

**FACTORS INFLUENCING EMPLOYEE WORK PERFORMANCE  
IN THE WATER UTILITY INDUSTRY  
IN THE STATE OF SELANGOR**

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## **DECLARATION**

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I hereby declare that this dissertation is the result of my own work, except for quotations and summaries which have been duly acknowledged.

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## **ABSTRACT**

Clean water is essential for health and well-being. Everyone has the right to access clean drinking water for their basic needs. However, in 2013, WHO and UNICEF reported that a total of 1.3 billion people did not have access to safe water. Malaysian government has embarked on water sector reformation effort and constitutional amendment to make the water utility industry sector more efficient as well as to improve the customer orientation of service provision. Although the supply of treated water has achieved a relatively high standard, unfortunately, the Non-Revenue Water (NRW) rate is currently at 35 percent which is considered as a major inefficiency in water industry that must be addressed. Therefore, the aim of this study is to examine the factors influencing the employee work performance in water utility industry. This study will explore the factor of organisational commitment, transformational leadership, job characteristics among employees of water utility industry which may influence the employee work performance with the mediating effect of employee engagement. Studies have examined the relationship between these factors but there is no clear and comprehensive answer especially in relation to work performance in the water utility industry. A self-administered approach is deployed to collect data from 455 respondents comprising of the executive and non-executive employees of Pengurusan Air Selangor Berhad. The findings revealed that factors of organisation commitment and transformational leadership had no significant relationship, while job characteristics was confirmed to have a significant relationship with employee work performance in water utility industry in the state of Selangor. The findings also revealed that all other three indirect hypotheses used in this study were supported. These provide evidences on the role played by employee engagement as a mediator variable between organisation commitment, transformational leadership and job characteristics with work performance among the employees of water utility industry. Future study should consider conducting longitudinal and qualitative studies to re-examine the dynamic nature of the effects of organisational commitment, transformational leadership, job characteristics and employee engagement on employee work performance to provide further insights regarding the probable outcome. This approach will also enable future researchers to get deeper insights and understanding of the problem setting.

**Keywords:** Water utility industry, organisational commitment, transformational leadership, job characteristics, employee engagement, employee work performance.

## **FAKTOR-FAKTOR YANG MEMPENGARUHI PRESTASI KERJA PEKERJA DI INDUSTRI UTILITI AIR DI NEGERI SELANGOR**

**ZAINUDDIN BIN OTHMAN**

### **ABSTRAK**

Air bersih penting untuk kesihatan dan kesejahteraan. Semua orang mempunyai hak untuk mengakses air minuman yang bersih bagi keperluan asas mereka. Namun, dalam tahun 2013, *WHO* dan *UNICEF* melaporkan sejumlah 1.3 juta orang tidak mendapat akses kepada air yang selamat. Kerajaan Malaysia telah memulakan satu usaha pembaharuan sektor air dan pindaan perlembagaan untuk menjadikan sektor industri utiliti air lebih cekap serta untuk memperbaiki orientasi pelanggan bagi penyediaan perkhidmatan. Walaupun bekalan air terawat telah mencapai satu piawaian yang tinggi secara relatif, malangnya, kadar Air Bukan Hasil (NRW) pada masa ini adalah pada 35 peratus yang dianggap sebagai satu ketidakcekapan utama dalam industri air yang mesti ditangani. Oleh itu, matlamat kajian ini adalah untuk memeriksa faktor-faktor yang mempengaruhi prestasi kerja pekerja dalam industri utiliti air. Kajian ini akan meneroka faktor komitmen organisasi, kepemimpinan transformasi, ciri-ciri pekerjaan di kalangan pekerja industri utiliti air yang boleh mempengaruhi prestasi kerja pekerja dengan kesan pengantaraan bagi penglibatan pekerja. Kajian-kajian telah memeriksa hubungan antara faktor-faktor ini tetapi tiada jawapan yang jelas dan komprehensif terutamanya berkaitan dengan prestasi kerja dalam industri air. Pendekatan sendiri digunakan untuk mengumpul data daripada 455 responden yang merangkumi pekerja eksekutif dan bukan eksekutif bagi Pengurusan Air Selangor Berhad. Penemuan mendedahkan bahawa faktor-faktor komitmen organisasi dan kepemimpinan transformasi tidak mempunyai hubungan yang signifikan, manakala ciri-ciri pekerjaan telah disahkan mempunyai hubungan yang signifikan dengan prestasi kerja pekerja dalam industri utiliti air di negeri Selangor. Penemuan turut mendedahkan bahawa kesemua tiga hipotesis tidak langsung yang digunakan dalam kajian ini turut disokong. Ini memberikan

bukti-bukti terhadap peranan yang dimainkan oleh penglibatan pekerja sebagai pemboleh ubah pengantara di antara komitmen organisasi, kepimpinan transformasi dan ciri-ciri pekerjaan dengan prestasi kerja di kalangan para pekerja industri utiliti air. Kajian masa depan perlu mempertimbangkan pelaksanaan kajian longitudinal dan kajian kualitatif untuk menyemak semula kesan dinamik bagi komitmen organisasi, kepimpinan transformasi, ciri-ciri pekerjaan dan penglibatan pekerja terhadap prestasi kerja pekerja untuk memberikan pandangan lanjut berkaitan kemungkinan kesan tersebut. Pendekatan ini akan membolehkan penyelidik masa depan untuk mendapat pandangan dan pemahaman yang lebih mendalam bagi persekitaran masalah berkenaan.

***Kata kunci:*** Industri utiliti air, komitmen organisasi, kepimpinan transformasi, ciri-ciri pekerjaan, penglibatan pekerja, prestasi kerja pekerja.

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# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

This chapter will provide deliberations on the study, starting with the background of the subject matter by highlighting the global and local issues and problems faced by water utility industries in the state of Selangor followed by posing the research question that would help in providing solution to the ‘gaps’ that have been identified. It also provides the research objectives, scope of study, significant of the study and explains the definition of terms used in this study. Finally, it ends by providing the organisation of the whole thesis.

### 1.1 Background to the study

“In a sustainable world, water and related resources are managed in support of human well-being and ecosystem integrity. Sufficient and safe water is made available to meet every people’s basic needs, with healthy lifestyles and behaviours easily upheld through reliable and affordable water supply and sanitation services, in turn supported by equitably extended and efficiently managed infrastructure... (United Nations, 2015)”.

Clean water and adequate sanitation are essential for health and well-being. Everyone has the right to have access to drinking water in quantities and of a quality equal to

his or her basic needs. Anything that disturbs the provision and supply of water therefore tends to disturb the very survival of humanity. In many countries, however, public service providers have failed to provide the population with adequate water supply and services. According to World Health Organisation and United Nations International Children's Emergency Fund report, in the year 2013 about 1.3 billion people lack access to safely managed drinking water services (WHO/UNICEF 2013).

These people remained without access to clean water and proper sanitary services because most of the times the system fails, often because not enough was invested to appropriately build and maintain them, and also because of the stress that urbanisation places on the existing infrastructure (World Bank, 2012). Poor governance in most of the water and sanitation systems also means that many places lack services and where they are available the quality of service is unsatisfactory (Asis, Leary, Ljung, and Butterworth, 2009).

According to the Water Framework Director of the European Union, 'water services' is defined as;

“All services which provide for households, public institutions, or any economic activity. These include abstraction, impoundment, storage, treatment and distribution of surface water, or ground water, and waste water collection and treatment facilities which subsequently discharge into surface water (Schwartz, 2006).”

Under this definition, water services relate to the whole series of activities from the abstraction of raw material at the source of delivery (treated) water to the consumer and from the consumer back to the water source. The definition encompasses a broad

range of consumers such as provision of industrial water, irrigation water for agriculture, and portable water for domestic purposes.

In many countries, water utility providers are owned or supported by the governments. However, these service providers are often plagued with various problems. They are bogged with high number of employees than what is considered 'efficient' as well as confronted with financial problems due to a combination of low tariffs, poor consumer records and inefficient billing and collection practices. In addition, many of these utility service providers experienced high rates for Non-Revenue Water (NRW) which often average about 50 per cent. This means that half of the portable water produced is lost somewhere in the provision process. NRW losses may be due to leakages, illegal connections or theft, and unbilled legal usage and consumption such as water used for cleaning reservoirs and flushing the network system, fire-fighting, and water provided free to certain groups and institutions (Bernard and Eugene, 2006). High NRW often indicates poor management system, poor commercial practices, and inadequate network maintenance to the system.

Past failures of many of water utility service providers prompted the World Bank in the 1990s to come out with a solution on how to improve the performance of these water utilities. The focus of the World Bank then was on the managerial approach which followed two paths; First management of the water utilities was to be delegated to the private sector through concession contracts or other contractual arrangements. The second approach was to keep the management of the utility within the public domain but concentrated on introducing management practices associated with the

private sector in the public water utility. The World Bank at that time saw the private sector as an essential component of the solution for many of the water utility problems. They wanted the significant increase in private involvement in financing, operation as well as ownership. As a result, between year 1990 and year 2000 more than 40 countries were engaged over 200 projects with private sector participation in the water and sewerage sector (World Bank, 2006). Nonetheless, the private involvement in the water supply and sanitation sector faded in the early 2000s. Many high-profile concession contracts which were once presented as representing the future of the water service sector collapsed or faced operational difficulties (Schwartz, 2006). The use of private sector participation to increase efficiency was found to be less effective and therefore contributed little to ameliorate performance in the water and sanitation system. Many of the projects failed while of those considered success still needed government support or required little private risk.

