and Lin, 2011). Employee engagement at workplace is crucially importance as it can be a deciding antecedent of organisational effectiveness (Sundaray, 2011). It also proven empirically that empowerment has positive relationship with employee satisfaction in public or private sector (Rizwan and Mukhtar, 2014). It is added that when staff are given a power in decision making this would increase their satisfaction. Therefore, by referring to the above points, the following hypothesis is posited:

H6: There is positive relationship between staff involvement on staff satisfaction.

A lot of studies found out that job stress is influencing staff job satisfaction and performance at workplace (Ahsan and Alam, 2009). This would cause staff to search for another job elsewhere (Gregory, 2014). But, Rehman et al. (2012) in their study in Pakistan private colleges found that stress is positively related to staff job satisfaction. In contrary, other author stated that stress, huge amount of workload, overtime, fatigue and boredom are among the antecedent of job dissatisfaction (Jain and Kaur, 2014). In a study by Mustapha and Yu Ghee (2013), it showed that there was negative significant relationship between workload in workplace and job satisfaction. Other than that, heavy workloads are the extreme demotivating factor for job satisfaction in university (Zabarauskaite, 2012). It was also revealed that the factors of stress among staff are caused by heavy workloads and a long hour working hour (Shaw and Ward, 2014). Job stress is hazardous to staff satisfaction for its negativity at workplace and it was found quantitative and qualitatively that high level of stress would contribute to low level of job satisfaction (Memon et al., 2016).

In addition, job satisfaction is related with the elimination of work stress and there is negative relationship between tension and stress at work with job satisfaction (Ahsan and Alam, 2009; Branham, 2005; Gregory, 2014; Musa et al., 2012; Mustapha, 2013; Volkwein et al., 1998). Other than that, staff with high percentage of stress at work tend to be dissatisfied with their employment and then will feel unsettled and distress working in the organisation (Bemana et al., 2013). Other than that, Mullins (2007) narrated that stress because of work is the main reason of work sickness absence. Almost majority of worker around the world fail to do their job efficiently because of stress and stress also could cost the employment rate in organisation as employees cannot cope with the job there. In addition, stress or poor fit of employees with their job would create dissatisfaction (Gregory, 2014). Therefore, based on the arguments presented above, the following hypothesis is to be tested:

H7: Workload has a significant effect on staff satisfaction.

There is a positive correlation between employees development and their satisfaction (Igbaria and Greenhaus, 1992). This is supported by Volkwein et al. (1998) that found several extrinsic factors that influence one 's job satisfaction and one of it is staff opportunities to grow and develop. Meanwhile, training and development is also an important key in enhancing employee engagement, productivity and motivation (Faisal Azeem et al., 2013). Additionally, Kreisman (2002) stated that the availability of skill development opportunities is the "key attractors" to the organisation success. In addition, employees that know how their career would develop tend to feel more satisfied (Arokiasamy, 2013; Kumari, 2011). Employees development is also linked with their commitment and turnover (Grawitch et al., 2007; Kulkarni, 2013). Bellou (2010) in her research acknowledged the values in organisation culture as a factor that contribute to job satisfaction. Among the values are fairness and opportunity for personal growth.

Kumari (2011) agreed that staff would be satisfied if the opportunity to grow is provided to them. Development would become a primary reason for resignation if an organisation does not recognize the individuals' needs and their desire to grow (Kreisman, 2002). Kulkarni (2013) in her study on Quality of Work Life (QOW), she defines QOW as the conditions and environments at the workplace that are favourable

to support and promote employee satisfaction by providing them with the opportunity to grow or improve. In contrary, it was revealed that when there is lack of opportunities to grow on one's job, one would find his or her employment as unsatisfactory (Chahal et al., 2013; Luthans, 2011). Zabarauskaite (2012) pointed out that insufficient scope for personal growth and limited career opportunities are among the factors that are problematic for job satisfaction. In addition, employees that have limited opportunities to growth tend to bear overwhelming job dissatisfaction and turnover intention; even though there is a positive relationship between current salary to job satisfaction, commitment and turnover intention, but it cannot be denied that future opportunities to grow would affect turnover intention more (Igbaria and Greenhaus, 1992). On the other hand, Kusku (2003) studied the universities in Turkey and found that academic staff had higher satisfaction if they have proper career development and advancement. This is because they set it as top priority in their career life. In contrary, organisation that fails in providing the opportunities to grow for the employees would lead to their frustration as they are obstructing their employees from developing (Branham, 2005). Therefore, this hypothesis is to be tested:

H8: There is positive relationship between self-development and staff satisfaction.

Working environment is important for organisation success (Rizwan and Mukhtar, 2014). It was found that numerous of businesses failed to comprehend the essential of working environment towards employees job satisfaction at workplace (Raziq and Maulabakhsh, 2015). The workplace environment is positively or negatively has impacts on employee morale, productivity and engagement (Chandrasekar, 2011; Noordin and Jusoff, 2009; Rizwan and Mukhtar, 2014; Salunke, 2015). Factors of working environment are related to certain outcomes such as employee retention, motivation, satisfaction, performance and organisational productivity (Noordin and Jusoff, 2009; Raziq and Maulabakhsh, 2015; Rizwan and Mukhtar, 2014). Thus, it can be stated that without a healthy working environment, it would decrease staff happiness and their satisfaction (Salunke, 2015). This is supported by Chandrasekar (2011), who mentioned that poor workplace environment lead to poor performance. Work environment is among the most crucial factor which influence the satisfaction and motivation level of employees (Jain and Kaur, 2014; Raziq and Maulabakhsh, 2015; Salunke, 2015).

In a study in Malaysia, it was found out that staff feel enjoy and cheerful to work in an environment that balance the needs between their work and life (Noor, 2011). Therefore, maintaining good work environment or culture would affect positively to the performance of staff and company (Jain and Kaur, 2014; Noordin and Jusoff, 2009). In addition, good working condition, good facilities, and security develop satisfaction in workplace. Working environment that is progressive maintains staff satisfaction as well as organisation performance (Jain and Kaur, 2014). Amazt and Idris (2011) pointed out that security and working condition in workplace were considered as the factors that predict job satisfaction. This is well supported by Santhapparaj et al. (2005) study which found that working condition is among the determinants of job satisfaction. Other than that, Hong et al. (2012) pointed that working environment must be given a lot of attention to nurture higher level of job satisfaction. Memon et al. (2016) stated that present findings found out that a stressful environment would lead to low job satisfaction and increase turnover. In short, the working environment of staff in organisation is directly proportional with staff satisfaction and performance (Rizwan and Mukhtar, 2014). In this regard, the following hypothesis is to be tested:

H9: There is positive relationship between working environment on staff satisfaction.

It was found that job satisfaction is consistently related with the communication in organisation (Amos et al., 2005; Kamasak and Bulutlar, 2008). Employees' satisfaction is very important as when they are satisfied, it would improve valued to the service industry and the dissemination of positive grapevine would increase satisfaction (Arokiasamy, 2013). In Kumari (2011) study, it was found that communication between superior and subordinate plays a vital role in determining the employees' satisfaction. Communication system in organisation would increase the relationship between superior and subordinate.

Meanwhile, negative relationship between them would have negative impact to organisation. This is supported by Robbins and Judge (2013) that surveyed 100 organisations and there are more than 200,000 sample respondents. It was showing that there are strong linkage between social relationship of employees and supervisors with job satisfaction. In addition, communication in organisation is consistently related with positive attitudes toward the working environment which lead to job satisfaction,

improved performance and decrease employee intention to leave (Amos et al., 2005; Byrne and Lemay, 2006; Robbins and Judge, 2013). Bad communication in organisation makes employees feel isolated and alienated with the organisation (Gregory, 2014) and could also cause job dissatisfaction (Branham, 2005). This is elaborated by Gregory (2014) who stated that this is detrimental to organisation health as staff feel neglected and would perform below average level when they are not getting a proper communication on how to do their work. This is because, increase in communication climate would have positive effect on job satisfaction (Kamasak and Bulutlar, 2008; Wińska, 2010). Consequently, the following hypothesis is postulated:

H10: There is positive relationship between communication on staff satisfaction.

Keeping staff satisfaction is very crucial and cannot be ignored in every organisation (Gregory, 2014). The higher the job satisfaction, the higher the organizational commitment and the lower the turnover rate (Gregory, 2014; Lambert et al., 2001; Memon et al., 2016; Rizwan and Mukhtar, 2014; Silverthorne, 2004; Wan Ahmad and Abdurahman, 2015). Scholars also showed that job satisfaction is positively associated with staff productivity (Adeniji, 2011) and negatively associated with employee turnover (Egan et al., 2004; Igbaria and Greenhaus, 1992; Kusku, 2001; Brett and Fritz, 2002; Medina, 2012; Noor, 2011; Schwepker, 2001; Silverthorne, 2004). Staff satisfaction is essential in organisations as it is the determinant to increase in staff retention (Arokiasamy, 2013; Mustapha and Yu Ghee, 2013; Porter et al., 1973).

Lambert et al. (2001) stated that staff that are highly satisfied with their job are associated with low turnover. This is in line with Arokiasamy (2013), that stated employee satisfaction is significant in any organisation as it would lead to increase in employee retention. In addition, Noordin and Jusoff (2009) pointed out that high job satisfaction lead to low turnover and absenteeism. In contrary, low level of job satisfaction leads to absenteeism, turnover and burnout (Mehrad et al., 2015; Noor and Zainuddin, 2015). In other word, as employees' satisfaction level increase, staff turnover intention is reduced and staff turnover would also be decreased (Kusku, 2001). In other words, individual that is highly satisfied with their job would devote their energy towards organisation goal and would remain with organisation (Porter et al.,

1973). In a nutshell, job satisfaction play a crucial role in staff retention in organisation (Mallikarjuna, 2012) and in this regard, the following hypothesis is posited:

H11: There is negative relationship for staff satisfaction on turnover intention.

Therefore, based on the above hypotheses, the following research model is developed and proposed. The hypothesised model is presented in Figure 2.4.
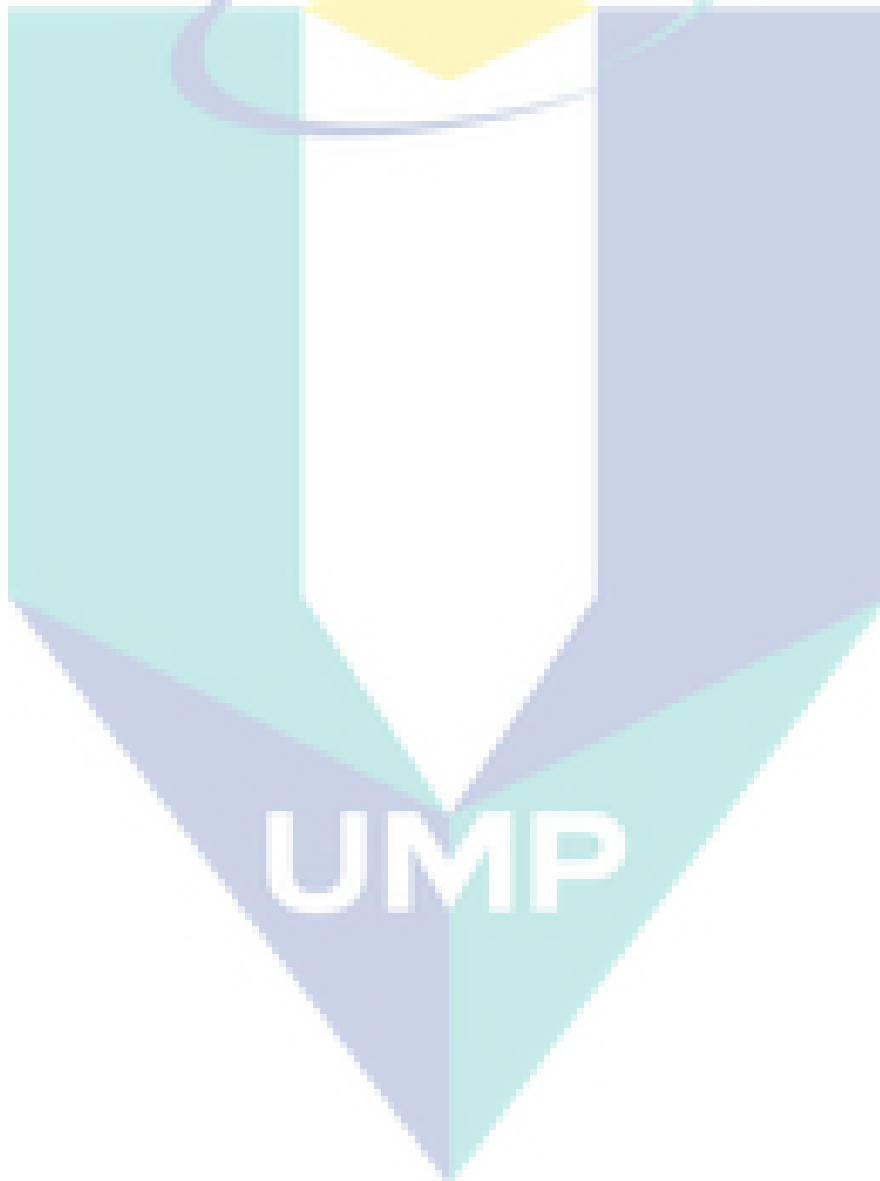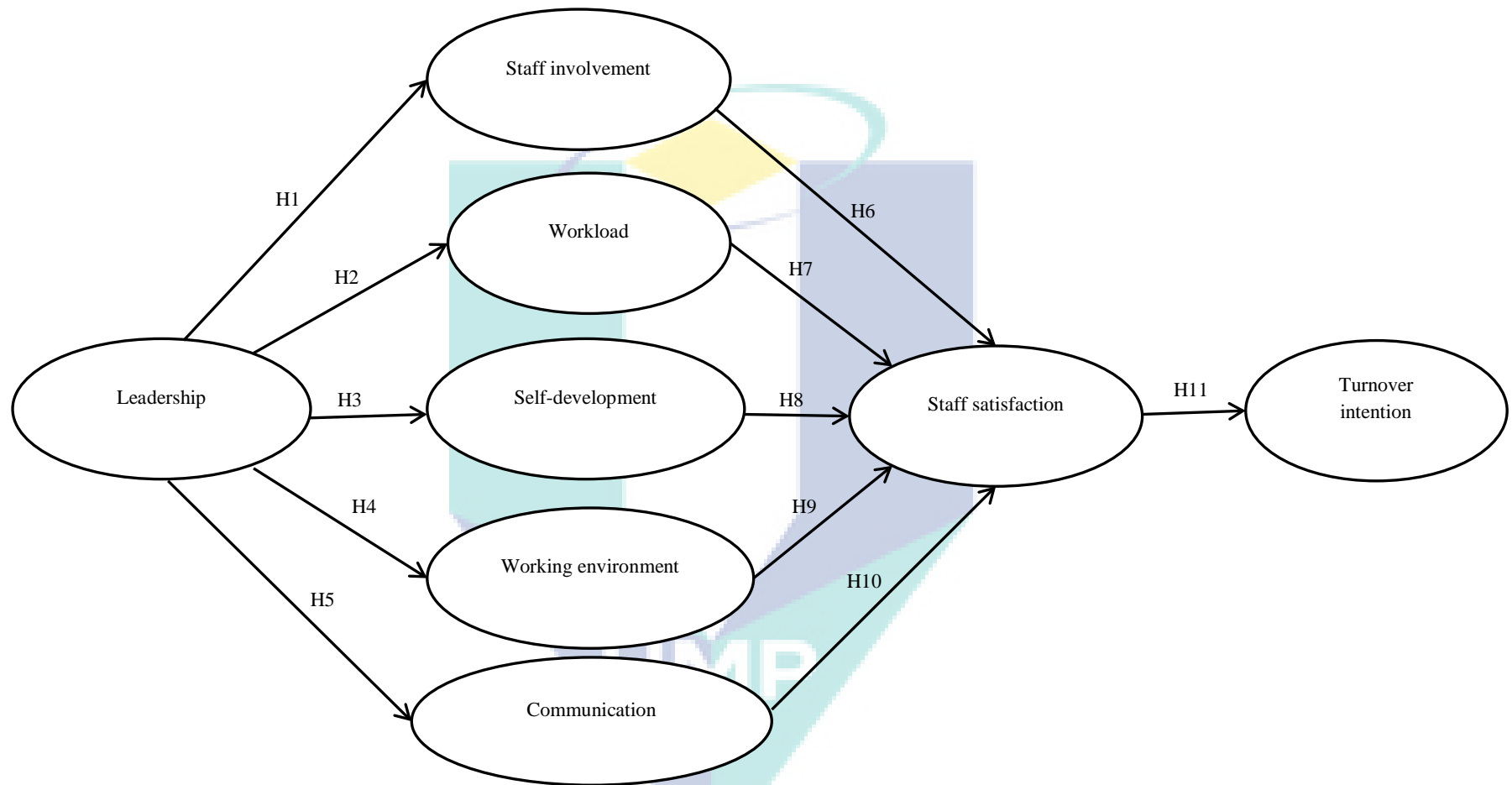
Figure 2.4. Hypothesised model

Based on Figure 2.4, the following relationships are hypothesised:

a) Relationship between leadership and staff involvement.

b) Relationship between leadership and workload.

c) Relationship between leadership and self-development.

d) Relationship between leadership and working environment.

e) Relationship between leadership and communication.

f) Relationship between staff involvement and staff satisfaction.

g) Relationship between workload and staff satisfaction.

h) Relationship between self-development and staff satisfaction.

i) Relationship between working environment and staff satisfaction.

j) Relationship between communication and staff satisfaction.

k) Relationship between staff satisfaction and turnover intention.

2.6   Summary

This chapter reviews the literature on the relationship of staff satisfaction on turnover intention in the organisation. This chapter also hypothesised model based of predictors of staff satisfaction and its consequential impacts on turnover intention in higher education institutions. Staff perceptions of leadership, staff involvement, amount of workload, self-development, working environment and communication in their workplace are among the studied variables in the model that predict staff satisfaction. Accordingly, staff satisfaction would affect the turnover intention and also have an impact to university performance. The next chapter discussed on the research methodology to examine the relationship between the constructs of staff satisfaction and its impact on turnover intention.

CHAPTER 3

RESEARCH METHODOLOGY

3.1   Introduction

The main purpose of this study is to test the model of the impact of predictors on staff satisfaction on turnover intention. The model hypothesised the relationships between the latent constructs (unobserved variables) and observed variables (indicators) from staff satisfaction survey, in which the study uses data collected in 2015 from staff at Universiti Malaysia Pahang (UMP). This chapter discusses the procedures for data cleaning, the research design and structural technique i.e. partial least square structural equation modelling (PLS-SEM) that is used in analysing the research model.

3.2   Research Design

This study is a cross-sectional study and used quantitative (positivism) or numerical approach to measure the impact of staff satisfaction on turnover intention and the research design used is survey method by obtaining secondary data. This study is designed to find out the structural relationship between staff satisfaction and its impact on turnover intention in UMP. From the collected data, respondent's answers are based on their deductive reasoning on how they felt working in UMP.

