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KNOWLEDGE SHARING PRACTICES IN A LOCAL PUBLIC TRAINING INSTITUTE

Annie Liaw

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KNOWLEDGE SHARING PRACTICES IN A LOCAL PUBLIC TRAINING INSTITUTE

ANNIE LIAW

This project is submitted in partial fulfilment of the requirements for the degree of Master of Science in Human Resource Development

Faculty of Cognitive Sciences and Human Development
UNIVERSITI MALAYSIA SARAWAK
(2014)

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ABSTRACT

KNOWLEDGE SHARING PRACTICES IN A LOCAL PUBLIC TRAINING INSTITUTE

This study explores knowledge sharing practices in a public training institute in Sarawak, from the aspects of the importance of knowledge sharing, types of knowledge shared, problem faced in knowledge sharing, ways to promote knowledge sharing, and the personality traits of knowledge sharers in the institute. This study is conducted qualitatively. The sampling method used is purposive sampling based on informants' demographic backgrounds and job descriptions. Eight informants were involved in providing data through open-ended survey and personality tests. This study has successfully met the research objectives. The importance of knowledge sharing, the types of knowledge shared, the problem faced in knowledge sharing, ways to promote knowledge sharing, and personality traits of knowledge sharers are identified and discussed extensively in the report. The findings of this research contribute to the knowledge, the practitioners, methodology and the policy related to knowledge sharing. It also comes out with recommendations for future researchers and the top management to enhance knowledge sharing in the organization.

ABSTRAK

AMALAN PERKONGSIAN ILMU DI SEBUAH INSTITUT LATIHAN AWAM TEMPATAN

Kajian ini dilakukan untuk meninjau amalan perkongsian ilmu di sebuah institut latihan awam di Sarawak dari aspek kepentingan perkongsian ilmu, jenis ilmu yang dikongsikan, masalah-masalah yang dihadapi dalam perkongsian ilmu, cara-cara untuk menggalakkan perkongsian ilmu dan tret personaliti di kalangan orang yang berkongsi ilmu di institut tersebut. Kajian ini diadakan secara kualitatif. Kaedah persampelan adalah persampelan bertujuan berdasarkan latar belakang demografik dan deskripsi tugas pemberi maklumat. Lapan orang telah terlibat sebagai pemberi maklumat melalui soal selidik jawapan terbuka dan ujian personaliti. Kajian ini telah berjaya mencapai objektifnya. Kepentingan perkongsian ilmu, jenis ilmu yang dikongsikan, masalah-masalah dalam perkongsian ilmu, cara-cara menggalakkan perkongsian ilmu dan tret personaliti orang yang berkongsi ilmu telah dikenalpasti serta dibincangkan secara terperinci dalam laporan ini. Dapatan kajian ini menyumbang kepada ilmu, pengamal, metodologi kajian dan polisi yang berkaitan dengan perkongsian ilmu. Turut disertakan syor kepada pengkaji lain pada masa akan datang, serta pihak pengurusan tertinggi bagi meningkatkan perkongsian ilmu di dalam organisasi berkenaan.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter provides an insight into the research area of the paper. The chapter starts with discussing the background, followed by the problem statement, objectives, research questions and the definition of terms used throughout the study. The chapter ends with a summary.

1.1 Background of the Study

According to Nonaka (1994), knowledge exists in tacit and explicit forms. Explicit knowledge is formal, systematic and can be codified. On the other hand, tacit knowledge is personal, intangible and embedded in people's mind through the process of learning and experiences (Polanyi 1996, 1998 as cited in Sandhu, Jain & Ahmad, 2011).

There are several perspectives of knowledge as explained by Wu and Zhu (2012). For instance, knowledge as a state of mind; knowledge as a thing or an

object independent of human action; knowledge as a process and centers of applying expertise; knowledge as a condition of access to information; and knowledge as a capability builds on capability. A latter perspective theorized that knowledge has a potential to build intangible assets and intellectual capital.

Indeed, the concept of knowledge in organizations has become popular in literature, with knowledge being considered as the most critical and strategic resource for the organizations to gain sustainable competitive advantages in today's knowledge-based economy (Ipe, 2003; Wang & Noe, 2010; Sandhu, Jain & Ahmad, 2011; Wu & Zhu, 2012). As knowledge is recognized as a crucial resource in organizations, organizational knowledge must be organized in a way that it is easy to access and retrieve. For that reason, knowledge management is important to facilitate the flow of knowledge in the organizations. Organizations must emphasize on the effort to exploit knowledge-based resources that exist within the organization and find ways to transfer the knowledge from experts to the other members (Wang & Noe, 2010).

According to Nordin, Daud and Meor Osman (2012), the introduction of the concept of knowledge management by Davenport in 2008 has attracted increasing attention ever since; in which many organizations especially those who are in knowledge-intensive industries have introduced knowledge management systems in their effort to use knowledge resource more effectively and efficiently. Relatively, Amayah (2011) mentioned that knowledge sharing is the integral part of knowledge management. However, there is no all-round definition of

knowledge sharing as argued by Wu and Zhu (2012). This is especially true as there are literary reviews on knowledge sharing suggest various definitions of knowledge sharing based on researcher's point of view.

There are several definitions of knowledge sharing by some researchers which conclude that it as a provision or receipt of knowledge in the form of information, know-how and feedback (Cummings, 2004), that help others and to collaborate with others to solve problems, to develop new ideas, or to implement policies or procedures (Wang & Noe, 2010). Knowledge sharing involves communicating knowledge within a group of people to make knowledge available to others within the organization (Ipe, 2003; Cheng, Ho & Lau, 2009), in which the knowledge held by individual is converted into a form that can be understood, absorbed and used by other individuals (Ipe, 2003).

Despite the fact that there is no all-round definition for knowledge sharing, it is undeniably important as it provides a link between individuals in the organization; and as in a bigger picture, it contributes to knowledge flow for economic sustainability. In this regard, Malaysia has formulated its Knowledge Based Economy Master Plan in 2002 to expedite the transition in the area of human resource, physical and institutional infrastructure, and science and technology capability. The shift to the knowledge based economy is part of a wider plan to achieve the objective of the nation's Vision 2020. For that purpose, Knowledge Based Economy Index was developed as a monitoring tool in achieving the knowledge-based economy, which involves computer infrastructure,

education and training, research and development (R&D), and technology (Economic Planning Unit, 2002).

The plan on knowledge management in the public sector in particular indicates the government's awareness that our nation can no longer rely on input driven strategy, but must transform in order to recognize knowledge as an important source to remain competitive. Economic Planning Unit (2002) also mentioned that the civil service has two basic functions to perform in the development of a knowledge-based economy: firstly, to facilitate the development of the economy, and secondly, to develop itself into a knowledge-based civil service.

In the context of an organization, it is important to know organization members' perceptions and their willingness to share knowledge, as well as how the organization can facilitate the knowledge sharing behavior towards achieving desirable and profitable effects. Therefore, this study attempts to explore knowledge sharing practices among staff in a local public training institute. The discussion is concerned with the importance of knowledge sharing among the organization members and with their clients, the types of knowledge they shared, the problems they faced during knowledge sharing, as well as the ways to promote knowledge sharing in a public training institute.