In Malaysia, the responsibility for water supply is vested in each state government. While the federal government formulates overall policies for the development of the water sector, state governments lay down detailed policies and set up institutions for the development and management of water services in each respective state. However, in 2005 the Malaysian government embarked on the water reform, and constitutional amendment was made that gave both States and Federal Government equal responsibility on water services (PAAB, 2010). Two laws were passed in 2006 that formed the legal framework of the water and sanitation sector. The Water Services Industry Act 2006 established a national Water Asset Management Company or a Malay acronym PAAB, and The National Water Services Commission Act 2006

which established a National Water Services Commission or Suruhanjaya Perkhidmatan Air Negara (SPAN). These two Acts separated the functions of policy making (government), regulation (SPAN), asset ownership (PAAB) and service provision (state water companies) from each other. The objectives of the water service reform were to make the sector more efficient, to create sustainable funding mechanism, and to improve the customer orientation of service provision (Yew, 2010). SPAN is the regulator for the water industry, issues licenses for water operators, decides on tariff rates and water requirement needs. Its core functions include monitoring the quality of water resources (owned by state governments), treating raw water, distributing water to consumers, monitoring water loss, and running the water assets leased from Pengurusan Aset Air Berhad (PAAB). The government realises that the level of efficiency on water service industries lies on the performance of the companies in operating the water systems. Thus, SPAN has set the standard level of services required and had imposed the requirement to the state water companies. Compliance to this standard level of service is a must. According to Water Service Industry Act 2006, if the company violates the standard level of service, in the case of major violation may affect either vary or revocation of licence to operate.

In 2015, the water services industry in Selangor, Federal Territory of Kuala Lumpur and Putrajaya underwent a restructuring exercise where Pengurusan Air Selangor Berhad (Air Selangor), a wholly owned company of the Selangor State Government acquired and consolidated the four concession companies, namely Syarikat Bekalan Air Selangor Sdn Bhd (SYABAS), Puncak Niaga (M) Sdn Bhd (PNSB), Konsortium ABASS Sdn Bhd (ABASS), and Konsortium Air Selangor Berhad (KASB).

Pengurusan Air Selangor Berhad is now the sole water supply service operator providing holistic water services from raw water abstraction and treatment to the distribution of treated water to consumers including customer services and billings (Air Selangor, 2017). Although the production of treated water and water treatment have achieved relatively high standards as benchmarked against some of the leading water utility companies in the world, the company faces severe problems especially those related to the managing and distribution of treated water to the consumers. In addition, performance of the company in terms of coverage hours of service, quality of water and cost coverage has remained relatively low. The services provided by water utility company are still characterised by high levels of Non-Revenue Water (NRW), poor management practices, lack of openness and accountability, and low tariffs which are insufficient to cover operations and maintenance costs. Acute water shortages in some part of the country were made worst by the high level of water losses due to poor infrastructure. The current 35 per cent NRW is still considered as a major inefficiency in the water industry that must be urgently addressed (SPAN, 2017). Thus, there is a need to study the performance of the water utility in the country in order for the government to improve water efficiency and boosting overall water availability and reliability.

The issue of inefficiency level in water utility industry had been discussed and debated in the Parliament of Malaysia. The member of Parliament were informed that Non-Revenue Water (NRW) mainly caused by water leakage from worn-out pipes, water theft and meters inaccurately recording water usage is the indicator of inefficiency level in water utility industry. In 2016, the state of Perlis recorded the country's highest

percentage of non-revenue water (NRW), at 60.7 per cent, followed by Kedah, Kelantan and Pahang, all which registered close to 50 per cent NRW and Selangor at 35 per cent. In addressing the issue the Ministry of Energy, Green Technology and Water had allocated RM531 million for the Non-Revenue Water (NRW) program in six states (Perlis, Kedah, Kelantan, Pahang and Selangor) in view to the government target to reduce the NRW rate at 25 percent by the year 2020 (New Straits Time, 2017). The Malaysia Water Industry Guide 2016 reported that a total of 1,056,837 water service complaints were recorded from all thirteen states in Malaysia in the year 2015 and Selangor recorded 235,650 water service complaints which is about 22.3 per cent from the total complaints. While water service interruption recorded a total of 167,055 in 2015 and Selangor recorded 81,969 which is about 49 per cent from the total complaints of water service interruptions recorded in 2015. The other major water industry problem in Selangor was caused by pipe burst. Pengurusan Air Selangor Bhd reported that the industry recorded 5,782 pipe burst in 2016 and 3,708 pipe burst were recorded from January 2017 up to August 2017.

The World Bank's Benchmarking Water and Sanitation Utilities database and the Asian Development Bank databases were used to assess the performance of 246 water utility industries in 51 developed and developing countries through four broad measures of a well-run water utility. These are efficiency of investment, efficiency operations and maintenance, financial sustainability and responsiveness to customers (Tynan and Kingdom, 2002). Meanwhile, Gupta, Kumar and Sarangi (2006) measured performance of a water utilities in 27 cities in India based on how effectively and efficiently it delivers the required service and efficiency relates to

investments, billing and collections, water quality, human resource, and non-revenue water (NRW). However, according to Zergebruk, Mayabi, Gathenya, and Tsige,(2014) improving the performance of a water utility is a combined process of managerial capacity and technical competence of the employees. Capable managers are needed to design and manage the implementation and operations of the system, while competence employees are employed on the installation, operation and maintenance. Zergebruk et al. (2014) also suggested the importance of assessing the human resource development as performance indicator because the efficiency of the water utility is the reflection of its employee's performance. Tynan and Kingdom (2002) concurred that efficient utilisation of human resources is a critical performance for the water utility because personnel costs constitute a large portion of the company's expenditure. The study revealed that there were high number of manpower in the utility industries especially in the developing countries where it measures the combining wages and staffing to give personnel costs as a share of total operation costs 39 percent.

Similarly, Abbas and Yaqoob (2009) found employees' work performance as a major component of organisational performance, and that employees are the critical component of the firm, and indeed the firm's success depends highly on performance of employees (Hameed and Waheed, 2011). Studies by Karia, Omari, Mwahaongoro, and Kimori (2016), Bhat (2013), Hau and Omar (2015), Slavic and Berber (2014), and Truitt (2011) also found that the efficiency and effectiveness of water utilities depended more on the employees' performance and proficiency. They also argued that improved employee performance could improve organisational performance as well. Based on this discussion, there is a need to examine the employees' work performance

in the water utility company in Malaysia for the company to achieve certain performance indicators as required by the regulator (SPAN).

Employee work performance is usually defined as the extent to which an employee contributes to achieving the goals of the organisation. It is what an employee does or does not do, and could include quantity and quality of output, timeliness of output, presence at work, or cooperativeness (Zhang, 2012). Employee performance is also dependent on the willingness and the openness of the employee doing his or her job. This could increase the employee's productivity which leads to the performance (Sinha, 2001). To achieve specific organisational goals, employee tasks must be done on track where they could be monitored and helped to improve their performance (Stup, 2003). Past studies have identified various factors that contribute to employees' performance. For example, Bushiri (2014) found working environment factors such as supervisor support, job aid, ergonomic workplace, performance feedback, and workplace incentives may affect employees' performance, while Zhang (2012) found continuous communication within organisation and personnel development impacted significantly and positively on employee work performance. Similarly, Sheppard (2016) found work-life balance programs' effectiveness helped improve the employee overall performance.

A number of studies have also linked organisational commitment with employee performance (Cesario and Chambel, 2017; Susanty and Miradipta, 2013; Alderton, 2016; Steyrer, Schiffinger and Lang, 2008; Toban and Sjahrudin, 2016; Janoniene and Endriulaitiene, 2014). Cesario and Chambel (2017) revealed the existence of a

positive relationship between organisational commitment and employee performance but commitment did not present significant predictor strength, while Susanty and Miradipta (2013) and Alderton (2016) and Steyrer, Schiffinger and Lang (2008) confirmed the positive and significant effect of organisational commitment on employee performance. However, Toban and Sjahruddin (2016) only found the indirect relationship where organisational commitment acted as a complete mediator in explaining the effect of transformational leadership and employee performance. In addition, a study by Janoniene and Endriulaitiene (2014) revealed that some components of organisational commitment had negative aspects for employee performance. The study found that continuous commitment could make employees feel lack of employment alternatives and being trapped in the organisation (Vandenberghe et al., 2007). These employees could be frustrated, easily emotionally exhausted, reacted inadequately, and becoming professionally ineffective (Meyer et al., 2004). Thus, studies on the relationship between organisational commitment and employee performance still do not give clear and comprehensive answer, and this requires further verification.