This study begins with comprehensive literature in Chapter 2. The research questions in the study were posited and based on the survey and data of the staff involvement and satisfaction in 2015. The extent of interference in the data collection is

minimal as the data used is secondary data that is taken from the UMP's human resource department with population sampling of 1676 staff. The following Figure 3.1 shows the flow chart of the research process for this study.
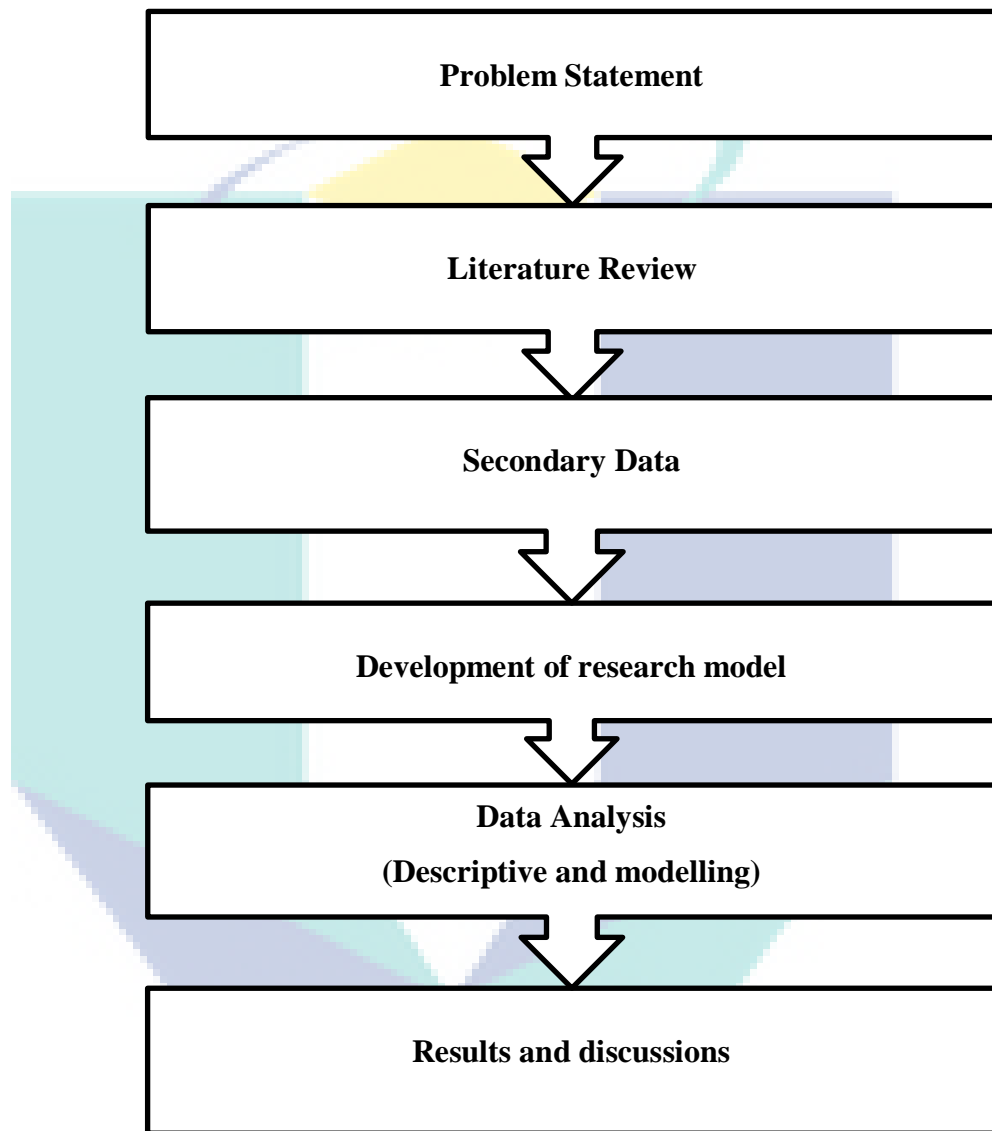
Figure 3.1. Research process.

3.3   Instruments from the Secondary Data

From the questionnaire that was developed by previous researcher (see appendix A), the first part of the instrument is on general information and demographics of respondent (part A) from section A1 to A8. Section A1 is the gender; section A2 is the race of respondent that is divided into four which are Malay, Chinese Indian or others. Section A3 is about the category of position of respondent at UMP which consists of Academic staff, Non-academic staff (management and professional) and Non-academic staff (supporting staff). Section A4 is the job status of the respondent whether he or she is permanent employee, contract or part-timer. Section A5 is the faculty/centre/department that respondents have been posted and respondents have to list down the faculty/centre/department and section A6 is the duration of respondent in UMP according to pre-determined several categories i.e. less than three years, in between three and five years and more than five years. Section A7 is about the range of respondent's age where ranges from 20-29, 30-39, 40-49 and 50 and above. Finally, Section A8 is the respondent placement either in Gambang campus or Pekan campus.

The second part (part B) focuses on the survey questions that consist of 47 items with a four-point response scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree) in which the higher scores correspond to staff satisfaction in eight constructs: staff involvement, workload, self-development, working environment, leadership, communication, job satisfaction and turnover intention are assigned from section B to I. The items in the survey instrument used are presented in Table 3.1.

3.4   Population and sampling

The population is UMP staff and since this is population-based study and used secondary data, thus the sampling is done conveniently based on secondary data that was collected for 4 consecutive years from 2012, 2013, 2014 and 2015. Thus, the latest data is clusterly sampled and used for the analysis in this research.

Table 3.1. **Indicators of staff satisfaction in UMP (Taken from UMP staff satisfaction survey, 2015)**

Components	Label	Indicators
Leadership	F1	Dean/Director/ Head of Departments ensure that staff has the skills needed
(Dean/ Director/	F2	Dean/Director/ Head of Departments is approachable
Head of Department)	F3	Dean/Director/ Head of Departments concern about staff's personal crisis
	F4	Dean/Director/ Head of Departments give recognition to work well done
	F5	Dean/Director/ Head of Departments provide feedback on staffs' performance
	F6	Dean/Director/ Head of Departments motivates staff to give their best
	F7	Dean/Director/ Head of Departments keeps staff informed of UMP's development
	F8	Dean/Director/ Head of Departments deals with staff who is weak diligently
	F9	Dean/Director/ Head of Departments understands the technical aspects of the staffs' job
	F10	Dean/Director/ Head of Departments treats staff equally
Staff involvement	B1	I am a part of UMP
	B2	UMP is a great organisation to work for
	B3	I am able to influence changes in my areas of work
	B4	My superior encourage cooperation among departments
	B5	I am informed about UMP's initiatives
	B6	I was given chances to participate in planning and making decision
	B7	I am willing to work hard in order to help UMP be successful
	B8	I am proud to tell others that I am UMP's staff
Workload	C1	*Workloads are distributed fairly at my workplace
	C2	*The workload allocation process is transparent
	C3	My workload has increased in the last one year
	C4	I often need to work after hours to finish my work
	C5	I find it is difficult to annual leave as result of my workload
	C6	I find my current workload is too much and struggling to cope

Table 3.1 continued

Components	Label	Indicators
Self- development	D1	The numbers of in house training provided are adequate
	D2	Types of in house training provided are in sync with job requirement
	D3	Chances to join outside training is equally given
	D4	Budget allocated for outside training is adequate
	D5	UMP is concerned about staff training and development
	D6	I was encouraged to learn things even if they were not related to my job
Working environment	E1	I am satisfied with my physical work space and office
	E2	UMP has a comfortable working ambience
	E3	UMP has adequate infrastructure for teaching and learning (Lecture rooms, laboratory and equipment)
	E4	UMP has adequate infrastructure (roads, recreation spot and mosque)
	E5	Food and catering facilities for staff are good
	E6	There is place where staff can take a rest during break time
	E7	I feel safe in my working environment
Communication	G1	On the whole, communication in UMP is effectives
	G2	Communication between top management and staff is effective
	G3	Overall, communication within my department is effective
Job satisfaction	H1	My working satisfaction is high
	H2	My experience is appreciated by University
	H3	My experience is appreciated by co-workers
	H4	My position in UMP is secure
	H5	There is a lot of chance for career improvement in UMP
Turnover intention	I1	I always thought of leaving UMP
	I2	If I was offered job by other agency, I will accept it

*negatively coded item.

3.5   Statistical Techniques for Data Analysis and Modelling

3.5.1   Descriptive Statistics

The data collected were analysed using frequencies, percentages, mode, mean, standard deviation, median and variance. The SPSS 23 package was used to analyse the data through descriptive statistical analyses.

3.5.2   Normality

Normality test for the data is an important step prior to use the data for certain multivariate data analysis technique including the regression analysis and structural equation modelling (SEM) (Tabachnick and Fidell, 2012). In this matter, when the assumption of data normality is violated, then an alternative for data analysis technique should be used (Hair et al., 2010; Henseler et al., 2009). The data normality test for this study was analysed using Kolmogorov-Smirnov and Shapiro-Wilk statistical analysis.

3.5.3   Outliers

The outlier analysis was carried to identify its presence in the data. The outlier is the data that have a unique value and it is very different from other data because it has an extreme response to a particular question or answer (Hair et al., 2011, 2014). Outlier is also a case where the score value is too high or too low as compared to other scores in a set of data (Byrne, 2010). Conducting investigation on outlier is an important step because if we skip the outlier's examination it would disturb the statistical test if there is a problematic outlier (Hair et al., 2010). The analysis to identify outliers is crucial to be carried out to get high quality outputs; that is by searching the data that have the values which are biased towards the model (Field, 2009).

The squared Mahalanobis distance is used for this analysis. The present of outlier can be detected if there is a point that is located in its own location that is far away from the centroid (Tabachnick and Fidell, 2012). This method statistically

measures the standard deviation distance between a set of scores for one case and the sample means for all the variables (Byrne, 2010).

3.5.4   Correlation Analysis

The data must also be screened for multicollinearity so that it is not violating the purity of the data. Coltman et al. (2008) and Hair et al. (2014) reported that items in formative measurement models are not mutually interchangeable unlike reflective indicators. If there is high correlation between formative indicators exists, they can show a problem from a methodological and interpretational point of view (Hair et al., 2014). The worst cases form of collinearity occurs if there are two or more formative indicators that measure exactly the same information in them. In other words, they are perfectly correlated or measuring the same thing.

Therefore, if the correlation between two independent (exogenous) variables is above 0.90 or above, it shows high collinearity in the variables (Tabachnick and Fidell, 2012). Other than that, the collinearity level could also be determined by tolerance and variance inflation factor (VIF). The tolerance is representing the amount of variance of one formative indicator which is not explained by the other indicators in the same model (Hair et al., 2014). The tolerance value that is equal or lower than 0.20 and a VIF value which is 5 or higher would indicate a potential collinearity problem (Hair et al., 2014, 2013, 2011).

3.5.5   Common Method Variance

Common Method Variance (CMV) is one of potential source of error in a study; thus, any analysis has to be done as this issue should not be overlooked. Method biases are an issue as they are among the source of measurement error in a research (Podsakoff et al., 2003). Measurement error is a big issue as it threatens the validity of the study because it would alter the conclusion of the relationship between the measures and it is well known to have both of a random and systematic error (Podsakoff et al., 2003).

The CMV can be analysed using Harman's single factor (Podsakoff et al., 2003). Harman 's single factor test was a procedure in which all the indicators that measure diversity of different constructs were subjected to one factor analysis. CMV is present if a single factor emerges from the factor analysis or one factor is explaining the majority of covariance among measures (Carlson and O'Cass, 2011; Podsakoff et al., 2003). If one factor is absent (no common factor in data) and the majority of variance was not explained by one general factor; thus, there is no evidence of CMV in the data (Carlson and O'Cass, 2011).

3.6   Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) is a "statistical method that uses a confirmatory (i.e., hypothesis-testing) analysis approach towards a structural theory bearing on some phenomenon" (Byrne, 2010). SEM has become a standard statistical tools in psychology (Hu and Bentler, 1998), social sciences, education and marketing research (Henseler et al., 2012) to investigate the credibility of empirical hypothetical model that explain the relationship between one set of variables. The objectives of SEM analysis is to determine the level of the hypothetical model that is supported by the sample data (Schumacker and Lomax, 2004). There are numerous theoretical models and hypothesis can be tested in SEM. Then, it can be determined how these construct are interrelated to each other.

In SEM, the variables that are not measured directly are called construct (unobserved variables or latent variables), which have two or more item (Byrne, 2010) and represented by oval or circle shape. Path model in a diagram is used to exhibit the relationship between constructs and research hypothesises that are being studied when SEM is applied (Chin et al., 2003; Hair et al., 2014; Tenenhaus et al., 2005). In this study, eleven hypothesises, which are H1, H2, H3, H4, H5, H6, H7, H8, H9 and H10, H11 are put forward (refer to Figure 2.4, chapter 2). The indicators, called items, observable variables, are a function to the latent variables or unobserved variables that build a strong basis on what the construct are supposed to represent. In this matter, the observable variables are all the indicators (all questions) measured.

In SEM, the constructs that explain another constructs are known as exogenous constructs. This means that exogenous constructs are synonymous with independent variables, and they causes fluctuation in the values of other variables represented in the model (Byrne, 2010). In this study, there are six exogenous variables, which are leadership, staff involvement, workload, self-development, working environment, and communication. Two other constructs that are being explained in the model are endogenous constructs, where endogenous variables are synonymous with dependent variables (Byrne, 2010), and they are being explained by exogenous variables in the model (Kline, 2005). In this study, the endogenous variables are staff satisfaction and turnover intention that are included in the model specification.

There are three step procedures used in running the structural equation model. First, SPSS 23 was used to initially analyse the data for the identification of outlier and normality test. Secondly, the descriptive statistics were used to explain and examine the participant demographic characteristics, frequencies, percentages, means, modes, standard deviation and variance. Lastly, the item with factor loadings below than 0.70 is removed before running the SEM factor analysis. The removal of items would decrease the number of indicators, and the consequence is that the model becomes more faithfully. Usually, removing the items in the experimental studies would improve model fit, increased the values of average variance extracted, attain data that are more continuous and normal (Tempelaar et al., 2007), increases indicator reliability (Sterba and MacCallum, 2010), decrease the number of model parameters, and acquire more stable parameter estimates (Tempelaar et al., 2007).

3.6.1 Partial Least Squares-Structural Equation Model (PLS-SEM)

Partial least square is an estimation that is popular and powerful in structural equation model that enable researcher to explore the relationship between a set of variables and identify the main pathways that exist in between the variables (Hair et al., 2014). PLS-SEM was used by numerous researchers from variety of field and disciplines, such as strategic management (Hulland, 1999), organizational and consumer behaviour (Barker and Rayens, 2003), marketing (Hair et al., 2012),

international marketing (Henseler et al., 2009), human resource management (Becker et al., 2012), and management information systems (Abdi et al., 2013).

PLS-SEM is very useful when there is small sample size, such as inferential statistics based on PLS-SEM that need only representative sample (Hair et al., 2013). Figure 3.2 shows the systematic procedure to use PLS-SEM.

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┌─────────────────────────────────────────────────────────────────┐
│              Stage 1: Specifying the Structural Model             │
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                                  ↓
┌─────────────────────────────────────────────────────────────────┐
│            Stage 2: Specifying the Measurement Models             │
└─────────────────────────────────────────────────────────────────┘
                                  ↓
┌─────────────────────────────────────────────────────────────────┐
│             Stage 3: Data Collection and Examination              │
└─────────────────────────────────────────────────────────────────┘
                                  ↓
┌─────────────────────────────────────────────────────────────────┐
│               Stage 4: PLS Path Model Examination                 │
└─────────────────────────────────────────────────────────────────┘
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│ Stage 5: Assessing PLS - SEM results of the Reflective Measurement Model │
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│ Stage 6: Assessing PLS - SEM results of the Formative Measurement Model │
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│        Stage 7: Assessing PLS Results of the Structural Model     │
└─────────────────────────────────────────────────────────────────┘
                                  ↓
┌─────────────────────────────────────────────────────────────────┐
│     Stage 8: Interpretation of Results and Drawing Conclusions    │
└─────────────────────────────────────────────────────────────────┘
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Figure 3.2. Systematic procedure for applying PLS-SEM

Sources: Hair et al. (2010, 2014)

3.6.2   PLS-SEM Algorithm

The partial least square-structural equation model consist of two component, the first one consists of measurement model, it is also can be referred as outer model in PLS-SEM context (Hair et al., 2011). The first component in PLS-SEM is the measurement model and also known as outer model (Henseler et al., 2009; Hair et al, 2014). This model is displaying the latent construct and the indicator relationship (Hair et al., 2014; Tenenhaus et al., 2005). There is only one direction of predictive relationship between indicator and latent construct; thus multiple relationships is not permitted (Hair et al., 2011). In PLS-SEM, there are reflective and formative indicator in the measurement model (Hair et al., 2014, 2011; Henseler et al., 2009). Reflective indicators are the indicator where the arrow is pointing from construct towards indicator variables. Meanwhile, formative indicators are the indicator that is pointing from indicator variables towards construct (Hair et al., 2014) (see Figure 3.3, page 51). Outer loading is the relationship between reflective indicator and latent construct and the values for the relationship of formative and latent construct is called outer weight (Hair et al., 2014, 2011).

The second component is a structural model and also known as inner model in PLS-SEM. It is represented by circle or oval shape. Moreover, the inner model/structural model depicts the relationship (paths) between the constructs. The structural model exhibits the relationship of exogenous construct (independent variable) towards endogenous construct (dependent variable) (Hair et al., 2014, 2011; Henseler et al., 2016; Tenenhaus et al., 2005). The endogenous construct are explained at least partially by the other constructs. This means that there should be at least one arrow in the structural model that points to it (Henseler et al., 2016). There are outer model/measurement model which related to indicator loadings and inner model/structural model which is related to path coefficient measures.