Other than that, previous studies also have indicated that it is essential that leaders in public sectors understand personality in order to maintain trust and

loyalty of the group in order to fit people into the right roles as mentioned by Abdul Manaf and Ahmad Marzuki (2009), and to improve organization's approach in motivating employees to achieve higher performance (Lin, 2007 as cited from Wang & Noe, 2010). Hence, this study also seeks to assess the personality traits of knowledge sharers in the selected organization.

1.2 Problem Statement

As explained in the previous section, knowledge sharing is crucial to ensure that individual and institutional knowledge are properly and strategically managed in order to become an excellent organization, in parallel with knowledge-based economy agenda. Numerous studies have been conducted quantitatively in various contexts of knowledge management within organizations. However, most of the past studies were conducted in transnational organizations (Joji, 2013), and in foreign countries (i.e. Matzler, Renzl, Muller, Herting & Mooradian, 2008; Lauring & Selmer, 2012; Akhavan, Rahimi & Mehralian, 2012; Fullwood, Rowley & Delbridge, 2013) which may not describe the practices in local contexts.

Whilst there is prevailing recognition of the importance of knowledge sharing to organizations and wide discussions on knowledge management, there is little study on both knowledge management and knowledge sharing within public sectors in developing countries including Malaysia (McAdam & Reid, 2000 as cited in Ismail & Mohammad Yusof, 2008; Salleh & Syed Ahmad, 2006, as cited

in Abdul Manaf & Ahmad Marzuki, 2009). Furthermore, very little literature is found on knowledge sharing practices in public training institutes despite that knowledge sharing is relevant to them as they provide and deal with knowledge. Therefore, this study seeks to assess knowledge sharing practices in a local public training institute.

Additionally, organizations need to consider the characteristics of employees who have a positive attitude toward knowledge sharing that can most effectively facilitate knowledge management (Hutasuhut, 2007) as understanding employee personalities will improve knowledge management practise (Amayah 2011) and make a substantial difference in the way organization approach and motivate their employees to achieve higher performance (Lin, 2007 as cited form Wang & Noe, 2010).

Although many researchers have studied personality traits and its relationship with variety of managerial and organizational factors, only a few studies have examined the aspects of personal characteristics such as personality traits that may have impact on knowledge sharing intention and its role in one's motivation to share knowledge (Hutasuhut, 2007; Amayah, 2011). Hence, this study also examines the personality traits of knowledge sharers in the organization.

1.3 Research Objectives

1.3.1 General Objective

This research is conducted to explore knowledge sharing practices in a local public training institute, and generate recommendations to promote knowledge sharing in the organization.

1.3.2 Specific Objectives

The specific objectives are:

i. To assess staff's perceptions on the importance of knowledge sharing in a public training institute;

ii. To identify the types of knowledge shared by the staff in a public training institute;

iii. To investigate problems faced by the staff in a public training institute in sharing their knowledge;

iv. To identify ways to promote knowledge sharing in a public training institute; and

v. To find out the personality traits of knowledge sharers in a public training institute.

1.4 Research Questions

In order to achieve the objective of the study, the following research questions have been developed.

i. How is knowledge sharing important in a public training institute?

ii. What are the types of knowledge being shared by the staffs in a public training institute?

iii. What are the problems faced by the staff in a public training institute during knowledge sharing?

iv. How to promote knowledge sharing in a public training institute?

v. What are the personality traits of knowledge sharers in a public training institute?

1.5 Definition of Terms

1.5.1 Knowledge

i. Conceptual: Information processed by individuals including ideas, facts, expertise and judgments relevant for individual, team and organizational performance (Wang & Noe, 2010).

ii. Operational: Information including idea and expertise processed by individuals in a public training institute that are relevant to their specific job.

1.5.2 Knowledge Sharing

i. Conceptual: Provision or receipt of knowledge in the form of information, know-how and feedback (Cummings, 2004) to collaborate with others to solve problems, develop new ideas, or implement policies or procedures (Wang & Noe, 2010).

ii. Operational: The process to communicate knowledge from source to recipient in a public training institute.

1.5.3 Personality Traits

i. Conceptual: 'Personality' describes the patterns of behaviour, thought and emotion that make a person unique (British Broadcasting Corporation, 2014). There are five principal dimensions that explain most of the variance in personality known as the Five Factor Model of Personality that comprises of extraversion, agreeableness, conscientiousness, neuroticism and openness (Amayah, 2011; Raducanu, 2012).

ii. Operational: Individual's characteristics which permits prediction of individual's behavior, thought and emotion in certain situations. In this study, the Five Factor Personality (also known as the Big Five Inventory) is used to identify personality dimensions (extraversion, agreeableness, conscientiousness, neuroticism and openness).

1.5.4 Public Training Institute

i. Conceptual: Public is "related to the government and the services it provides for the people"; training is "the process of teaching or being taught the skills for a particular job or activity"; and institute is "an organization that has a particular purpose such as scientific or educational work, or the building where this organization is based" (Longman Dictionary, 2005).

ii. Operational: A government organization that provides training programs to adult learners.

1.6 Summary

This chapter explains the background of the study and the need to conduct the study, as well as the objectives and research questions plotted to guide the development of the study. This chapter also provides definition of terms used in the study. Next chapter provides discussions on literature review that are related to the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter provides discussions of past studies by other researchers that are related to this field. Main findings and appropriate information from their research are discussed and cited in this chapter. The chapter ends with a summary.

2.1 Findings from Past Studies

2.1.1 The Importance of Knowledge Sharing

A review on various literatures (Gurteen, 1999; Sandhu, Jain & Ahmad, 2011; Ismail & Mohammad Yusof, 2008; Azudin, Ismail & Taherali, 2009; Cheng, Ho and Lau, 2009; Abdul Manaf & Ahmad Marzuki, 2009; Fullwood, Rowley & Delbridge, 2013; Akhavan, Rahimi & Mehralian, 2013; Nordin, Daud & Meor Osman. 2012) implicates the importance of knowledge sharing in organizations. There are several advantages of knowledge sharing discussed by the researchers. In his article Gurteen (1999) mentioned that the application of

new knowledge from knowledge sharing activities is the source for sustainable competitive advantage. He also mentioned that knowledge sharing plays an important role for knowledge retention and prevent knowledge lost when individuals who have the expertise leave the organization. This view is supported by Sandhu, Jain and Ahmad (2011), and Zhang, Li and Shi (2005), as cited in Ismail and Mohammad Yusof, (2008), who said that knowledge sharing minimizes organizational dependency on individuals who have a knowledge by changing individual knowledge into organizational knowledge; therefore when individuals leave the organization, the crucial knowledge loss can be minimized.

Furthermore, knowledge sharing is important to enhance performance and improve work quality within organizations (Azudin, Ismail & Taherali, 2009; Cheng, Ho & Lau, 2009). Azudin, Ismail and Taherali (2009) also stated that knowledge sharing also enables both parties (sharer and recipient) not only to retain information, but "amplify and expand the knowledge through an exchange process". In addition to that, in the context of public sectors, Abdul Manaf and Ahmad Marzuki (2009) mentioned that government agencies need to emphasize on knowledge sharing to enhance its effectiveness to build sustainable and competitive government organizations.