Leadership styles that can assist management in making employees to make changes are transformational leadership (Holten and Brenner, 2015). Transformational leadership has been found to have positive and significant impact on the organisational resiliency as well as the subordinates' performance (Valero, Jung and Andrew, 2015). Transformational leaders have the ability to change the work environment, motivation, and work patterns, and the values of work employees perceived that they are better able to optimise performance to achieve organisational goals (Bass and Bass, 2008).

Transformational leaders are able to foster new ideas, providing creative solutions to the problems faced by the employees, and encourage them to look for new approaches in carrying out organisational tasks (Yukl, 2010). However, researchers have yet to agree on the precise transformational style that can influence the employee performance in the water utility industry. Thus, this lacuna warrants further examination.

Many scholars have argued that employee performance can also be improved through restructuring job characteristics by making them more challenging, motivating and satisfying to the individual (Faturochman, 1997). According to job characteristics theory there are five specific task conditions in which individuals are predicted to prosper in their work. These are skill variety, task identity, task significance, autonomy, and job feedback (Hackman and Oldman, 1976; 1980). Johari, Yean, Yahya and Adnan (2015) found that job characteristics significantly influenced employee job performance while Hernaus and Mikulic (2013) revealed the existence and importance of interaction between job characteristics and employee work outcomes. Studies by Steyn and Vawda (2014), Bohlander and Snell (2013), Cascio (2010) and Moorhead and Griffen (2008) confirmed the influence of job characteristics on critical psychological states which in turn produce high quality work performance. However, Kim (2016) found that only skill variety, task significance, and feedback of the five core job characteristics are positively associated with motivation and indirectly to work performance. Thus, the relationship between job characteristics and employee work performance needs further investigation.

Employee engagement has become top priority in businesses because having high-performing workforce is essential for growth and survival. According to Perrin (2003) it is the employees' willingness and ability to help their company succeed, largely by providing discretionary effort on a sustainable basis while Dervovsek (2008) likened employee engagement to positive employees' emotional attachment and commitment. Studies have found that employee engagement is a strong predictor of positive organisational performance (Markos and Sridevi, 2010), positively related to customer satisfaction (Ellis and Sorensen, 2007; Heintzman and Marson, 2005), strives the employee to exert extra time, effort, and initiative to contribute to the success of the business (Baumruk and Gorman, 2006), increases productivity, creates a better and more productive working environment, and reduces non-attendance and employees leaving (Caplan, 2013) as well as contributes to organisational overall success (Shmailan, 2015). However, employee engagement was also tested as a mediator variable and found to mediate the relationship between job characteristics and positive and negative extra-role behaviours (Sulea et al., 2012) and the relationship between job satisfaction and job performance, and the relationship between job satisfaction and intention to quit (Yalabik, Popaitoon, Chowne and Rayton, 2013). Therefore, understanding the mediating role of employee engagement in employee work performance in the water utility company in the state of Selangor is worth investigating.

## **1.2 Problem Statement and Research Gap**

The services provided by water utility industry has been characterised by high levels of Non-Revenue Water (NRW), poor management practices, lack of openness and

accountability, and low tariffs which are insufficient to cover operations and maintenance costs. It was reported that acute water shortages in some part of the country were made worst due to poor infrastructure and also inefficiency in managing the industry. Past studies by Gupta, Kumar and Sarangi (2006) and Tynan and Kingdom (2002) using data from 246 water utilities in 51 countries in developed and developing countries, confirmed that efficiency in utilisation of employee is a critical contribution to the performance of the organisation in the water utility industries. Several studies revealed that employee work performance is an important topic because it will reflect the overall performance of an organisation (Berberoglu and Secim, 2015). Performance results collectively from the employees' ability and efforts toward achieving the organisation's target (Kocak, 2006). The previous studies also argued that improved employee's performance could improve organisational performance as well. Unfortunately, not much attention has been given to the issue of employee performance in water utility industry in the State of Selangor. There is an increasing assumption that employee performance has affected the performance of the organisation particularly in the standard of service levels, indicated by the increase of the number of water pipe bust, water service complaints, and water service interruptions. It is evidenced by the report shown in Malaysia Water Industry Guide (2016), where water service complaints recorded 1,056,837 cases in 2015 for the whole Malaysia and water utility industry in the state of Selangor recorded 235,650 (22.3%). A total of 167,055 cases of Water service interruptions were also recorded in 2015 and water utility industry in the state of Selangor recorded 1,969(49.06%). The current 35 per cent of non-revenue water is considered as a major inefficiency in the water industry (SPAN 2017). Beside employee's work performance, this study also assessed

and examined the effect of employee's organisational commitment, perceive transformational leadership style, job characteristics and the mediating effect between employee engagement and the above predictor variables with employee work performance in water utility industries in the state of Selangor.

Past studies have revealed the inconsistency of the linked organisational commitment with employee work performance. Although Allen and Meyer (1996), Meyer et al. (1989), and Bashaw and Grant (1994) asserted that there is positive relationship between organisational commitment and employees' overall work performance, Somers and Birnbann (1998) also examined the relationship between work related commitment and employee job performance but found no relationship exists between organisational commitment and performance. Similarly Jing (2010) studied the predictive power of organisational commitments for academics' teaching styles and reported that affective commitment is consistently associated with adaptive attributes and positive outcomes, but continuance commitment is linked to non-adaptive attributes or poor job performance. Thus, the study did not support the claim of positive link between organisational commitment and performance. Other researchers such as Caruana et al. (1997), Keller (1997) and Meyer et al. (2002) exhibited ambiguous or weak relationship between organisational commitment and performance while Meyer et al. (2002), Hackett et al. (1994) and Shore and Wayne (1993) found negative or non-significant relationship between organisational commitment and work performance. Due to the inconsistencies in the past studies, this study examined the relationship between organisational commitment among employees of the water industry in the State of Selangor.

The study by Zhu and Akhtar (2014) on 175 sales and service employees and their supervisors in two private companies located in Southeast China found significant and positive relationship between transformational leadership and employees' work performance. Other studies involving employees from a broad spectrum of organisations in Germany and Switzerland by Kovjanic et al. (2012) suggested that transformational leadership can help shape employees' attitudes and behaviours through fulfilling employees' basic psychological needs; autonomy, self-efficacy, affective commitment, while Zhang (2016) concurred on the positive effect of transformational leadership on employee's work performance. However, most researchers have yet to agree on the precise transformational style that can influence the employee performance in the water utility industries. Thus, this study assessed and examined the relationship of the perceived transformational leadership style and the employee work performance in the water utility industry in the state of Selangor.

According to job characteristics theory, there are five specific task conditions in which individuals are predicted to prosper in their work (Hackman and Oldman, 1976; 1980). These are skill variety, task identity, task significance, autonomy, and job feedback. The study by Sultan (2012) on 366 employees (183 men and 183 women) from different banks in Karachi, Pakistan revealed that all the five dimensions; skill variety, task identity, task significance, autonomy, and job feedback, were effective predictors of employees' work motivation and job satisfaction. Tungkiatsilp (2013) sampled 300 restaurant chefs in Thailand, and the study also revealed all the five dimensions of job characteristics show positive relationship with job performance. Hernaus and Mikulic (2013) revealed the existence and importance of interaction between job characteristics

and employee work outcomes while studies by Steyn and Vawda (2014), Bohlander (2013), Cascio (2010) and Moorhead and Griffen (2008) had also confirmed the influence of job characteristics on critical psychological states which in turn produce high quality work performance. However, Kim (2016) found that only skill variety, task significance, and feedback of the five core job characteristics are positively associated with motivation and indirectly to work performance for the public servant in Korea. Similarly, the study of the job characteristics model among agents in Egyptian agricultural extension system by Kassem and Sarhan (2013) found that all core job characteristics except skill variety had non-significant relationship with performance. Thus the findings have shown the relationship between job characteristics and employee work performance is mixed or still inconclusive. Thus, this study examined the relationship of job characteristics with work performance of employees in the water utility industry.

El Badawy and Bassiouny (2014) conducted a study on 500 employees of Vodafone in Egypt, and found employee engagement as a mediator between transformational leadership and intention to quit, while another study by Yalabik, Popaitoon, Chowne, and Rayton (2013) in United Kingdom found that employee engagement mediates the relationships between affective commitment and job performance and intention to quit. The study also found that employee engagement mediates the relationship between job satisfaction and job performance, but partially mediates the relationship between job satisfaction and intention to quit. Another study on front- line service employees of organised retail store located in South India was conducted by Itam and Singh (2017) who found the mediating role

of employee engagement on the relationships between internal branding practices and outcome variables such as job satisfaction, employee loyalty and employee performance, while a study on employees working within 185 departments across ten hospitals within a large healthcare organisation in the USA by Collini, Guidroz, and Perez (2015) revealed that employee engagement fully mediates the relationship between respect and turnover, and the relationship between mission fulfilment and turnover. Further study on employees within IT organisations in Malaysia by Alias, Mohd Noor and Hassan (2014) found that employee engagement mediates the relationship between job resources and job performance, and between talent management practices and employee retention. Based on the mediator role played by employee engagement in many types of relationships, this study examined the mediating effect of employee engagement between organisational commitment, transformational leadership, job characteristic and employee work performance in the water utility industries.