3.7   Assessment of Measurement Model

The first step in PLS-SEM analysis is to evaluate the outer model (or measurement model). The purpose is to determine how well the item (questions) load on the hypothetical-defined construct. Analysing the outer model comprises of unidirectional predictive relationships between each of the latent construct that is linked with the observed indicator (Hair et al., 2011). Generally, there are two distinct measures of the indicators in PLS-SEM that are reflective and formative outer model (Becker et al., 2012). The assessment of reflective outer model involves the examining of reliabilities of the individual items (indicator reliability), reliability of each latent variables, internal consistency (Cronbach alpha and composite reliability), construct validity (loading and cross loading), convergent validity (average variance extracted, (AVE)) and discriminant validity (Fornell-Larcker criterion, cross loading, HTMT criterion) (Hair et al., 2014; Henseler et al., 2015). Figure 3.3 shows the different between reflective and formative outer model.
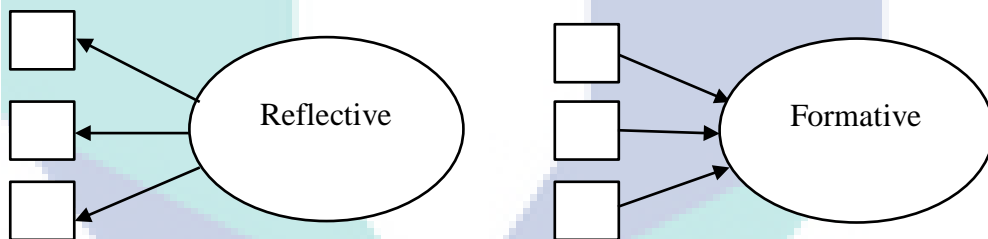
Figure 3.3. Reflective and Formative outer models

Sources: Hair et al. (2011, 2014)

3.7.1   Internal Consistency

The most common measurement used for internal consistency is Cronbach alpha and composite reliability, in which it measures the reliability based on the interrelationship of the observed items variables. In PLS-SEM, the values are organised according to their indicator's individual reliability (Hair et al., 2014). The values are between 0 to 1 and the higher the value indicates higher reliability level. In exploratory research, values of composite reliability/ Cronbach alpha between 0.60 to 0.70 are acceptable, while in more advanced stage the value have to be higher than 0.70 (Hair et

al., 2014). However, the value that is more than 0.90 is not desirable and the value that is 0.95 or above is definitely undesirable (Nunnally and Bernstein, 1994).

3.7.2 Indicator Reliability

Indicator reliability is the proportion of indicator variance that is explained by the latent variable. The values range from 0 to 1. The outer loadings value should be higher than 0.708 and it should be considered for deletion if the removal of the indicator with outer loadings that is between 0.40 and 0.70 contributes to an increase in composite reliability and average variance extracted (AVE) (Hair et al., 2014). On the other hand, indicators with outer loading below 0.40 should always be removed (Hair et al., 2011; Hulland, 1999).

3.7.3 Convergent Validity

Convergent validity is the assessments to measure the level of correlation of multiple indicators of the same construct are in agreement. To establish convergent validity, the factor loading of the indicator, composite validity (CR) and the average variance extracted (AVE) have to be considered (Hair et al., 2014). The value ranges from 0 to 1. AVE value should exceed 0.50 so that it is adequate for convergent validity (Bagozzi and Yi, 1988; Fornell and Larker, 1981; Hair et al., 2014; Henseler et al., 2009).

3.7.4 Discriminant Validity

Discriminant validity is referring to the extent in which the construct is actually differing from another empirically. It also measures the degree of differences between the overlapping construct (Hair et al., 2014). The discriminant validity can be evaluated by using cross loading of indicator, Fornell-Lacker criterion and Heterotrait-monotrait (HTMT) ratio of correlation. By using cross loading indicators, the factor loading indicators on the assigned construct have to be higher than all loading of other constructs (Hair et al., 2014); with condition that the cut-off value of factor loading is higher than 0.70 (Hair et al., 2014, 2011).

The second criterion is to assess discriminant validity using Fornell-Lacker criterion (Fornell and Cha, 1994). This method compares the square root of the average variance extracted (AVE) with the correlation of latent construct (Hair et al., 2014). A latent construct should explain better the variance of its own indicator rather than the variance of other latent constructs. Therefore, the square root of each construct's AVE should have a greater value than the correlations of other latent constructs (Hair et al., 2014).

The other measure for discriminant validity is Heterotrait-monotrait (HTMT) ratio of correlation. Henseler et al. (2015) proposed the superior performance of this method by means of Monte Carlo simulation study and found that HTMT is able to achieve higher specificity and sensitivity rates (97% to 99%) compared to the cross-loadings criterion (0.00%) and Fornell-Lacker (20.82%). HTMT values close to 1 indicated a lack of discriminant validity. Using the HTMT as a criterion involves comparing it to a predefined threshold. If the value of the HTMT is higher than this threshold, one can conclude that there is a lack of discriminant validity. Some authors suggest a threshold of 0.85 (Kline, 2011). In addition, Gold et al. (2001) argued with it and proposed a value of 0.90. Table 3.2 summarizes the assessment for measurement model.

Table 3.2. **The Assessment of Reflective Measurement Model**

Criterion	Description	Reference
Indicator reliability	The outer loadings should be higher than 0.708. Considering to removes item between 0.4 to 0.7 if the removal will increase Average Variance Extracted (AVE).	Hair et al (2014), Henseler et al. (2009)
Internal consistency (Cronbach alpha, Composite reliability)	The values must be higher than 0.708.	Hair et al (2010,2014)
Convergent validity (AVE)	The AVE must be higher than 0.50.	Fornell-Larcker (1981), Henseler et al. (2009), Hair et al (2014)
Fornell-Larker Criterion	The square root of AVE of a construct must be higher than the correlation of other constructs.	Fornell-Larcker (1981), Hulland (1999),Hair (2014)
Cross loadings	The loadings of the construct should have higher value than all of it cross loading with other construct. .	Hair et al (2014)
Heteroterait-monotrait Criterion (HTMT)	HTMT values must be below the threshold value of 0.85 for the loading to be free from correlation.	(Kline,2011)

3.8   Assessment of the Structural Model (Inner Model)

After analysing the outer model, the next step in PLS-SEM analysis is to analyse the inner model or structural model. Assessing the inner model involves the examining of the relationship between constructs and predictive capability of constructs. PLS-SEM only allows recursive relationship and can only head in a single direction except any causal loops in the structural model (Hair et al., 2011). There are four important steps in measuring the result of the structural model which are : assessment of the significance and relevance of the structural model relationship, assessment of the level of R^2 values, assessment of the effect size f^2, and assessment the predictive relevance Q^2 (Hair et al., 2014).

3.8.1 Path Coefficients

The first evaluation in structural model is the path coefficient. According to Henseler et al. (2009), path coefficient is assessed in terms of magnitude, sign and its significance. The path coefficients values of the hypothesised relationship between constructs can be achieved by running the PLS-SEM algorithm (Hair et al., 2014). The standardized values of each path coefficient are in between -1 and +1. The values of path coefficients that is close to +1 show that the constructs have strong and positive relationship and would always be significant statistically and vice versa if the values is close to -1, which indicates that there are negative relationship between constructs. The significant of path coefficients can be determined from the standard error obtained by using bootstrapping method and the empirical t value can be computed from standard error bootstrapping. Thus, large empirical t value shows that the critical values of path coefficient are significant. In this study, the samples of 5000 for bootstrapping two-tailed t-test procedure are used following the value that is suggested by Hair et al. (2011). Table 3.3 demonstrated the significant level for one and two tailed t-test.

Table 3.3. **Significant level for t-test (one-tailed and two-tailed)**

α	One-tailed	Two-tailed
0.01	2.330	2.570
0.05	1.645	1.960
0.10	1.230	1.645

3.8.2 Coefficient of Determination (R^2 Values)

Among the most common method used to evaluate and predict the accuracy of structural model is the coefficient of determination (R^2 value); the coefficients are calculated as the squared correlation between a specific endogenous construct's predicted and actual values. It also represents the amount of variance in the endogenous latent constructs that are explained by all the exogenous constructs that are linked to it (Hair et al., 2014, 2011). The R^2 represents higher level of predictive accuracy and the values also ranged from 0 to 1 (Hair et al., 2014). The R^2 values for endogenous constructs in the structural model are substantial when $R^2 = 0.75$, moderate when $R^2 = 0.50$, and weak when $R^2 = 0.25$ (Hair et al., 2011, 2013). The adjusted R^2 (R^2_{adj}) can be

used as the criterion to avoid bias to complex model with multiple regression (Hair et al., 2014).

3.8.3 Effect Size (f^2)

The other assessment for the model is the effect size (f^2). The effect size analysis has to be performed for regression based analysis exogenous latent construct on endogenous constructs. This analysis is used to measure the change of R^2 in order to comprehend whether a specific independent latent construct (exogenous construct) from model has a substantive impact on dependent construct (endogenous construct) (Cohen, 1988; Hair et al., 2014). After the estimation of R^2 values for each of endogenous variables, the modified values of R^2 would be obtained when a specified exogenous latent variable is eliminated from the model to gauge whether it has substantial impact on the endogenous variable (Hair et al., 2014). According to Cohen (1988), the values of f^2 is assessed as 0.02, 0.15, and 0.35 which represent small, medium, and large effects of the exogenous latent variable. Methodologically, the formulae of effect size is given by

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}} \tag{3.1}$$

Where $R^2_{included}$ and $R^2_{excluded}$ are the R^2 values of the endogenous latent construct when a selected exogenous latent construct is included or excluded from the structural model.

3.8.4 Blindfolding and Predictive Relevance (Q^2)

In addition, the magnitude of the R^2 values as a criterion of predictive accuracy has to be evaluated by means of the Stone's Q^2 values (Geisser, 1974; Stone, 1974). The Q^2 indicates the measurement of how well the observed values would be reconstructed by the model and its parameter estimates (Hair et al., 2014; Vinzi et al., 2010). It has been indicated that when the values of Q^2 is larger than zero for a certain specified endogenous construct, it shows the path model's predictive relevance for this

particular construct (Hair et al., 2014, 2011; Henseler et al., 2009). Table 3.4 shows the summary for the assessment for structural model.

Table 3.4. **The criteria for structural test**

Criteria	Description	Reference
Path coefficient	Are the estimation of path relationship in structural model	Hair et al. (2014), Henseler et al. (2009)
Significance test: Bootstrapping:5000 samples	T-test	Hair et al. (2011)
Coefficient of determination (R^2)	Measuring the predictive accuracy of the model Weak: 0.25 Moderate: 0.5 Substantial: 0.75	Hair et al. (2011), Henseler et al. (2009)
f^2 effect size	Small: 0.02 Medium: 0.15 Large: 0.35	Cohen (1988)
Predictive relevance (Q^2)	The value must be bigger than zero	Hair et al. (2014), Hair et al. (2011), Henseler et al. (2009)

3.9   Summary

This chapter discussed on the research design for this study and highlighted the process of managing data before analysis and modelling. The instrument used also tested so that it has a good reliability and validity. Structural Equation Modelling (SEM) was briefly discussed in this chapter. Partial least square structural equation modelling (PLS-SEM) was used to empirically evaluate the research model and to test the hypothesis.

CHAPTER 4

DATA ANALYSIS AND RESULTS

4.1   Introduction

This chapter focused on the results obtained from data analysis. In specific, this chapter provides the findings from descriptive analysis of latent constructs, outer models and inner model. The analysis of data from the questionnaire is mainly to validate the hypothesised model as stated and discussed in previous chapter using Structural Equation Modelling (SEM) through Partial Least Square (PLS) technique. The total cases from the secondary data are 1042 respondents and to be screened beforehand to treat any problem before further analyses using PLS-SEM.

This study involved a research model that has been developed based on the literature review which consisted of exogenous latent construct i.e. leadership, staff involvement, workload, self-development, working environment and communication. Also, the structural effect of the exogenous variables is mapped onto endogenous variables which are staff satisfaction and turnover intention respectively. Several hypotheses are tested and R^2 coefficient of determination, f^2 effect size, and Q^2 predictive relevance are also presented in this chapter.

4.2 Data Screening and Preliminary Analysis

The very first step that has to be carried out before data analysis is data screening. The data is checked in advance whether it meets the required psychometric properties for data analysis. This process involves treatment of missing data, multicollinearity, outlier, data normality, and common method bias which of these would have been issues in data analysis techniques if they are not treated. All the process is carried out by using IBM SPSS Statistics 23 (Statistical Package for Social Sciences).

4.2.1 Missing data analysis

In this study, there is no missing data detected. This is because the data is a secondary data that was taken from Universiti Malaysia Pahang (UMP) human resource department. Therefore, the data is already treated from missing data (See Appendix B). Nevertheless, two data are removed from the analysis who are respondents whose age below 19. This reduces the total number of respondents to 1040 only. Nevertheless, the numbers of respondents are more than suffice for the modelling analysis.

4.2.2 Outlier

Next, multivariate outliers are detected with Mahalanobis distance greater than the critical value of chi-squared (df = 8, $p < 0.001$) are removed from the data set (Filzmoser, 2005; Tabachnick and Fidell, 2012). Finally, 18 outliers were removed and the total numbers of respondents (1022) are to increase the authenticity of the data (Sekaran, 2006) and still fulfilling the criteria's needed for analysis and modelling.

4.2.3 Data normality

The Kolmogorov-Smirnov and Shapiro-Wilk tests would indicate whether the null hypothesis of normally distributed data would be rejected or not (Hair et al., 2014). The hypotheses are:

H_0 = The data follow normal distribution;
H_1 = The data does not follow normal distribution.

The p values/significant values < 0.05 in the Table 4.1 indicate that the data is not normally distributed. Therefore, this data is suitable for Partial Least Square-Structural Equation Model (PLS-SEM) analysis.

Table 4.1. **Test of Normality**

Construct	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	sig.	Statistic	df	Sig.
Staff Involvement	0.069	1022	0.000	0.979	1022	0.000
Workload	0.076	1022	0.000	0.987	1022	0.000
Self-Development	0.089	1022	0.000	0.985	1022	0.000
Working Environment	0.082	1022	0.000	0.989	1022	0.000
Leadership	0.102	1022	0.000	0.972	1022	0.000
Communication	0.194	1022	0.000	0.938	1022	0.000
Job Satisfaction	0.115	1022	0.000	0.977	1022	0.000
Turnover Intention	0.135	1022	0.000	0.942	1022	0.000

4.2.4 Collinearity

In this study, the correlational analysis was done to make sure that the variables are not highly correlated with each other. The bivariate spearman correlation was used to test the correlation of the independent variables as the data is not normally distributed. In the Table 4.2, it can be seen that there is very low correlation between the variables in the data set as it shown the correlation values that are below 0.90 (Tabachnick and Fidell, 2012) and these are reasonable. In Table 4.3, The variance inflation factor (VIF) and tolerance values also showed that colleniarity is not an issue

between the independent (exogenous) variables as they are below 5 for VIF values and greater than 0.20 for tolerance (Hair et al., 2011, 2013, 2014). Therefore, it can be concluded that from the collinearity analysis that there is no multicollinearity found among the variables. Subsequently, all items for each of the constructs/ variables are used in the modelling analysis.
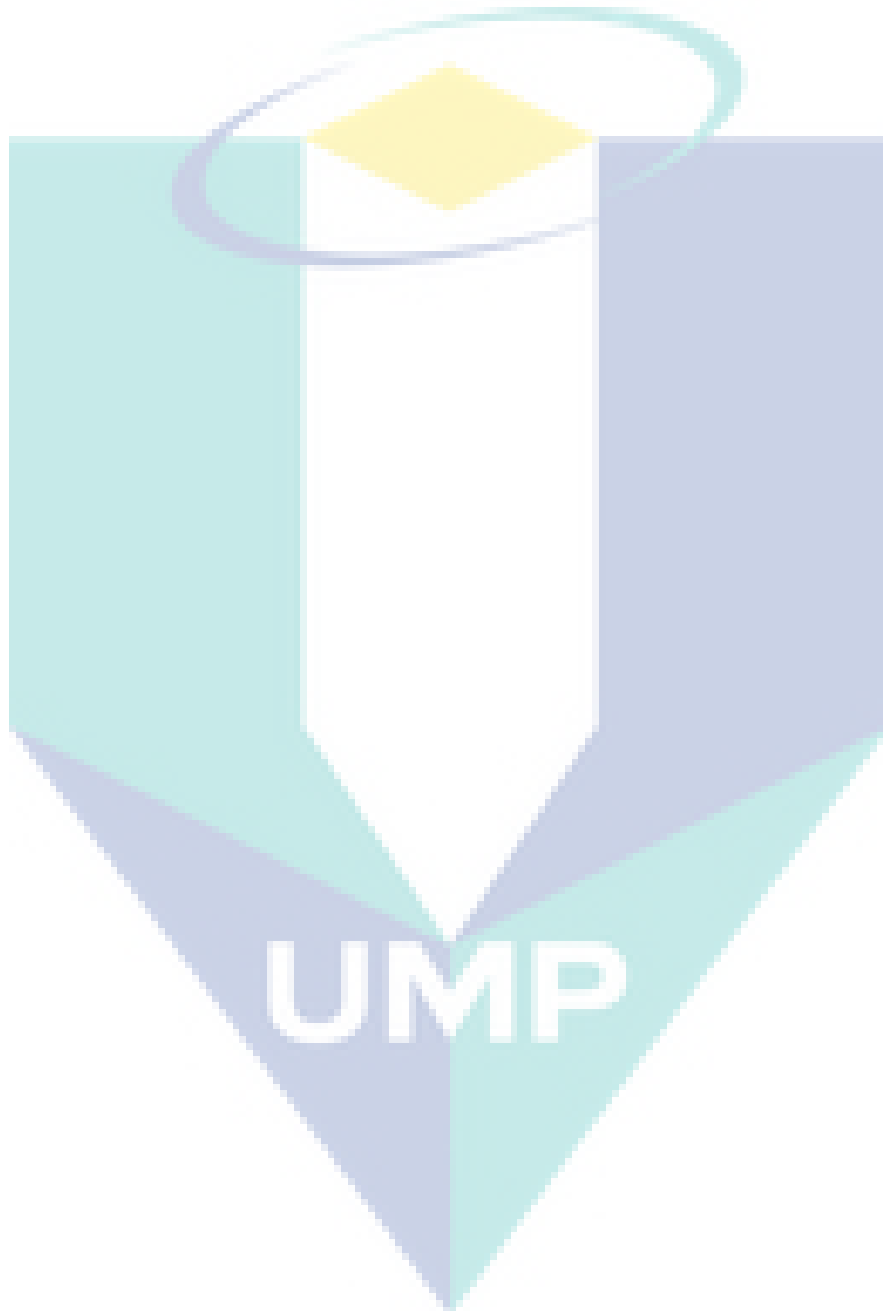
Table 4.2. **Correlation Analysis**

	SI	W/L	SD	WE	LEAD	COMM	SS	TI
SI	1							
W/L	-0.194**	1						
SD	0.575**	-0.237**	1					
WE	0.528**	-0.266**	0.569**	1				
LEAD	0.696**	-0.282**	0.611**	0.561**	1			
COMM	0.600**	-0.270**	0.584**	0.640**	0.721**	1		
SS	0.682**	-0.281**	0.571**	0.596**	0.645**	0.655**	1	
TI	-0.391**	0.272**	-0.266**	-0.313**	-0.324**	-0.313**	-0.432**	1

Note: ** correlation is significant at the 0.01 level (2-tailed). SI = Staff Involvement; W/L = Workload; SD = Self-development; WE = Working Environment; LEAD = Leadership; COMM = Communication; SS = Staff Satisfaction (dependent variables); TI = Turnover Intention (dependent variables).