Fullwood, Rowley and Delbridge (2013) on the other hand, indicate that organization members' positive attitudes towards knowledge sharing are related to their belief that knowledge sharing would improve and extend individual's relationships with colleagues. Meanwhile, Skyrme (2000), as cited in Akhavan,

Rahimi and Mehralian (2013) listed numerous benefits of knowledge sharing including time reduction in the work process, reducing costs, and improvement of customer services. In addition to that, Nordin, Daud and Meor Osman (2012) claimed that "valuable knowledge can be disseminated effectively and efficiently through the process of knowledge sharing".

2.1.2 The Types of Knowledge Shared

Several researchers (e.g. Abdul Manaf & Ahmad Marzuki, 2009; Raducanu, 2012; Akhavan, Rahimi & Mehralian, 2013) have analyzed the types of knowledge that are being shared in organizations using the knowledge typology by Nonaka (1994) to explain the categorizations of knowledge into explicit and tacit, as explained earlier in the first chapter of this paper.

Types of knowledge shared are also discussed in the perspectives of formal and informal knowledge (Abdul Manaf & Ahmad Marzuki, 2009; Azudin, Ismail & Taherali, 2009; Smith & McKeen, 2002). Abdul Manaf and Marzuki (2009) mentioned that knowledge sharing takes place in both formal and informal methods; through face-to-face interactions (i.e. courses, seminars, workshop, events, team projects) and virtual communications (i.e. teleconferences / videoconferences, e-meetings, online courses, web-based collaborative).

In addition to that, Azudin, Ismail and Taherali (2009) in their study on knowledge sharing among workers through informal communication also stated

that both formal and informal knowledge are being shared in the workplace. They also emphasized that informal knowledge sharing such as through conversation during lunch hour, is helpful to build trust and strengthen relationships between the colleagues; therefore they suggested that the management should encourage the sharing of informal knowledge along with formal knowledge in organizations.

The sharing of formal and informal knowledge is also mentioned by Smith and McKeen (2002). They stated that knowledge sharing can occur through many different media including conversations, meetings, processes, best practices, data bases and questioning.

2.1.3 Problems in Knowledge Sharing

There are several problems faced during knowledge sharing process in the organizations as mentioned by previous researchers. A prominent study that was done by Riege (2005), listed the problems of knowledge sharing as individual barriers, organizational barriers and technological barriers. His findings were also discussed by other researchers (i.e. Chen, Sandhu & Jain, 2009; Sandhu, Jain & Ahmad, 2011) which explained the problems faced in knowledge sharing.

At the individual level, some of the barriers identified by Riege (2005) are general lack of time to share knowledge, apprehension of fear for job security, low awareness on the benefits of knowledge sharing, dominance in sharing explicit knowledge over tacit knowledge, use of strong hierarchy or formal power,

differences in experience level, lack of contact time and interaction, poor verbal and interpersonal skills, age differences, gender differences, lack of social network, differences in education levels, lack of trust in people, fear of not receiving recognition, lack of trust in knowledge source accuracy and cultural differences.

At the organizational level, Riege (2005) outlined that the barriers to knowledge sharing as unclear integration between knowledge management initiatives into organization's goals, lack of leadership and managerial direction, shortage of formal and informal spaces to share knowledge, lack of transparent rewards and recognition systems, unsupportive corporate culture, low priority on knowledge retention on experienced staff, shortage of appropriate infrastructure, deficiency of company resources for adequate sharing opportunities, high competition within business units or functional areas and between subsidiaries, restricted communication and knowledge flows, restrictive work environment or layout of work areas, hierarchical organization structure and size of business unit.

Meanwhile, technology barriers as highlighted by Riege (2005) are lack of integration of information technology (IT) systems and processes, lack of technical support, lack of maintenance of integrated IT systems, people's unrealistic expectation on IT, lack of compatibility between diverse IT systems and processes, mismatch between need requirements and IT system, people's reluctant to use IT systems and lack of training for familiarization of IT systems and processes.

In addition to the three categories of barriers in knowledge sharing as listed earlier by Riege (2005), Chowdhury (2006) as cited in Azudin, Ismail and Taherali (2009) argues that trust is one of the most challenging barriers that hinders people to share their knowledge in Asia, by saying that "people basically do not trust each other, and, the knowledge that they possess. People are also lack of confidence to share and exchange expertise." Another factor mentioned by Azudin, Ismail and Taherali (2009) on the problems in knowledge sharing in Asia is people's fear of being penalised and the perceptions that sharing knowledge will make them lose out in some way.

Meanwhile, Burges (2005) as cited in Raducanu (2012) argues that problems in knowledge sharing occur as there is a tendency that an organization will focus mainly on tools or tasks that enables knowledge sharing and pay less attention to the interactions between people and their characteristics and motivations as knowledge facilitators. Consequently, knowledge sharing is still a challenge as knowledge are embodied in individuals who make choice about sharing their knowledge (Bock et al., 2005 as cited in Raducanu, 2012). Mindset of firm members, communication in the firm, the firm's structure, relationship among firm members, and human resource management are the other knowledge sharing barriers observed by Nonaka (1994).

2.1.4 Promoting Knowledge Sharing

Numerous studies (i.e. Riege, 2005; McDermott & O'Dell, 2001; Smith & McKeen, 2002; Liu & Cheng, 2007; Fullwood, Rowley & Delbridge, 2013; Cheng, Ho & Lau, 2009; Lee & Lim, 2013; Sohail & Daud, 2009; Gurteen, 1999) have discussed the ways to promote knowledge sharing in order to overcome and reduce problems related to knowledge sharing in the organizations.

Riege (2005) provides some suggestions on how to overcome the individual, organizational and technological barriers as mentioned in the previous subsection. According to him, a knowledge sharing strategy may not necessarily need formal mechanisms as collaboration often occurs among organization members in any given informal situations. He claimed that people share knowledge "not because the manager tells them to do so but because internal business environments have become more competitive and fast moving and people increasingly depend on each other's knowledge to complete their job". Therefore, organizations should improve their knowledge management strategies to encourage communications, as well as expanding formal and informal networks that already exist in the organizations in order to retain professional knowledge. This opinion is consistent with McDermott and O'Dell (2001) who claimed that combination of human networks is the key to knowledge sharing; therefore it is important to support and leverage knowledge in those networks to better promote knowledge sharing.

Other than that, McDermott and O'Dell (2001) suggested that organizations should make knowledge sharing directly part of the business strategy in order to promote knowledge sharing through several mechanisms including best practices and knowledge centers. Meanwhile, Smith and McKeen (2002) mentioned that organizational culture change is needed to put a high value on knowledge sharing culture. They also stated that there must be a compelling vision linked to the organization's strategy and management attention to motivate people to share their knowledge. In addition to that, Liu and Cheng (2007) suggested that organizations should create suitable climate to encourage more knowledge sharing within the organization by providing their team members the influence over decision making and encourage frequent interactions among them.

Reward and recognition is another way to make the importance of knowledge sharing visible (McDermott and O'Dell, 2001). Likewise, Fullwood, Rowley and Delbridge (2013) captured that rewards, norms and anticipated contribution improve knowledge sharing behavior. This is consistent with another recent study on knowledge sharing in academic institutions in Malaysia by Cheng, Ho and Lau (2009) which found that appropriate incentive systems and personal expectations regarding the value of knowledge sharing are important in cultivating sharing behavior amongst academicians. Lee and Lim (2013) also mentioned that the majority of informants in their recent study perceived that rewards can motivate them to share knowledge with others.