### **1.3 Objectives of the study**

Generally, this study aimed to examine the relationships between organisational commitment, perceived transformational leadership style, job characteristics, employees' engagement and employee work performance in the water utility industry in the state of Selangor. Specifically, the objectives of the study are:

1. To determine if there is significant relationship between organisational commitment and employee work performance among employees in the water utility industry.

2. To determine if there is significant relationship between perceived transformational leadership style and employee work performance among employees in the water utility industry.
3. To determine if there is significant relationship between job characteristics and work performance among employees in the water utility industry.
4. To examine if employee engagement mediates the relationship between organisational commitment and employee work performance.
5. To examine if employee engagement mediates the relationship between perceived transformational leadership style and employee work performance.
6. To examine if employee engagement mediates the relationship between job characteristics and employee work performance.

#### **1.4. Research Questions**

To address the issues highlighted in the problem statement section, the following research questions would help in providing solution to the ‘gaps’ identified:

1. Is there significant relationship between organisational commitment and work performance among employees in the water utility industry?
2. Is there significant relationship between perceived transformational leadership style and work performance among employees in the water utility industry?
3. Is there significant relationship between job characteristics and work performance among employees in the water utility industry?

4. Does employee engagement mediate the relationship between organisational commitment and employee work performance?
5. Does employee engagement mediate the relationship between perceived transformational leadership style and employee work performance?
6. Does employee engagement mediate the relationship between job characteristics and employee work performance?

### **1.5 Scope of Study**

This research is centred on the direct and indirect effects of organisational commitment, transformational leadership styles, job characteristics, and employee commitment on employee work performance in the water utility industry in the State of Selangor. Thus, the assessment of the selected water utility companies is limited to the following variables of study; organisational commitment, transformational leadership styles, job characteristics, employee commitment, and employee work performance. In addition, this study is restricted to four companies under Pengurusan Air Selangor Berhad that operate the water service industry in the State of Selangor, Federal Territory of Kuala Lumpur and Putrajaya. As at 31<sup>st</sup> December 2016, the company served to 2,144,547 customer counts (Air Selangor, 2017). The population is the employees at the executive and non-executive levels of the water utility companies.

Data for this study were collected using a survey questionnaire research instrument with five primary sections, specifically organisational commitment, transformational

leadership style, job characteristics, employee engagement, and employee work performance. The use of questionnaire is the logical way to measure intangible constructs such as perceptions and attitudes. Questionnaire also can provide an efficient and versatile data gathering technique (Babbie, 2010; Breakwell and Fife-Shaw, 2004; Schmitt, 1994). Although, questionnaire may result in data bias due to time of measurement effects and the inability to measure any changes in attitudes, perceptions, or behaviours (Breakwell and Fife-Shaw, 2004), it is still the most prevalent data collection method used in business and management research.

### **1.6 Significance of study**

The major significance of this study emanated from the fact that few studies had examined the integration of organisational commitment, transformational leadership, job characteristics, employees' engagement on work performance in the water utility industry. This study makes contribution to the literature on human resource management in the water utility industry which is still believed to be under-researched. It supports other researches to suggest that the problem in the water utility industry is not only the technical operations but also the employees' capability that may have effect on the organisational performance. It provides useful reference materials on factors influencing employee performance, and exposed areas for further research which can be useful in expanding knowledge in the water utility sector.

The study will benefit policy makers by underscoring how essential factors influencing effectiveness and sustainability in the water utility industry. This information will be useful in formulating better strategies, regulatory tools and funding conditions to enhance the sector performance.

To the management, the information that will be provided from this study could serve as an input for planning purposes data collected for organising and a source of directing, and act as a basis for developing policies that would enhance the performance of the water utility industry. Finally, this study is expected to increase knowledge and provide up-to-date information on the water supply system and enable citizens and communities to engage with the service providers and regulators in providing quality and affordable water supply.

### **1.7 Research Hypotheses**

These research hypotheses were developed based on literature review on previous research but in the different scope of study using the similar variables used in this study.

**H1:** There is significant relationship between organisational commitment and work performance among employees in the water utility industry,

**H2:** There is significant relationship between perceived transformational leadership and work performance among employees in the water utility industry,

- H3:** There is significant relationship between job characteristics and work performance among employees in the water utility industry,
- H4:** Employee engagement mediates the relationship between organisational commitment and work performance,
- H5:** Employee engagement mediates the relationship between perceived transformational leadership and work performance, and
- H6:** Employee engagement mediates the relationship between job characteristics and work performance.

## **1.8 Definition of Terms**

- 1.7.1 **Water Services** - All services which provide for households, public institutions, or any economic activity. These include abstraction, impoundment, storage, treatment and distribution of surface water, or ground water, and waste water collection and treatment facilities which subsequently discharge into surface water (Schwartz, 2006)
- 1.7.2 **Employee Work Performance** – The employees’ set of behaviour that contributes toward the organisational goal accomplishment encompassed by the comprehensive dimensions of task performance and contextual performance. Task performance is the proficiency with which one performs central job task such as work quantity, work quality and job knowledge and contextual performance is the individual behaviour that supports the organisational, social and psychological environment in which the technical core must function (Borman and Motowidlo, 1993)

- 1.7.3 **Organisational Commitment** – A unidimensional construct consisting affective commitment as the strength of an employee’s identification with and involvement within an organisation, and normative commitment as a sense of moral obligation or duty to remain with an organisation (Allen and Meyer, 1990).
- 1.7.4 **Transformational Leadership** – A leadership style that advocates for positive changes in individuals and social systems. It has four dimensions; idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration. The goal of transformational leadership is to align followers’ identity, values, and aspirations with the missions and values of the organisation. Positive outcome is generated through this leadership with the end goal of helping followers become leaders (Bass, 1985).
- 1.7.5 **Job Characteristics** – The characteristics of each job that are being designed to provide an intrinsic motivation of the work which consists of five dimensions; (a) Skill Variety which is the degree to which the job requires a number of different activities that involve a number of different skills and talents, (b) Task Identity which refers to the degree in which the job requires in completing a whole identifiable piece of work from the beginning to the end with a visible outcome, (c) Task Significance which refers to the degree to which the job has a substantial impact on the lives of other people, particularly people in the world at large, (d) Autonomy which is the degree to which the job provides freedom, independence, and discretion on an individual who performs the work, and (e) Job Feedback which is the degree in which the job provides employees with

clear information about how well they are performing and carrying out the activities as required (Hackman and Oldham, 1980).

1.7.6 **Employee Engagement** – A positive, fulfilling, work related state of mind that is characterised by vigour, dedication and absorption. Vigour is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is characterised by being fully concentrated and deeply engrossed in one's work (Schaufeli, Salanova, Gonzalez-Roma, and Bakker, 2002).

1.7.7 **Water Utility Employee** - is the employees at the executive and non-executive levels of the four water utility companies under Pengurusan Air Selangor Berhad that operates the water service industry in the State of Selangor, Federal Territory of Kuala Lumpur and Putrajaya.

## 1.9 Organisation of the Thesis

This research is presented in a sequence of five (5) chapters. Chapter 1, provided the introduction to the study and discussed the effects of organisational commitment, transformational leadership styles, job characteristics, and employee commitment on employee work performance mediated by employee engagement based on the past studies. This chapter also outlined the background of the study identifying problem statements and the research gap, significance and scope of this study, objectives of the study, research hypotheses, and finally the definition of terms used in this study. Chapter

2, reviewed the past and existing empirical works in the area of human resource management in the water utility industry specifically related to direct and indirect effects of organisational commitment, transformational leadership styles, job characteristics, and employee engagement on employee work performance in the water utility industry are discussed. The mediating effects of employees' engagement is also addressed. This chapter also examined the definitions, theories and measurements pertaining to this study. Chapter 3 addressed the research methodology for this study, including the research design, instrument development, sampling techniques, methods of data collection, measurement and techniques of data analysis. Chapter 4 mainly reports on the findings, and Chapter 5 discussed on the summary of findings, the direct effect of the independent variables on the dependent variable, theoretical and practical implications of the findings to the employee of water utility industry in the state of Selangor and also the limitation of the study and suggestions for future research.

### **1.10 Chapter Summary**

This study examined the factors influencing employee work performance in the water utility industry, with the specific objectives of assessing the human resource development in identifying the factors that influence the employee work performance in the water utility industry in the state of Selangor. As suggested by Zergebruk et al. (2014) the importance of assessing the human resource development as performance indicator because the efficiency of the water utility is the reflection of its employee's performance. This has been concurred by Tynan and Kingdom (2002) that efficient utilisation of human resources is a critical performance for the water utility because personnel costs constitute

a large portion of the company's expenditure. Several previous research findings had revealed that improved employee work performance will improve the organisation performance as well. Thus, this study had identified organisation commitment, transformational leadership, job characteristics as the independent (exogenous) variables, employee engagement as mediating (endogenous) variable and employee work performance as dependent (endogenous) variable for the study. Based on literature review, several studies had been conducted using the similar variables but in the different area of study and different geographical area. This study will answer the research question, respond to the objectives of this study as well as to justify the significance and to test the six (6) hypotheses of this study which will be beneficial to parties involve in the water utility industry in the state of Selangor.