Table 4.3. **Variance Inflation Factor and Tolerance**

	Collinearity Statistics	
Independent variables	Tolerance	VIF
Staff Involvement	0.435	2.301
Workload	0.831	1.204
Self-development	0.487	2.054
Working Environment	0.484	2.066
Leadership	0.318	3.147
Communication	0.326	3.063
Turnover Intention	0.791	1.264

Note: Dependent variable: Turnover Intention

4.2.5   Common Method Bias

It is typical that data collected using questionnaires are sensitive to Common Method Variance (CMV). Besides, the data that is collected from the same group of respondents which might contribute to this issue as they might be swayed by the social desirability, halo effects, or leniency effect (Podsakoff et al., 2003). Therefore, Harman's single factor test was used to solve this issues (Podsakoff et al., 2003). An exploratory factor analysis (EFA) was done and revealed that the unrotated factor solution of all of the items in the questionnaire with the first factors explaining only 35.40% of the variance (See appendix C). This showed that no single factor is explaining more than 50% of the variance. Subsequently, the was no general factor generated from the unrotated factor solution; thus, CMV is not contaminating the data.

4.2.6   Non-response bias

In this study, it can be stated that there is no non-response bias that contaminate the data because the sample size taken for the study is large enough with 1042 staff out of 1676. Secondly, the data used is also a secondary data and thus non-response bias analysis is not possible to be evaluated. Therefore, it can be implied that non-response bias is not an issue in this study.

4.3   Respondents And Demographic Profiles

Descriptive statistics is done in order to provide simple description of the data analysed. The items measured are explained in terms of frequency and percentages. The staff who participated in the study was 1022 from 1676 UMP's staff from all the faculties in Gambang and Pekan campuses (See appendix D, E). All the 1022 participants formed the full data set of the original case in which data were collected from human resource department (secondary data). In addition, the mean scores and standard deviation for each of the variable were also provided (See appendix F).

In summary, from the results of descriptive analysis, UMP staff were in unanimity agreeing that they are involved in pioneering towards university excellence. But, there are problematic constructs that should really be taken care of in the university because according to the study they were the cause that are dragging down the staff satisfaction level in UMP. These constructs are self-development, working environment and workload. Firstly, staff perception about their workload still in low satisfaction level. This is mainly because of their workload is keep on increasing as compared to previous years. Secondly, Staff were satisfied with the university agenda in their self-development there; but, they still put up their hope so that university management gives them more chances in participating in outside training. As found in this study, it can be understood from the mean score that budget allocated for outside training showed that staff were not satisfied with it.

Thirdly, the lowest mean in this study is in the working environment construct. The items E5 and E6 showed that staff were very dissatisfied in this respective indicators. It was found that the food and catering facilities for staff were distasteful. It was reported that there were a lot of issues regarding the cafeteria in UMP, they are as follow: 1) the cleanliness of the cafeteria was not in a good level; 2) staff had to share the cafeteria with students as the cafeterias provided are small in size and number; and 3) the choices of food in the cafeteria were limited (Ibrahim and Burhanuddin, 2015).

4.4   Assessment of Measurement Model

4.4.1   Indicator Reliability

Table 4.4 shows the outer loadings of the measurement model. It can be seen that there are a lot of items that are lower than 0.708 in the table. It was narrated by Hair et al. (2014) that the outer loading that is between 0.40 and 0.70 should be removed if the removal leads to the increasing of AVE > 0.5 or above. Therefore, the items C3, C4, C5 and C6 were removed to increase the AVE value. Other than that, the item in staff involvement construct is also removed to increase the AVE in the construct. The items that were removed are B3, B5 and B6. In addition, E5, D6 and H4 indicators were also removed. A total of 10 indicators were removed in total in the model. There are certain items that has outer loading below 0.708 which is not removed from the model as the AVE is satisfying (0.50 or above), the outer loading that is above 0.4 can still be accepted in the model (Hair et al., 2014).

In addition, Table 4.5 shows the cross-loading of item after the deletion of several items in indicator reliability test as shown in Table 4.4. In the cross-loading examination, two items were deleted. The deleted items were B4 and G3 as they did not fulfil the construct validity test.

Table 4.4. **Outer Loading of Indicator**

Construct	Indicator	Loading	t-test
Leadership (LEAD)	F1	0.756	48.092
	F2	0.809	61.415
	F3	0.777	48.376
	F4	0.762	45.708
	F5	0.824	73.582
	F6	0.863	100.341
	F7	0.791	49.347
	F8	0.763	47.780
	F9	0.781	58.022
	F10	0.793	61.862
Staff Involvement (SI)	B1	0.651	28.780
	B2	0.746	45.285
	B3	0.546	15.822
	B4	0.668	34.382
	B5	0.692	26.063
	B6	0.653	31.450
	B7	0.667	26.537
	B8	0.730	34.914
Workload (W/L)	C1	0.883	97.265
	C2	0.888	102.182
	C3	0.060	0.810
	C4	-0.076	1.094
	C5	0.095	1.374
	C6	0.214	2.947
Self-development (SD)	D1	0.766	44.663
	D2	0.736	41.854
	D3	0.775	47.506
	D4	0.721	36.678
	D5	0.791	57.284
	D6	0.575	20.042
Working Environment (WE)	E1	0.693	32.675
	E2	0.801	57.822
	E3	0.701	32.093
	E4	0.677	29.974
	E5	0.592	22.394
	E6	0.636	25.886
	E7	0.734	43.303
Communication (COMM)	G1	0.899	120.113
	G2	0.876	97.017
	G3	0.825	65.109
Staff Satisfaction (SS)	H1	0.800	58.208
	H2	0.808	61.629
	H3	0.722	36.361
	H4	0.525	15.569
	H5	0.743	47.649
Turnover Intention (TI)	I1	0.898	80.142
	I2	0.893	85.035

All items are significant at t-values > 2.58 for alpha = 0.01.

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Table 4.5. **Cross-Loading examination of construct (after deletion of several items)**

Indicator	Construct							
	COMM	LEAD	SD	SI	SS	TI	WE	W/L
B1	0.320	0.330	0.295	**0.690**	0.399	0.313	0.340	0.303
B2	0.510	0.520	0.399	**0.790**	0.542	0.390	0.470	0.452
B4	0.500	0.660	0.418	**0.680**	0.473	0.219	0.360	0.540
B7	0.330	0.390	0.330	**0.720**	0.401	0.271	0.400	0.324
B8	0.450	0.470	0.399	**0.770**	0.521	0.334	0.440	0.392
C1	0.560	0.640	0.444	0.510	0.542	0.289	0.440	**0.886**
C2	0.630	0.630	0.532	0.500	0.604	0.285	0.560	**0.895**
D1	0.470	0.460	**0.780**	0.340	0.445	0.193	0.450	0.387
D2	0.430	0.460	**0.757**	0.450	0.466	0.242	0.450	0.404
D3	0.440	0.500	**0.797**	0.400	0.469	0.230	0.400	0.464
D4	0.420	0.430	**0.743**	0.310	0.421	0.174	0.430	0.410
D5	0.560	0.510	**0.785**	0.460	0.586	0.303	0.520	0.450
E1	0.440	0.420	0.374	0.360	0.438	0.233	**0.720**	0.392
E2	0.550	0.490	0.466	0.480	0.542	0.316	**0.820**	0.457
E3	0.510	0.440	0.413	0.430	0.450	0.210	**0.710**	0.422
E4	0.460	0.410	0.409	0.380	0.435	0.215	**0.670**	0.376
E6	0.390	0.340	0.394	0.270	0.393	0.216	**0.610**	0.339
E7	0.500	0.460	0.456	0.410	0.502	0.279	**0.740**	0.432
F3	0.560	**0.780**	0.438	0.490	0.552	0.230	0.410	0.524
F4	0.610	**0.760**	0.523	0.490	0.590	0.292	0.500	0.503
F5	0.660	**0.820**	0.517	0.510	0.587	0.275	0.510	0.545
F6	0.710	**0.860**	0.516	0.580	0.602	0.287	0.530	0.597
F7	0.680	**0.790**	0.482	0.500	0.549	0.237	0.500	0.545
F8	0.550	**0.760**	0.432	0.540	0.490	0.265	0.430	0.580
F9	0.560	**0.780**	0.456	0.570	0.520	0.327	0.450	0.599
F10	0.560	**0.790**	0.463	0.590	0.518	0.294	0.450	0.646
F1	0.640	**0.760**	0.527	0.520	0.642	0.233	0.510	0.563
F2	0.600	**0.810**	0.475	0.530	0.569	0.287	0.490	0.533
G1	**0.900**	0.650	0.546	0.530	0.623	0.306	0.610	0.582
G2	**0.880**	0.620	0.530	0.520	0.642	0.304	0.600	0.580
G3	**0.830**	0.740	0.496	0.510	0.594	0.281	0.530	0.582
H1	0.600	0.600	0.495	0.560	**0.820**	0.380	0.580	0.549
H2	0.590	0.560	0.515	0.490	**0.824**	0.357	0.520	0.475
H3	0.530	0.560	0.456	0.460	**0.733**	0.274	0.440	0.485
H5	0.500	0.490	0.478	0.510	**0.739**	0.359	0.460	0.499
I1	0.320	0.310	0.258	0.400	0.402	**0.900**	0.330	0.295
I2	0.290	0.300	0.280	0.350	0.388	**0.892**	0.290	0.282

Note: Bold values are the loading of the respective construct. SI = Staff Involvement; W/L = Workload; SD = Self-development; WE = Working Environment; LEAD = Leadership; COMM = Communication; SS = Staff Satisfaction TI = Turnover Intention

4.4.2 Internal Consistency and Composite Reliability

The Cronbach alpha and composite reliability values were shown in the Table 4.6. The result shows that the Cronbach alpha values are ranging from 0.739 to 0.911 and all of them are above 0.70 as suggested by the majority of researchers (Fornell and Larker, 1981; Hair et al., 2014, 2011; Tenenhaus et al., 2005). The same goes for the Composite Reliability with coefficients that are ranging from 0.860 to 0.934 and all of them are above the cut off values of 0.70.

4.4.3 Convergent Validity

In Table 4.6, all AVE values are in between 0.512 to 0.877 which are higher than the 0.50 (Hair et al., 2014). Thus, this supports the convergent validity of the measurement model. In the table, it can clearly be seen that all the eight constructs (leadership, staff involvement, workload, self-development, working environment, communication, staff satisfaction and turnover intention) achieved the convergent validity test as their factor loadings, composite reliability and average variance extracted are higher than the values recommended.

Next, the model is further assessed to determine the discriminant validity of the constructs used in the instrument by using Fornell and Larcker Criterion (1981) and Heterotrait-monotrait (HTMT) ratio of correlations by Henseler et al. (2015).

Table 4.6. **Convergent Validity Assessment**

Construct	Indicator	Loading	Cronbach alpha	Composite Reliability	AVE
Leadership (LEAD)	F2	0.809	0.911	0.930	0.654
	F3	0.777			
	F4	0.762			
	F5	0.824			
	F6	0.863			
	F8	0.763			
	F9	0.781			
Staff Involvement (SI)	B1	0.651	0.785	0.860	0.606
	B2	0.746			
	B7	0.667			
	B8	0.730			
Workload (W/L)	C1	0.883	0.739	0.884	0.793
	C2	0.888			
Self-development (SD)	D1	0.766	0.832	0.881	0.597
	D2	0.736			
	D3	0.775			
	D4	0.721			
	D5	0.791			
Working Environment (WE)	E1	0.693	0.807	0.862	0.512
	E2	0.801			
	E3	0.701			
	E4	0.677			
	E6	0.636			
	E7	0.734			
Communication (COMM)	G1	0.899	0.860	0.934	0.877
	G2	0.876			
Staff Satisfaction (SS)	H1	0.800	0.784	0.861	0.608
	H2	0.808			
	H3	0.722			
	H5	0.743			
Turnover Intention (TI)	I1	0.898	0.754	0.890	0.803
	I2	0.893			

a. Average variance extracted (AVE) = (summation of the square of the factor loading)/{(summation of the square of factor loadings) + (summation of the error variances)}
b. Composite reliability (CR) = (Square of the summation of the factor loading)/{(Square of the summation of the factor loadings) + (Square of the summation of the error variance)}

4.4.4 Discriminant validity

a. Fornell and Larcker Criterion (1981)

It is perceived in the Table 4.7 that all of the square roots of the AVE of the latent constructs are higher than the correlation of each pair of the latent constructs (the bold and diagonal values are higher than the values without bold (off-diagonal)). Hence, the model achieved adequate discriminant validity.

b. Heterotrait-monotrait (HTMT) ratio of correlation (Henseler et al. 2015)

In this study, the threshold value used is 0.85. First, by using smart PLS 3 software, PLS algorithm was run and the result of the HTMT ratio of correlation is depicted in Table 4.8. The result indicated that there is no problem in discriminant validity according to the $HTMT_{0.85}$ criterion. The result also shows that the latent construct are really discriminant to each other. Therefore, the assessment of measurement model (outer model) is complete and the next analysis is to evaluate the structural model (inner model).

Table 4.7. **Fornell and Larcker 1981's Discriminant Validity Test**

	COMM	LEAD	SD	SI	SS	TI	WE	W/L
COMM	**0.937**							
LEAD	0.658	**0.809**						
SD	0.575	0.594	**0.773**					
SI	0.509	0.551	0.463	**0.779**				
SS	0.675	0.691	0.624	0.608	**0.78**			
TI	0.326	0.347	0.300	0.424	0.442	**0.896**		
WE	0.649	0.585	0.586	0.532	0.647	0.345	**0.716**	
W/L	0.620	0.686	0.549	0.481	0.644	0.323	0.566	**0.890**

Note: Bold values are the square root of the AVE on the diagonal, meanwhile the off-diagonals are the correlations among variables; SI = Staff Involvement; W/L = Workload; SD = Self-development; WE = Working Environment; LEAD = Leadership; COMM = Communication; SS = Staff Satisfaction TI = Turnover Intention

Table 4.8. **HTMT result**

	COMM	LEAD	SD	SI	SS	TI	WE	W/L
COMM								
LEAD	0.742							
SD	0.673	0.678						
SI	0.604	0.637	0.557					
SS	0.820	0.817	0.765	0.758				
TI	0.404	0.418	0.374	0.544	0.571			
WE	0.778	0.678	0.713	0.655	0.807	0.439		
W/L	0.777	0.836	0.697	0.619	0.846	0.432	0.730	

Note: All the values must be below 0.85 to show the validation of discriminant validity; SI = Staff Involvement; W/L = Workload; SD = Self-development; WE = Working Environment; LEAD = Leadership; COMM = Communication; SS = Staff Satisfaction TI = Turnover Intention

In addition, three more items were deleted in the measurement model which is to increase the validity of the model. The items deleted were F7, F1 and F10. The items were deleted to fulfil the criteria of Heterotrait-Monotrait ratio (HTMT) discriminant validity test which is to have the values that is below the threshold value. Total item deleted is 15 out of 47 items which is approximately 32% from the measurement model.

4.5   Assessment of Structural Model

4.5.1   Path Coefficient

From Figure 4.1 and Figure 4.2, it revealed that most of the path coefficients or regression weights are important and they are also statistically significant at $\alpha = 0.01$ (1% error) significance level. In addition, the directions of the study hypotheses are in line with the hypotheses proposed as discussed in the reviewed literature.
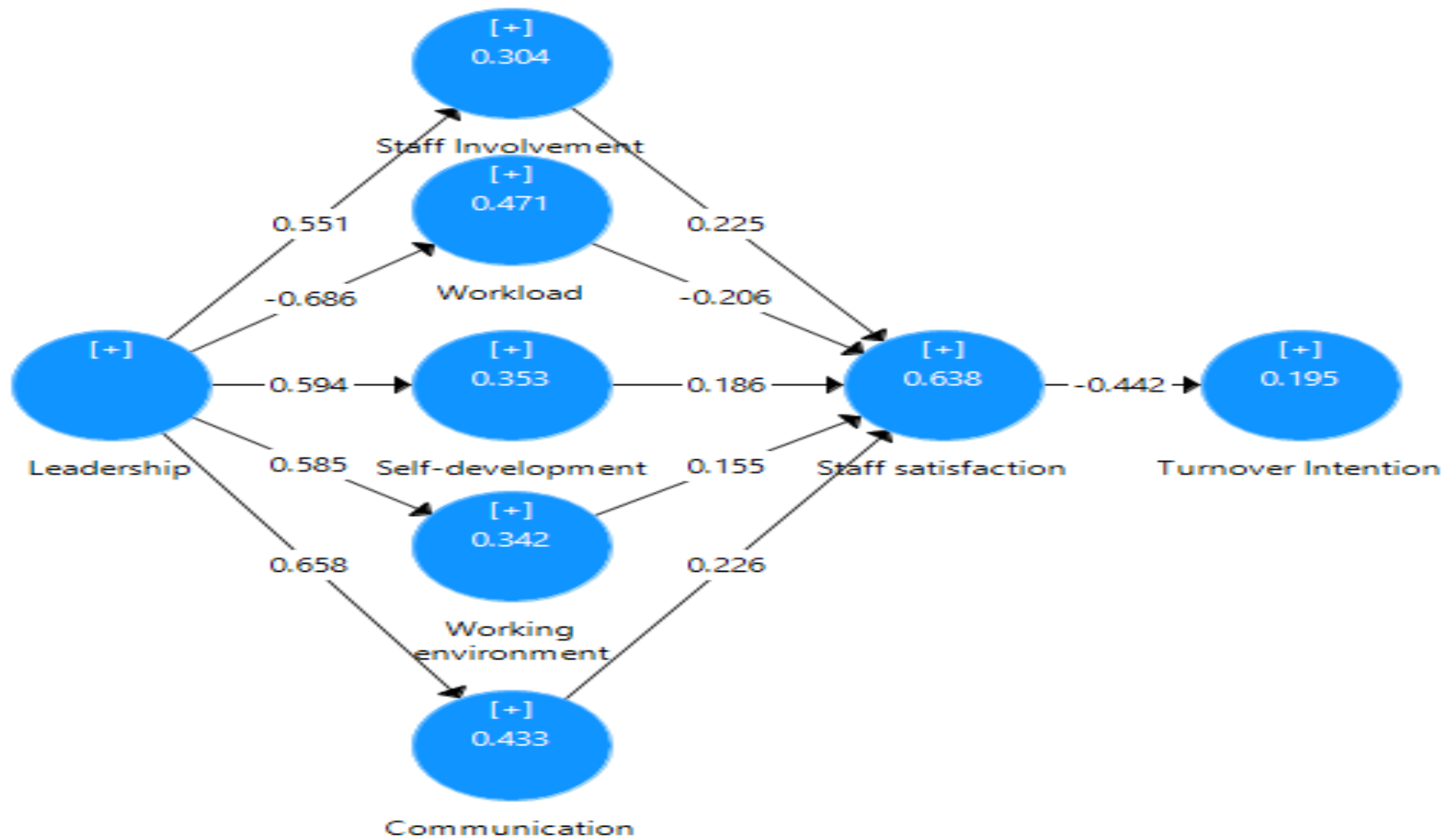
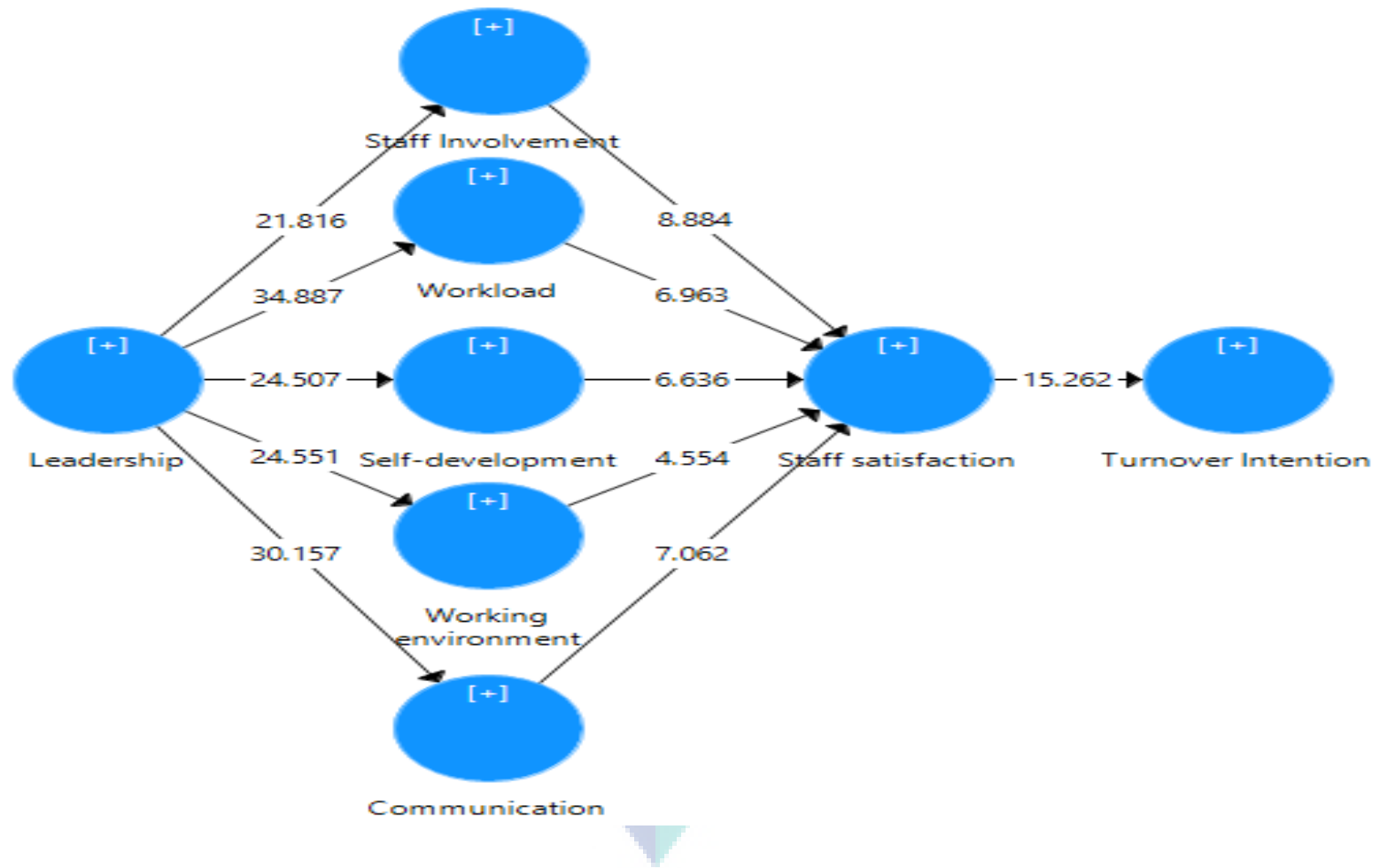**Figure 4.1.** The assessment of structural model (inner model) of the hypothesised model

