TRUST, REWARD AND KNOWLEDGE SHARING ATTITUDE AS ANTECEDENTS OF KNOWLEDGE SHARING IN THE PUBLIC SECTOR

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ABSTRACT

This quantitative study is aimed to study the relationship between the factors of trust, knowledge sharing attitude and reward on knowledge sharing in the public sector. Respondents of this study comprised of 210 respondents from nine district and land offices in Selangor. T-test analysis was used to determine the difference in knowledge sharing between male and female respondents. In addition, ANOVA analysis was done to examine the difference in the level of knowledge sharing based on the length of service and education level. Correlation and regression analysis were used to determine the relationship between the independent variables, namely trust, knowledge sharing attitude and reward and the dependent variable which is knowledge sharing. The result of the t-test and ANOVA analysis have shown that there is no significant difference in knowledge sharing between male and female, length of service as well as education levels. The result from the correlation analysis shows that all of the independent variables which are trust, knowledge sharing attitude and reward were positively correlated to knowledge sharing. The regression analysis shows that only 36.5% of knowledge sharing has been significantly explained by the three independent variables. However, the variable of trust does not have any significant influence on knowledge sharing. Furthermore, knowledge sharing attitude is the most influencing factor which affects knowledge sharing among staffs at district and land in Selangor. In this study, the findings were further discussed, and recommendations for the organization and future researcher were addressed.

Keywords: Knowledge sharing, trust, knowledge sharing attitude, reward, public sector

ABSTRAK

Kajian kuantitatif ini adalah bertujuan untuk mengkaji hubungan faktor kepercayaan, sikap terhadap perkongsian pengetahuan dan ganjaran ke atas perkongsian pengetahuan di sektor awam. Responden kajian ini terdiri daripada 210 kakitangan yang berkhidmat di sembilan pejabat tanah dan daerah di Selangor. Ujian t telah diguanakan untuk mengkaji perbezaan perkongsian pengetahuan di antara responden lelaki dan perempuan. Selanjutnya, ujian ANOVA telah dijalankan untuk mengkaji perbezaan tahap perkongsian pengetahuan berdasarkan tempoh perkhidmatan dan tahap pendidikan. Analisis korelasi dan regresi telah digunakan untuk mengkaji hubungan dan pengaruh di antara pembolehubah-pembolehubah bebas iaitu kepercayaan, sikap terhadap perkongsian pengetahuan dan ganjaran, dan pembolehubah bersandar iaitu perkongsian pengetahuan. Keputusan ujian t dan ANOVA menunjukkan tidak terdapat perbezaan perkongsian pengetahuan yang signifikan di antara responden lelaki dan perempuan, tempoh perkhidmatan dan tahap pendidikan. Hasil analisa korelasi menunjukkan bahawa kepercayaan, sikap terhadap perkongsian pengetahuan dan ganjaran mempunyai hubungan signifikan yang positif terhadap perkongsian pengetahuan. Hasil analisa regresi menunjukkan bahawa ketiga-tiga pembolehubah bebas hanya mempengaruhi sebanyak 36.5% sahaja terhadap perkongsian pengetahuan. Walau bagaimanapun faktor kepercayaan tidak mempunyai pengaruh signifikan terhadap perkongsian pengetahuan. Keputusan kajian turut dibincangkan dan cadangan untuk organisasi serta pengkaji akan datang turut diutarakan.

Kata kunci: Perkongsian pengetahuan, kepercayaaan, sikap terhadap perkongsian pengetahuan, ganjaran dan sektor awam.

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Knowledge has been regarded as the most important aspect of our daily life (Syed Ikhsan & Rowland, 2004). Knowledge is essential to perform day to day tasks. Individuals, groups, organizations and governments currently recognize knowledge as the most valuable asset to remain competitive. In addition, knowledge sharing is one of the main activities in knowledge management, which has gained increasing attention as it is critical to organizational effectiveness particularly in the public sector. Effective knowledge management practices in an organization will only happen if employees are keen to share their knowledge with their colleagues (Amayah, 2013). Due to this reason, there is a need to conduct a study on the determinants of knowledge sharing in the public sector and examine their influence on the willingness of employees to share knowledge.

In 2011, the Malaysian Administrative Modernization and Management Planning Unit (MAMPU) have formulated the Public Sector Knowledge Management Blueprint to address the needs of Knowledge Management (KM) initiatives in the government. The Knowledge Management Blueprint aims to enhance the adoption of KM initiatives that is currently at a low level with only 12 per cent of agencies claiming to have KM strategy (MAMPU, 2011). On the other hand, the small percentage of government agencies that have knowledge management strategy within

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their organizations show that more emphasise should be done to promote and inculcate KM strategy in every agency. As a result, the continuous efforts by the government, to encourage and support the adoption of the KM blueprint in public organizations have led to an increase in the level of awareness and interest in knowledge management. A study conducted by MAMPU on thirty agencies in 2011, also revealed that there was minimal knowledge sharing in the public sector, and 83 percent of the respondent believed that their knowledge belongs to their respective agency (MAMPU, 2011).

In the public sector, knowledge is essential to enhance public service delivery (Wiig, 2002). A good public servant is knowledgeable and ready to share knowledge (Jamaludin, 2004). As knowledge and information are important assets in an organization, the success of mastering knowledge will enable the person and the organization to create new opportunities and achieve success. In the public sector, the main criteria for achievement are providing the best services to citizens.

Today, most organizations are facing stiffer competition due to the rapid change happening in the world (Mohd Sharif, 2011). Among the factors that affect public organizations today are globalization, rapid technological development, and the increasing demand from the more educated citizens. Due to these reasons the public sector, have been increasingly under pressure to improve their service delivery to the public. In 2010, the Malaysian government has embarked on an ambitious program which is known as the Government Transformation Program (GTP). The purpose of the GTP is to transform government agencies to become more efficient, and people oriented as reflected in the motto "People first, Performance now" (Najib, 2013). The

GTP has outlined seven national key result areas (NKRA) which will become the focus of the government to improve its service delivery. Improving rural development is one of the NKRAs that is related to the state and district administration in Malaysia

Among the government agencies that play an important role in the development of a particular state and facilitates rural development are the district and land offices in the state. As the front-liner agency, it provides services at the state and district level. The role of district and land offices is crucial in implementing government policies at the grass-root level. Another important role of district and land offices is as coordinators between federal and state agencies at the district levels. Despite rapid development that was experienced in recent years, the issues of land usage have become more critical, and it entails various legislation. Issues regarding the National Land Code and various bureaucracies contribute to unsettled land cases which affect the performance of land offices in the eyes of various stakeholders including the people (Mohd Sharif, 2011). The lack of coordination between agencies at the district level has also contributed to overlapping tasks and inefficiencies in providing services to the people.

Today, the quality of the public service in Malaysia including at the state and district level has been widely criticized by many parties. As taxpayers, the public has a right to fast, quality, transparent and effective government services. The effectiveness of government service delivery can be gauged through the complaints received from the public by the Public Complaints Bureau. The number of complaints recorded by the Public Complaints Bureau is as shown on Table 1.1 and Table 1.2:

Table 1.1
Number of complaints received by the Public Complaints Bureau (2012)

State	Total			
	Received	Under Investigation	Number of Resolved Case	Percentage of Resolved Cases(%)
Selangor	911	386	525	57.6
Pahang	676	43	633	93.6
Johor	601	4	597	99.3
Sarawak	448	3	445	99.3
Sabah	413	18	395	95.6
Perak	380	1	379	99.7
Terengganu	292	14	278	95.2
Negeri Sembilan	285	6	279	97.9
Melaka	269	11	258	95.9
Pulau Pinang	212	2	210	99.1
Kedah	197	15	182	92.4
Kelantan	142	6	136	95.8
Perlis	75	2	73	97.3
Total	**4,901**	**511**	**4,390**	**89.6**

Source: Public Complaint Bureau complaint statistics by state (2012)

Table 1.2
Category of complaints received by the Public Complaint Bureau (2012)

No	Category	Total Complaints					
		Ministry	%	State	%	Received	%
1.	Delay/No Action	3,093	40.3	2,784	56.8	5,877	46.7
2.	Unsatisfactory Quality of Service	1,408	18.3	434	8.9	1.842	14.6
3.	Unfair Action	1,121	14.6	289	5.9	1,410	11.2
4.	Failure of Enforcement	529	6.9	459	9.4	988	7.9
5.	Miscellaneous Complaints	547	7.1	361	7.4	908	7.2
6.	Lack of Public Amenities	374	4.9	413	8.4	787	6.3
7.	Failure to Adhere to Set Procedures	240	3.1	77	1.6	317	2.5
8.	Misconduct of Civil Servant	189	2.5	33	0.7	222	1.8
9.	Abuse of Power/ Misappropriation	122	1.6	38	0.8	160	1.3
10.	Inadequancies of Policy Implementation and Law	58	0.8	13	0.3	71	0.6
	Total	7,681	100	4,901	100	12,582	100

Source: Public Complaint Bureau complaint statistics by category (2012)

According to the statistics of complaint by the Public Complaints Bureau (2012), the Selangor state government has recorded by far the highest number and percentage of unresolved complaints among all states in Malaysia. The number of complaints regarding delays in solving complaints by the public, shows that there are still weaknesses in the public service delivery in Selangor particularly at the district level. Among the factor that has been identified in causing the delay in acting on public complaints is the lack of knowledge sharing between agencies (9th MP 2006).

According to the Auditor's General Report (2011), several weaknesses have been identified regarding land issues in Selangor particularly in violations of land status, construction of illegal factories, construction of cemetery without permission and swiftlet farming and industrial activities which are still being monitored inefficiently. Weaknesses in the implementating land conversion processes also need to be given attention, such as delays in processing land conversion applications, registration of titles has not been done although the State Authority has approved the applications, uncollected land premiums and quit rents, and finally the lack of information management between the state land offices and district land offices regarding land conversion information. Among the corrective measures which have been suggested is for the state land office to maintain an inventory records to monitor violations of the land conditions and update the status of enforcement for each violation that occurred. With this information, stern enforcement action can be taken on the violators with the cooperation of the relevant district land office.

The main function of the district and land offices is to act as the coordinator between various agencies at the district level in conducting land management and rural

development. District and land offices are the main implementers of government policies at the state and district levels. Therefore, the district and land offices are the front liner departments in providing services directly to the people and must realize the importance of managing and sharing of knowledge in order to remain relevant to stakeholders. Knowledge sharing is essential at the district and land offices as it can facilitate collaboration within departments and outside the department. Collaboration is important in executing a task in an effective manner and to provide quality service delivery to the people.