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## Appendix 1. Sample of Questionnaire

### **BORANG KAJI SELIDIK**

*(SURVEY QUESTIONNAIRE)*

Tuan/Puan,

Saya adalah calon ijazah kedoktoran di Open University Malaysia (OUM) sedang menjalankan kajian bertajuk “Hubungan di antara komitmen organisasi, kepemimpinan transformasi, ciri-ciri pekerjaan, penglibatan pekerja, dan prestasi kerja di sektor utiliti air.” Saya sedang menggunakan soal selidik ini sebagai instrumen kajian untuk melengkapkan keperluan pengajian saya. Sila lengkapkan soal selidik ini dengan menandakan pilihan yang tepat kerana maklum balas anda amat dihargai. Tiada jawapan betul atau salah dalam soal selidik ini. Semua maklumat yang diberikan akan dianggap sulit, dan identiti anda tidak diperlukan. Kerjasama anda didahului dengan ucapan ribuan terima kasih.

*Dear Sir/Madam,*

*(I am a doctoral candidate of Open University Malaysia (OUM) conducting a research on the “Relationships between organisational commitment, transformational leadership, job characteristics, employee engagement, and employee work performance in the water utility sector”. I am using this questionnaire as research instrument in order to complete the requirement of my studies. Kindly complete this questionnaire by ticking the correct option as your candid responses would be highly appreciated. There is no right or wrong answer in this questionnaire. All information provided will be stored*

confidentially, and as such your identity is not required. Thank you for your time and cooperation. )

Yours faithfully,

Zainuddin Bin Othman  
 HP: 0122800437  
 Email: zainuddin3660@gmail.com

Open University Malaysia (OUM)

**SEKSYEN A: KOMITMEN ORGANISASI**  
 (SECTION A: ORGANISATIONAL COMMITMENT)

Pernyataan ini menerangkan komitmen anda terhadap organisasi. Sila gunakan skala di bawah untuk menentukan tahap setuju atau tidak setuju anda ke atas setiap pernyataan ini. Tandakan (/) atau bulatkan mana-mana skala yang anda fikir sesuai. *(These are statements that describe your commitment to the organisation. Please use the scales below to indicate your level of agreement or disagreement with each statement. Make a tick (/) or circle on any scale that you feel appropriate)*

- |                                          |   |
|------------------------------------------|---|
| Amat Setuju<br>(Strongly Agree)          | 5 |
| Setuju<br>(Agree)                        | 4 |
| Neutral<br>(Neither Agree Nor Disagree)  | 3 |
| Tidak Setuju<br>(Disagree)               | 2 |
| Amat Tidak Setuju<br>(Strongly Disagree) | 1 |

No.	Item	5	4	3	2	1
1.	Saya akan berasa sangat gembira untuk menghabiskan kerjaya saya dengan organisasi ini <i>(I would be very happy to spend the rest of my career in this organisation)</i>	5	4	3	2	1
2.	Saya benar-benar merasakan bahawa masalah organisasi adalah masalah diri saya <i>(I really feel as if the organisation's problems are my own)</i>	5	4	3	2	1
3.	Saya berasa seperti 'sebahagian daripada keluarga' di organisasi ini <i>(I feel like 'part of the family' at this organisation)</i>	5	4	3	2	1
4.	Saya berasa terikat secara emosi dengan organisasi ini <i>(I feel emotionally attached to this organisation)</i>	5	4	3	2	1

- |     |                                                                                                                                                                                                                                               |   |   |   |   |   |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 5.  | Organisasi ini mempunyai makna yang sangat peribadi bagi saya ( <i>This organisation has a great deal of personal meaning to me</i> )                                                                                                         | 5 | 4 | 3 | 2 | 1 |
| 6.  | Saya mempunyai rasa kekitaan yang tinggi kepada organisasi saya ( <i>I do feel a strong sense of belonging to this organisation</i> )                                                                                                         | 5 | 4 | 3 | 2 | 1 |
| 7.  | Saya berasa tanggungjawab saya untuk kekal dengan majikan saya sekarang ( <i>I feel my obligation to remain with my current employer</i> )                                                                                                    | 5 | 4 | 3 | 2 | 1 |
| 8.  | Walaupun meninggalkan organisasi sekarang boleh memberikan kelebihan kepada saya, saya berasa tindakan ini tidak tepat ( <i>Even if it were to my advantage, I do not feel it would be right to leave my organisation now</i> )               | 5 | 4 | 3 | 2 | 1 |
| 9.  | Saya akan berasa bersalah jika meninggalkan organisasi saya sekarang ( <i>I would feel guilty if I left my organisation now</i> )                                                                                                             | 5 | 4 | 3 | 2 | 1 |
| 10. | Organisasi ini layak mendapatkan kesetiaan saya ( <i>This organisation deserves my loyalty</i> )                                                                                                                                              | 5 | 4 | 3 | 2 | 1 |
| 11. | Saya tidak akan meninggalkan organisasi saya sekarang kerana saya mempunyai rasa tanggungjawab kepada warga kerja di dalamnya ( <i>I would not leave my organisation right now because I have a sense of obligation to the people in it</i> ) | 5 | 4 | 3 | 2 | 1 |
| 12. | Saya sangat berhutang budi kepada organisasi saya ( <i>I owe a great deal to my organisation</i> )                                                                                                                                            | 5 | 4 | 3 | 2 | 1 |

**SEKSYEN B: KEPIMPINAN TRANSFORMASI**  
(SECTION B: TRANSFORMATIONAL LEADERSHIP)

Pernyataan ini menerangkan gaya kepimpinan ketua anda yang terdekat. Sila gunakan skala di bawah untuk menentukan tahap setuju atau tidak setuju anda ke atas setiap pernyataan ini. Tandakan (/) atau bulatkan mana-mana skala yang anda fikir sesuai. (*These are statements that describe the leadership style of your immediate superior. Please use the scales below to indicate your level of agreement or disagreement with each statement. Make a tick (/) or circle on any scale that you feel appropriate.*)

No.	Item	5	4	3	2	1
1.	Beliau menyampaikan visi masa hadapan yang positif dan jelas ( <i>He/She communicates a clear and positive vision of the future</i> )	5	4	3	2	1
2.	Beliau menganggap kakitangannya sebagai individu, memberi sokongan dan galakan untuk pembangunan mereka ( <i>He/She treats staff as individuals, supports and encourages their development</i> )	5	4	3	2	1

3.	Beliau memberikan galakan dan pengiktirafan kepada kakitangannya ( <i>He/She gives encouragement and recognition to staff</i> )	5	4	3	2	1
4.	Beliau memupuk sifat amanah, penglibatan dan kerjasama di kalangan ahli pasukan ( <i>He/She fosters trust, involvement and cooperation among team members</i> )	5	4	3	2	1
5.	Beliau menggalakkan pemikiran cara baru mengenai masalah dan mempersoalkan andaian ( <i>He/She encourages thinking about problems in new ways and questions assumptions</i> )	5	4	3	2	1
6.	Beliau amat jelas mengenai nilai-nilai dirinya ( <i>He/She is clear about his/her values</i> )	5	4	3	2	1
7.	Beliau mengamalkan apa yang dia sarankan ( <i>He/She practices what he/she preaches</i> )	5	4	3	2	1
8.	Beliau menanamkan rasa bangga dan menghormati orang lain ( <i>He/She instills pride and respect in others</i> )	5	4	3	2	1
9.	Beliau menanamkan dorongan untuk saya menjadi lebih berkebolehan ( <i>He/She inspires me by being highly competent</i> )	5	4	3	2	1

**SEKSYEN C: CIRI-CIRI PEKERJAAN  
(SECTION C: JOB CHARACTERISTICS)**

Pernyataan ini menerangkan ciri-ciri pekerjaan anda. Sila gunakan skala di bawah untuk menentukan tahap setuju atau tidak setuju anda ke atas setiap pernyataan ini. Tandakan (/) atau bulatkan mana-mana skala yang anda fikir sesuai. (*These are statements that describe characteristics of your work. Please use the scales below to indicate your level of agreement or disagreement with each statement. Make a tick (/) or circle on any scale that you feel appropriate.*)

No.	Item	5	4	3	2	1
1.	Pekerjaan saya menyediakan banyak kepelbagaian ( <i>My job provides me a lot of variety</i> )	5	4	3	2	1
2.	Pekerjaan saya menyediakan saya dengan pelbagai tugas ( <i>My job provides me with a variety of work</i> )	5	4	3	2	1
3.	Pekerjaan saya menyediakan peluang untuk saya melakukan beberapa perkara yang berbeza ( <i>My job gives me the opportunity to do a number of different things</i> )	5	4	3	2	1
4.	Pekerjaan saya memberi peluang untuk saya menyiapkan tugas yang saya mulakan ( <i>My job allows me the opportunity to complete the work I start</i> )	5	4	3	2	1
5.	Pekerjaan saya diatur supaya saya berkesempatan untuk melakukan tugas daripada awal hingga akhir ( <i>My job is arranged so that I have a chance to do the job from</i>	5	4	3	2	1