Figure 4.2. Bootstrapping of structural model (Inner Model) (n=5000)

4.5.2   Hypotheses Testing

There are eleven hypotheses that were posited in the hypothesised model as in chapter 2 and they are being tested using PLS estimation. The result of the modelling is depicted in the Table 4.9 below. The table represents the path coefficient (β) and their significance level in the structural model. All of the relationships between the construct were found to be significant. It can also be seen that all of the eleven hypotheses were well supported.

Table 4.9. **Hypotheses testing**

Hypo	Relationships	Beta (β)	Std. error	t-value	Decisions
H1	Leadership -> Staff involvement	0.551	0.025	21.816*	Supported
H2	Leadership -> Workload	-0.686	0.020	34.887**	Supported
H3	Leadership -> Self-development	0.594	0.024	24.507*	Supported
H4	Leadership -> Working environment	0.585	0.024	24.551*	Supported
H5	Leadership -> Communication	0.658	0.022	30.157*	Supported
H6	Staff involvement -> Staff satisfaction	0.225	0.026	8.884*	Supported
H7	Workload -> Staff satisfaction	-0.206	0.030	6.963**	Supported
H8	Self-development -> Staff satisfaction	0.186	0.028	6.636*	Supported
H9	Working environment -> Staff satisfaction	0.155	0.034	4.554*	Supported
H10	Communication -> Staff satisfaction	0.226	0.031	7.062*	Supported
H11	Staff satisfaction -> Turnover intention	-0.442	0.029	15.262*	Supported

*$p < 0.01$, 1-tailed ($t > 2.33$), **$p < 0.01$, 2-tailed ($t > 2.57$)

It was posited by the hypothesis 1 that there is a positive impact of leadership on staff involvement. From the result, it was revealed that there is a significant impact with standardized regression weight 0.551, t-value = 21.816 at 0.01 significant level one-tailed test. It means that if leadership increase in one standard deviation, the staff involvement would be increased by 0.551. Next, hypothesis 2 posited that there is a negative impact of leadership on workload and the result supported the relationship as the standardised regression weight –0.686, t-value = 34.887 at 0.01 significance, two-tailed. This means that, whenever leadership is increased by 1 standard deviation, the workload would be decrease by 0.686.

Meanwhile, hypothesis 3 is examining the structural impact of leadership on self-development and it was revealed a significant impact at 0.01 one-tailed significance

level, t-value = 24.507 with beta score of 0.594. This denotes that when leadership is increased by one standard deviation the self-development would also increase by 0.594. Then, hypothesis 4 posited that there is significant relationship between leadership and working environment. Based on the analysis, it revealed that the beta score is 0.585 with t-value of 24.551 at 0.01 significant levels. This testifies that if leadership is increased by 1 standard deviation, then working environment would increase by 0.585.

Hypothesis 5 posited that there is significant impact of leadership on communication. From the result, it could be seen that the regression weight is 0.658 at t-values of 30.157 at 0.01 significant levels. This pointed out that when leadership is increased by 1 standard deviation, communication would also increase by 0.658 units. Next, it was posited by hypothesis 6 that there is significant impact of staff involvement on staff satisfaction. The analysis showed that the beta score is 0.225 with t-value of 8.884 at 0.01 significant level at one-tailed test. This connotes that if staff involvement increased by 1 standard deviation, then staff satisfaction is increased by 0.225.

Hypothesis 7 posited that there is significant impact of workload on staff satisfaction. From the result, it could be seen that the regression weight is -0.206 at t-values of 6.963 at 0.01 significant levels. This points that when workload increased by 1 standard deviation, staff satisfaction would decrease by 0.206 units. Next, it was posited by hypothesis 8 that there is significant impact of self-development on staff satisfaction. The analysis shows that the beta score is 0.186 with t-value of 6.636 at 0.01 significant level at one-tailed test. This connotes that if self-development increased by 1 standard deviation, then staff satisfaction increased by 0.186.

Hypothesis 9 posited that there is an impact of working environment on staff satisfaction. From the result, it revealed a significant impact with regression score of 0.155, t-value = 4.554 at 0.01 significant level, one-tailed. It expresses that if working environment is increased by one standard deviation, then staff satisfaction is increased by 0.155. Then, hypothesis 10 posited that there is significant impact of communication on staff satisfaction and result supported the relationship as the standardised regression weight of 0.226, t-value of 7.062 at 0.01 one-tailed significant level. This entails that, whenever communication is increased by 1 standard deviation, the staff satisfaction would increase by 0.226. Lastly, hypothesis 11 examined the relationship of staff

satisfaction and turnover intention. From the result, it shows beta score of -0.442, t-test = 15.262 at 0.01 one-tail significant level. It defines that if staff satisfaction is increased, then employee turnover intention would decrease by 0.442.

4.5.3 The Coefficient of Determination (R^2)

Based on the Figure 4.3, the R^2 adjusted value for staff satisfaction construct is 0.637, which means that 63.7% of the staff satisfaction is explained by staff involvement, workload, self-development, working environment and communication construct. In addition, the R^2 adjusted value for turnover intention is 0.194 which means that 19.4 % of the construct is explained by staff satisfaction construct. In overall, the variances that are explained by each of the endogenous construct from exogenous constructs are acceptable as testified in Figure 4.3.
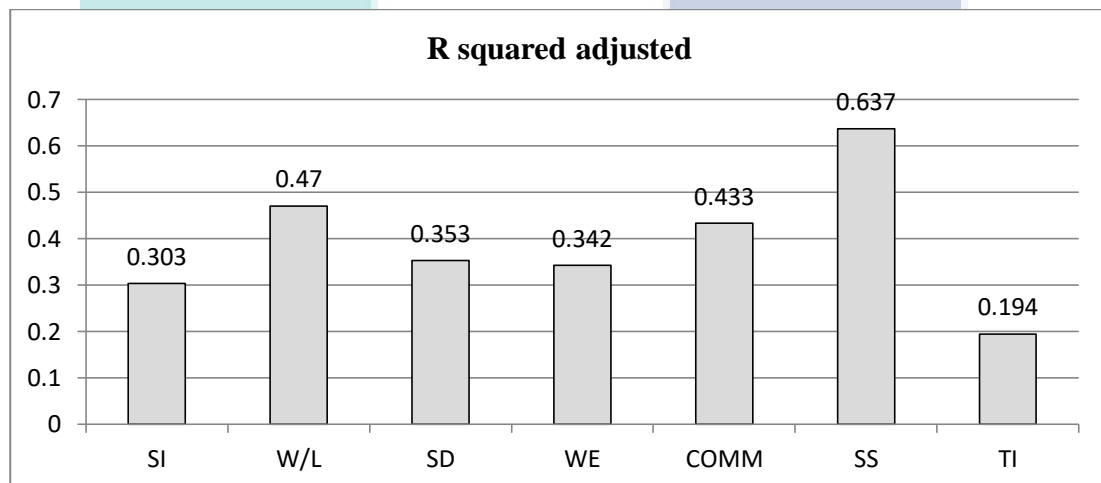
Note: SI = Staff Involvement; W/L = Workload; SD = Self-development; WE = Working Environment; LEAD = Leadership; COMM = Communication; SS = Staff Satisfaction TI = Turnover Intention

Figure 4.3. *R* square adjusted

4.5.4   The f^2 Effect size

In Figure 4.4, it can be seen that there is medium effect size of staff satisfaction towards turnover intention (0.242). Lastly, there is very small effect size of staff involvement, workload, self-development, working environment and communication on staff satisfaction which is between 0.03 to 0.15.
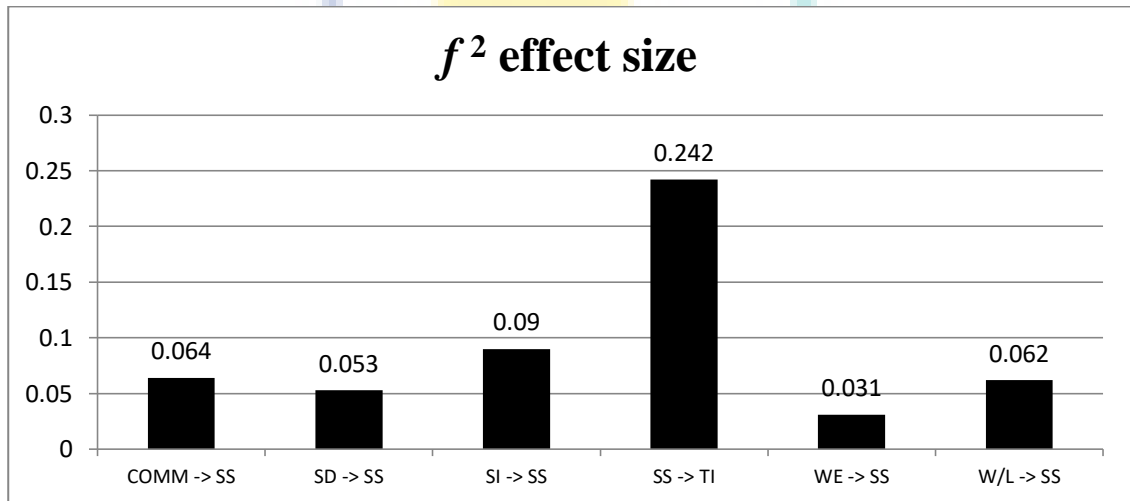
Note: SI = Staff Involvement; W/L = Workload; SD = Self-development; WE = Working Environment; LEAD = Leadership; COMM = Communication; SS = Staff Satisfaction TI = Turnover Intention

Figure 4.4. The f^2 Effect size from exogenous construct to endogenous construct

4.5.5   Predictive Relevance (Q^2)

Table 4.10 shows the predictive relevance of each of the constructs with omission distance, $D = 10$. The values ranged from 0.155 to 0.385 and they are fulfilled the criteria for predictive relevance of the structural model.

Table 4.10. **Predictive Relevance (Q^2)**

Constructs	Q^2
Staff Involvement	0.178
Workload	0.373
Self-development	0.209
Working Environment	0.174
Communication	0.379
Staff Satisfaction	0.385
Turnover Intention	0.155

4.6 Summary

Basically, the model is successfully undergoing the measurement and structural validity test assessment by examining the impact of staff satisfaction on turnover intention based on the 6 variables studied (leadership, staff involvement, workload, self-development, working environment and communication). The hypothesised model proposed were developed based on the literatures that were reviewed.

In short, this chapter analysed the measurement model by identifying the weak factor loadings, internal consistency, convergent validity and discriminant validity test. The structural model was also assessed through path coefficient, R^2, f^2 effect size and Q^2. In a nutshell, the hypothesised model proposed is valid in the context of organisation under study. The next chapter discusses on the relationship of the proposed hypotheses in a detailed manner in order to meet the research objectives and answer the research questions.

CHAPTER 5

DISCUSSIONS AND CONCLUSIONS

5.1   Introduction

In this chapter, it is aimed at providing a thorough discussion from the empirical results and findings that were obtained during the analysis of data in Chapter 4. It presents the whole findings in tandem with answering the research questions and the hypotheses proposed in the earliest chapter. This chapter also discussed on how the result would fill the gap addressed in chapter 1 and also the contribution of the study in terms of staff satisfaction in Malaysian universities as a whole and the higher education intuition under study in specific. In addition, this study also highlights the knowledge of staff satisfaction conceptualisation and its impact on turnover intention, and also validates the research model by using PLS-SEM.

5.2   Summary of the Findings

A set of questionnaire data from previous study was used to obtain the staff perception about their satisfaction with their current work in Universiti Malaysia Pahang (UMP). The perceptions were analysed to answer the research questions and to validate the research model that was proposed. This study managed to answer all five the research questions and fulfilled the research objectives for the study. In return, this study has developed and validated the research model proposed that contains a total of six dimensions which lead to staff satisfaction and its effect on turnover intention. Table 5.1 below summarized the research findings from the previous chapter.

Table 5.1. **Summary of research findings**

Constructs	Beta (β)	Adj R^2	f^2	Q^2
Staff involvement	0.225	0.303	small	Has predictive relevance
Workload	-0.206	0.470	small	Has predictive relevance
Self-development	0.186	0.353	Small	Has predictive relevance
Working environment	0.155	0.342	Small	Has predictive relevance
Communication	0.226	0.433	Small	Has predictive relevance
Staff satisfaction	-0.442	0.637	Medium	Has predictive relevance
Turnover intention	-	0.194	-	Has predictive relevance

Based on the findings, it was found that staff satisfaction (SS) is substantially influenced by three of its factors which are communication (0.226), staff involvement (0.225) and workload (-0.206). In contrary, two of its antecedents which are working environment (0.155) and self-development (0.186) are having a weak contribution to staff satisfaction. In addition, it can also be inferred that leadership contributes strongly to all of the constructs that are connected to it. On the other hand, the assessment of the constructs that leads to staff satisfaction shows that 63.7% of the overall variance ($R^2_{adjusted} = 0.637$) in staff satisfaction are explained by all factors understudy.

Therefore, the relationship among the six constructs are strong components that contribute to staff satisfaction. The relationship is also fully supported and proved by the previous studies of staff satisfaction (Chahal et al., 2013; Mcmullen and Group, 2013; Mustapha and Yu Ghee, 2013; Faisal Azeem et al., 2013; Kulkarni, 2013; Rehman et al., 2012; Kumari, 2011; Medina, 2012; Kumari, 2011; Sempane et al., 2002; Winska, 2000;).

In addition, the result also demonstrated that staff satisfaction has a negative relationship with turnover intention and contributed to 19.4% of the variance ($R^2_{adjusted} = 0.194$) in turnover intention. This study is inline and matches with the literature review that stated when the staff satisfaction increases, their turnover intention would decrease (Arokiasamy, 2013; Egan et al., 2004; Kusku, 2001; Medina, 2012; Mehrad et al., 2015; Silverthorne, 2004). Eleven hypotheses in the study (i.e. H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11) were supported with all of them are significant (t= 21.816,

34.887, 24.507, 24.551, 30.157, 8.884, 6.963, 6.636, 4.554, 7.062, 15.262). All of the t-values exceeding 2.58 which shows that the hypotheses are well-supported with one and two-tailed t-test at 1% significant level.

Thus, in the following section, further explanations of the results obtained are discussed in greater detail.

5.3 Discussion of the Findings

In this section, the findings of the study answer the relationship between each of the exogenous and endogenous latent variables as developed in the hypothesised model in Chapter 2. Following this, the relationships between predictors in the study are discussed thoroughly and towards staff satisfaction and its impact on turnover intention at the higher education institutions.

5.3.1 Relationship of Leadership on Staff Involvement, Workload, Self-Development, Working Environment, Communication

The outcome shows that leadership positively affected staff involvement and proved by the previous studies that found that there are positive relationships between leadership and the involvement of staff in organisation (Amazt and Idris, 2011; Donovan et al., 2004; Irawanto, 2015; Khuong et al., 2015; Kónya et al., 2015; Liang-Chieh et al., 2010; Lin and Lin, 2011; Straiter, 2005). The finding shows that, by having good leaders who are always giving proper recognition to the staff would enhance the staff involvement or participation. It can be done by giving them awards, present or praise for the excellent job done. Hence, it ignites the competition and spirit among the staff to perform a good work with tremendous result. The leaders may also give constructive feedbacks on the staff performance, and by doing that the staff would improve their skills according to the advice or comments given. Indirectly, the staff is always under the leader's supervision which would put the staff on track with the job given to them. Therefore, they would put more effort and involves more to give a positive impression towards their leaders. On the other hand, the staff are inspired to give more effort in their work as they are being appreciated for the good job done. Also,

the staff would feel beloved to the organisation for including the staff in the decision making process in order to reach conclusion for certain issues.