While human aspect is important, technological aspects also deserve some consideration in promoting knowledge sharing activities (Sohail & Daud, 2009). Hendrick (1999) as cited in Sohail and Daud (2009) suggested that ICT is helpful to enhance knowledge sharing by lowering temporal and spatial barriers between knowledge workers, and improving access to information about related knowledge that they need. Gurteen (1999) also claimed that technology plays an important role and is a key part of changing the corporate culture to knowledge sharing culture, as it enables quick and effective knowledge sharing and with collaboration within organizations.

2.1.5 Personality Traits of Knowledge Sharers

A few studies have examined the relationship between personality traits and motivation to share knowledge. According to Matzler et al (2008), of the five personality traits, openness to experience was the strongest predictor of knowledge sharing. However, according to Wang, Noe and Wang (2011) as cited in Amayah (2011), in organizations which evaluate employees on knowledge sharing and reward them for sharing knowledge, individuals with higher levels of openness were less likely to engage in knowledge sharing behavior. The authors suggested that the differences may be due to the fact that individuals with high levels of openness tend to seek knowledge, rather than share it.

Findings from previous studies also show that extraversion consistently has a positive relationship with knowledge sharing. Extravert individuals tend to

share knowledge whether or not they would be held accountable and rewarded for it (Wang et al., 2011 as cited in Amayah, 2011). Awad and Ghaziri (2004) as cited in Ismail and Mohammad Yusof (2008) also mentioned that employees who are extroverts, self-confidence and feel secured have more tendencies to share their experience and knowledge compared to those who are introverts, self-centered or security conscious.

Matzler et al. (2008) also found that agreeableness was positively related to knowledge sharing, as people with high levels of agreeableness are friendly, generous and willing to help others. The authors also mentioned that the elements of helpfulness, cooperation, collaboration and good interpersonal relationship with others in the agreeableness dimension are parallel with knowledge sharing intention. Similarly, conscientiousness, which is known as predictor of work performance, was also found to be related to knowledge sharing (Matzler et al., 2008). Cho (2007) as cited in Abdul Manaf and Ahmad Marzuki (2009) also mentioned that conscientiousness is related to commitment and has influence on knowledge sharing.

Meanwhile, neuroticism which refers to tendency of negative emotions such as anxiety, anger or guilt was found to have no significant relationship with intention to share knowledge in all studies cited in this paper. Raducanu (2012), for instance mentioned that neurotic individuals are experiencing negative emotions, therefore they are less likely to interact and engage in knowledge sharing activities.

2.2 Summary

This chapter provides review on the literature related to the study. Based on the review, there are already several research work done on the importance of knowledge sharing, the types of knowledge being shared, the problems faced during knowledge sharing process, ways to promote knowledge sharing, and the personality traits that are related to knowledge sharing behavior in organizations. However, most of the works cited in the review were conducted using quantitative method. Therefore, there is a need to do an in-depth analysis of knowledge sharing practices in the organization using qualitative methodology.

It is also necessary to explore on the types of knowledge being shared in a local public training institute as their knowledge community (including the stakeholders and trainees) are different from those in the previous studies, which mostly focused on the organization members or among colleagues.

Other than that, there is also a need to understand the specific problems or barriers faced by the staff when sharing their knowledge, as well as the personality traits of knowledge sharers in a public training institute in order to come out with specific recommendations based on the analysis. Next chapter clarifies the methodology used in conducting this research.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter provides an insight of the research design used in this study. It elaborates population, sample and sampling technique used for the study, as well as data collection method and procedure involved in data collection. Explanations on the research instrument are also detailed out together with validity and reliability measures taken. This chapter also discusses data analysis procedure used and the research timeline for completing the study. The chapter ends with a summary.

3.1 Research Design

This is a case study conducted qualitatively to explore and get an in-depth understanding on the issue related to knowledge sharing practices in a public training institute. The focus of this study is to answer "what" and "how" questions related to knowledge sharing practices in the organization. The unit of

analysis is individual, as this study attempts to assess individual's perception of the observed phenomenon.

Creswell (2009) presented the characteristics of a qualitative study. One of the criteria mentioned was qualitative research which is done in its natural setting or the actual site. It is here that the informants experience the issue which is being studied. Other than that, Creswell (2009) also mentioned that "qualitative research is a form of interpretative inquiry in which researchers make an interpretation of what they see, hear and understand". Meanwhile, Yin (2003) as cited in Baxter and Jack (2008) mentioned that a case study approach should be used when a researcher seeks to get the answer for "how" and 'why" questions; hence this cannot manipulate the behavior of those involved in the study, and inclined to cover contextual conditions relevant to the phenomenon under study.

In order to avoid the common pitfall associated with case study such as a tendency for the researcher to attempt to answer a question that is too broad or a topic that has too many objectives for a single study as mentioned by Baxter and Jack (2008), the case is confined to a specific local public training institute. This is to ensure that the study maintains its reasonable scope. This particular place of study is chosen as there was not much study found in the same setting, as explained earlier in the problem statement section.

3.2 Population and Sample

The population of this study is the organization members in a public training institute in Sarawak. The institute is a branch office that caters for training for the local community. Its current employment is 16 people, working as trainers and administrative staff. The researcher aimed to obtain half of the population (8 informants) as samples in this study.

3.3 Sampling Method

Purposive sampling method is used in this study. Informants were chosen based on their demographic backgrounds and job descriptions. The researcher purposively select the informants form various demographic backgrounds to represent the population.

3.4 Instruments

The instruments used for data collection in this study are open-ended survey and personality test. Research instruments used for each research question are shown in Table 3.1.

Table 3.1 Research Instrument Used for Each Research Question

Research Question	Instrument
1	Self-report open-ended survey
2	Self-report open-ended survey
3	Self-report open-ended survey
4	Self-report open-ended survey
5	Self-assessment and peer-assessment personality tests

3.4.1 Open-ended Survey

For this study, primary data collection instrument used is open-ended survey as replicated from previous study by Joji (2013). The open-ended survey questionnaire is adopted because it is the most recent instrument used to explore knowledge sharing practices in a public higher learning institution, which is almost similar to the nature of work of the population targeted for this study.

Open-ended survey is used as it provides more freedom to informants to express their opinions and enable them to focus on providing answers from their own perspectives without being dominated by interviewer or interfered by unrelated conversations as compared to interview. As this method is explorative in nature, it often leads the researcher to discover issues that is not expected beforehand (Wade, 2010 as cited in Joji, 2013). Apart from that, due to time limitation, using open-ended survey is more convenient as informants are able to manage their own time to provide answers.

The open-ended survey questionnaire consists of two parts; Part A includes warm-up questions and followed situational questions for each objective; Part B on informant's demographic information. Questions were asked to investigate the importance of knowledge sharing, the types of knowledge being shared with superior, colleagues and trainees, problems related to knowledge sharing, and ways to promote knowledge sharing in a public training institute.