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	<i>beginning to end)</i>					
6.	Pekerjaan saya diatur supaya saya berkemungkinan dapat melihat projek hingga akhir penyempurnaannya ( <i>My job is arranged so that I may see projects through to their final completion</i> ).	5	4	3	2	1
7.	Pekerjaan saya ialah sesuatu yang mungkin memberi kesan kepada orang ramai melalui bagaimana tugas itu dilaksanakan dengan memuaskan ( <i>My job is one that may affect a lot of other people by how well the work is performed</i> ).	5	4	3	2	1
8.	Pekerjaan saya secara relatifnya signifikan dalam organisasi ( <i>My job is relatively significant in the organisation</i> ).	5	4	3	2	1
9.	Pekerjaan saya sangat signifikan dalam konteks umumnya ( <i>My job is very significant in the broader sense of things</i> ).	5	4	3	2	1
10.	Pekerjaan saya membolehkan saya bersendirian melakukan kerja sendiri ( <i>My job lets me be left on my own to do my own work</i> ).	5	4	3	2	1
11.	Pekerjaan saya memberi peluang untuk pemikiran dan tindakan bebas ( <i>My job provides the opportunity for independent thought and action</i> ).	5	4	3	2	1
12.	Pekerjaan saya memberi peluang kebebasan yang agak luas tentang bagaimana melakukan kerja saya ( <i>My job gives me considerable opportunity for independence and freedom in how I do my work</i> ).	5	4	3	2	1
13.	Pekerjaan saya memberi maklum balas tentang prestasi tugas saya semasa saya sedang bekerja ( <i>My job provides feedback on how well I am performing as I am working</i> ).	5	4	3	2	1
14.	Pekerjaan saya memberi saya peluang untuk mengetahui tentang prestasi kerja yang sedang saya lakukan ( <i>My job provides me with the opportunity to find out how well I am doing</i> ).	5	4	3	2	1
15.	Pekerjaan saya memberi perasaan yang saya tahu prestasi kerja memuaskan atau tidak ( <i>My job provides me with the feeling that I know whether I am performing well or poorly</i> ).	5	4	3	2	1

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**SEKSYEN D: PENGLIBATAN PEKERJA  
(SECTION D: EMPLOYEE ENGAGEMENT)**

Pernyataan ini menerangkan penglibatan anda dengan pekerjaan dan organisasi. Sila gunakan skala di bawah untuk menentukan tahap setuju atau tidak setuju anda ke atas setiap pernyataan ini. Tandakan (/) atau bulatkan mana-mana skala yang anda fikir sesuai. (*These are statements that describe your engagement to the work and organisation. Please use the scale below to indicate your level of agreement or*

*disagreement with each statement. Make a tick (/) or circle on any scale that you feel appropriate.)*

No.	Item	5	4	3	2	1
1.	Dalam kerja saya, saya rasa amat bertenaga ( <i>At my work I feel that I am bursting with energy</i> )	5	4	3	2	1
2.	Dalam kerja saya, saya rasa kuat dan bersemangat ( <i>At my job I feel strong and vigorous</i> )	5	4	3	2	1
3.	Saya penuh semangat mengenai kerja saya (I am enthusiastic about my job)	5	4	3	2	1
4.	Pekerjaan saya memberi dorongan kepada saya ( <i>My job inspires me</i> )	5	4	3	2	1
5.	Apabila saya bangun pagi saya rasa ingin untuk pergi kerja ( <i>When I get up in the morning I feel like going to work</i> )	5	4	3	2	1
6.	I rasa gembira apabila saya melakukan kerja dengan bersungguh-sungguh ( <i>I feel happy when I am working intensely</i> )	5	4	3	2	1
7.	Saya bangga dengan kerja yang saya lakukan ( <i>I am proud of the work that I do</i> )	5	4	3	2	1
8.	Saya melibatkan diri dalam kerja saya ( <i>I am immersed in my work</i> )	5	4	3	2	1
9.	Saya terbawa-bawa apabila melakukan pekerjaan ( <i>I get carried away when I am working</i> )	5	4	3	2	1

**SEKSYEN E: PRESTASI KERJA  
(SECTION E: WORK PERFORMANCE)**

Pernyataan ini menerangkan prestasi kerja anda. Sila gunakan skala di bawah untuk menentukan tahap setuju atau tidak setuju anda ke atas setiap pernyataan ini. Tandakan (/) atau bulatkan mana-mana skala yang anda fikir sesuai. (*These are statements that describe your work performance. Please use the scales below to indicate your level of agreement or disagreement with each statement. Make a tick (/) or circle on any scale that you feel appropriate.*)

No.	Item	5	4	3	2	1
1.	Saya berupaya merancang kerja saya supaya dapat dilaksanakan dalam masa yang ditetapkan ( <i>I managed to plan my work so that it was done on time</i> )	5	4	3	2	1
2.	Saya membayangkan keputusan yang perlu saya capai dalam kerja ( <i>I kept in mind the results that I had to achieve in my work</i> )	5	4	3	2	1

3.	Saya dapat memisahkan isu penting daripada isu sampingan di tempat kerja ( <i>I was able to separate main issues from side issues at work</i> )	5	4	3	2	1
4.	Saya berupaya melaksanakan kerja dengan memuaskan dalam masa dan dengan usaha yang minimum ( <i>I was able to perform my work well with minimal time and effort</i> )	5	4	3	2	1
5.	Perancangan saya adalah yang terbaik ( <i>My planning was optimal</i> )	5	4	3	2	1
6.	Kerjasama dengan orang lain adalah sangat produktif ( <i>Collaboration with others was very productive</i> )	5	4	3	2	1
7.	Saya memulakan tugas baru sendiri setelah tugas lama saya selesai ( <i>I started new tasks myself when my old ones were finished</i> )	5	4	3	2	1
8.	Saya mengambil tugas yang mencabar apabila tersedia ada ( <i>I took on challenging work tasks when available</i> )	5	4	3	2	1
9.	Saya bekerja dengan memastikan pengetahuan kerja saya sentiasa terkini ( <i>I worked at keeping my job knowledge up-to-date</i> )	5	4	3	2	1
10.	Saya bekerja dengan memastikan kemahiran kerja saya sentiasa terkini ( <i>I worked at keeping my job skills up-to-date</i> )	5	4	3	2	1
11.	Saya menghasilkan penyelesaian kreatif untuk masalah-masalah baru ( <i>I came up with creative solutions to new problems</i> )	5	4	3	2	1
12.	Saya mengambil tanggungjawab tambahan ( <i>I took on extra responsibilities</i> )	5	4	3	2	1
13.	Saya sentiasa mencari cabaran baru dalam kerja saya ( <i>I continuously sought for new challenges in my work</i> )	5	4	3	2	1
14.	Saya terlibat secara aktif dalam perundingan kerja atau mesyuarat ( <i>I participated actively in work consultations or meetings</i> )	5	4	3	2	1

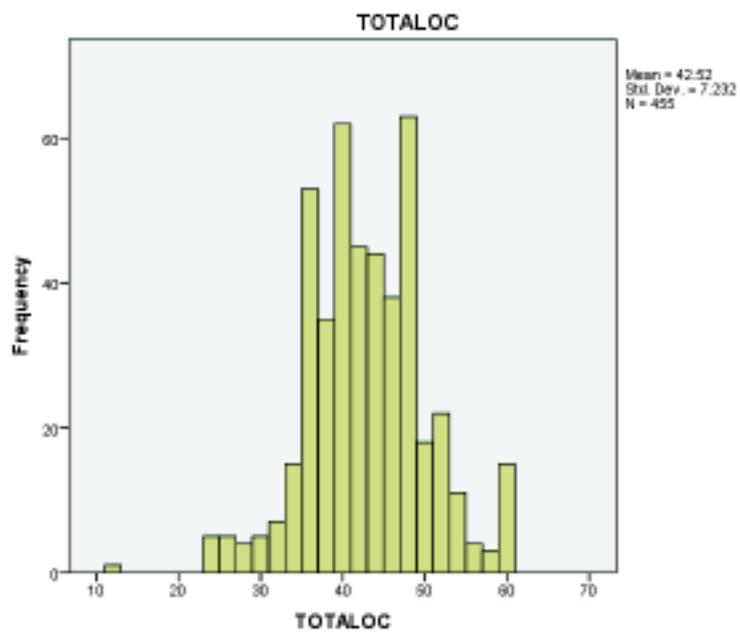
**SEKSYEN F: DEMOGRAFI**  
(SECTION F: DEMOGRAPHY)

Sila tandakan (/) di dalam kotak berkenaan  
(Please tick (/) in an appropriate box)