On the contrary, leadership gives a negative impact on workload. This is because a good leader in an organisation would distribute the workload evenly and in accordance to the staff ability. The leaders should understand and familiar with their subordinate's task and expertise, therefore, would not be given any job which is outside of their job scope. By doing this, it would increase the effectiveness and productivity of the staff because they are doing the task that is perfectly right for them. The leaders may also ensure that the staff are well-equipped by giving them proper skills and training to familiarize themself with their jobs or any new task given, thus, it would not weight or burden the staff inappropriately. This study is in tandem empirically with previous scholars that found the same negative relationship between leadership and workload such as Zhou et al. (2015), Mustapha and Yu Ghee (2013), Mustapha (2013), Avey et al. (2012) and Judge and Colquitt (2004).

Besides that, leadership is significantly and positively affected staff self-development. Research shows that leaders would develop proper skills and trainings for the staff by involving them with a relevant development program; hence, staff would be well-trained, develop and qualified to do their work efficiently and effectively. It is perceived that training and development program would sharpen the staff skills and performance so that they would become well-acquainted with their work as time goes by. Moreover, good leaders also encourage and motivate their staff to develop themselves by giving recognition for the staff that excel in their work. Therefore, staff would always try to work hard and improve their skills in order to impress and gain recognition from the superior. Likewise, leader encourages and supports the staff by giving remarks and advice on their performance in many positive way. Leaders may also provide them with suggestion so that they can improve and perform better in the future. Hence, there is a positive relationship between a good leadership towards staff self-development and the result is parallel with the previous researches that studied the relationship between leadership on self-development such as Maung and Chemsripong (2014), Hua et al. (2011) and Ismail et al. (2010).

On the other hand, leadership also has a significant and positive relationship on working environment (Raziq and Maulabakhsh, 2015; Kumari, 2011; Mayer et al., 2010; Holloway, 2012; Momeni, 2009; Makaske, 2015; Sempane et al., 2002). This is probably due to university leadership put their staff well-being as the top priority in the organisation. Hence, this makes the staff to work in a conducive and friendly environment despite there is shortcoming if any. This would create an atmosphere which avoids the staff to work under pressure and cause irrelevant distress to them. This findings also connotes that, leaders should also have an emphatic attitude towards the staff by understanding and be concerned with the staff problem by placing themselves in the staff position. When a problem occurs, leaders would work together with the staff to provide a solution rather than blaming the staff for the mistake done. This incites them to treat staff with affection and ensure that staff are not working in a stressful environment.

However, in any organisation it cannot be ignored that there must be at least staff that is problematic that need to be handled procedurally. For example, the organisation introduces an Exit Policy which allows the underperform staff for early retirement. Initially, these staff would be advised and given proper warning. Upon several considerations, if the staff failed to show any improvement, the organization would decide whether to terminate or taking disciplinary action against them. In addition, leaders are giving positive feedbacks and proper recognition towards the staff by treating them with confidence and respect. The treatment and admiration given should be equal among the staff without having any favouritism. Therefore, this environment is a contributing factor in motivating the staff to work in efficient manner and can be considered as an ideal working environment. Therefore, staff know that they are important and well-appreciated in the organisation.

Next, leadership also has a positive and significant effect on communication. This is probably because leaders practice a two-way communication with their staff in their governance. Therefore, staff can have a proper communication with their superior as leaders are showing concern, respect and openness with the staff. This is an important point because in certain organisation, the two-way communication is not taking place. This is because the leaders are not friendly and did not listen to their staff grievances. This would create a stressful environment for the staff. In fact, the leaders

should listen attentively to the staff and provide them with solution or at least suggestion to the solution. Hence, staff do not need to use another medium such as lodging a complaint form or need to meet with an intermediate person which is time-consuming and encumbrance. In this case, they should directly communicate and confront with their superior face to face. This oriented style is surely reducing the gap between leaders and the staff in organisation.

Apart from that, Employees Assistance Program (EAP) is developed to manage this matter. EAP is a program created in order to assist the staff to voice out their problems, difficulties and dissatisfaction in which would affect their performance and productivity. The discussion made between the counsellor and the staff are treated private and confidential. On that account, the staff would have a place to express their dissatisfaction whether it is job related or personal to a professional counsellor. This ensures the staff are given proper support and advice. The result of this study is in tandem with most of the previous studies of leadership on communication such as Kónya et al. (2015), Terek et al. (2015), Madlock (2008) and Byrne and Lemay (2006).

5.3.2   Relationship of the Antecedents of Staff Satisfaction

In this study, it was found that staff involvement is positively affecting staff satisfaction. The findings revealed that staff are involved and participate in decision-making process in the organisation. Thus, this would make the staff feel that their existence is important and contribute to something in achieving organisational success. This sense of ownership would create or catalyse a feeling of satisfaction for them. Secondly, staff are involved in almost every activity or programs conducted in the organisation. Consequently, staff would feel that they can do more or contribute more in their work. This feeling would make them to put every endeavour to commit and involve more in participating for organisational improvement.

Other than that, it was also found out from the findings that staff are proud with their job as they feel that they are working in a great organisation. Staff that feel proud with their workplace depicts that they experience a high satisfaction and loved their job. Therefore, it can be stated that they would work with high spirit and do their best for the

sake of the organisational performance and success. This study is identical with previous studies which also found positive relationship between staff involvement and staff satisfaction such as Raziq and Maulabakhsh (2015), Irawanto (2015), Ali and Farooqi (2014), Amazt and Idris (2011), Kumari (2011), Lin and Lin (2011), Donovan et al. (2004), Igbaria and Greenhaus (1992), Volkwein et al. (1998).

In addition, it is established that workload has negative effect towards staff satisfaction. It can be found that this study is in line with most of the studies on workload and its negative effect to staff satisfaction in organisation (Ahsan and Alam, 2009; Branham, 2005; Gregory, 2014; Jain and Kaur, 2014; Memon et al., 2016; Musa et al., 2012; Mustapha, 2013; Mustapha and Yu Ghee, 2013; Shaw and Ward, 2014; Zabarauskaite, 2012). The findings revealed that staff would be burdened by heavy workloads and task in their work and this would somewhat affect the staff satisfaction. This explains why staff always had to stay in the office during break, lunch hour and after office hour just to commit with the workload that is too much to be handled and finished. The worse is that the workload given to the staff keeps on increasing as compared to prior year as the KPI for every year is very demanding.

If the situation continues, it would be difficult for the staff to have rest or relax as they need to continuously deal with another workload that would be handed to them as soon as they finished with the previous one. Thus, this is making it difficult for them to take annual leave that is allocated for them as they know that it is suicidal for them to take one as they would suffer double amount of workloads that accumulated as a result from their leave even for a day. On that account, this would really burden the staff if they really had to take a leave such as emergency leave and therefore this would dissatisfy and stress them up. Hence, this is seriously affecting staff satisfaction in a very bad way as staff can no longer cope with abundant of workload that are given to them.

On the other hand, the finding of this study also found that self-development of the staff has positive relationship on staff satisfaction. This study is equal with previous studies which also found positive relationship between self-development and staff

satisfaction (Raziq and Maulabakhsh, 2015; Arokiasamy, 2013; Faisal Azeem et al., 2013; Zabarauskaite, 2012; Kumari, 2011; Bellou, 2010; Grawitch et al., 2007; Igbaria and Greenhaus, 1992). This proves the organisation manages to train and develop staff so that they are equipped with the skill and expertise to do their work with efficiently. In explanation, the training program provided is sufficient for all staff; hence, staff are well-trained for themselves. Secondly, staff are able to join outside or external training. Therefore, they have chance to mingle with outsiders and at the same time shares different knowledge. This exposure benefits the staff and enables them to learn a lot. This type of training would develop staff to be more independent and survival in facing various challenges in the future. Aside from that, staff are also incited to learn and develop themselves more to furnish new skills to widen the job scope. Consequently, they could be an enhanced and more versatile staff in the university. The staff would be more satisfied in their work as they could survive and adapt with new condition easily.

Additionally, working environment also has positive and significant effect on staff satisfaction. This result is in tandem with a lot of previous studies that also found positive relationship between working environment and staff satisfaction (Salunke, 2015; Raziq and Maulabakhsh, 2015; Jain and Kaur, 2014; Rizwan and Mukhtar, 2014; Arokiasamy, 2013; Hong et al., 2012). This is due to staff had a good and well-furnished office to do their work. The physical space of the staff is crucial as staff are working and spend most of their time there. Thus, by providing a complete working space, staff would feel satisfied as they have all the equipment and material that is needed. In addition, staff are provided with a cosy and comfy ambiance in the workplace. The organisation is surrounded by trees and beautiful landscape; thus, creating a healthy working area and proven to be a productive environment for the staff either in Pekan or Gambang campus.

Other than that, the organisation offers facilities such as gymnasium, varieties of court, and jogging track for staff to practice a healthy lifestyle. Also, the organisation provides with multitudinous infrastructures like meeting room, laboratory and lecture hall for the staff to use in handling certain program and activities. In addition, a mosque is also provided for the Muslim staff to perform congregational prayer. Other than that, the facilities are also disabled-friendly as they provide exclusive parking space, exclusive toilet and special entrance for disabled and wheelchair user. Not to forget, the

organisation also provide health centre which is free for the staff and similarly panel clinic for staff that lived outside of the organisation. Hence, the staff may easily seek for medical assistance when they are unwell. Besides, the organisation are well-guarded and fully equipped to ensure the safety of the staff at work. To begin with, the organisation is guarded by stringent security twenty-four seven and their safety are guaranteed. On the other hand, the buildings are equipped with safety plan which include fire extinguisher, escape route, security camera and gathering point. So, there is not much headache for the staff to work in a safe and nice working environment.

Besides that, it is also found in this study that communication is positively affecting the staff satisfaction. The findings revealed that there is an effective communication between staff and their superior. This means that information from leader is clearly understood by the staff. The information is conveyed to the staff by social media and application such as emails, 'facebook' and 'whatsapp'. Certain information which requires wide coverage may be spread through circular, e-community website or notice board. Still, the best way of communication is by discussing a matter face to face through a meeting. This result is in consistent with the literatures reviewed which also found the positivity between communication and staff satisfaction (Amos et al., 2005; Farahbod et al., 2013; Ibrahim et al., 2014; Kamasak and Bulutlar, 2008; Kónya et al., 2015; Kumari, 2011; Madlock, 2008; Mohd Noor, 2013; Proctor, 2014; Robbins and Judge, 2013).

5.3.3   The Impact of Staff Satisfaction on Turnover Intention

The studies of staff satisfaction and its effect on turnover intention is no stranger to researchers throughout the world regardless of location, types of industry and time. It was found that most of literatures support the negative relationship between job satisfaction and turnover intention (Jehanzeb et al., 2015; Rizwan and Mukhtar, 2014; Masood et al., 2014; Mohd Noor, 2013; Medina, 2012; Mudor and Phadett, 2011; Noor, 2011; Paillé, 2011; Grawitch et al., 2007; Egan et al., 2004). In the study, it was stated that staff are satisfied with their job. It proves that the staff are complacent with the workload, staff development, staff involvement, communication, working environment and the superior that they are working with. They believe that their experience and idea

are accepted and appreciated by their colleagues and organisation. Moreover, the staff position in the organisation is secured because the promotion and increment in salary is guaranteed according to performance and experience. The staff also have the opportunity to improve their position for continuing their study. It is well-established fact that satisfied staff would never intend to leave their employment as they satisfied with how the organisation is recognising their experience. This is also possibly due to staff that has the expertise and experience are given trust to handle bigger program or activity.

5.3.4   Finalised Model and its relations to underpinning theories

The empirically validated model supported the underlying theories i.e. Maslow Hierarchy of Needs, Herzberg Two-Factor theory and Expectancy Theory of Motivation used in this study. This indicated that these theories are suitably used and applied in higher education setting in determining the staff satisfaction. Notably, leadership is the dominant and salient factors in most staff satisfaction research and most theories recognised the role of leadership. Thus, in ensuring the staff satisfaction, the selection of best brains in navigating the organisation should be taken serious consideration. As hierarchy of needs relates the esteem and social needs of staff with the leadership of the top management in higher education institution, this means that leadership ability is vital in determining that staff get the best out of the other dimensions that are studied (i.e. staff involvement, self-development, working environment, communication and workload).

In addition, communication got the highest regression value in this study as compared to others towards determining staff satisfaction. This variable fall onto the category of social needs in Maslow Hierarchy of Needs and intrinsic factor in Herzberg Two-Factor theory where the communication with supervisor, subordinate and also with colleagues are crucial for the staff to feel the sense of belonging and acceptance in the university. When the communication between all parties in university is effective and in a high level, then staff would definitely feel satisfied with their work. It can also be stated that the absence of these elements would lead to depression, anxiety and forlornness in university environment.

Next, it cannot be ignored that staff involvement is also among the decisive variable in deciding staff satisfaction in this study. This is well-explained in Maslow Hierarchy of Needs where staff involvement is located in the highest order of the hierarchy. As self-actualisation and Esteem needs indicated that staff that get proper recognition would be given chance and responsibility in the university. This variable is also being discussed in Herzberg Two-Factor theory where it is categorized as a motivational factor which determine staff satisfaction. As aforementioned, staff that involves would show their creativity and skill in handling the responsibility that is being trusted to them. Hence, they would feel that their knowledge is not being wasted by blindly following order from above without having chance in expressing their own opinion in decision making.

Other than that, the workload of staff in university is also a crucial aspect that need to be emphasised. As hygiene factor in Herzberg Two-Factor theory relates that workload allocation should be appropriate and suitable without burdening the staff. Too much workload in the workplace will require staff to work overtime or outside working hour to finish it. Hence, having piles of work that need to be finished in short amount of time will put pressure onto them. This indirectly exerts extreme pressure to staff as they have to work harder to finish the work in the specific time given and this will cause stress. Therefore, it is obvious that leaders should seek to minimise the negative feeling cause by the dissatisfiers that could jeopardise staff satisfaction in university.

Moreover, the findings also found the significant of working environment in determining staff satisfaction. As hygiene factor and safety needs in two of the theories studied emphasised on providing a conducive working environment to the staff in the university. Therefore, there is a need for top management to brainstorm on what they can do for to improve the university working environment such as increasing the facilities, flexible environment and security. Therefore, an enthusiasm among staff can be encouraged.

Lastly, it cannot be neglected the contribution of self-development in instilling staff satisfaction in the university. Herzberg and Maslow Theories relate them as among the vitally importance variable that should really be taken care of in higher education

institution. Self-development is placed in the highest order in Maslow Hierarchy of Needs which categorized as self-actualisation needs for the staff. Herzberg Two-Factor theory also placed self-development as motivational factor to determine staff satisfaction. Therefore, the training and development of staff in university really is a salient variable as staff would always feel motivated and satisfied if they are growing and advancing in their job.

5.4 Significant Contribution of the Research

This research provided further comprehension on the concept of staff satisfaction impact on turnover intention. The implication of this study in term of theoretical, methodological and practices are presented in this section.

5.4.1 Contribution to Theory

Even though this current study was conducted in only one public university, that limits the generalisation; the findings and result of the study still contribute to the body of knowledge in staff satisfaction literature. The findings are also supporting and completing the other literatures. The findings encourage the implementation and betterment of staff satisfaction level. Generally, this study extends the staff satisfaction model research by developing and validating an integrated staff satisfaction model based on multivariate framework. For example, factors of staff satisfaction → staff satisfaction and staff satisfaction → turnover intention. This study contributes to research by explaining the research model that is related to staff satisfaction in a public university in Malaysia context. Thereby, the theoretical contribution is presented as follows:

First, the study contributes in various ways to staff satisfaction research in the public university context. The analysis from literature: 1) the study has outlined the domain of the staff satisfaction constructs (i.e., staff satisfaction antecedents → staff satisfaction → turnover intention); 2) The study also discover a broad and parsimonious staff satisfaction model, that comprises of six antecedent constructs link to staff satisfaction and further link to turnover intention. The research model contains eight

constructs with 47 indicators all together in which can be considered as complex model (Hair et. al, 2011). Furthermore, it was also rare to find the study that relates leadership with all of staff satisfaction constructs (i.e., staff involvement, workload, self-development, working environment and communication) in determining staff satisfaction, most of the studies relate direct relationship of leadership with staff satisfaction or turnover intention only; 3) the study has heightened the comprehension of staff satisfaction theory of modelling staff satisfaction as an antecedents model. The theoretical framework is integrating the staff satisfaction constructs into a research model; the antecedent constructs (i.e., leadership, staff involvement, workload, self-development, working environment and communication) related to staff satisfaction, staff satisfaction related to turnover intention; and 4) the research data was analysed using Partial Least Square- Structural Equation Modelling (PLS-SEM) as it has the suitability in explaining a model that is complex (Hair et. al, 2014). Thereby, the usage of PLS-SEM extends the contribution of this study in term of its application in support of the theory used.

Secondly, the study also includes turnover intention as the outcome of staff satisfaction. The concept is crucial in staff satisfaction in order to understand the impact of dissatisfaction in the university whether staff would want to stay or leave. Hence, there is direct contribution of the assessment to the theory as it examined the predictors that would influence staff intention to leave in public university context. Previous studies gave suggestion to explore more on staff satisfaction and turnover intention by using different samples or population (Memon et al., 2016; Rizwan and Mukhtar, 2014).

5.4.2 Contribution to Practice

The findings of this study provide huge implication for staff satisfaction in university, any organisation, industries and society generally. The findings show that staff evaluated their perception on satisfaction in overall level of the integrated research model with the variables i.e. leadership, staff involvement, workload, self-development, working environment and communication on staff satisfaction and its effect on turnover intention. Human resource management or top management in organisation would be

interested in the study findings as it would give them better understanding on how staff evaluate their satisfaction in university. The ability to predict staff perception on how they evaluate their satisfaction and its effect on turnover intention as it is very vital for top management.

Particularly, the findings suggested that top management or leaders in university should put their focus in improving the quality of each of the constructs studied, in which can be attained in the integrated model. The integrated model is the infusion of the antecedent model of staff satisfaction (the relationship between leadership with staff involvement, workload, self-development, working environment and communication and their relationship with staff satisfaction) and also their relationship with turnover intention. The top management could improve staff satisfaction by making improvement in the entire construct that are predicting staff satisfaction in the university.

The model developed in this study would help the top management in comprehending on how a single staff satisfaction antecedent construct is interacting with staff satisfaction and establishes a relationship with staff turnover intention. The findings of the study are in support of the vitality of staff satisfaction antecedents in determining staff satisfaction as well as turnover intention. Therefore, the overall findings of this study would shift the paradigm on how top management looks into staff needs and satisfaction. The findings also found that all of the constructs studied are crucial in developing satisfied staff in the university. Satisfied staff are important as it would facilitate the sense of loyalty and allegiance towards the university. In addition, the findings of this study also suggest that top management should consider staff satisfaction and turnover intention as important constructs to achieve a better staff satisfaction and negative turnover intention in the future.