According to Dato' Abdul Halim Ain (2010), Director General of the Land and Mines Department (JKPTG), the federal government with the assistance of the State governments have embarked in various initiatives in improving the service delivery in land administration in Malaysia. Among these initiatives include the revision of standard operating procedures and the introduction in of ICT usage in several land administration areas such as *Sistem Pendaftaran Tanah Berkomputer* (SPTB) and *E-Tanah*. The introduction of such initiatives require that civil servants in the district and land offices must be ready to embrace changes such as implementing knowledge sharing practices to further increase the performance of their respective departments.

1.2 Problem Statement

According to Drucker (1993), knowledge is considered as the most important asset that matters to the organization. In order to remain competitive, organizations needs to embrace knowledge sharing. Knowledge needs to be shared in order for it to be meaningful to the organization. However, the process of sharing knowledge among

employees is very challenging (Amayah, 2013). There are two challenges that an organization may face to encourage knowledge sharing. First, tacit knowledge by nature is very hard to be shared and secondly knowledge sharing is a voluntary act (Lin, 2007). Therefore, due to this fact, there are three main reasons on why the researcher has decided to conduct a study on knowledge sharing among staffs at district and land offices in Selangor.

In the Malaysian context, several studies were done on respondents from the government perspective but there is little evidence that a similar study was done on front-liner agencies such as the district and land offices. For example studies by Ismail & Yusof (2012) and Sandhu, Jain, & Ahmad, (2011) were conducted on respondent at the ministerial level, Yassin, Ashaari, & Salim,(2011) conducted a study on knowledge sharing among teachers and Wei, Choy, Chew, & Yen, (2012) conducted a study on knowledge sharing on undergraduate students at Multimedia University. Therefore, this is one of the research gaps on the study of knowledge sharing in Malaysia.

The high number of complaints reported to the Public Complaints Bureau in 2012 as shown in Table 1.1 and Table 1.2 on the service delivery by the Selangor state government is still unsatisfactory as compared to other states. A possible reason for this is the lack of knowledge sharing between staffs at the district offices. This is due to the fact that knowledge is crucial in making timely decisions, improved effectiveness, integrity and collaboration in the public sector (Yusof et. al, 2012).

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Secondly, many researchers have studied some factors which affects knowledge sharing in the public organizations in other countries (Amanyah, 2013; M. Ismail & Yusof, 2012; Sandhu, Jain, & Ahmad, 2011). For example, a study by Liebowitz and Chen (2003), has found that knowledge sharing does not happen easily in the public sector due to employees link knowledge with power and promotion opportunities. A study by Seba, Rowley and Delbridge (2012) found that factors of organizational structure, leadership, time allocation, and trust are barriers to knowledge sharing in the Dubai police force.

A number of studies have found that the factor of trust is among the critical factor that determine the success of knowledge sharing in organization (M. Ismail & Yusof, 2012; Wickramasinghe & Widyaratne, 2012; Holste & Fields, 2010). Trust has been widely researched by researchers as the main antecedents of knowledge sharing (Wang and Noe, 2010). Ardichvili (2008) found that employees will be more inclined to use the knowledge made available if they trust it to be a reliable and objective source of information. Several studies have also found that reward facilitates knowledge sharing in an organization (Ismail & Yusof, 2012 and Nor Azmi 2009). In this study, reward was defined as the point to which employees feel the incentives provided by the organization whether financial, promotion and performance evaluations to influence them to share knowledge (Choi, Kang, & Heeseok, 2008). Employees are more likely to share knowledge when they received compliments from their employers, or if knowledge sharing is considered as part of the evaluation of the employee's performance appraisal (Bryant 2003). Therefore, due to this reason, there is a need to study the effects of reward and trust on knowledge sharing at district and land offices in Selangor.

Several researchers have also found that knowledge sharing attitude is also among the antecedents which critically affects knowledge sharing at an organization (Hooff, Schouten, & Simonovski, 2012; Chow & Chan, 2008; Bock & Kim, 2001). Knowledge sharing attitude is defined as the degree of one's favourable or positive feeling about sharing one's knowledge (Chow & Chan, 2008), In other words, an employee will only inclined to share knowledge if they have positive feelings on the action. Therefore, this study included knowledge sharing attitude at the land and district offices in order to make recommendations to the management on how to improve the organizational climate to foster knowledge sharing among employees.

Lastly, the research has provided insigths on the best management practices to be implemented at district and offices in Selangor. Therefore, the study was done to determine the level of knowledge sharing as well as to examine the relationship between the factors that influence knowledge sharing at district and land offices in Selangor. The findings of the research have served as a guide in the development of human resources policies and implementing knowledge management at district and land offices of Selangor in the future.

1.3 Research Questions

Based on this study, the research questions which have been identified are as the following:

i) Is there any difference in the level of knowledge sharing based on gender, education level and length of service at district and land offices in Selangor?

ii)   Is there a relationship between trust, knowledge sharing attitude and reward on knowledge sharing intensity among staffs at district and land offices in Selangor?

iii)   Do trust, knowledge sharing attitude and reward, have influenced on knowledge sharing among staffs at district and land offices in Selangor?

1.4 Research Objectives

The objectives of this research are as the following:

i)   To determine the differences in knowledge sharing between gender, education level and length of service in knowledge sharing at district and land offices in Selangor.

ii)   To investigate the relationship between trust, knowledge sharing attitude, and reward in knowledge sharing at district and land offices in Selangor.

iii)   To investigate the influence between trust, knowledge sharing attitude, and reward in knowledge sharing at district and land offices in Selangor.

1.5 Scope of Study

The study does not cover other knowledge management activities such as knowledge capture, knowledge use, and knowledge retention. All of the officers and staffs from management and professional, support staffs one and support staff two of all district and land offices in Selangor were involved as the population of the study.

1.6 Significance of Study

This study has provided insights on the relations between antecedents of knowledge sharing and the degree of knowledge sharing practices among officers and staffs at the district land offices in Selangor. As most knowledge sharing studies, however, are conducted in private sector organizations (Amayah, 2013), there is a growing need for further research on knowledge sharing in the public sector. There are few studies on knowledge sharing at the front-line agency such as the district and land offices in Selangor. The purpose of this study is to assess the extent of the practice and perception of knowledge sharing among the officers in the land office in Selangor. At the same time, this study has served as a guide in the development of human resources policies and implementing knowledge management initiatives at district and land offices of Selangor in the future.

1.7 Limitations of Study

The study only involves sample and population of district and land offices in Selangor. Although there are district and land offices in all states in Malaysia, the structure and staff compositions are almost the same with district and land offices in Selangor. Another limitation of the research is that staffs at district and land offices are dominantly Malay which makes it difficult to make a comparison on the differences of race and ethnic culture in knowledge sharing.

1.8 Organization of the Thesis

This research paper consists of five main chapters. The first chapter begins with a brief the background of the study, problem statements, research questions, research objectives, significance of the research and scope of the study. This chapter ends with an explanation on the limitations of the research. Chapter two is the literature review. In this chapter, several theories and past literatures related on the research are reviewed. Chapter three has focused on the research methodology. Chapter three consists of the research framework, hypotheses development and research design. The findings based on the methodology from Chapter three are discussed in Chapter four. The final chapter is Chapter five which states the conclusions and recommendations of the study. In this chapter, the implication of the study was discussed. In addition, recommendations for the organization and future research are provided based on the results of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The purpose of this literature review is to review past research related to this study. Hypotheses are developed for this research based on a review of past researches that were conducted in the field of knowledge sharing.

2.2 Definition of Knowledge

There are various definition of knowledge based on previous research. According to Drucker (1993), knowledge is considered as the most important asset that matters to the organization. Nowadays, most organization recognized knowledge as the most important assets to remain competitive, and it is continously generated in the organization (Suppiah & Sandhu, 2011). Knowledge can be categorized into two types which are tacit knowledge and explicit knowledge (Nonaka & Takeuchi 1995). Tacit knowledge refers to knowledge which is available in an individual or also known as internal knowledge. Explicit knowledge is knowledge that can be articulated, codified and stored in certain media either in digital or manual form. Documents and repositories are sources of knowledge in an organization as well as know-how that resides in people minds (Al-Alawi, Al-Marzooqi, & Mohammed, 2007). Individual also regards knowledge as a product of their experience on the evaluation from surroundings input (Davenport & Prusak 2000).

2.3 Knowledge Management

The importance of knowledge management to an organization cannot be denied. Knowledge management helps organizations to improve their effectiveness and efficiency, improve market position, improve communication between employees, enhance synergies between employees and allow learning to be more effective and efficient (Beijerse, 1999). Knowledge management is a topic which has gained serious attention recently as the world economy evolve towards a knowledge-based economy (Merat & Bo, 2013) Basically, knowledge management refers to the activity of an organization to create, share and exploit knowledge to achieve organizational goals (Jain & Jeppesen, 2013). Knowledge management is the process of obtaining, storing, sharing, using, identifying, organizing and managing knowledge resources that include tacit and explicit knowledge (Al-Hawamdeh 2003, Davenport & Prusak 1998). According to Al Hawamdeh (2003), five important dimensions of knowledge management consist of knowledge capture, knowledge creation, knowledge use, knowledge sharing and knowledge retention. Knowledge sharing can be considered as the most critical aspect in knowledge management as without knowledge sharing knowledge cannot be retained nor can it be created (Yassin, Ashaari, and Salim, 2011). Therefore, managing and sharing knowledge is important for any organization to remain competitive and efficient.

2.4 Knowledge Sharing

Knowledge sharing is important to an organization as it can increase job performance and aid the creation of new knowledge in either public or private organization (Ismail

& Yusof, 2006). The definition of knowledge can be defined as the setting up of task information and know-how to help and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures (Cummings, 2004; Pulakos, Dorsey, & Borman, 2003). Knowledge sharing exists when social interaction happens between individuals. There are various methods where knowledge can be shared among individuals. Knowledge can be shared informally without the specific intention to do so such as through face-to-face interactions or by formal channels such as telephones or emails (Amayah, 2013). However, there are two challenges that an organization may face in encouraging knowledge sharing. First, tacit knowledge by nature is very hard to be shared, and secondly knowledge sharing is a voluntary act (Lin, 2007). In other words, knowledge sharing will only happen if employees are willing to share their knowledge with another co-worker.