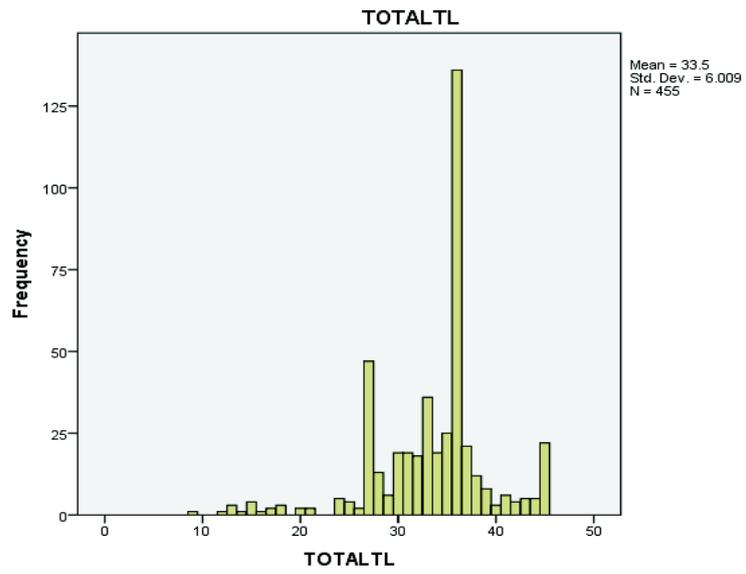
- |    |                     |                                     |                                                      |
|----|---------------------|-------------------------------------|------------------------------------------------------|
| 1. | Jantina<br>(Gender) | Lelaki (Male)<br>Perempuan (Female) | <input type="checkbox"/><br><input type="checkbox"/> |
| 2. | Bangsa              | Melayu (Malay)                      | <input type="checkbox"/>                             |

	(Ethnicity)	China ( <i>Chinese</i> )	<input type="text"/>
		India( <i>Indian</i> )	<input type="text"/>
		Dayak ( <i>Dayak</i> )	<input type="text"/>
		Kadazan/Dusun ( <i>Kadazan/Dusun</i> )	<input type="text"/>
		Lian-lain ( <i>Others</i> )	<input type="text"/>
3.	Umur (Tahun) ( <i>Age</i> ) Years	20 dan ke bawah( <i>Less than 20</i> )	<input type="text"/>
		21 - 30	<input type="text"/>
		31 – 40	<input type="text"/>
		41 – 50	<input type="text"/>
		Melebihi 50 ( <i>More than 50</i> )	<input type="text"/>
4.	Tahap Pendidikan ( <i>Education Level</i> )	SPM dan ke bawah( <i>SPM and below</i> )	<input type="text"/>
		STPM/Diploma	<input type="text"/>
		Ijazah Pertama( <i>Ist Degree</i> )	<input type="text"/>
		Sarjana( <i>Masters Degree</i> )	<input type="text"/>
		PhD ( <i>Doctoral Degree</i> )	<input type="text"/>
5.	Status Perkahwinan ( <i>Marital Status</i> )	Kahwin ( <i>Married</i> )	<input type="text"/>
		Bujang( <i>Single</i> )	<input type="text"/>
		Janda/Duda/Balu ( <i>Widow</i> )	<input type="text"/>
6.	Jawatan ( <i>Job Position</i> )	Eksekutif ( <i>Excutive</i> )	<input type="text"/>
		Bukan Eksekutif( <i>Non-Executive</i> )	<input type="text"/>
7.	Pengalaman dalam Organisasi sekarang (tahun) ( <i>Experience in the current organization(Year)</i> )	Kurang 5	<input type="text"/>
		5 – 10	<input type="text"/>
		11 – 15	<input type="text"/>
		16 – 20	<input type="text"/>
		Lebih 20	<input type="text"/>

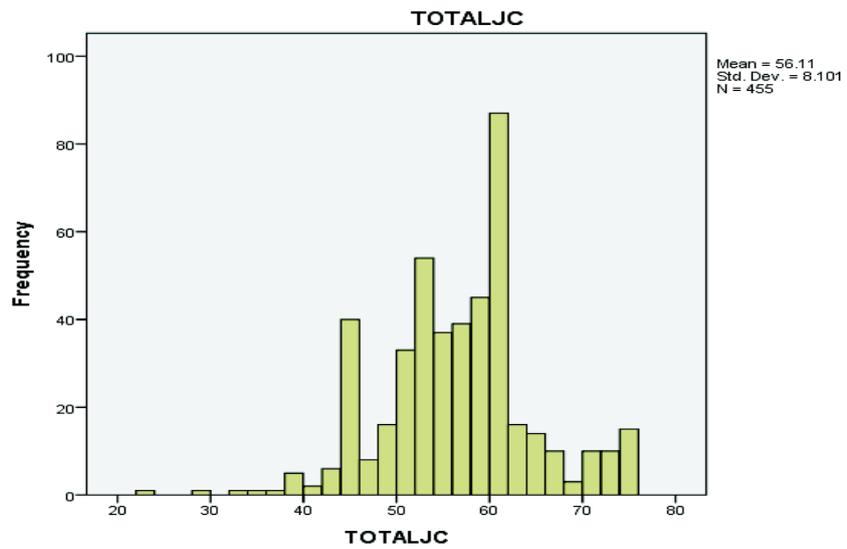
## Appendix 2. Testing for Normality – Histogram plot



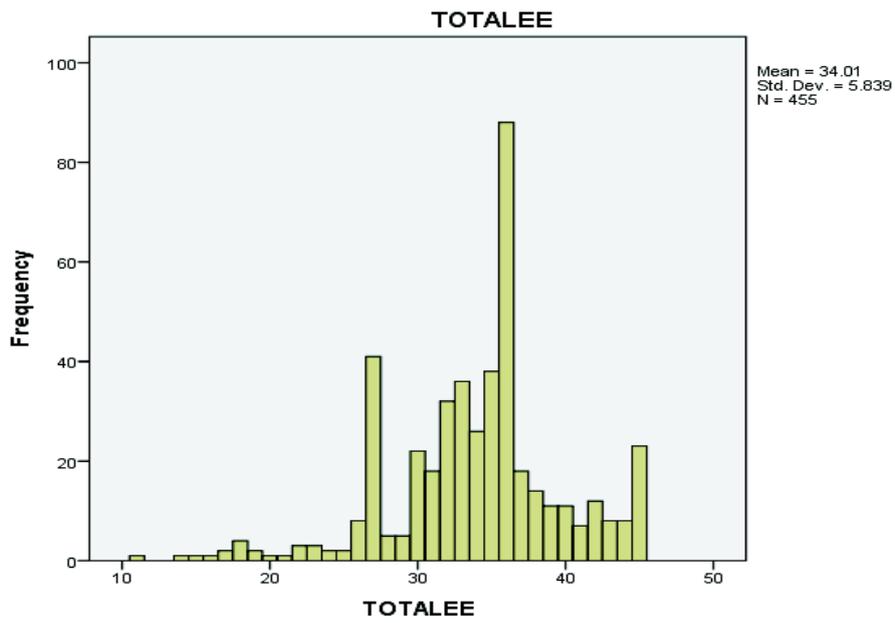
*Histogram Showing Normality of Data (Organisational Commitment)*



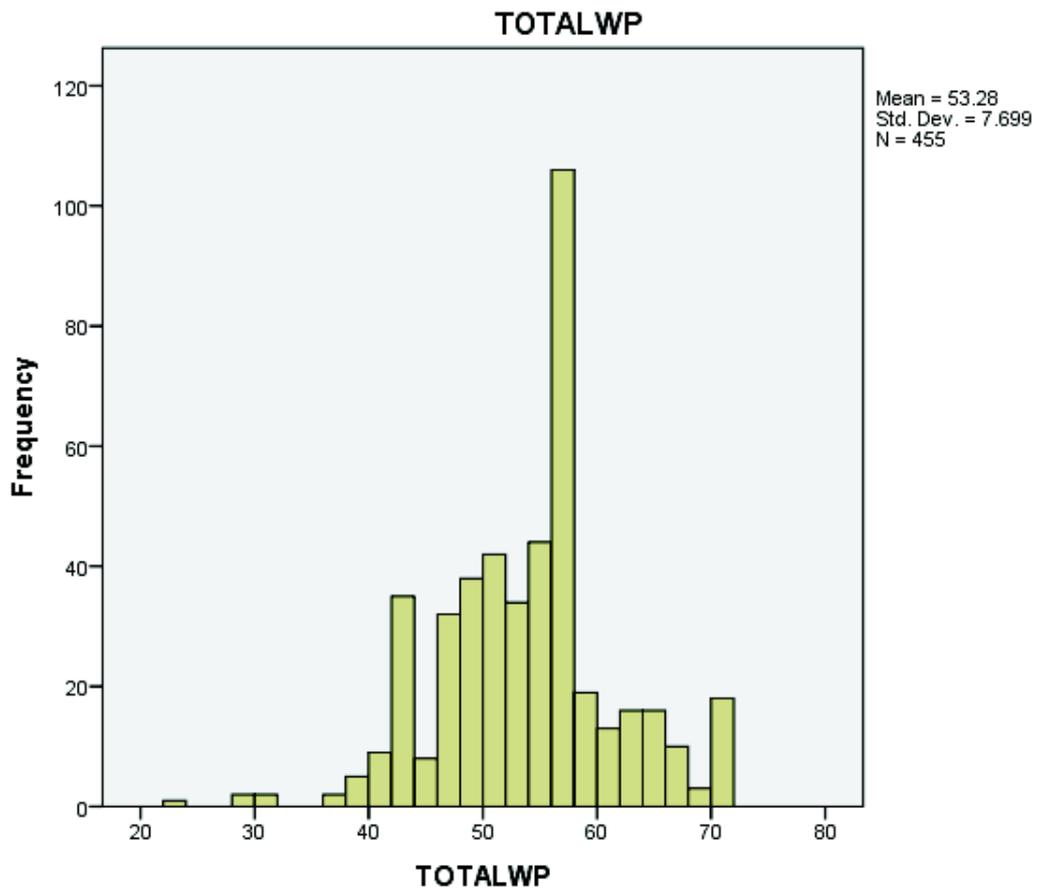
*Histogram Showing Normality of Data (Transformational Leadership)*