The findings of the study are extending the scope of staff satisfaction for practitioners by making a model of the impact of staff satisfaction on turnover intention. The significances of the research are highly relevant to practitioners especially in higher education institutions. In overall, the findings on staff satisfaction would assist practitioners in building a better staff satisfaction system in higher education intuitions.

5.5   Limitations

The study tried to expound the understanding of the constructs of staff satisfaction. Although it was worth the effort, but there is always limitations. The limitations are as follow:

First, this study is conducted in specific constructs of the staff satisfaction and in one public higher education institution (HEI). Therefore, there is a limitation for generalizability of the findings. Although staff satisfaction research by its nature is context-specific, but the result might be differed when the study is used in another public HEIs or in the privates HEIs. Hence, the replication of this study can be used in order to further validate the reliability and validity of this model studied.

Secondly, the secondary data used was obtained through a cross-sectional design and is limited only to a single point of time; hence, the study cannot cover the exact nature of the hypotheses study in the future.

Thirdly, the secondary data obtained is using 4-point Likert scale where the choice of answer are strongly disagree, disagree, agree and strongly agree. Therefore, respondent has only two options either to agree or disagree with the questions asked without having a choice to have a neutral perception.

Fourthly, the research model in this study is not comprehensive as it could have been. The model used six constructs suitable in determining staff satisfaction in HEIs context. Therefore, it could explain on the construct studied of staff satisfaction and its outcome. There may be another constructs that are related to staff satisfaction that are not a part of this study but are significant in determining staff satisfaction (see Table 2.2 in chapter 2).

Fifthly, the study also may have relevance with the other HEIs settings in Malaysia only. This is because the culture, races and the way of life may be similar. Therefore, there might be dissimilarity in staff perception on satisfaction in other countries or regions especially in Western countries.

5.6   Future Research Directions

Following suggestions for future research on staff satisfaction study are:

Firstly, this study was examining staff satisfaction in a public HEI using secondary data; future work can investigate the same study in distinct settings with primary data or data collection. Hence, the whole process of theoretical built in this study can be applied to another HEIs. Therefore, the findings of both researches can be compared. But, some issues should not be neglected such as the consistency and validity of the research instrument. Therefore, it is suggested to also study the qualitative study to further purify the research findings. In addition, such studies would enhance the generalizability of the staff satisfaction model.

Other than that, the study also did not consider the moderating and mediating effect of certain variables (i.e., mediating effect of staff satisfaction between staff involvement and turnover intention). Other than that, variables such as age, gender, education level and age can also be used as moderation within the constructs. Thus, future researcher can follow this suggestion in order to have better understanding of staff satisfaction.

In addition, future study could also add new variables in the research model. Aforementioned in the limitation, there may be any other variables that may be significant but are not included in this study such as leadership styles, demography and pay for performance initiative. In addition, future research could also study different effect of staff satisfaction other than turnover intention such as staff motivation, staff performance and staff empowerment. Thus, future study can develop a more robust model of staff satisfaction.

Methodologically, future researcher could use the research model but using different techniques other than Partial Least Square-Structural Equation Model (PLS-SEM) such as covariance based SEM (CBSEM). Therefore, the robustness of this research model can be established.

5.7   Concluding Remarks

The objective of this study is to investigate the relationship between constructs in an integrated staff satisfaction model. The study is focusing on the impact of staff satisfaction antecedents (leadership, staff involvement, workload, self-development, working environment and communication) on staff satisfaction and turnover intention. The research model then was tested in a public higher education institution using secondary data with 1022 sample size and the study utilized PLS-SEM path modelling in order to evaluate the secondary data with hypotheses proposed.

The assessment of the research model affirmed that the model has sufficiently fulfilled the measurement and structural model properties. The research model was explaining 63.7% of variance explained in staff satisfaction and 19.4% of variance in turnover intention. Furthermore, all of the eleven paths in the research model were significant and in the direction that was proposed in this study, supporting eleven hypothesised relationships. In addition, the study has confirmed the impact of staff satisfaction on turnover intention. The model was empirically tested and showed a good internal consistency, rigour and also robust findings.

In overall, this study has provided an important direction of staff satisfaction in higher education institution. The findings of the study are a highly valuable for top management in sustaining high level of staff satisfaction with university governance. Generally, the findings of this study can help HEI in understanding on how staff evaluates the governance in HEI and how to ensure staff remain loyal with the university. Therefore, this knowledge renders an essential steps and practical resolution to the staff satisfaction in HEIs especially in Malaysia and specifically at the university under study.

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APPENDICES

APPENDIX A

QUESTIONNAIRE

Universiti Malaysia PAHANG

FAKULTI SAINS & TEKNOLOGI INDUSTRI
UNIVERSITI MALAYSIA PAHANG
KARUNG BERKUNCI 12,25000 KUANTAN
PAHANG DARUL MAKMUR
TEL: 09-5492765 FAX: 09-5492766

MEMO

Kepada : Staf Akademik dan Bukan Akademik
Fakulti Sains & Teknologi Industri

Daripada : Puan Nenie Zuryati Bt Abdullah
Pembantu Tadbir P/O
Fakulti Sains & Teknologi Industri

Tarikh : 15/9/2015

Perkara : Kaji Selidik Penglibatan Dan Kepuasan 2015

Dengan hormatnya perkara diatas adalah dirujuk.

2.   Bersama ini disertakan Kaji Selidik Penglibatan Dan Kepuasan 2015   untuk perhatian tindakan selanjutnya

3.   Mohon pihak Y.Bhg Dr/Tuan/Puan mengembalikan borang ini kepada pihak pentadbiran untuk tindakan selanjutnya. Kerjasama dan tindakan segera pihakY.Bhg Dr/Tuan/Ppuan dalam perkara ini amatlah dihargai.

Sekian,terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan tugas,

nenie zuryati

....
(NENIE ZURYATI BT ABDULLAH)
Pembantu Tadbir P/O
Fakulti Sains & Teknologi Industri

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KAJI SELIDIK PENGLIBATAN DAN KEPUASAN STAF 2015

STAFF ENGAGEMENT AND SATISFACTION SURVEY 2015

Catatan/Remark	2012	2013	2014
Tahap Kepuasan/ Satisfaction Index	73%	68%	67%
Bilangan responden/ Number of respondants	675 (50%) staf dari 1339 staf	752(51%) staf dari 1461 staf	183 (12%) staf dari 1581 staf

SILA BERIKAN MAKLUMBALAS ANDA DENGAN MENJAWAB KESEMUA SOALAN

PLEASE RESPONSE TO ALL QUESTIONS

TERIMA KASIH/THANK YOU
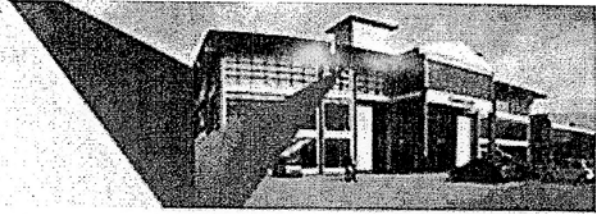
Kaji Selidik Penglibatan dan Kepuasan Staf 2015/Staff Engagement and Satisfaction Survey 2015

Tujuan kajiselidik ini adalah untuk mengumpul data/maklumat tentang penglibatan dan tanggapan staf UMP terhadap suasana kerja di Universiti Malaysia Pahang. Kajiselidik ini dibentuk dalam beberapa dimensi iaitu Penglibatan Staf, Beban Tugas, Latihan & Pembangunan, Persekitaran Kerja, Kepimpinan, Komunikasi dan Kepuasan Bekerja./The purpose of this survey is to collect data/information on the engagement and perception of UMP staff regarding the working environment at Universiti Malaysia Pahang. This survey is categorized by a number of dimensions such as Staff Engagement, Workload, Training & Development, Work Environment, Leadership, Communication and Job Satisfaction.

Bahagian A : Maklumat Umum/Section A : General Information

[Sila tanda pilihan anda]/[Please mark your choice]

A1. Jantina/Gender *

☐ Lelaki/Male

☐ Perempuan/Female

A2. Bangsa/Race *

☐ Melayu/Malay

☐ Cina/Chinese

☐ India/Indian

☐ Lain-lain/Others

A3. Kategori jawatan anda sekarang? /The category of your position? *

☐ Akademik/Academic

☐ Bukan Akademik - Pengurusan & Profesional/Non Academic - Management & Professional

☐ Bukan Akademik - Kumpulan Sokongan/Non Academic - Support Staff

A4. Status jawatan anda sekarang?/ Your job status? *

☐ Tetap/Permanent

☐ Kontrak/Contract

☐ Sambilan/Part Time

A5. Fakulti/Pusat/Bahagian anda ditempatkan./Faculty/Centre/Department you have been posted. *

(Sila nyatakan, contoh : Pejabat Naib Canselor)/(Please specify, example : Vice Chancellor Office)

4. **A4. Status jawatan anda sekarang?/ Your job status? ***

Check all that apply.

- ☐ Tetap/Permanent
- ☐ Kontrak/Contract
- ☐ Sambilan/Part Time

5. **A5. Fakulti/Pusat/Bahagian anda ditempatkan./Faculty/Centre/Department you have been posted. ***

(Sila nyatakan, contoh : Pejabat Naib Canselor)/(Please specify, example : Vice Chancellor Office)

_____

_____

_____

_____

6. **A6. Tempoh bertugas di UMP?/Duration in UMP? ***

Check all that apply.

- ☐ Kurang daripada 3 tahun/less than 3 years
- ☐ 3 hingga 5 tahun/3 to 5 years
- ☐ Melebihi 5 tahun/More than 5 years

7. **A7. Julat umur anda? Your age range ***

Check all that apply.

- ☐ Bawah 19 tahun/under 19 years old
- ☐ 20-29 tahun/20 – 29 years old
- ☐ 30-39 tahun/30-39 years old
- ☐ 40-49 tahun/40-49 years old
- ☐ 50 tahun ke atas/above 50 years old

8. **A8. Penempatan anda/Your placement ***

Check all that apply.

- ☐ Kampus Gambang/Gambang Campus
- ☐ Kampus Pekan/Pekan Campus

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Bahagian B/ Section B: Soalan Kaji selidik/ Survey questions

Untuk soalan seterusnya tunjukan tahap persetujuan anda kepada kenyataan yang diberikan dengan membuat pilihan seperti berikut: **1-Sangat Tidak Setuju, 2-Tidak Setuju, 3-Setuju dan 4-Sangat Setuju.** Sila jawab semua soalan.

For the following questions please show the level of your agreement to the given statement by choosing number as follows: **1-Strongly Agree, 2-Strongly Disagree, 3-Agree and 4-Strongly agree.** Please answer all questions.

1. B1. Saya adalah sebahagian daripada UMP/ I am a part of UMP
Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

2. B2. UMP adalah organisasi hebat sebagai tempat kerja/ UMP is a great organisation to work for
Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

3. B3. Saya mampu membawa perubahan dalam kerja/ I am able to influence changes in my area of work
Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

4. B4. Pegawai atasan saya menggalakan kerjasama antara jabatan/ My superior encourages cooperation among departments
Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

5. B5. Saya dimaklumkan mengenai inisiatif UMP/ I am informed with UMP's initiative

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

6. B6. Saya diberi peluang untuk mengambil bahagian dalam merancang dan membuat keputusan/ I was given chance to participate in planning and making decision

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

7. B7. Saya sedia berkerja bersungguh-sungguh untuk membantu UMP/ I am willing to work hard in order to help UMP successful

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

8. B8. Saya bangga menguar-uarkan yang saya adalah staf UMP/ I am proud to tell other that I am UMP staff

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

9. C1. Beban tugas dibahagikan sama rata di tempat saya/ Workload is distributed evenly at my workplace

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

10. C2. Proses pembahagian beban tugas di buat secara telus/ Workload allocation process is transparent

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

11. C3. Beban tugas saya bertambah sejak setahun yang lalu/ My workload has increase since last year

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

12. C4. Saya sentiasa perlu bekerja di luar waktu pejabat untuk menyiapkan kerja saya/ I always has to work outside working hour to finish my work

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

13. C5. Saya sukar mengambil cuti tahunan disebabkan kerja saya yang banyak/ I find it is difficult to take annual leave as a result of my workload

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

14. C6. Saya dapati beban tugas saya sekarang terlalu banyak dan membebankan/ I find my current workload is too much and struggling to cope

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

15. D1. Bilangan latihan yang disediakan adalah mencukupi/ Number of in house training provided are adequate

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

16. D2. Jenis latihan dalaman yang dianjurkan menepati keperluan tugas/ types of in house training provided are in sync with job's requirement

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

17. D3. Peluang unutk menyertai latihan luaran adalah sama rata/ Chances to join outside trainingis equally given

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

18. D4. Peruntukan bagi latihan luaran adalah mencukupi/ Budget allocated for outside training is adequate

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

19. D5. UMP menitikberatkan latihan dan pembagunan staf/ UMP is concerned about staff training and development

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

20. D6. Saya diberi peluang mempelajari sesuatu walaupun tidak berkaitan dengan tugas saya/ I was given chance to learn new things even if they were not related to my job

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

21. E1. Saya berpuas hati dengan ruang fizikal dan pejabat saya/ I am satisfied with my physical work space and office

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

22. E2. UMP mempunyai suasana persekitaran kerja yang selesa/ UMP has a comfortable working ambiance

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

23. E3. UMP mempunyai kemudahan infrastruktur khusus yang mencukupi bagi pembelajran and pengajaran (bilik kuliah, makmal dan peralatan p&p)/ UMP has adequate infrastructures for teaching and learning (lecture rooms, laboratory and equipment)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

24. E4. UMP mempunyai kemudahan infrastruktur umum (jalaraya, kawasan riadah dan masjid)/ UMP has adequate infrastructure (roads, recreation spot and mosque)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

25. E5. Kemudahan kantin dan catering adalah baik/ Food and catering facilities for staff are good

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

26. E6. Terdapat ruang rehat untuk staff waktu rehat/ There is place where staff can take a rest during break time

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

27. E7. Saya merasa selamat dengan persekitaran kerja saya/ I feel safe in my working environment

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

28. F1. Dekan/ Pengarah/ Ketua jabatan memastikan staff mempunyai kemahiran yang diperlukan (Dean/ Director/ HOD ensures that staff has the skills needed)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

29. F2. Dekan/ Pengarah/ Ketua jabatan senang untuk berkomunikasi dan dibawa berbincang (Dean/ Director/ HOD is approachable)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

30. F3. Dekan/ Pengarah/ Ketua jabatan perihatin dengan masalah peribadi staf (Dean/ Director/ HOD concern about staff personal crisis)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

31. F4. Dekan/ Pengarah/ Ketua jabatan memastikan pengiktirafan bagi kerja yang cemerlang (Dean/ Director/ HOD gives recognition to work well done)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

32. F5. Dekan/ Pengarah/ Ketua jabatan memberikan maklumbals mengenai pencapaian staf (Dean/ Director/ HOD provides feedback on staff performance)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

33. F6. Dekan/ Pengarah/ Ketua jabatan memberikan motivasi kepada staf untuk bekerja lebih baik (Dean/ Director/ HOD motivates staff to do their best)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

34. F7. Dekan/ Pengarah/ Ketua jabatan memaklumkan kepada staf mengenai perkembangan UMP (Dean/ Director/ HOD keeps staff informed with UMP's development)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

35. F8. Dekan/ Pengarah/ Ketua jabatan menguruskan staff yang bermasalah dengan baik (Dean/ Director/ HOD deals with the staff who is weak diligently)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

36. F9. Dekan/ Pengarah/ Ketua jabatan memahami skop teknikal dan tugas staf (Dean/ Director/ HOD understand the technical scopes of staff)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

37. F10. Dekan/ Pengarah/ Ketua jabatan melayani staff sama rata (Dean/ Director/ HOD treats staff equally)

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

38. G1. Pada keseluruhan komunikaasi dalam UMP adalah berkesan/ On the whole, communication at UMP is effective

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

39. G2. Komunikasi antara pengurusan universiti dan staf adalah berkesan/ Communication between top management and staff is effective

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

40. G3. Pada amnya komunikasi di jabatan saya adalah berkesan/ Communication in my department is effective

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

41. H1. Kepuasan kerja saya adalah tinggi/ My satisfaction at work is high

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

42. H2. Pengalaman saya dihargai pihak universiti/ My experience is valued by the university

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

43. H3. Pengalaman saya dihargai rakan sekerja/ My experience is valued by co-workers

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

44. H4. Jawatan saya di UMP adalah terjamin/ My job at UMP is secured

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	○	○	○	○	Sangat Setuju/ Strongly Agree

45. H5. Terdapat banyak peluang penigkatan kerjaya di UMP/ There is a lot opportunities for career advancement in UMP

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

46. I1. Saya selalu memikirkan untuk meninggalkan UMP/ I always thought of leaving UMP

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

47. I2. Jika saya ditwarkan bekerja di tempat lain saya akan menerimanya/ If i get offer from other places I will accept it

Mark only one

	1	2	3	4	
Sangat Tidak Setuju/ Strongly Disagree	◯	◯	◯	◯	Sangat Setuju/ Strongly Agree

48. Komen dan/ atau Cadangan/ Comments and/ or Suggestions

Untuk bahagian ini, sila nyatakan komen dan/ atau cadangan anda (jika ada) bagi memantapkan lagi tadbir urus di UMP./ For this section please write your comment and/ or suggestion (if any) to govern UMP effectively.