The survey questions were prepared in both English and Malay language, to ensure that all informants can fully understand the questions and therefore are able to provide their best answers in any of the language that they preferred. The survey took approximately 30 to 40 minutes to be completed. However, a one-week time was given to the informants to allow them to complete the survey at any time of their convenience.

3.4.2 Personality Test

The second instrument used in this study is personality test adopted from John (1992) as cited in John and Srivastava (1999) known as "The Big Five Inventory" or the "Five Factor Personality Test", as it is more formally known. The traits it measure are extraversion, agreeableness, conscientiousness, neuroticism and openness.

According to British Broadcasting Corporation (2014), the Five Factor Personality Test is one of the most common tools used by psychologists who

study personality; and generally acknowledged as the most stable measure of personality over time, if compared to most personality scales. The questions in the Five Factor Personality Test are grouped together to test how people react and determine their preferences with respect to concepts, ideas and situations. Their answers are scored in accordance to an established scale and are averaged to discover their overall score for that trait.

The test was conducted in two parts. Part A consists of 44 questions that measure informant's perception about themselves by indicating the strength of their agreement using the scale of 1 to 5, in which 1 being strongly disagree and 5 being strongly agree. Meanwhile Part B consists of the same 44 questions completed by a peer, to measure the colleague's perception about the informant. The questions were prepared in both English and Malay languages, to ensure that all the informants fully understand the questions and therefore could answer accurately. Each test took less than 10 minutes to be completed.

3.5 Pre-test

Prior to the actual data collection, a pre-test was conducted to one of the staff of the same organization. The individual was not included as informant in this study. The reason to conduct the pre-test was to detect and eliminate problems, and make amendments accordingly to improve the readability of the instruments.

3.6 Validity and Reliability

According to Sekaran and Bougie (2009), validity is a circumstance of how well an instrument measures the particular concept it attempts to undertake. Creswell (2009) stated that validity is one of the strengths of qualitative research based on determining whether the findings are accurate. The primary validity strategies introduced by previous researchers include triangulation of data sources, spend prolonged or intense exposure to the phenomenon, member checking, and detailed description (Baxter & Jack, 2008; Creswell, 2009). Additional strategies including peer examination, double coding (Baxter & Jack, 2008), peer debriefing, and use external auditor to review the project (Creswell, 2009) are also useful to increase validity or credibility of the research.

Reliability, on the other hand is a test of how consistently the instrument measures the concept it is measuring to ensure consistent measurement across time and across the various items in the instrument (Sekaran & Bougie, 2009). Transcripts checking, coding checking and inter-coder agreement (or cross-checking) are examples of reliability measures mentioned by Creswell (2009).

3.6.1 Validity

For this study, various measures has been taken to ensure that it reach validity. For example, expert advice from the research supervisor was obtained

from time to time to get the best opinion to ensure that the instruments used in this study are accurate and error free. Peer review was also done to test readability and understanding on the instruments. A pre-test as explained earlier was also conducted to confirm validity of the instruments.

Additionally, as mentioned by Baxter and Jack (2008), a researcher may also perform member checking, in which the researcher share and discuss about data interpretations with the participants. This provides opportunity for the participants to clarify and contribute new or additional perspectives on the issues which are under study. Therefore, for this study, member checking was also conducted to check the accuracy of the data interpretations. Some additional information was obtained from the exercise.

3.6.2 Reliability

In the data collection procedure, reliability measure was performed by conducting the personality test through self-assessment and peer-assessment, and the results were compared to check its consistency. Other than that, the researcher also seeks expert advice from the research supervisor and course lecturers for their guidance and views in performing the data analysis. Furthermore, inter-coder analysis involved another analyst (a peer) was also done to reduce potential bias during analysis process.

3.7 Ethics

Sekaran and Bougie (2009) mentioned about ethical issues that a researcher should address while collecting and representing research data. Some of the important issues the authors highlighted were researcher's responsibility in treating information provided by the informants as private and confidential, to present accurately the purpose of the study to the informants, not to socialite personal or intrusive information, not to force informants to respond or provide information, and to ensure there is no misrepresentation or distortion in reporting the data.

Therefore, various measures have been taken regarding ethics in this study. The purpose of the study, procedures involved, potential risks and benefits, confidentiality, participation and enquiry were all stated in the Informed Consent Form and were explained to the informants before they participate in the study. Apart from that, all information provided were treated as fully confidential and were not disclose to any other person without informant's permission. Informants' identities were also treated with high sensitivity to avoid soliciting them to any personal or apparently intrusive information. The researcher also conducted member checking as explained earlier to ensure that there is no bias and misrepresentation in reporting the data.

3.8 Data Collection Procedure

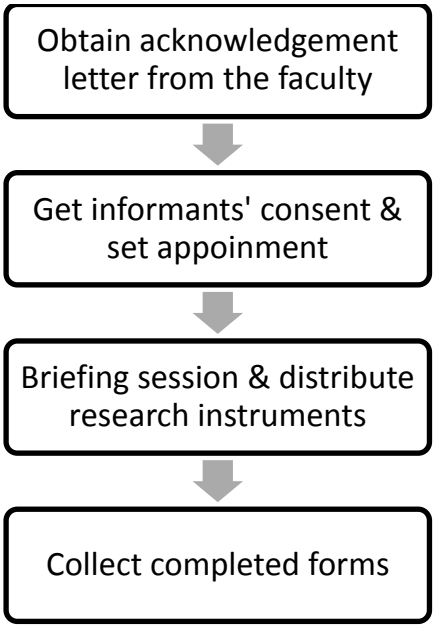

Figure 3.1 Data Collection Procedure

To collect the data, a letter of acknowledgement from the faculty was obtained for permission to conduct the study in the selected organization. Upon receiving the consent from the head of department, an appointment was arranged to conduct a briefing session on November, 8, 2013. The briefing was to explain the objectives and research instrument. Seven out of eight targeted informants attended the briefing; while another one informant was unable to attend due to prescheduled official duty.

Informed Consent Forms were also distributed to all participants during the briefing session. Informants were given two sets of forms to obtain their agreement in becoming the informants in this study, and to ensure that they

understand the content and their rights as informants. In the briefing session, the researcher explained the terms verbally to make sure that the informants truly understand the terms and conditions of the data collection process as stated. They were also required to read, understand and sign the forms if they agree to the terms and conditions as stated. A copy of the form is then kept by the researcher, and the other is kept by the informant.

The informants were also informed that only 40 to 60 minutes of their time are needed to complete the open-ended survey and the personality test. However, due to their busy schedule, the informants were given a one-week period from November, 8, 2013 until November, 18, 2013 to fill in both forms. The completed forms were then collected personally according to informants' availability. The majority of informants replied within the time frame given. Several follow-up interviews were also conducted in-person or by telephone, to get clarifications and additional information from some of the informants.

3.9 Data Analysis Procedure

Content analysis method is used to analyze data in this study. According to Sekaran and Bougie (2009), content analysis "enables the researcher to analyze large amounts of textual information and systematically identify its properties, such as presence of certain words, concepts, characters, themes, or sentences", in which the text is coded into categories and then analyzed using conceptual analysis or relational analysis.