Knowledge can be categorized into two types, namely tacit knowledge and explicit knowledge (Nonaka & Takeuchi 1995). Tacit knowledge refers to knowledge that is available in an individual or internal knowledge. Usually, an individual is not aware on the knowledge they possess and the value of the knowledge he shared with others. Therefore, tacit knowledge is difficult to be shared with others as it usually resides in a specific individual (Bartol & Srivastava, 2002). On the other hand, explicit knowledge can be articulated, codified and stored in certain media either in digital or manual form. Examples of explicit knowledge which are common in the workplace are manuals, documents, procedures and video recordings. Based on the SECI (Socialization, Externalization, Combination and Internalization) model, both tacit and explicit knowledge can be shared or transferred in four different ways as below:

1) Tacit knowledge to Tacit knowledge - Socialization

2) Tacit knowledge to Explicit knowledge - Externalization

3) Explicit knowledge to Explicit knowledge - Combination

4) Explicit Knowledge to Tacit Knowledge – Internalization
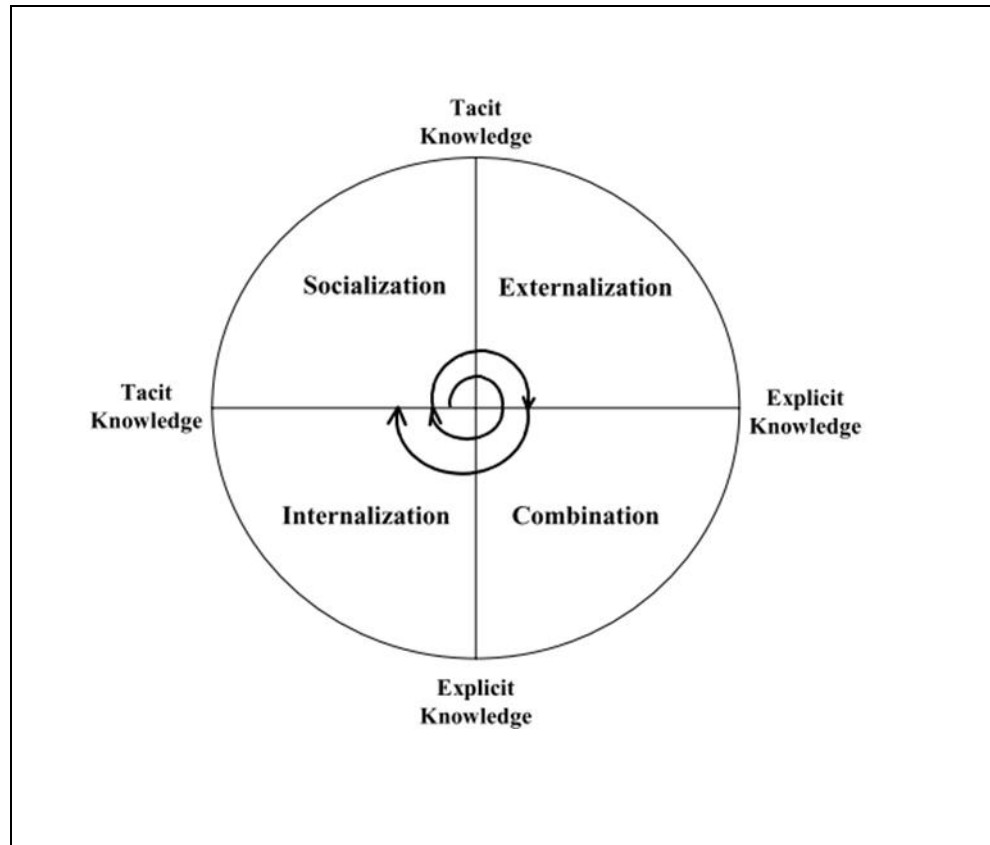
Figure 2.1
SECI Model (Nanoka & Takeuchi, 1995)

Based on this model, socialization is the process of sharing experiences through face to face interactions such as through meetings and brainstorm sessions. Tacit knowledge is difficult to be shared formally. Therefore, it can only be acquired by hands on experience rather than from written manuals or textbook. In addition, the creation of social networks such as communities of practice will help the acquiring of tacit knowledge from individuals (Amayah, 2013). This is because tacit knowledge can only be shared between individuals from various locations if a social network

exists. On the other hand, externalization is the process of articulating tacit knowledge into explicit forms. Examples of externalization are transferring tacit knowledge such as concepts and know-how into manuals and books. Combination is a process of combining different types of knowledge to create new knowledge or innovations. Lastly, internalization is the process of embodying explicit knowledge into tacit knowledge which means that new knowledge is learned by doing. When experiences through socialization, externalization, and combination are internalized into individuals tacit knowledge bases in the form of shared mental models or technical know-how, they become value assets. Based on the SECI model, Nonaka (1995) argued that the important factor of knowledge sharing depends on individual and organizational commitment.

Knowledge sharing processes refers to the processes on how employees share their work-related experiences, expertise, know-how, and contextual information with other colleagues in an organization (Lin, 2007). Hoof and Wenen (2004) have distinguished two dimensions of knowledge sharing processes, namely knowledge donating and knowledge collecting. Knowledge donating is the process of employees communicating their personal intelectual capitals to others. On the other hand, knowledge collecting is the process in which employees consult their colleagues to encourage them to share their intellectual capital. Both of these processes are different from each other and can be influenced by other factors. Both of these processes will transform individual's knowledge into group and organizational knowledge in the long term.

Knowledge collecting has a significant effect on all types of innovation strategies in an organization (Kamasak & Bulutlar, 2010). This is due to knowledge collecting requires an individual to constantly consulting with other colleague to learn from them. This process has resulted in the exchange of new ideas, approaches and culture which promotes organizational innovation (Darroch and McNaughton, 2002). Employee willingness to donate and collect knowledge helps in sustaining innovativeness and thus improves the competitive advantage of an organization (Lin, 2007). In the Malaysian context, a study by Jain, Sandhu and Sindhu (2007) has shown that perception towards knowledge donating is higher as compared to the perception of knowledge collecting among academic staffs in a selected Malaysian university when it comes to their willingness to share knowledge.

2.5 Knowledge Sharing in the Public Sector

Previous studies on knowledge sharing have focused on the comparison between private and public sector organizations, as well as determining the factors that affect knowledge sharing (Amayah, 2013). For example, a study by Liebowitz and Chen (2003), has found that knowledge sharing does not happen easily in the public sector due to employees link knowledge with personal power and promotion opportunities. A study by Seba, Rowley and Delbridge (2012), found that factors of organizational structure, leadership, time allocation, and trust are barriers to knowledge sharing in the Dubai police force. However, most knowledge sharing studies are on the private sector as compared to the public sector organizations (Amayah, 2013). This is due to the nature of public sector as a non-profit organization (Syed Ikhsan & Rowland 2004) compared to the private sector which are profit oriented. In general, public

sector organizations regard knowledge management as very important in drafting policies and enhancing service delivery (Thomas, 2005).

In Malaysia, several researchers have undertaken studies on knowledge sharing in public organizations. Among the well-known studies of knowledge sharing in the Malaysian public sector is a study by Syed Ikhsan and Rowland (2004) which examined the issues regarding factors that encourage knowledge generation and knowledge sharing in a ministry. Other studies on knowledge sharing in Malaysia is a study by Supar, Ibrahim, Mohamed, Yahya & Abdul (2005) on factors affecting knowledge sharing in three selected higher institutions and their impact on performance. Another study by Ismail and Yusof (2006) has identified 12 factors affecting knowledge sharing in public organizations in Malaysia which can be categorized into three categories namely individual, organizational and technological factors. A study by Nor Azmi (2009) on the Royal Malaysian Navy has found that individual factors have influenced the level of knowledge sharing among navy officers. Other studies such as by Ismail & Yusof (2009) and Sandhu et al. (2011) was conducted on respondent at the ministerial level; Yassin et al. (2011) conducted a study on knowledge sharing among teachers; and a study by Wei et al. (2012) who conducted a study on knowledge sharing on undergraduate students at Multimedia University. Therefore, based on the researcher review of existing literature, there is little evidence that a knowledge sharing study on front liner departments such as district and land offices in Malaysia has been undertaken. Therefore, for the purpose of this research, the antecedent factors affecting knowledge sharing in the district and land offices in Selangor will be examined.

2.6 Benefits of Knowledge Sharing

Knowledge Sharing has many benefits towards the individual and organization such as saving employee and employer's time (Gibbert and Krause 2002), reduce errors, speed up problem solving, accelerated learning process and reduce costs (Zhang et al., 2006). Knowledge sharing between employees is important in building intellectual capital of an organization. Knowledge sharing is important in the creation of knowledge and in leveraging knowledge for improved organizational performance. Knowledge sharing is an important way through which employees can contribute to knowledge application, innovation and the competitive advantage of the organization (Jackson, Chuang, Harden, Jiang & Joseph, 2006).

Recently, the importance of knowledge sharing as a competitive advantage has increased. In a world of uncertainty due to globalization, knowledge is becoming more important in order to remain competitive. Understanding the factors which impacts knowledge sharing is vital for an the public sector to remain relevant.

2.7 Factors Affecting Knowledge Sharing

Previous studies have shown that there are many factors which affect knowledge sharing either positively or negatively. Several models have been designed and tested on various organizational setting. For example, Kim and Lee (2006) have conducted a study on the impact of organizational structure, organizational culture, and information technology on employee knowledge sharing capabilities. Riege (2005) suggested thirty-six barriers to knowledge sharing, which can be categorized into three categories namely individual barriers, organizational barriers and technological

barriers. Ismail and Yusof (2006) have conducted a study on the individual, organization and technology factors based on the Orlikowski's (1992) model of technology and a study by Van den Brink (2003). Ardichvili (2008) has suggested that the two factors affect individuals' willingness to share knowledge includes motivational factors such as personal benefits and barriers such as trust. Few of those factors have been tested empirically.

There are two main theories which explain the social interaction of people, namely economic exchange theory and social exchange theory. According to the economic exchange theory, individuals will behave by rational self-interest. In other words, knowledge sharing will occur when its rewards exceed its costs (Bock & Kim, 2001). Due to this reason, many researchers have conducted studies on the incentive systems for successful knowledge management. A more positive knowledge sharing attitude will happen if employees believe that they will receive extrinsic benefits such as monetary rewards, promotion, or educational opportunity in return from their knowledge sharing efforts.

On the other hand, social exchange theory is more concern on intrinsic rewards (Blau, 1967). Social exchange theory differs from economic exchange theory in that social exchange entails unspecified obligations. In contrast to economic exchange theory, the benefits involved in social exchange are quantifiable cannot be bargained about. Social exchange theory tends to engender feelings of personal obligation, gratitude, and trust.

Current empirical research suggests a lack of consensus on the key determinants of knowledge sharing For the purpose of this study, individual factors of trust, knowledge sharing attitude and reward has been chosen.

2.8 Demographic factors and Knowledge Sharing

Previous studies have shown that there were mix results on the relationship between demographic factors and knowledge sharing. Several demographic variables such as age, gender and experience level have been studied by several researchers as barriers on knowledge sharing in an organization (Syeiby, 1997; Syeiby and Simons, 2002; Reige, 2005).