_____

_____

_____

_____

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Appendix B

Missing Value

	A1. Jantina	A2. Bangsa	A3. Kategori jawatan anda	A4. Status jawatan anda	A5. Fakulti/Jabatan anda ditempatkan	A6. Tempoh bertugas di UMP	A7. Julat umur anda	A8. Penempatan anda
N Valid	1040	1040	1040	1040	1040	1040	1040	1040
Missing	0	0	0	0	0	0	0	0

B1. Saya adalah sebahagian daripada UMP	B2. UMP adalah organisasi yang hebat sebagai tempat kerja	B3. Saya mampu membawa perubahan dalam kerja	B4. Pegawai atasan saya menggalakkan kerjasama antara jabatan	B5. Saya dimaklumkan mengenai inisiatif UMP	B6. Saya diberi peluang untuk mengambil bahagian dalam merancang dan membuat keputusan	B7. Saya bersedia bekerja bersungguh-sungguh untuk membantu kejayaan UMP	B8. Saya bangga menguar-uarkan yang saya adalah staf UMP
1040	1040	1040	1040	1040	1040	1040	1040
0	0	0	0	0	0	0	0

C1. Beban tugas dibahagikan sama rata di tempat saya	C2. Proses pembahagian beban tugas di buat secara telus	C3. Beban tugas saya bertambah sejak setahun yang lalu	C4. Saya sentiasa perlu bekerja di luar waktu pejabat untuk menyiapkan kerja saya	C5. Saya sukar untuk mengambil cuti tahunan disebabkan kerja saya yang banyak	C6. Saya dapati beban tugas saya sekarang terlalu banyak dan membebankan
1040	1040	1040	1040	1040	1040
0	0	0	0	0	0

D1. Bilangan latihan dalam yang disediakan adalah mencukupi	D2. Jenis latihan dalaman yang dianjurkan menepati keperluan tugas	D3. Peluang untuk menyertai latihan luaran adalah sama rata	D4. Peruntukan bagi latihan luaran adalah mencukupi	D5. UMP menitikberatkan latihan dan pembangunan staf	D6. Saya diberi peluang mempelajari sesuatu walaupun tidak berkaitan dengan tugas saya
1040	1040	1040	1040	1040	1040
0	0	0	0	0	0

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E1. Saya berpuas hati dengan ruang fizikal dan pejabat saya	E2. UMP mempunyai suasana persekitaran kerja yang selesa	E3. UMP mempunyai kemudahan infranstruktur khusus yang mencukupi bagi pengajaran dan pembelajaran (bilik kuliah, makmal dan peralatan p&p)	E4. UMP mempunyai kemudahan infranstruktur umum yang mencukupi (jalanraya, kawasan riadah dan masjid)	E5. Kemudahan kantin dan katering adalah baik	E6. Terdapat ruang rehat untuk staf semasa waktu rehat	E7. Saya merasa selamat dengan persekitaran kerja saya
1040 0	1040 0	1040 0	1040 0	1040 0	1040 0	1040 0

		F1. Dekan/Pengarah/Ketua Jabatan memastikan staf mempunyai kemahiran yang diperlukan	F2. Dekan/Pengarah/Ketua Jabatan senang untuk berkomunikasi dan dibawa berbincang	F3. Dekan/Pengarah/Ketua Jabatan prihatin dengan masalah peribadi staf	F4. Dekan/Pengarah/Ketua Jabatan memberikan pengiktirafan bagi kerja yang cemerlang	F5. Dekan/Pengarah/Ketua Jabatan memberikan maklumbalas mengenai pencapaian staf	F6. Dekan/Pengarah/Ketua Jabatan memberikan motivasi kepada staf untuk bekerja lebih baik	F7. Dekan/Pengarah/Ketua Jabatan memaklumkan kepada staf mengenai perkembangan UMP	F8. Dekan/Pengarah/Ketua Jabatan menguruskan staf yang bermasalah dengan baik	F9. Dekan/Pengarah/Ketua Jabatan memahami skop teknikal dan tugas staf	F10. Dekan/Pengarah/Ketua Jabatan melayani staf sama rata
N	Valid	1040	1040	1040	1040	1040	1040	1040	1040	1040	1040
	Missing	0	0	0	0	0	0	0	0	0	0

G1. Pada keseluruhannya komunikasi dalam UMP adalah berkesan	G2. Komunikasi antara pengurusan universiti dan staf adalah berkesan	G3. Pada amnya komunikasi di jabatan saya adalah berkesan
1040 0	1040 0	1040 0

H1. Kepuasan bekerja saya adalah tinggi	H2. Pengalaman saya dihargai oleh pihak universiti	H3. Pengalaman saya dihargai oleh rakan sekerja	H4. Jawatan saya di UMP adalah terjamin	H5. Terdapat banyak peluang peningkatan kerjaya di UMP	H6. Saya selalu memikirkan untuk meninggalkan UMP	H7. Jika saya ditawarkan bekerja di tempat lain saya akan menerimanya
1040 0	1040 0	1040 0	1040 0	1040 0	1040 0	1040 0

Appendix C

Harman's Single Factor Test

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.639	35.402	35.402	16.639	35.402	35.402
2	2.331	4.959	40.361			
3	2.013	4.282	44.643			
4	1.974	4.200	48.843			
5	1.400	2.979	51.822			
6	1.271	2.703	54.526			
7	1.124	2.393	56.918			
8	1.019	2.167	59.086			
9	.972	2.069	61.154			
10	.877	1.866	63.020			
11	.844	1.797	64.817			
12	.824	1.752	66.569			
13	.788	1.677	68.246			
14	.750	1.596	69.843			
15	.732	1.558	71.401			
16	.703	1.497	72.897			
17	.663	1.410	74.307			
18	.648	1.379	75.686			
19	.634	1.348	77.034			
20	.610	1.298	78.332			
21	.595	1.267	79.599			
22	.562	1.196	80.796			
23	.557	1.184	81.980			
24	.534	1.136	83.116			
25	.509	1.083	84.199			
26	.480	1.022	85.220			
27	.479	1.020	86.240			
28	.443	.943	87.183			
29	.430	.916	88.099			
30	.426	.907	89.006			
31	.411	.874	89.880			
32	.400	.851	90.730			
33	.375	.798	91.528			
34	.364	.775	92.303			
35	.359	.764	93.067			
36	.338	.720	93.787			
37	.334	.710	94.497			
38	.321	.682	95.179			
39	.305	.649	95.828			
40	.297	.633	96.461			
41	.276	.586	97.047			
42	.260	.553	97.600			
43	.250	.531	98.131			
44	.240	.510	98.642			
45	.228	.486	99.127			
46	.216	.460	99.588			
47	.194	.412	100.000			

Extraction Method: Principal Component Analysis.

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Demographics of the Respondent

In Table below, it can be seen that there were 577 (56.5%) males and 445 (43.5%) females' staff in UMP. The majority of respondent 968 (94.7%) were Malays and 12 (1.2%) were Chinese, 11 (1.1%) Indian and 31 (3.0%) for others. There were 270 (26.4%) academic staff and 752 (73.6%) non-academic staff involved in the study. In addition, 812 (79.5%) of them were full time staff and 201 (19.7%) were contract and only 9 (0.9%) part timers. Besides that, there were 264 (25.8%) staff work at UMP for less than 3 years, 156 (15.3%) in between 3-5 years and 602 (58.9%) have been working for more than 5 years. On the other hand, the majority of staff was in 30-39 age range with 563 (55.1%). Age 312 (30.5%) scored second and there were only 27 staff (2.6%) whose age was more than 50. Lastly, majority of the staff came from Gambang Campus with 749 (73.3%) and there were only 273 (26.7%) staff in Pekan campus.

Measure	Item	Frequency	Percent (%)
Gender	Male	577	56.5
	Female	445	43.5
Ethnic	Malay	968	94.7
	Chinese	12	1.2
	Indian	11	1.1
	Others	31	3.0
Position category	Academic	270	26.4
	Non-academic (management)	193	18.9
	Non-academic (support)	559	54.7
Position status	Full time	812	79.5
	Contract	201	19.7
	Part time	9	0.9
Duration in UMP	< 3 years	264	25.8
	3-5 years	156	15.3
	> 5 years	602	58.9
Age range	20-29	312	30.5
	30-39	563	55.1
	40-49	120	11.7
	>50	27	2.6
Placement	Gambang campus	749	73.3
	Pekan campus	273	26.7

Appendix E

Staff's faculties (n = 1022)

Table below represents the distributions of percentages and frequency of respondents, where 15 staff (1.5%) were from the Faculty of Mechanical Engineering (FKM), 14 staff (1.4%) were from Faculty of Industrial Management (FIM), 32 staff (3.1%) were from Centre for Modern Languages and Human Sciences (PBMSK), 35 staff (3.4%) were from Faculty of Industrial Science and Technology (FIST), 24 staff (2.3%) Centre for Informational Technology and Communication (PTMK), 34 staff (3.3%) were from Faculty of Civil Engineering and Earth Resources (FKASA), 47 staff (4.6%) were from Faculty of Computer Systems and Software Engineering (FSKKP), 67 staff (6.6%) were from Faculty of Chemical and Natural Resources Engineering (FKKSA), 41 staff (4.0%) were from Treasure Department, 21 staff (2.1%) were from Registry Department, 36 staff (3.5%) were from Faculty of Manufacturing Engineering (FKP), 58 staff (5.7%) were from Faculty of Engineering Technology (FTEK), 15 staff (1.5%) were from Research and Innovation Department (JP&I), 71 staff (6.9%) were from Faculty of Electrical and Electronics Engineering (FKEE), 52 staff (5.1%) were from Library, 7 staff (0.7%) were from Audit and Integrity Unit (AIU), 95 staff (8.9%) were from Properties Development and Management Department (JPPH) , 18 staff (1.8%) were from Sports Centre , 29 staff (2.8%) were from Student Health Department (PKP), 5 staff (0.5%) were from Entrepreneur Centre, 7 staff (0.7%) were from International Office (IO), 8 staff (0.8%) were from UMP Advanced Education (UAE), 9 staff (0.9%) were from UMP Publisher, 10 staff (1.0%) were from Institute of Postgraduate Studies (IPS), 12 staff (1.2%) were from Corporate Affairs and Quality Department (JHKK) and Department of Industry and Network (JJIM), 13 staff (1.3%) were from Islamic Centre and Human Development UMP (PIMPIN), 17 staff (1.7%) were from The Central Laboratory, 24 staff (2.3%) were from Department of Academic Affair and International (JHEAA), 40 staff (4.0%) were from Vice Chancellor Office (VCO), 66 staff (6.5%) were from Security Department, 67 staff (6.6%) were from Student Affairs and Alumni Department (JHEPA). Lastly, Academic Management Office (BPA) involved 25 staff (2.4%).

Faculty/ Department	Frequency	Percentage (%)
FKM	15	1.5
FIM	14	1.4
PBMSK	32	3.1
FIST	35	3.4
PTMK	24	2.3
FKASA	34	3.3
FSKKP	47	4.6
FKKSA	67	6.6
Treasurer Department	41	4.0
Registry Department	21	2.1
FKP	36	3.5
FTEK	58	5.7
JP&I	15	1.5
FKEE	71	6.9
Library	52	5.1
AIU	7	0.7
JPPH	91	8.9
Sports Centre	18	1.8
PKP	29	2.8
Entrepreneur Centre	5	0.5
International Office	7	0.7
UAE	8	0.8
Publisher	9	0.9
IPS	10	1.0
JHKK	12	1.2
JJIM	12	1.2
PIMPIN	13	1.3
The Central Laboratory	17	1.7
JHEAA	24	2.3
VCO	40	4.0
Security Department	66	6.5
JHEPA	67	6.6
BPA	25	2.4

Appendix F

Descriptive analysis

Descriptive statistical analysis of the dean/head of department/director's leadership

The mean values of the respective indicators were between 2.80 and 3.00. The indicator with the highest mean score (3.00) was "Dean/Director/ Head of Departments understands the technical aspects of the staffs' job". The second highest mean score (2.95) was "Dean/Director/ Head of Departments is approachable" and followed by "Dean/Director/ Head of Departments treats staff equally". This was followed by "Dean/Director/ Head of Departments deals with staff who is weak diligently" and Dean/Director/ Head of Departments ensure that staff has the skills needed by having the same mean values. The lowest score (2.80) indicator was "Dean/Director/ Head of Departments concern about staff's personal crisis". The standard deviation score (0.700 to 0.841) demonstrated a greater consistency in which most respondent responding to scale nearest to the mean; that was 2 and 3 in 4-point Likert scale. The data was shown in Table below.

	Statements	Mean	Std. Deviation
F1	Dean/Director/ Head of Departments ensure that staff has the skills needed	2.91	0.700
F2	Dean/Director/ Head of Departments is approachable	2.95	0.775
F3	Dean/Director/ Head of Departments concern about staff's personal crisis	2.80	0.797
F4	Dean/Director/ Head of Departments give recognition to work well done	2.83	0.789
F5	Dean/Director/ Head of Departments provide feedback on staffs' performance	2.81	0.735
F6	Dean/Director/ Head of Departments motivates staff to give their best	2.88	0.750
F7	Dean/Director/ Head of Departments keeps staff informed of UMP's development	2.86	0.721
F8	Dean/Director/ Head of Departments deals with staff who is weak diligently	2.92	0.763
F9	Dean/Director/ Head of Departments understands the technical aspects of the staffs' job	3.00	0.755
F10	Dean/Director/ Head of Departments treats staff equally	2.93	0.841

Descriptive statistical analysis of the staff involvement

For staff involvement, the mean values of the respective indicators were between 2.70 to 3.54. The indicator with the highest mean (3.54) was "I am a part of UMP". The second highest mean score (3.38) was "I am willing to work hard in order to help UMP be successful" and followed by "I am able to influence changes in my areas of work" by scoring 3.27. This was followed by "I am proud to tell others that I am UMP's staff", "My superior encourage cooperation among departments", and "UMP is a great organisation to work for". The lowest score (2.70) indicator was "I am informed about UMP's initiatives". The standard deviation score ranged from 0.598 to 0.781 demonstrated that greater consistency among respondents in responding to the questionnaire. Most of them responding to scale that are nearest to the mean; which was 2 and 3 on 4-point Likert scale. The data were shown in Table below.

	Statements	Mean	Std. Deviation
B1	I am a part of UMP	3.54	0.621
B2	UMP is a great organisation to work for	3.13	0.727
B3	I am able to influence changes in my areas of work	3.27	0.598
B4	My superior encourage cooperation among departments	3.14	0.731
B5	I am informed about UMP's initiatives	2.70	0.783
B6	I was given chances to participate in planning and making decision	2.72	0.743
B7	I am willing to work hard in order to help UMP be successful	3.38	0.640
B8	I am proud to tell others that I am UMP's staff	3.23	0.726

Descriptive statistical analysis of the workload

In the workload construct, the mean values of the respective indicator were between 2.24 to 2.91. The indicator with the highest mean score (2.91) was "My workload has increased in the last one year". The second highest mean score was "I often need to work after hours to finish my work" and this is followed by "I find my current workload is too much and struggling to cope". This was followed by "The workload allocation process is transparent" and "I find it is difficult to annual leave as result of my workload". The least mean score (2.24) was "Workloads are distributed fairly at my workplace". The standard deviation score demonstrated that the score for workload was nearest to the mean; that was 2 to 3 on 4-point Likert scale. The data were shown In Table below.

	Statements	Mean	Std.Deviation
C1	*Workloads are distributed fairly at my workplace	2.19	0.799
C2	*The workload allocation process is transparent	2.27	0.744
C3	My workload has increased in the last one year	2.91	0.801
C4	I often need to work after hours to finish my work	2.58	0.912
C5	I find it is difficult to annual leave as result of my workload	2.24	0.838
C6	I find my current workload is too much and struggling to cope	2.45	0.764

*negatively coded item

Descriptive statistical analysis of the self-development

In self-development construct, the mean values of the respective indicators were between 2.31 to 2.96. The indicator with highest mean score (2.96) was "I was encouraged to learn things even if they were not related to my job". The second highest mean scores was "Types of in-house training provided are in sync with job requirement" and followed by "UMP is concerned about staff training and development". This were followed by "The numbers of in-house training provided are adequate" and "Chances to join outside training is equally given". The lowest mean score (2.31) was "Budget allocated for outside training is adequate". The standard deviation score (0.734 to 0.894) demonstrated greater consistency among the respondents in responding to the questionnaire; most of the them responding nearest to the mean; that was 2 to 3 on 4-point Likert scale. The data were shown in Table below

	Statements	Mean	Std. Deviation
D1	The numbers of in house training provided are adequate	2.60	0.778
D2	Types of in house training provided are in sync with job requirement	2.90	0.731
D3	Chances to join outside training is equally given	2.59	0.881
D4	Budget allocated for outside training is adequate	2.31	0.894
D5	UMP is concerned about staff training and development	2.81	0.747
D6	I was encouraged to learn things even if they were not related to my job	2.96	0.734

Descriptive statistical analysis of the working environment

In working environment construct, the mean values of the respective indicators were between 2.17 to 2.86. The indicator with the highest mean score (2.86) was "I feel safe in my working environment". The second highest was "UMP has a comfortable working ambience" and followed by "UMP has adequate infrastructure (roads, recreation spot and mosque)". These were followed by "I am satisfied with my physical work space and office" and "UMP has adequate infrastructure for teaching and learning (Lecture rooms, laboratory and equipment)" by sharing the same mean. The lowest

mean (2.17) was "Food and catering facilities for staff are good". The standard deviation scored demonstrated that there are greater consistency among respondents in answering the questionnaire; most of them responding to scale nearest to the mean score; which was on 2 to 3 on 4-point Likert scale. The data were shown in Table below

	Statements	Mean	Std. Deviation
E1	I am satisfied with my physical work space and office	2.81	0.854
E2	UMP has a comfortable working ambience	2.85	0.768
E3	UMP has adequate infrastructure for teaching and learning (Lecture rooms, laboratory and equipment)	2.81	0.745
E4	UMP has adequate infrastructure (roads, recreation spot and mosque)	2.82	0.841
E5	Food and catering facilities for staff are good	2.17	0.903
E6	There is place where staff can take a rest during break time	2.35	0.905
E7	I feel safe in my working environment	2.86	0.748

Descriptive statistical analysis of the communication

In the Communication construct, the mean values of the indicators were between 2.67 to 2.83. The highest mean score (2.83) was "Overall, communication within my department is effective". This was followed by "On the whole, communication in UMP is effectives". The lowest mean score (2.67) was "Communication between top management and staff is effective". The standard deviation scored demonstrated that there are greater consistency among respondents in answering the questionnaire; most of them responding to scale nearest to the mean score; that was 2 to 3 on 4-point Likert scale. The data were shown in Table below.

	Statements	Mean	Std. Deviation
G1	On the whole, communication in UMP is effectives	2.76	0.720
G2	Communication between top management and staff is effective	2.67	0.759
G3	Overall, communication within my department is effective	2.83	0.742

Descriptive statistical analysis of the job satisfaction

In the job satisfaction construct, the mean values of the indicators ranged from 2.72 to 2.93. The item with highest mean score (2.93) was "My experience is appreciated by co-workers" and this was followed by "My position in UMP is secure". Next, the third highest mean was scored by "My working satisfaction is high" and followed by "There is a lot of chance for career improvement in UMP". Lastly, the lowest mean score (2.72) was "My experience is appreciated by University". The standard deviation scored demonstrated that there are greater consistency among

respondents in answering the questionnaire; most of them responding to scale nearest to the mean score; that was 2 to 3 on 4-point Likert scale. The data were shown in Table below.

	Statements	Mean	Std. Deviation
H1	My working satisfaction is high	2.81	0.723
H2	My experience is appreciated by University	2.72	0.783
H3	My experience is appreciated by co-workers	2.93	0.700
H4	My position in UMP is secure	2.92	0.782
H5	There is a lot of chance for career improvement in UMP	2.75	0.878

Descriptive statistical analysis of the turnover intention

In turnover intention construct, the mean values of the indicator were from 2.14 to 2.50 respectively. The highest mean score (2.50) was "If I was offered job by other agency, I will accept it" and the lowest mean score (2.14) was "I always thought of leaving UMP". The standard deviation score demonstrated that there are greater consistency among respondents in answering the questionnaire; most of them responding to scale nearest to the mean score; that was 2 to 3 on 4-point Likert scale. The data were shown in Table below.

	Statements	Mean	Std. Deviation
I1	I always thought of leaving UMP	2.14	0.943
I2	If i was offered job by other agency, I will accept it	2.50	0.948