In terms of steps taken in the data analysis procedure, according to Miles and Huberman (1994) as cited in Sekaran and Bougie (2009), there are generally three steps in qualitative data analysis, namely data reduction, data display, and the drawing of conclusions. Data reduction refers to the process of selecting, coding and categorizing the data. Data display refers to ways of presenting the data. Meanwhile drawing conclusions is to answer the research questions by determining the themes, as well as providing explanations for observed patterns and relationships, or making contrast and comparisons.

3.9.1 Data Reduction

Data reduction is the first step in data analysis which is done through coding and categorization (Sekaran & Bougie, 2009). The authors explained that 'codes' are labels given to units of text which are later grouped and categorized. The purpose of coding is to help researchers draw meaningful conclusions about the data. Meanwhile, data categorization is the process of organizing, arranging, and classifying coding units. During the process of categorizing the data into categories and subcategories, the researcher is able to notice patterns and relationships between the data.

Sekaran and Bougie (2009) also mentioned that sometimes the researcher may want to capture the number of times a particular theme or event occurs, or how many informants bring up certain themes or events. Quantification of the

qualitative data may provide the researcher with a rough idea about the importance of the categories and subcategories.

3.9.2 Data Display

Data display is the second major activity which the researcher should go through when analyzing qualitative data (Miles & Huberman, 1994 as cited in Sekaran & Bougie, 2009). Charts, matrices, diagrams, graphs, phrases or drawings may help the researcher to organize the data and to discover patterns and relationships in the data so that the figures are eventually facilitated. In this study, phrases, tables, figures and charts are used to display and illustrate the selected data.

3.9.3 Drawing Conclusions

This step is the "final" analytical activity in the process of analyzing qualitative data, and is the essence of data analysis (Sekaran & Bougie, 2009). At this point, the researcher provided themes and explanations about the data. Conclusions were then made based on the findings and discussions.

3.10 Research Timeline

Table 3.2 Research Timeline

Date	Activity
May 2013	Find topic
May – June 2013	Write chapter 1, 2 & 3
July 2013	Proposal presentation
August – September 2013	Amend and proof read report
October 2013	Develop instrument, review & pre-testing
October – November 2013	Data collection
November 2013	Data analysis, findings and discussion
December 2013	Final presentation
December 2013 – January 2014	Amend and proof read report
February 2014	Submit full report

3.11 Summary

This chapter explained the methodology used throughout this study. Justifications on each element of research design, data collection and data analysis techniques used are also explained. The next chapter discusses about the research findings of this study.

CHAPTER FOUR

RESEARCH FINDINGS

4.0 Introduction

This chapter provides elaborations on the research findings obtained from the informants through open-ended survey and personality test conducted. The chapter starts with information on informants' demographic background and brief introduction on each of the informant, followed by research findings which provide answers to each research question. The chapter ends with a summary.

4.1 Informants' Demographic Background

There are eight (8) informants involved in this study out of the total number of 16 employees in the organization. Therefore, half of the population is being studied. In this study, the numbers of males and females informants are four from each gender; in which four each represent the Training Unit and the Management Unit. There are various job descriptions among the informants, which represent core activities of their respective units, namely Training Unit and Management Unit. As staff of a training institute that provides training to local community,

their core activities involve training management, teaching and research; along with managerial activities to support their core business. Other activities include financial, administration and service management. Informants' demographic background is presented in the following Table 4.1.

Table 4.1 Informants' Demographic Background

Informant	Unit	Service Period	Gender	Age	Marital Status	Ethnic	Religion	Highest Education
1	Training	5 yrs	M	36	M	Iban	Christian	Bachelor Degree
2	Training	6.5 yrs	M	27	M	Malay	Muslim	STPM
3	Training	3 yrs	M	30	M	Bidayuh	Christian	Diploma
4	Training	2 yrs	F	43	M	Malay	Muslim	Diploma
5	Management	6 yrs	F	34	M	Malay	Muslim	Bachelor Degree
6	Management	1 yr	F	40	M	Iban	Christian	STPM
7	Management	9 mths	F	37	M	Malay	Muslim	Bachelor Degree
8	Management	5 yrs	M	28	M	Iban	Christian	STPM

From Table 4.1 above, it is observed that informants' service period in current organization ranged from less than a year to 6.5 years. The number of years they serve in current organization however does not reflect their actual working experiences as these service periods are concurrent with the establishment of the institute, which is about seven years back. It is also observed that the informants' ages ranged from 27 to 43 years old, and all of them are

married. The informants are from various ethnic groups – three Malays, four Ibans, and a Bidayuh. In term of highest education obtained, three informants are holding Malaysian Higher School Certificate (*Sijil Tinggi Pelajaran Malaysia* / STPM), two informants own a diploma, and three informants are bachelor degree holders. Brief introduction on each of the informant are provided in the following subsections.

4.1.1 Informant 1

Informant 1 is a trainer who has been working in the organization for five years. He is an expert in the field of rural management and finance. He is an Iban, Christian, married, and holds a Bachelor Degree. He perceived that knowledge sharing in a training institute is very important as it help to expand one's knowledge, as well as to enrich one's experience and exchange knowledge with other experts. To him, knowledge sharing enable both parties to learn new things that could make their daily work implemented in a better way. He is willing to share as much knowledge with his superior and colleagues; and to share with his trainees depending on their ability. On the other hand, he said that he is not willing to share knowledge in tense situations and when he thinks that the knowledge is already known to others. The problem in sharing knowledge to him is due to different opinions, which he believes can be improved by initiating further discussions. Other than that, to overcome the problem, he also listens and tries to rationalize other's opinion. According to him, supportive management and individual awareness are important to encourage knowledge sharing.

4.1.2 Informant 2

Informant 2 is also a trainer who has been working in the organization for six and a half years. He is a Malay, Muslim and married. He holds STPM, and is an expert in adult learning. He has a vast experience as a facilitator for rural management, village action plan workshops and rural tourism training. He mentioned that knowledge is eternal and has no boundary. Therefore sharing with others on a daily basis is very important in order for him to learn new things. According to him, individual knowledge must be shared and institutionalized so that it can benefit the organization. Therefore, he is willing to share whatever knowledge he has with his superior, colleagues, and trainees through discussion or conversation. However, to him, knowledge sharing might not be successful if someone put a negative mind set or barrier to the process. This informant indicated that differences in educational achievement, position and individual characteristics are the factors that hinder knowledge sharing. He is not willing to share knowledge when others disregard or disrespect him. Apart from formal events like seminar, he said that team building is beneficial to promote knowledge sharing as the team can build up on their strengths and remedies their weaknesses through this activity.

4.1.3 Informant 3

Informant 3 is another trainer who has been working in the organization for almost three years. His expertise is in the field of training management. He is a Bidayuh, Christian and married. Having a diploma, he perceived that knowledge sharing is a must in his job to improve his skills. To him, knowledge sharing is much easier than knowledge acquisition. Therefore he is willing to share knowledge through formal and informal activities, as long as the knowledge does not relate to others' sensitivities, in respect of their ethnicity and community values. He perceived that the management plays an important role to promote knowledge sharing. He also suggested that in-group activities and games to be used in small groups to ensure the effectiveness of knowledge sharing.