In the Malaysian context, a study by M. Ismail & Yusof (2009), has indicated that there are no significant difference between demographic factors and knowledge sharing. In this study, the factor of age, gender, levels of education, and length of service did not significantly influenced knowledge sharing among middle managers at the ministerial level in the Malaysian public sector. A study by Pangil and Nasrudin (2008) on employees of R & D companies in Malaysia has indicated that working experience do not significantly influenced knowledge sharing.

Other studies elsewhere have also indicated that demographic factors have no significant influenced in knowledge sharing Abili, Mokhtarian and Rashidi (2011) in their study has indicated that gender, work experience, educational level and field of study did not have any significant influenced in the amount of knowledge sharing practices among managers in the Institute for Energy Studies in a Middle East

country. Furthermore, many researchers have shown that age was not significantly affect knowledge sharing among employees (Ojha, 2003; Watson and Hewett, 2006).

Few studies have indicated that gender did not significantly influenced knowledge sharing among employees (Chowdhury, 2005; Watson & Hewet 2006). However, Pangil and Nasrudin (2008) in their study have argued that there are differences in knowledge sharing behaviour among male and female employees. A study by Lin (2006) has shown a similar finding that has shown female respondents was more actively involved in knowledge sharing behaviour than men because they perceive to gain more benefit out of it.

A study by Ojha (2003) has shown that there was no significant difference between education level and knowledge sharing behaviour among employees of a software development team. However, an employee with high education background might be more inclined to share his knowledge with other colleagues because he has more knowledge than those with lower education background (Amin, Hassan, Ariffin, & Rehman, 2011). Therefore, for this study, the effects of gender, age and work experience were selected and analysed to determine its effects on knowledge sharing among employees at land and district offices in Selangor.

2.9 Trust and Knowledge Sharing

Knowledge sharing is facilitated by reciprocal trust amongst members in a community (Scarbrough & Swan, 2001). Trust has been widely researched by researchers as the main antecedents of knowledge sharing (Wang and Noe, 2010). In the study of factors that influence knowledge sharing, Ardichvili (2008) found that

employees will be more inclined to use the knowledge made available if they trust it to be a reliable and objective source of information. Trust is the key to knowledge transfer (Davenport & Prusak, 1998).

Trust leads to greater openness between individuals, encourages sharing of knowledge and willingness to collaborate with others (Liao, 2006; Sharratt and Usoro, 2003). Interpersonal trust is one of the individual factors which affect knowledge sharing among employees at the workplace. Interpersonal trust is defined as "the degree of one's willingness to vulnerable to the actions of other people" (Mooradian, Renzl, & Matzler, 2006). Adequate level of trust needs to be cultivated in order to encourage employees to share knowledge among them Von-Krough (1998).

2.10 Knowledge sharing attitude

Attitude is defined as "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991). In addition, Randall and Gibson (1991) have defined attitude towards performing the behavior as a person's general feeling of favorableness or favorableness about performing the particular behavior Therefore, a person is more likely to perform the behaviour if his or her feeling is more favourable towards that behaviour.

Knowledge sharing attitude refers to the degree of one's favorable feelings about sharing one's knowledge (Chow & Chan, 2008). Several researchers have related attitude and knowledge sharing. There are several studies that relate attitude and knowledge sharing. For example, Bock and Kim (2002) and Kuo and Young (2008)

in their study have found that, attitude is a determinant of an individual's knowledge sharing behaviour apart from the recognition the individual received for his or her contribution.

2.11 Reward and Knowledge Sharing

Rewards and recognitions are the basis to an individual's motivation to obtain resources through strategic relationships (Thompson, 2000). Remuneration means monetary incentives while recognition refers to non-monetary incentives (Bartol & Sivastava, 2002; Bock et al., 2005; Al - Hawamdeh, 2003). Financial rewards such as salary and non-monetary rewards such as performance evaluation and incentives will create a consistent culture of knowledge sharing (Davenport & Prusak, 1998, and Al - Hawamdeh 2003).

Certain studies have suggested that monetary incentive alone is not sufficient to motivate knowledge sharing among individuals (Lee, Choi & Kang, 2008). Employees are more likely to share knowledge when they received compliments from their employer, and knowledge sharing is considered as part of the evaluation of the employee's performance (Bryant 2003). Lin (2007) in his study found that employees would be more positively willing to donate and receive knowledge if they believe that organizational reward was provided for their knowledge contribution.

2.12 Conclusion

In this chapter, the overall literature on trust, knowledge sharing attitude, and reward to knowledge-sharing has been reviewed. As discussed in this chapter, a few past researchers have asserted the relationship and influences of these three factors on knowledge sharing.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter will discuss the methodology of this research, namely the research design, population and sampling, data collection, measurement, instrument development and the pilot study.

3.2 Research Framework

The focal point of this study is the relationship between the variables of trust, attitude, reward as the independent variables and how it affects knowledge sharing, the dependent variable. The hypothesis relationship between these variables is depicted in Figure 3.1:

Independent Variables   **Dependent Variable**
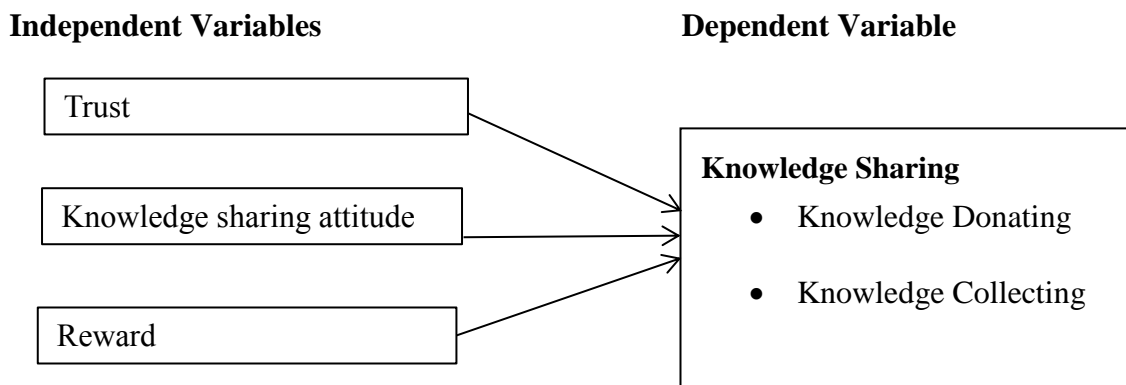
Figure 3.1
Research Framework

3.3 Hypothesis Development

Based on previous literature review and the research objectives as outlined in Chapter two, five hypotheses have been developed.

H1a: The construct of trust is positively related to knowledge sharing

H1b: The construct of knowledge sharing attitude is positively related to knowledge sharing.

H1c: The construct of reward is positively related to knowledge sharing.

H2: Trust, knowledge sharing attitude and reward significantly influence knowledge sharing.

H3: There is no significant difference in knowledge sharing between male and female.

H4: There is no significant difference in knowledge sharing between education levels.

H5: There is no significant difference in knowledge sharing between the length of service.

3.4 Research Design

3.4.1 Research Approach

This section will discuss in detail the approaches and processes employed in this study to analyze the data for hypothesis testing. The research methodology for this research includes research design, population and sampling study, data collection methods, questionnaire design, pilot test, reliability test, normality test, linearity test and data analysis methods.

The study is in the form of a quantitative study involving hypothesis testing. Testing and analysis for this study involved individual respondent who represents a unit of analysis. Descriptive analysis was conducted to enable the researcher to understand the features of the variables in this study, while the hypothesis seeks to explain the nature of the relationship and the relationship between two or more factors in this study. The study was conducted in the form of a structured questionnaire.

The survey form will then be distributed among officers and staffs of all of district and land offices in Selangor through their respective management services department. Bahasa Malaysia and English were used in the survey form to give further understanding to the respondent pertaining each item asked. The purpose of providing bilingual language of the questionnaire is to maximize the level of understanding among the respondents (Holden, Fekken & Jackson, 1985). Translation of the questionnaire was done using back-translation method. Back-translation is a method whereby the original text was translated by two translators.

Afterwards, both of the translations were compared with each other to check for consistency.

3.4.2 Research Sample

The population of this study comprises of officers and staffs at all 9 District Offices in Selangor. The number of population consists of 1698 of officers and staff from various departments as shown in table 3.1 below. This population consists of 9 District Officers (M54), 27 Chief Assistant District Officers (M48 and M52), and 78 Assistant District Officer (M44, M41 and N41) who represents the management and professional category. Meanwhile, the rest of the population consists of 1170 supporting staff one and 414 are from supporting staff two category.

Based on Krejcie and Morgan (1970) in Sekaran (2003), for a population of 1698 the appropriate sample size is 313.The number of sample chosen in this study was based on the proportionate stratified random sampling technique which involves a process of segregation of the samples into exclusive groups that are relevant, appropriate and meaningful for the purposed of this research (Sekaran, 2003). The stratified random sampling was chosen for the purpose of collecting data from each group of positions and to examine the differences in knowledge sharing among the groups. For this research, each total number of positions for every level was divided with the sample size to find the proportionate percentage for every stratum. For example, 78 from the Assistant District Officer were divided with the total sample size of 313 to get the proportionate percentage of 4.59%. Then, this percentage was used to find the proportionate sample for the group of Assistant District Officer which was 14.

However, the number of samples on each category needs to be adjusted using the disproportionate stratified random sampling due to the number of samples in some categories were too small and not meaningful to represent the category. For example, the number of sample for the Chief Assistant District Officer was adjusted from five to fifteen. A small sample will not give a fair response which can be representing the whole population according to Sekaran (2003).

Table 3.1
Number of Staff and Employees at District Offices in Selangor

Designation	Grade	Number of Post	Proportionate (%)	Proportionate sampling	Disproportionate sampling
District Officer	M54	9	0. 53	2	0
Chief Assistant District Officer	M48 & M52	27	1.59	5	15
Assistant District Officer	M41, M44 & N41	78	4.59	14	30
Supporting staff 1	Grade 17-40	1170	68.90	216	178
Supporting staff 2	Grade 1-16	414	24.38	76	90
Total		1,698	100.00	313	313

3.5 Operational Definition

Operational definition is a concept to render it measurable which is done by looking at the behavioural dimensions, facets or properties denoted by the concept on the construct being used in this study (Sekaran, 2010). The constructs in this study are knowledge sharing (donating and collecting knowledge), trust, knowledge sharing attitude and reward.