*Histogram Showing Normality of Data (Job Characteristic)*

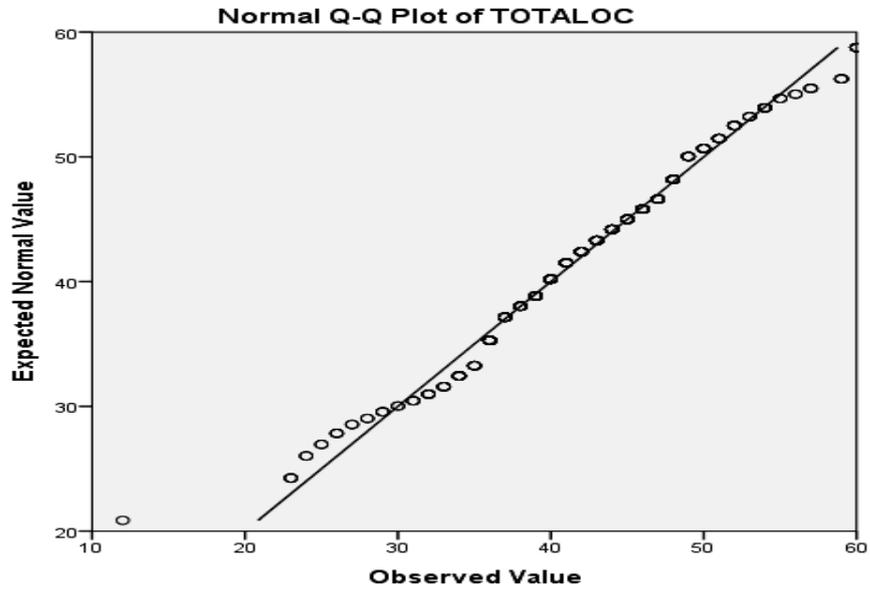


*Histogram Showing Normality of Data (Employee Engagement)*

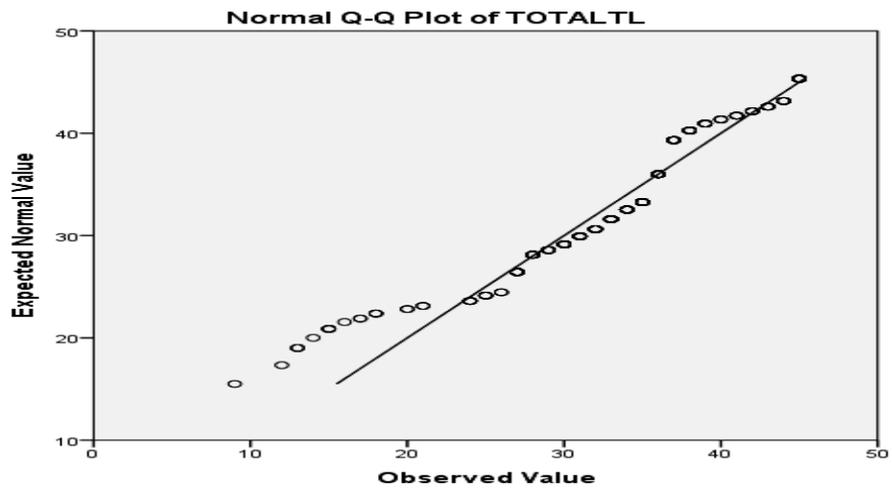


*Histogram Showing Normality of Data (Employee Work Performance)*

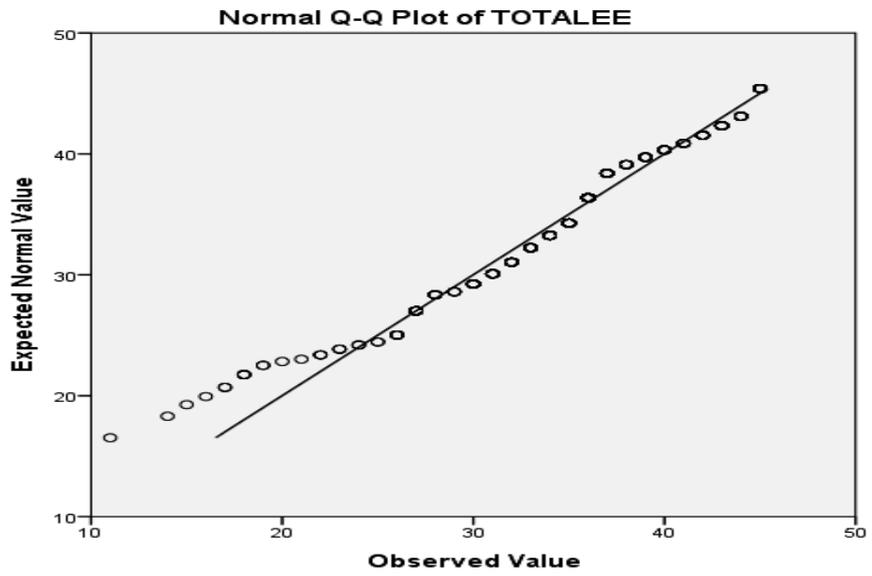
### Appendix 3. Testing for Normality – Probability Plots.



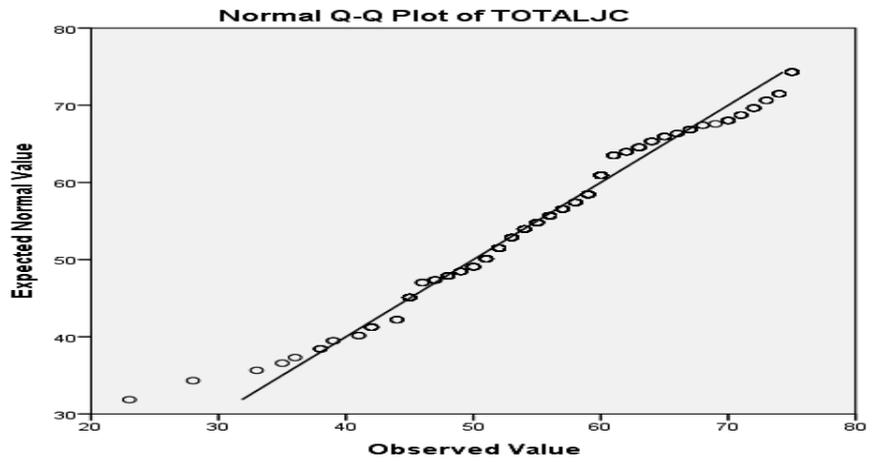
*Probability plots of Organisational Commitments residuals*



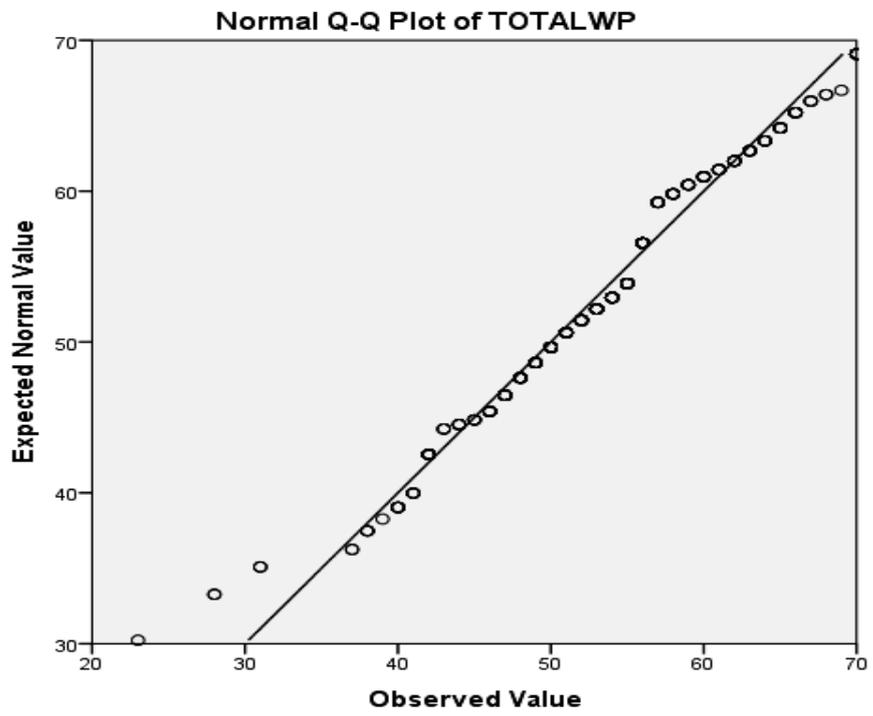
*Probability plots of Transformational Leadership residuals*



*Probability plots of Employee Engagement residuals*



*Probability plots of Job Characteristics residuals*



*Probability plots of Employee Work Performance residuals*