4.1.4 Informant 4

Informant 4 is another trainer in this organization. She is a Malay, Muslim and married. She is a diploma holder who has joined the organization for two years, and is an expert in management and implementation of training program. To her, knowledge sharing increases one's knowledge. She also said that sharing knowledge is useful among staff at different levels as it helps them to understand and perform their specific tasks and responsibilities. Therefore, she is willing to share her expertise with her superior, colleagues and trainees as long as the knowledge are not too personal. She also uses both formal and informal mechanisms to share knowledge with others.

4.1.5 Informant 5

Informant 5 has joined the organization for six years. She is a Malay, Muslim and married. She holds a bachelor degree in the field of administration, similar to what she is doing at work. Apart from administrative tasks, she is also one of the trainers in several series of training organized by the institute. She perceived that knowledge sharing is useful as the practice increases her knowledge and provides current information needed for her job. To her, knowledge sharing from other experts within the institute is important to become knowledge workers. She is willing to share work-related knowledge and prefers presentations, discussions, conversations, and lectures to share her knowledge with others. According to her, problem related to trainees background and different opinions are the main problems she faced when sharing knowledge. To overcome those problems, she always prepare herself before she share knowledge in formal situations. She also mentioned that support from the top management is most important to encourage knowledge sharing in the organization.

4.1.6 Informant 6

Informant 6 has joined the institute for a year. She is an Iban, Christian and also married. She is a STPM holder and has a vast experience in administration job. In her current job, she is responsible for administration, finance and service management. To her, knowledge sharing is important to improve work quality, as well as to build good relationships and cooperation among organization members.

She prefers to share work-related knowledge with others through discussions and conversations. She suggests that incentive-based system, along with supportive top management to be introduced to encourage people to share their knowledge. According to her, formal activities like trainings, seminars, workshops and dialogues are beneficial in promoting knowledge sharing.

4.1.7 Informant 7

Informant 7 is a Malay, Muslim and married, who holds a bachelor degree and has several years of experience in management and administration job before she joins the organization for the last nine months. She said that knowledge sharing is important in the organization because it helps in generating ideas; and from the ideas they are able to solve work-related problems. Therefore, she is always willing to share her knowledge with others whenever necessary, in both formal and informal activities. She preferred discussions, meetings, conversations to share knowledge. To her, supportive top management and participation from all members are important to the smooth process of knowledge sharing.

4.1.8 Informant 8

Informant 8 is an Iban, Christian and also married. He is a STPM holder and has joined the organization for five years as a staff in the Management Unit. Apart from management tasks, he also involves himself as a facilitator and secretariat for training programs organized by the institute. To him, knowledge

sharing is a necessity in his job as it enables him to improve the quality of his work. He said that he is always willing to share his knowledge with others. He prefers to share knowledge in both formal and informal activities through discussions, conversations and training activities. Some of the factors that hinder the smooth process of knowledge sharing according to him were time availability, and lack of in-depth knowledge in the specific field or subjects. Other than that, he also mentioned that knowledge sharing that happens mostly during informal activities is useful for him to learn new knowledge.

4.2 The Importance of Knowledge Sharing in a Public Training Institute

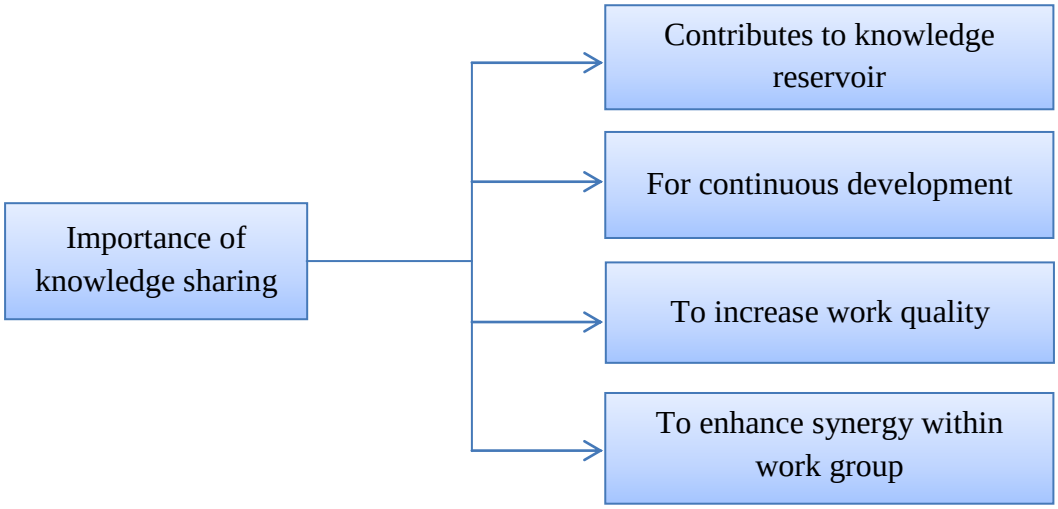

Figure 4.1 The Importance of Knowledge Sharing in a Public Training Institute

Informants were being asked about their perceptions on the importance of knowledge sharing in public training institute. All informants stated that knowledge sharing is crucial for their daily work. Therefore, the majority of them share knowledge either on a daily basis or occasionally. The importance of knowledge sharing in a public training institute discovered in this study based on the data provided by the informants are as in Figure 4.1. The details of each importance are provided in the following subsections.

4.2.1 Knowledge Sharing Contributes to the Knowledge Reservoir

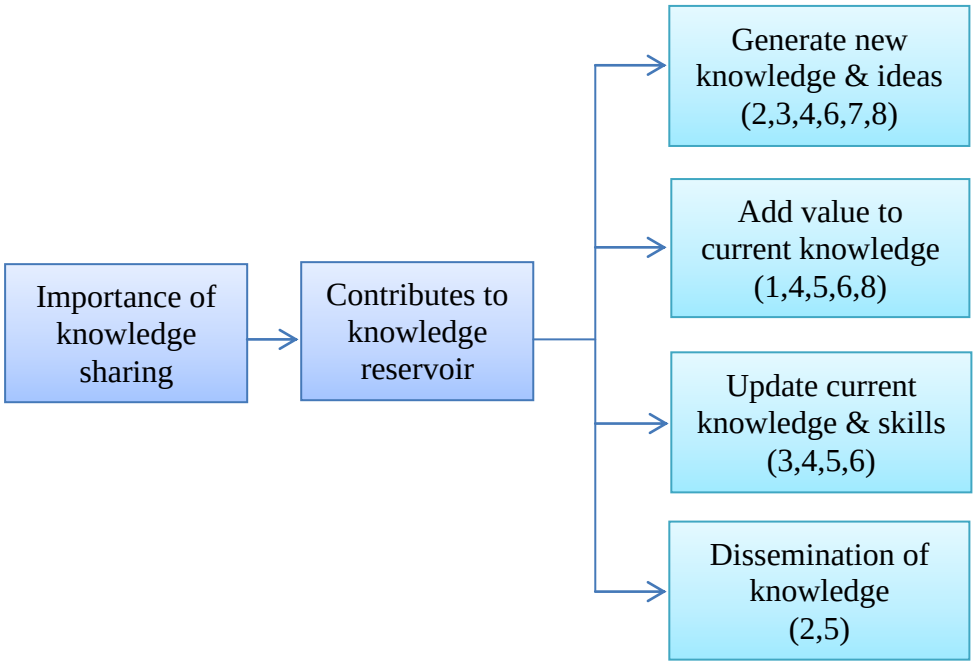

Figure 4.2 Knowledge Sharing Contributes to the Knowledge Reservoir

Knowledge reservoir refers to a pool of individual knowledge available in the training institute, which is useful for the staff in understanding and performing their daily tasks. Generating new knowledge is the production or discovery of new knowledge and ideas. Adding value to current knowledge means making the knowledge more productive. Meanwhile, updating current knowledge and skills means upgrading related knowledge and skills in line with latest needs; and dissemination of knowledge means spreading the knowledge.