3.5.1 Knowledge Sharing

In this research, knowledge sharing is defined as a process that involves individuals in the public sector to share knowledge either tacit or explicit for the purpose to increase performance and public service delivery (Ismail & Yusof, 2006). The knowledge sharing variable is further divided into two dimensions that are:-

a) Knowledge Donating (KD) – communicating to others what one's personal intellectual capital is.

b) Knowledge Collecting (KC) – collecting, consulting colleagues in order to get them to share their intellectual capital.

In this study, the knowledge sharing dimensions was adopted from the definition by (Hooff & Wenen, 2004).

3.5.2 Trust

In the study, trust was defined as the degree of one's willingness to vulnerable to the actions of other people. In this study, the trust construct was adapted from the definition by Mooradian, Renzl, & Matzler (2006).

3.5.3 Knowledge sharing attitude

In this study, knowledge sharing attitude was defined as the degree of one's favourable or positive feeling about sharing one's knowledge. In this study, the trust construct was adapted from the definition by Chow & Chan (2008)

3.5.4 Reward

In this study, reward was defined as the point to which employees feel the incentive provided by the organization whether financial, promotion and performance scores to influence them to share knowledge In this study, the reward construct was adapted from the definition by Lee, Choi and Kang (2008)

3.6 Measurement of Variables/Instrument

Questionnaire is the Instrument used in this research to collect data from the research sample. The measurement items used in this research are adapted from previous researches that have been published in academic journals. The questionnaire used in this research is divided into six sections that are as follows:

i.   Section A – Respondent's Background/Demography

ii.   Section B – Knowledge Sharing

iii.   Section C – Trust

iv.   Section D – Knowledge sharing attitude

v.   Section E – Reward

The questionnaire is designed in dual language both Malay and English language to avoid confusion and ease of understanding. Instrument and item used in the questionnaire are as Table 3.2:

Table 3.2

Instrument and items for questionnaire

Section	Factor	Reference	Question Item
A	Respondent's Background/Demography	Item includes department, gender, age, positions, length of Service, race, marital status and highest qualification	8
B	Knowledge Sharing i) Knowledge Donating ii) Knowledge Collecting	Adapted from Hoof and Wenen (2004),	14
C	Trust	Adapted from Eze, Goh, Goh, & Tan, 2013)	6
D	Knowledge sharing attitude	Adapted from Chow & Chan (2008),	5
E	Reward	Adapted from Lee, Choi & Kang (2008)	8

The content of the questionnaire was developed based on theoretical research framework and adapted existing questionnaire used in past studies. The five-point multi-item Likert scale was used to measure the independent variables, and dependent variable in this research.

3.6.1 Section A – Demographic Factor

Section A consists of eight items on the demographic factors of the respondents in this study. It consists of questions on department, gender, age, positions, length of Service, race, marital status and highest qualification. The purpose of these items was included in the questionnaire is to study and measure the influence of demographic factors on knowledge sharing.

3.6.2 Section B – Knowledge Sharing

Section B consists of 14 items that focus on the measurement for the dependent variable of knowledge sharing. The items for this section were divided into two dimensions that are knowledge donating and knowledge collecting. There are six questions for knowledge donating and eight questions for knowledge collecting. These items were adapted from a study by Hoof and Wenen (2004).

3.6.3 Section C – Trust

Section C consists of six items that focus on the measurement for the independent variable of trust. There is one negative question in this section to improve respondent's concentration during reading and answering the questions These items were adapted from a study by Eze, Goh, Goh, & Tan, (2013) which found that trust is among the determinants which influence knowledge sharing.

3.6.4 Section D – Knowledge sharing attitude

Section D consists of five items that focus on the measurement for the independent variable of trust. There is one negative question in this section to ensure that will improve respondent's concentration while reading and answering the questions. These items were adapted from a study by Chow & Chan (2008) which found that attitude is among the determinants that influenced knowledge sharing.

3.6.5 Section E– Reward

Section D consists of five items that focus on the measurement for the independent variable of trust. There is one negative question in this section to to improve respondent's concentration while reading and answering the questions. These items were adapted from a study by Choi, Kang and Lee (2008) which found that reward is among the determinants that influenced knowledge sharing.

3.7 Data Collection

This study relies heavily on primary data. The data collection involved the distribution of questionnaires to staffs of 9 District and land offices in Selangor. An appointment was made with the Chief Assistant District Officer (Administration) of every Land and District Office to explain and distribute the questionnaires. A letter of permission to conduct research has been sent in advance prior to the appointment. A total of 400 questionnaires were distributed with an expectation of obtaining a response from at least 250 respondents. Respondents were given two

weeks to complete the questionnaire in order to give ample time to respond and to ensure that there is no pressure on the respondent.

3.8 Statistical Analysis

To analyse the data, the Statistical Package for the Social Sciences (SPSS) version 22 was used. Analysis was done after the gathering of data was completed in order to answer the research question and objectives. Descriptive and Inferential statics analysis was used in this research. Descriptive analysis was used to analyse the demographic factors in this research while inferential statistic was used to analyse the other factors. Subsequently, the study has employed several statistical analyses procedure as follows:-

Table 3.3
Statistical Test Employed

Hypothesis	Statistical Analysis
H1a: Trust is positively related to knowledge sharing	Pearson Correlation
H1b: Knowledge sharing attitude is positively related to knowledge sharing.	Pearson Correlation
H1c: Reward is positively related to knowledge sharing.	Pearson Correlation
H2: Trust, knowledge sharing attitude and reward significantly influence knowledge sharing.	Multiple Regressions
H3: There is no significant difference in knowledge sharing between male and female.	T-test
H4: There is no significant difference in knowledge sharing between length of service	One-way ANOVA
H5: There is no significant difference in knowledge sharing between education levels	One-way ANOVA

3.9 Pilot test

Usually, items or statements in any research are designed to measure the construct and variables which were to be studied. Therefore, pilot test was conducted in order to determine the reliability of each statement in the questionnaire to ensure that the reliability value (Cronbach-Alpha) is within the acceptable range. A pilot test is a small scale field research prior to the actual research. According to Hair (2007), the minimum number of samples for test is between four to five respondents and the maximum number of respondent is more than 30. For the purpose of this research, a pilot test was conducted which involves 30 respondents from the Batang Padang Land and District Office in the state of Perak. The respondents were chosen as they resemble the same characteristics with the actual samples. Overall, most respondents understood and answer accordingly, the questions and statements in the survey form. Only minor adjustments need to be done on the questions to suit the situation of the respondents such as simplifying certain words to suit the Malaysian context and comprehension for lower level staffs.

3.10 Reliability Test

Reliability test was conducted in order to check the reliability of scales and internal consistency of the scales that are was used by checking the Cronbach's Alpha coefficient. A reliability value of more than 0.6 is considered and is acceptable for this research (Sekaran, 2003). As a guidance, the interpretation by Hair (2007) value of Cronbach's Alpha coefficient can be explained by the table 3.4 below.

Table 3.4
Cronbach's Alpha scale

No.	Range in scale	Consistency/Reliability
1.	0.80-0.99	Very good
2.	0.70-0.80	Good
3.	0.60-0.70	Fair
4.	0.60 and below	Poor

Source: Hair (2007)

Reliability test was conducted on the dependent variable of knowledge sharing in order to check the items reliability and internal consistency. Result for the Cronbach's Alpha value on the researcher's pilot study shows the value of 0.808. An analysis on the reliability test on both dimensions of knowledge sharing instrument by Hoof and Wenen (2004), shows that the value of 0.83 for knowledge donating and 0.90 for knowledge collecting. As a comparison, the pilot study by the researcher shows a reduced Cronbach's Alpha value, but it is still within a very good and good category as shown on Table 3.5 below:

Table 3.5

Cronbach's Alpha value for Knowledge Sharing

	Number of Items	Alpha Cronbach	
		Hoof & Weenen (2004)	Pilot study
Knowledge Sharing	14	-	0.808
Dimensions			
1.Knowledge Donating	6	0.83	0.864
2.Knowledge Collecting	8	0.90	0.756

Reliability test on trust, knowledge sharing attitude and reward instrument shows that the Cronbach's Alpha values were within a very good and the good category. As a comparison, the pilot study by the researcher shows a reduced Cronbach's Alpha value, but it is still within the fair range as shown on table 3.6 below:

Table 3.6

Cronbach's Alpha value for Knowledge Sharing

Variables	Previous Researchers	Number of Items	Alpha Cronbach	
			Previous research	Pilot study
Trust	Eze, Goh, Goh, & Tan, 2013)	6	0.85	0.639
Knowledge sharing attitude	Chow & Chan (2008)	5	0.78	0.823
Reward	Lee H. Choi S.Y, Kang Y.S (2008)	8	0.948	0.644

3.11 Hypotheses Testing

This study was conducted by obtaining quantitative data for statistical testing of the hypothesis through the distribution of questionnaires. The statistical testing includes descriptive analysis and inferential analysis.

3.11.1 Descriptive Analysis

Descriptive analysis in this study was done on data of demographic factors gathered from section A of the questionnaire. Demographic factors that are being tested include age, gender, length of service, departments, academic qualifications, positions and marital status. Descriptive analysis was conducted to provide simple summaries about the sample and measures.

3.11.2 Inferential Analysis

Inferential analysis was conducted to interpret and summarize data in more detail in order to fulfil the research objective specified in chapter 1. Inferential analysis was used in this research are Pearson correlation and multiple regressions. Inferential analysis was conducted to study the relationship and influence between the dimensions of the independent variables against the dependent variable.

a) **Pearson Correlation**

Pearson Correlation analysis was used to identify the relationship and strength of linear dependence between trust, knowledge sharing attitude and reward as independent variables and knowledge sharing as dependent variable. The strength of linear dependence between the two variables is

measured by a coefficient value of +1 and -1. The positive (+) and negative (-) value indicates either the linear relationship is a positive or negative correlation. In this study, the interpretation of the correlation coefficient value by Chua (2012) is being used as shown in table 3.7 below:

Table 3.7

The R-value and its interpretation

R value	Explanation
± 0.91 until ± 1.00	Very strong
± 0.71 until ± 0.90	Strong
± 0.51 until ± 0.70	Moderate
± 0.31 until ± 0.50	Weak
± 0.01 until ± 0.30	Very weak
± 0.00	No correlation

Source: Chua (2012)

b)   **Multiple Regression**

In this study, regression analysis was conducted to predict and explain the strength of the relationship that exists between two variables. On the other hand, multiple regression was used to determine the relationship, the degree of the relationship and strength of the relationship between more than one independent variables and dependent variable. In this study, multiple regression was used to regress three independent variables that consist of trust, knowledge sharing attitude and reward against knowledge sharing as the dependent variable.

3.12 Conclusion

This chapter has outlined the methodology used in this study, exploring the relationship between trust, attitude, reward, and the level of knowledge sharing. The following areas were discussed in this chapter are population and sample, variables (independent and dependent) and measures, research question and hypotheses, data collection and analysis, and finally the summary. Research on the relationship between trust, attitude, reward and recognition, and level of knowledge sharing is very important in implementing knowledge management policies and gaining competitive advantage in the globalization era.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter consists of the results and data analysis gathered from the returned questionnaires. The results of the studies have provided the answers for the research questions as stated in chapter one. This chapter starts with a discussion on the background of the respondents, descriptive analysis of the variables and finally the inference analysis. Inference analyses are conducted based on the data from the questionnaires and hypothesis developed from the previous chapter. Both descriptive and inferential analyses were performed using SPSS using version 22 for Windows.

4.2 Reliability and Normality Analysis

4.2.1 Reliability Analysis

Reliability analysis was performed on the data obtained from the actual study in order to measure the reliability of scales and internal consistency of the scales that was used. Data for this research was obtained from 210 respondents, and reliability analysis was performed based on the dimensions and variable of the study. A reliability value of more than 0.6 is and is acceptable for this study (Sekaran, 2003). The result of the reliability analysis was in the range of 0.753 to 0.912 as shown on Table 4.1 and Table 4.2. Cronbach's alpha value for the independent variable of trust is 0.737, attitude is 0.912 and reward is 0.775. The actual finding was the result

of deleting one item from the variable of trust and one item from the variable of attitude. Thus, the items of the trust variable only consist of five questions while the items of the knowledge sharing attitude variable are left with four items. Furthermore, the Cronbach's Alpha value for the dependent variable of knowledge sharing is 0.857. A further analysis on the reliability of the items for the dimensions of knowledge donating and knowledge collecting shows the Cronbach's Alpha value of 0.753 and 0.871 respectively. No items were deleted from both of the dimensions. Therefore, the internal consistency and reliability of the instruments used in this study were acceptable. A detailed analysis on the reliability of the instruments is as shown on Appendix C.

Table 4.1

Dependent Variable's Cronbach Alpha.

	Number of items	Number of items deleted	Cronbach Alpha
Knowledge Sharing	14	0	0.857
Dimensions			
Knowledge Donating	6	0	0.753
Knowledge Collecting	8	0	0.871

Table 4.2

Independent Variable's Cronbach Alpha of the actual study

Variable	Number of items	Number of items deleted	Cronbach Alpha
Trust	5	1	0.737
Knowledge sharing attitude	4	1	0.912
Reward	8	0	0.775

4.2.2 Normality Test

The normality test was used to determine the normal distribution of the data in this study. One way of determining the normality of data is to examine the skewness and kurtosis values for each variable. A value of zero (0) for skewness and kurtosis will show 100% normal distribution of the data (Chua, 2012). Positive skewness value indicates that the graph has a positive slant whereas a negative skewness value shows that the graph has a negative slant. Kurtosis shows the degree in the peak of the graph. A positive value for the kurtosis shows a peak distribution known as *"leptokurtic"* while negative value for the kurtosis shows a peak distribution known as "platykurtic". According to Hair et al. (2007), the data is considered normally distributed if the value of the skewness and kurtosis is between ± 1.96 at *p<0.05* significant level. The result for the normality test based on the value of skewness and kurtosis of each variable in this study is as shown in table 4.3 below:-

Table 4.3
Normality Test of the Variables

Variables	Skewness	Kurtosis
Trust	-0.034	0.384
Knowledge sharing attitude	0.319	-0.143
Reward	0.177	-0.335
Knowledge Sharing	0.527	1.176

The result in table 4.3 shows that data for all of the variables in this study have a normal distribution. This is due to the value of the skewness and kurtosis which lies within the range of ±1.96 at *p<0.05* significant level. Another way to determine the normal distribution of data is visually comparing the histogram of the sample data against a normal probability curve. The histogram should resemble a bell-shape which indicates a

normal distribution. A visual inspection on the histograms of every sample data shows that all of the variables were normally distributed. The histograms of all of the variables in this study are shown in Appendix C.

4.3 Response Rate

Overall, a total of 400 questionnaires have been distributed to six District and land offices in Selangor. Only 210 numbers of the questionnaires were completed. Therefore, the response rate was only 52.5% of respondents. Most of the questionnaires received were answered completely. This means that there is no questionnaire that is not accounted. Based on Sekaran (2010), if more than 25% of items are not fully answered the questionnaire is subject to be dropped from the analysis. The summary of the respondent's response in this study is as stated in table 4.4 below.

Table 4.4
Respondent's response rate

Questionnaire response	Frequency	Rate (%)
Number of questionnaires distributed	400	100
Returned questionnaires	210	52.5
Usable questionnaire	210	52.5

4.4 Background of Respondent

Descriptive analysis was conducted in order to explain about frequency and demographic factors in this study such as gender, age, level of education and positions. A total of 210 respondents participated in this study involving all nine

district and land offices in Selangor. The summary of the respondent according to departments is as table 4.5: -

Table 4.5
Respondent profile according to departments

Departments	Frequency	Percentage (%)
Sabak Bernam District and Land Office	15	7.1
Kuala Selangor District and Land Office	25	11.9
Klang District and Land Office	27	12.9
Kuala Langat District and Land Office	34	16.2
Gombak District and Land Office	26	12.4
Hulu Langat District and Land Office	22	10.5
Sepang District and Land Office	30	14.3
Hulu Selangor District and Land Office	15	7.1

Each district and land office has three separate sections, namely management and services, rural development and land administration. The participation of respondent in the management services section is 30.5% (n=64), rural development is 28.1% (n=59) and land administration is 41.4% (n=87). The summary of the respondent according to sections is as table 4.6 below:

Table 4.6
Respondent profile according to sections

Sections	Frequency	Percentage (%)
Management Services	64	30.5
Rural Development	59	28.1
Land Administration	87	41.4

The respondent positions can be divided into three categories which are management and professionals, support staff one and support staff two. The participation of

respondent in the management and professionals position is 18.1% (n=38), support

staff one is 30.0% (n=63) and support staff two is 51.9% (n=109). The summary of

the respondent according to positions is as table 4.7 below:

Table 4.7

Respondent profile according to positions

Positions	Frequency	Percentage (%)
Management and Professionals (41 and above)	38	18.1
Support staff one (Grade 27-40)	63	30.0
Support staff two (Grade 1-26)	109	51.9

The respondent length of service can be divided into five categories which are in the

range of 1-5 years, 6-10 years, 11-15 years, 16-20 years and more than 20 years. The

summary of the respondent according to length of service is as Table 4.8 below:

Table 4.8

Respondent profile according to length of service

Length of service	Frequency	Percentage (%)
1-5 years	60	28.6
6-10 years	76	36.2
11-15 years	23	11.0
16-20 years	10	4.8
21-25 years	10	4.8
More than 25 Years	31	14.8

Overall, the percentage of male respondents that participated in this study is 33.3%

(n=70), and the percentage of female respondents is 66.7% (n=140). The summary of

the respondent according to length of service is as table 4.9 below: -

Table 4.9

Respondent profile according to gender

Gender	Frequency	Percentage
Male	70	33.3%
Female	140	66.7%

The respondent age profile can be divided into six categories which are in the range of 20-25 years old, 26-30 years old, 31-35 years old, 36-40 years old, 41-45 years old, 46-50 years old and more than 50 years old. The summary of the respondent according to the age profile is as Table 4.10.

Table 4.10

Respondent profile according to age

Age	Frequency	Percentage (%)
20 - 25 years old	12	5.7
26 – 30 years old	47	22.4
31-35 years old	66	31.4
36-40 years old	29	13.8
41-45 years old	14	6.7
46-50 years old	13	6.2
More than 50 years old	29	13.8

The respondent marital status can be divided into three categories which are single, married and widow or widower. The percentage of single respondents that participated in this study is 19.5% (n=41), the percentage of married respondents is 78.1% (n=164) and the percentage of widow or widower respondents is 2.4% (n=5) and. The summary of the respondent according to marital status is as Table 4.11.

Table 4.11
Respondent profile according marital status

Marital Status	Frequency	Percentage (%)
Single	41	19.5
Married	164	78.1
Widow/Widower	5	2.4

The respondent race can be divided into four categories which are Malay, Chinese, Indian and others. The majority of the respondents are Malay with a percentage 97.1% (n=204), followed by other race with the percentage of 1.4% (n=3), the percentage of Indian respondents is 1.0% (n=2) and lastly the percentage of Chinese respondents is 0.5% (n=1) The summary of the respondents according to race are shown as in Table 4.12.

Table 4.12
Respondent profile according to race

Race	Frequency	Percentage (%)
Malay	204	97.1
Chinese	1	0.5
Indian	2	1
Others	3	1.4

The respondent education profile can be divided into five categories which are SRP/SPM, STPM/Diploma, Degree, Masters and Doctorate. The percentage of respondent which holds SRP/SPM is 35.2% (n=74), STPM/Diploma is 36.7% (n=77), Degree is 24.8% (n=54), and Masters is 7% (n=7). There is none of the

respondents which holds a doctorate participated in this study. The summary of the respondent according to education level is as shown in Table 4.13.

Table 4.13
Profile according to education level

Highest Education	Frequency	Percentage (%)
SRP/SPM	74	35.2
STPM/Diploma	77	36.7
Degree	54	24.8
Masters	7	3.3
Doctorate	0	0

4.5 The Analysis of Mean Scores

Descriptive analysis was used in order to explain the mean, median, mode, range and standard deviation of the variables in this study. The score value will explain the respondent responses towards the variables in this study. According to Hair et al. (2007), mean values can be categorized into three levels that are low (1.00-2.25); moderate (2.26-3.75) and high (3.76-5.00). For this study, the mean value for the dependent variable is considered as high at 3.8702. The mean value for the independent variable for trust and knowledge sharing attitude are considered as high while the mean value for reward is moderate. The statistical score for the dependent and independent variables are shown as on Table 4.14.

Table 4.14

Statistical scores for Independent and Dependent Variable

	Knowledge Sharing	Trust	Knowledge sharing attitude	Reward
Mean	3.8702	4.1162	4.1619	3.2304
Std Deviation	.39355	.47343	.47983	.59928
Minimum	2.79	2.40	3.00	1.75
Maximum	5.00	5.00	5.00	5.00

4.6 T-test Analysis

The t-test analysis is one of the inferential statistical test which is used to compare two or more groups of interval or ratio data (Chua, 2012). The t-test was conducted on two groups that are male and female. The result of the test for the knowledge sharing variable is as shown in Table 4.15.

Table 4.15
T-test Analysis

Dimension	Gender	Mean	Standard Deviation	t	Significance
Knowledge Donating	Male	3.8759	0.43298	0.148	0.882
	Female	3.8673	0.37390		
Total		3.8702			

Table 4.15 shows the T-test result on mean scores on the level of knowledge sharing based on gender. Male respondents have higher mean score of 3.8759, rather than female with a score of 3.8673. The result shows that male respondents are more willing to share knowledge than female respondents. The t value shows a value of 0.148. However, the result is considered not significant at 0.882 level ($p>0.05$). This

result indicates that there are no significant differences between male or female respondents in knowledge sharing.

4.7 Analysis of Variance (ANOVA)

The Analysis of Variance (ANOVA) was used to determine the differences in mean scores among different group of respondents. In this study, one-way ANOVA was used to test the differences in mean score of more than two groups. This is because t-test can only be used to compare the mean score for two groups. Furthermore, ANOVA test can be used to compare two, three, four or n number of mean scores. In this study ANOVA test was used to compare differences between each group in the category of length of service, position levels and education level.

1. **Length of Service**

The relevant ANOVA analysis on the mean score on knowledge sharing by respondents according to the length of service category is as shown on table 4.16. The F ratio is the ratio of the variance between groups and variance within the group, for this category the F ratio is at 1.460. The result in Table 4.16 shows that there are no significant differences in mean scores on the level of knowledge sharing at 0.235 ($p > 0.05$) level. These values show that knowledge sharing is being practiced across all level of staffs regardless of seniority at district and land offices in Selangor.

Table 4.16
ANOVA Analysis on Different Length of Service

Dependent Variable	Departments	Mean	Standard Deviation	F	Significance
Knowledge Sharing	1-10 years	3.8569	0 .40211	1.460	0.235
	11-20 years	3.8144	0.37620		
	More than 20 years	3.9590	0.37295		
Total		3.8702	.39355		

2. Education Level

The relevant ANOVA analysis on the mean score on knowledge sharing by respondents according to education level is as shown on Table 4.17. The F ratio is the ratio of the variance between groups and variance within the group, for this category the F ratio is at 1.412. The result in Table 4.17 shows that there are no significant differences in mean scores on the level of knowledge sharing at 0.240 ($p>0.05$) level. These values show that knowledge sharing is being practiced across all level of staffs regardless of education level at district and land offices in Selangor.

Table 4.17
ANOVA on Different Levels of Education

Dependent Variable	Education level	Mean	Standard Deviation	F	Significance
Knowledge Sharing	SRP/SPM	3.7991	0.37459	1.412	0.240
	STPM/Diploma	3.9294	0.39860		
	Degree	3.8818	0.38421		
	Masters	3.8839	0.55861		
Total		3.8702	0.39355		

4.8 Correlation Analysis

Correlation analysis is an inferential analysis which is use to examine the relationship between the independent and dependent variables (Chua, 2012). The correlation coefficient is used to measure the correlation between these variables. According to Hair et. al 2007, the correlation coefficient (r-value) is use to determine the strength of the relationship, the direction of the relationship of the variables and to determine whether the result is significant. The strength of the relationship varies according to the r-value. The value of 0.33 and below is considered as weak relationship, 0.34 to 0.66 is considered as moderate relationship while the value of more than 0.67 is considered as a strong relationship. A positive or negative r-value shows the direction of the relationship between the two variables. A positive value indicates that an increased value of one variable (X) will result in the increase of another variable (Y). A negative value indicates that an increase in the value of one variable (X) will result in a decrease value of the other variable (Y) and vice versa. The r-value for the variable in this study is as shown in table 4.18:

Table 4.18
Correlation of variables

	Knowledge Sharing	Trust	Knowledge sharing attitude	Reward
Knowledge Sharing	1.000			
Trust	0.322**	1.000		
Knowledge sharing attitude	0.547**	0.499**	1.000	
Reward	0.322**	0.128**	0.128**	1.000

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

Table 4.18 shows the results for the correlation analysis on all variables in the study. The result of the analysis shows that all the correlation coefficients for the dependent and independent variables are significant at p=0.001. The highest correlation value is 0.547, which is between knowledge sharing and knowledge sharing attitude. This correlation value shows a moderate relationship between the two variables. The other two independent variable of trust and reward both have a weak relationship with knowledge sharing with an r-value of 0.322. All independent variables have a positive correlation with the dependent variable. These results are in-line with the hypothesis developed in chapter three. The weakest correlation is between the variable of trust and knowledge sharing attitude with an r-value of 0.128. The detailed result of the correlation analysis can be found in Appendix C.

4.9 Regression Analysis

Multiple regression analysis was conducted to predict and explain the strength of the relationship that exists between the independent variables (trust, knowledge sharing attitude and reward) and dependent variable (knowledge sharing). The results for the multiple regressions are shown as Table 4.19 and Table 4.20:

Table 4.19
Anova (b) table

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	0.604	0.365	0.356	0.31592

a. Predictors: (Constant), Reward, Attitude, Trust
b. Dependent Variable: KS

The result in Table 4.19 shows that the all the independent variables are the predictors for this model. Based on the result, 36.5% (R square = 0.365) of the dependent variable are influenced by the independent variables while 63.5% are influenced by other factors. The regression analysis is significant at p=0.000 (p<0.05) with F=39.448 when all the variables are accounted in the prediction of the knowledge sharing model.

Table 4.20
Coefficient (a) table

Model		Unstandardized Coefficient		Standardized Coefficient		
		B	Std. Error	Beta	t	Sig.
1.	Constant	1.502	.237		6.347	0.000
	Trust	0.036	.053	.044	0.682	0.496
	Attitude	0.404	.053	.492	7.661	0.000
	Reward	0.167	.037	.254	4.518	0.000

The result in table 4.20 shows that the t value for trust is 0.682 and significant at p=0.496 (p>0.05), attitude is 7.661 p=0.000 (p<0.05) and reward is 4.518 p=0.000 (p<0.05). These values shows that attitude and reward have significant influence on knowledge sharing at significant level p=0.05. However, trust does not have significant influence on knowledge sharing. The unstandardized coefficients B for the independent variables are shown in Table 4.20. Therefore, the relationship between the independent variables and the dependent variable can be written as below:

$$Y = B_0 + B1X1 + B2X2 + B3X3 + e$$

B_0 is the constant, the value of Y when X = 0.

Y is Knowledge Sharing

X1 is Trust

X2 is Knowledge Sharing Attitude

X3 is Reward

Bi is the coefficient value

Therefore the equation for this model was written as below:

$$Y = 1.502 + 0.036X1 + 0.404X2 + 0.167X3$$

Knowledge sharing = 1.502 + 0.036 Trust + 0.404 Knowledge Sharing Attitude +

0.167 Reward

4.10 Summary

The findings in this study show that the demographic factors of gender, length of service and education levels do not significantly in influenced knowledge sharing among staffs at district and land offices in Selangor. On the other hand, the three independent variables of trust, knowledge sharing attitude and reward, have a positive relationship with knowledge sharing. Knowledge sharing attitude has a moderate relationship with knowledge sharing while trust and reward have a weak relationship with knowledge sharing. The multiple regressions analysis on the influence between the independent variables and dependent variable shows that only knowledge sharing attitude and reward, have significantly influenced knowledge

sharing. Trust does not have any influence on knowledge sharing in this study. The factor of trust, knowledge sharing attitude and reward have a 36.5% influence on knowledge sharing in this study. Meanwhile, other factors contribute to 63.5% influence on knowledge sharing in this study. A summary of the result of this study according to the hypothesis and statistical analysis are as Table 4.21.

Table 4.21
Summary of the Hypothesis Test

Hypothesis	Statistical Analysis	Result
H1a: The construct of trust is positively related to knowledge sharing H1b: The construct of knowledge sharing attitude is positively related to knowledge sharing. H1c: The construct of reward is positively related to knowledge sharing.	Pearson Correlation	Supported
H2: Trust, knowledge sharing attitude and reward significantly influenced knowledge sharing.	Multiple Regressions	Partially supported
H3: There is no significant difference in knowledge sharing between male and female.	t-test	Supported
H4: There is no significant difference in knowledge sharing between education levels.	One way ANOVA	Supported
H5: There is no significant difference in knowledge sharing between the length of service.	One way ANOVA	Supported

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter starts with a discussion on the findings of the study by comparing it with the previous studies and existing theory. The discussions in this chapter have provided some recommendations on how to improve knowledge sharing among staffs at district and land offices in Selangor. In addition, these recommendations might also be useful for future researchers to conduct a study in similar areas.

5.2 Discussion

In general, the discussions on the findings of the study were based on the hypothesis test from the previous chapter. Five hypotheses were tested and the results were compared against previous literature and existing theories in order to check their similarity. The results of the hypotheses have provided the answer on the research questions and objectives of this study.

H1a: The construct of trust is positively related to knowledge sharing

Correlation analysis was done on the independent variable of trust to show its relationship with the dependent variable of knowledge sharing. The result of the analysis shows the all the correlation coefficients for the dependent and independent variables are significant at $p=0.001$. The result from this study has shown that, a

positively weak relationship between trust and knowledge sharing. Therefore, this hypothesis is supported by the result of the analysis. This result indicates that if the trust among staff at district and land offices increases, subsequently knowledge sharing will increase as well. However, a possible explanation for the weak relationship between trust and knowledge sharing is due to the working culture and mutual understanding that exist among public sector employees. This finding is similar and in-line with a study by Davenport & Prusak (1998); Liao, 2006; Ardichvili (2008); Wang and Noe (2010); and Yusof, Ismail, Ahmad, & Yusof, (2012).

H1b: The construct of knowledge sharing attitude is positively related to knowledge sharing.

Correlation analysis was done on the independent variable of knowledge sharing attitude to show its relationship with the dependent variable of knowledge sharing. The result of the analysis shows that all the correlation coefficients for the dependent and independent variables are significant at $p=0.001$. The highest correlation value is 0.547, which is between knowledge sharing attitude and knowledge sharing. Therefore, this hypothesis was supported by the result of the analysis. This result indicates that if the knowledge sharing attitude among staffs at district and land offices increases, subsequently knowledge sharing will increase as well. This finding is similar and in-line with the study by Bock and Kim (2002); Chow and Chan (2008); Kuo and Young (2008) and Nor Azmi (2009). Therefore the hypothesis was supported by the result of the analysis.

H1c: The construct of reward is positively related to knowledge sharing

Correlation analysis was done on the independent variable of reward to determine its relationship with the dependent variable of knowledge sharing. The result of the analysis shows that all the correlation coefficients for the dependent and independent variables are significant at $p=0.001$. The result from this study has shown that, a weak and positive relationship between reward and knowledge sharing. Therefore, this hypothesis is supported by the result of the analysis. This result indicates that if the reward among staffs at district and land offices increases, subsequently knowledge sharing will increase as well. This finding is similar and in-line with a study by Bryant (2003); Lee at. al, (2008); Lin (2007); and Yusof et. al, (2012)

H2: Trust, knowledge sharing attitude and reward significantly influenced knowledge sharing.

Multiple regression analysis was done on the independent variable of trust; knowledge sharing attitude and reward to determine their influence on the dependent variable of knowledge sharing. The result of the analysis from the ANOVA table shows that the all the independent variables are the predictors for this model. Based on the result, 36.5% (R square = 0.365) of the dependent variable are influenced by the independent variables while 63.5% are influenced by other factors. The regression analysis is significant at $p=0.000$ ($p<0.05$) with F=39.448. The result for the coefficient table shows that the t value for trust is 0.682 and significant at $p=0.496$ ($p>0.05$), attitude is 7.661 $p=0.000$ ($p<0.05$) and reward is 4.518 $p=0.000$ ($p<0.05$). These values shows that attitude and reward have significant influence on knowledge sharing at significant level $p=0.05$. However, trust does not have

significant influence on knowledge sharing. The result from this study shows that, knowledge sharing attitude and reward has significantly influenced knowledge sharing. Meanwhile, trust does not significantly influenced knowledge sharing. Therefore, this hypothesis is partially supported by the result of the analysis. Trust have no significant influence on knowledge sharing in this study due to the work culture and mutual understanding that commonly exist among government servants. The finding is also in line with a study by Salleh (2013) on the relationship between factors of knowledge sharing at Selangor Customs Department.

H3: There is no significant difference in knowledge sharing between male and female.

T-test analysis was done on the demographic factor of gender to determine whether there is a significant difference between male and female in practising knowledge sharing. The test was conducted on 210 respondents that comprise mainly of 140 male respondents (66.7%) and 70 female respondents (33.3%). However, the result is considered not significant at 0.882 level (*p>0.05*). This result indicates that there are no significant differences between male or female respondents in knowledge sharing. Therefore, both male and female staffs at district and land offices in Selangor exhibit the same level of knowledge sharing behaviour. This finding is inline with the findings by Chowdhury, (2005); Watson and Hewet (2006) and Ismail and Yusof (2009). A study by Basiran (2010) on knowledge sharing among staffs of Selangor Fire and Rescue Department also indicate that, there is no difference between gender and knowledge sharing.

H4: There is no significant difference knowledge sharing between length of service

One-way ANOVA analysis was done on the demographic factor of length of service to determine whether there is a significant difference between the length of service and knowledge sharing. The result has shown that, there are no significant differences between length of service and knowledge sharing at $p=0.235$ ($p>0.05$) and F= 1.460. Therefore, this result indicates that knowledge sharing is being practiced across all level of staffs regardless of seniority at district and land offices in Selangor. This finding is inline with the study by Pangil and Nasrudin (2008); Ismail and Yusof (2009) and Abili et. al. (2011). A study by Basiran (2010) on knowledge sharing among staffs of Selangor Fire and Rescue Department also indicates that there is no difference between the length of service in knowledge sharing.

H5: There is no significant difference in knowledge sharing between education levels

One-way ANOVA analysis was done on the demographic factor of education level to determine whether there is a significant difference between education level and knowledge sharing. Four groups of respondents are involved in this study, namely groups with SRP/SPM, STPM/Diploma, Degree and Masters. The result has shown that there are no significant differences between length of service and knowledge sharing at $p=0.240$ ($p>0.05$) and F= 1.412. Therefore, this result indicates that knowledge sharing is being practiced across all level of staff regardless education level at district and land offices in Selangor. This finding is inline with the findings

on the study by Ojha (2003); Ismail, & Yusof (2009) and Abili. et. al (2011). A study by Basiran (2010) on knowledge sharing among staffs of Selangor Fire and Rescue Department also indicates that there is no difference education and knowledge sharing.

Is there any difference in the level of knowledge sharing based on gender, education level and length of service at district and land offices in Selangor?

The results for H4 and H5 have indicated that there are no differences in knowledge sharing between the demographic factors of gender, education level and length of service.

Is there a relationship between trust, knowledge sharing attitude and reward on knowledge sharing intensity among staffs at district and land offices in Selangor?

The results for H1 have indicated that trust, knowledge sharing attitude and reward have positive relationship with knowledge sharing.

Do trust, knowledge sharing attitude and reward, have influence on knowledge sharing among staffs at district and land offices in Selangor?

The results for H2 have indicated that only knowledge sharing attitude and reward have significantly influenced knowledge sharing.

5.3 Implications of Study

In general, this study has shown that reward and attitude significantly influence knowledge sharing among staffs at district and land offices in Selangor. Therefore, the management should take this into account and emphasis on enhancing knowledge sharing activities at their respective departments. Elements of remuneration should be emphasized in promoting the sharing of knowledge activities at front-liner departments such land offices as outlined in the MAMPU Knowledge Management Blueprint (2011). Elements of remuneration that may be considered include financial rewards and non-monetary rewards. These rewards can be in the form of awards and recognition on knowledge sharing activities.

On the other hand, attitude also plays a big role in promoting the sharing of knowledge among staff and district land offices in Selangor. In this study, it is found that the knowledge sharing attitude moderately influenced knowledge sharing. Therefore, management must also be concerned with these findings and must seek efforts to foster interest in employees to instil the habit of knowledge sharing practices among staffs. Furthermore, the results of this study is consistent with the findings on a study undertaken by Chong (2013) on several Malaysian organizations which indicated that stakeholder KM readiness preparation activities such as developing closer relationships among staff, instilling trust, creating awareness on knowledge sharing and KM familiarization program are important in facilitating KM in Malaysia.

At the same time, this study has served as a guide in the development of human resources knowledge management policies at district and land office of Selangor in the future. Human resource activities such as transfers, promotions and recruitment should be undertaken with caution in order to avoid the lost valuable organizational knowledge.

5.4 Limitations of the Study

There are several limitations in conducting this study due to several reasons. Among the limitations is that the focus of this study is limited to employees in the office of land and district in offices in Selangor. Therefore, the results of this study can be generalized only to civil servants only and not applicable to private organizations and statutory bodies' employees.

This study is also limited by the three independent variables of trust, knowledge sharing attitude and reward and the dependent variables of knowledge sharing. In addition, the respondent's assessment of the questions also is one of the limitations of the study. Regression analysis have verified that the factors of trust, attitudes and rewards can only explain 36.5% of the factors that influence knowledge sharing in land and offices in Selangor. So there are other factors such as awareness, ICT usage, management support, job satisfaction and personality which also influence knowledge sharing. For example a study by (Ismail & Yusof, 2006) shows that awareness, ICT application, job satisfaction and personality are among the factors that affect knowledge sharing among government servants in Malaysia.

The time provided to conduct this study is only limited to four months (June to November) that is also a limitation to this study. The time constraint have reduced the respondent's response rate (52.5%, n = 210). Therefore, if a more realistic time was provided, then the response rate might have increased.

5.5 Recommendations of the study

In the front-liner departments such as district and land offices, it is important to improve knowledge sharing practices among staffs due to several reasons. In the district and land offices, the management must realize that every staff poseses valuable knowledge. Therefore, efforts should be made to ensure knowledge is shared in order for it to be more meaningful to the organization. Certain knowledge aspects, such as land mapping knowledge, registration of land ownership, enforcement, and interpreting land codes are very important to be mastered by staffs at district offices. This knowledge is necessary because it forms the basis for the services offered at the land office. Most of these knowledge are difficult to be shared because it is in the form of tacit knowledge that dependents on the individual's experience. In addition, the loss of a source of knowledge in the land office can also occur when skilled personnel are transferred or retired from the civil service.

First of all, the management should demonstrate its support to inculcate the knowledge sharing habits among staffs. Several techniques can be applied by the management to promote knowledge sharing such as by acknowledging the knowledge contributions made by the workers and promote their reputation. Organization should structure a proper incentive, reward and recognition that can be

provided to those who are involve in the knowledge sharing process. Furthermore, management should also highlight the improved organization performance as a result of knowledge sharing.

Secondly, the management at land and district office should also focused on improving the knowledge sharing attitude among staffs. Managers should ensure that the office environment is conducive for knowledge sharing such as by introducing knowledge management systems that facilitate collaborative work and support knowledge sharing. Among the measures that could be considered, includes the creation of community of practice, mentor mentee program and knowledge forum as outlined in the MAMPU knowledge management blueprint (2011). The benefits of conducting these programs are the opportunity of learning from shared experience through best practices; and as first-hand knowledge transfer from mentor to mentee. In addition. These progrmas also serve as an entry point for connecting people to people, people to document and vice versa. Furthermore, these activities will make the experience of sharing knowledge more pleasant and enjoyable among staffs.

Thirdly, the management at the land and district office should also increase the awareness of employees in the importance knowledge sharing. The current mind set of people needs to be changed from regarding knowledge as a source of personal power to the importance of sharing knowledge in order for it to be meaningful to the organization. This paradigm shift will ensure that knowledge are being utilised by the organization for its benefit. Knowledge sharing activities such as regular knowledge sharing sessions and knowledge sharing fairs might increase employee's awareness on knowledge sharing. In addition, knowledge sharing exhibition is another activity

which should be considered to be held in order to display the latest technology and method available in the organization.

Next, human resource policy should be implemented cautiously to avoid the loss of valuable knowledge to the organization. Human resource activities such as transferring and promoting staffs should not be done indiscriminately as this could result in the loss of valuable tacit knowledge to the organization. Human resource manager should also plan ahead by ensuring staffs that hold valuable knowledge are retain or at least they documented or share their knowledge before leaving the organization.

Lastly, improvement on the study can be conducted by future researchers by studying other factors which influence knowledge sharing such as awareness, ICT usage, management support, job satisfaction and personality. A qualitative research can be conducted through interviews to gain further indepth findings on the knowledge sharing practices in the public sector. Future study on other factors of knowledge sharing will increase the contribution on the study of knowledge sharing particularly in the Malaysian public sector.

5.6 Conclusion

As a conclusion, this study has achieved its objective, and was able to answer the research questions for this research. The findings of the study have shown that demographic factors such as age, length of service and education level do not significantly influenced on the level of knowledge sharing at district and land offices

in Selangor. Therefore, knowledge sharing is equally practiced by staffs at district and land offices regardless of these demographic factors.

In addition, the factors of knowledge sharing attitude and reward have significantly influenced knowledge sharing practices among staffs at district and land offices in Selangor. However, the factor of trust does not significantly influenced knowledge sharing at district and offices in Selangor. Based on the findings, this study has discussed the research hypothesis and provides several recommendations towards the organization and for future research.

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