4.2.1.1 Generate New Knowledge and Ideas

Informant 2, 3, 4, 6, 7 and 8 emphasized that knowledge sharing help to generate new knowledge and ideas. Informant 2, for instance indicates that knowledge sharing is crucial as there is no limitation to knowledge. According to him, there are always new things (knowledge) to learn almost every day. He said:

> *"Perkongsian ilmu amat penting kerana ilmu tiada batasnya dan hampir setiap hari ada pelajaran baru".*
>
> *(Knowledge sharing is very important as knowledge has no barrier, and there are always new things to learn every day)*
>
> *(Informant 2)*

Other than that, informant 7, who is responsible for administration, highlighted that knowledge sharing among staff and with other experts help in generating new ideas in the process of decision making and problem solving.

4.2.1.2 Add Value to Current Knowledge

Informant 1, 4, 5, 6 and 8 mentioned that knowledge sharing add value to their current knowledge. Informant 1, who is a trainer, stated that knowledge sharing enables him to expand his current knowledge, and he also utilized the knowledge to help others. Meanwhile, Informant 5 mentioned that knowledge sharing from other experts helps her in getting clarification and understanding on certain subject, thus is able to apply the knowledge in her job. According to her:

> *"Perkongsian ilmu daripada pakar yang lain kepada saya penting kerana bidang yang saya kurang mahir dapat dijelaskan dengan lebih lanjut dan lebih mendalam sehingga difahami dan dapat digunakan dalam tugas harian".*
>
> *(Knowledge sharing from other experts is important to me as it can enlighten me in the field that I am not well-versed in until I could understand and eventually apply the knowledge in my daily job)*
>
> *(Informant 5)*

Additionally, Informant 8 also mentioned about the importance of knowledge sharing with his colleagues and superior, which helps him to improve his current knowledge, and thus is able to perform his tasks.

4.2.1.3 Update Current Knowledge and Skills

Informant 3, 4, 5 and 6 mentioned that knowledge sharing is essential to update their current knowledge and skills. For instance, informant 3 who is a

trainer stated that knowledge sharing is beneficial to increase his teaching skills according to current needs. Additionally, Informant 6 indicated that knowledge sharing helps to update her knowledge from time to time. She also mentioned that she is always willing to share her knowledge with others, as frequent as she received from other experts, and to keep her knowledge up-to-date.

4.2.1.4 Dissemination of Knowledge

Another importance of knowledge sharing is to disseminate knowledge as mentioned by Informant 2 and 5. For instance, Informant 2 expressed that:

> *"Agar ilmu atau kemahiran yang kita ada tidak hanya kita miliki tetapi dapat disebarkan kepada orang lain".*
>
> *(So that the knowledge or skills that we have are not kept within ourselves, but also be disseminated to others)*
>
> *(Informant 2)*

Meanwhile, Informant 5 expressed that knowledge sharing is important in the organization to disseminate information so that everybody are alert of latest information, news and current issues related to work.

4.2.2 Knowledge Sharing for Continuous Development

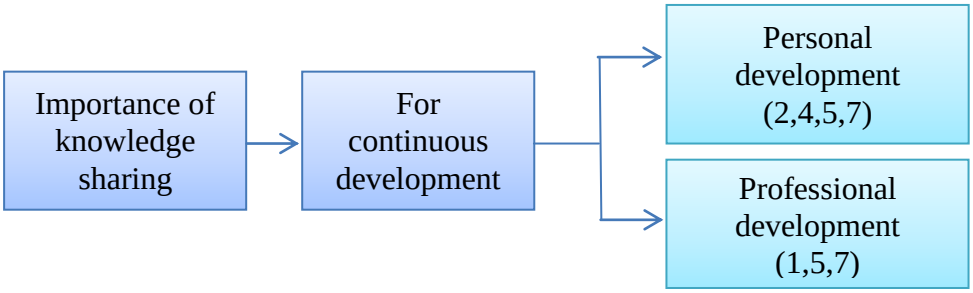

Figure 4.3 Knowledge Sharing for Continuous Development

Continuous development refers to individuals' ongoing growth, personally or professionally. Personal development means improvement concerning one's private life rather than matters related to work, which include increasing awareness, emotions, skills, talents and potentials that are essential for daily life or one's survivor. Meanwhile professional development means advancement in knowledge, skills and abilities that are useful to one's career.

4.2.2.1 Personal Development

Informant 2, 5 and 7 perceived that the sharing of personal knowledge such as life-skills and experience is beneficial to them to grow personally. Informant 2 stated that sharing knowledge with others is useful for him to enhance his strengths and overcome his weaknesses in dealing with every day issues. In addition to that, Informant 5 perceived that the sharing of personal knowledge through informal activities help her grow personally. She mentioned that

'tazkirah' (religious) sessions for the Muslims staff contribute to spiritual growth. She also mentioned that the sharing of personal knowledge during informal activities such as conversations over lunch in the office pantry also help to strengthen personal growth and relationships among colleagues. Informant 7 also stated that the sharing of expert knowledge from other individuals opens up more room for personal growth and different perspectives.

4.2.2.2 Professional Development

Knowledge sharing is useful for individuals to grow professionally as perceived by Informant 1, 5 and 8. Informant 1 stated that the sharing of knowledge increases his professional knowledge, experience and expertise he needs in dealing with his job. He mentioned:

> *"...perkongsian ilmu dapat memperkembangkan pengetahuan, meningkatkan pengalaman dan kepakaran...serta secara tidak langsung akan memudahkan urusan atau tugasan harian di pejabat..."*
>
> *(Knowledge sharing can widen one's knowledge, as well as to increase experience and skills...indirectly, it helps in making tasks or daily job in the office become easier)*
>
> *(Informant 1)*

Other than that, Informant 7 mentioned that knowledge sharing is useful for her to develop professionally as she gains more knowledge and experience to aid her in dealing with her tasks. According to her, sharing with others helps in decision making and problem solving related to her job. Meanwhile, Informant 8

stated that knowledge sharing from his superior and colleagues help him in performing his tasks. He said:

> *"…mereka (rakan setugas dan pegawai atasan) ada banyak ilmu yang dapat membantu saya dalam menjalankan tugasan yang diberi. Ia dapat meningkatkan lagi pengetahuan (untuk digunakan) semasa membantu Unit Latihan menganjurkan kursus".*
>
> *(My colleagues and superiors have lots of knowledge that are useful to help me in carrying out my tasks. Knowledge sharing from others increases my knowledge; so I could use it in helping the Training Unit to organize training)*
>
> *(Informant 8)*

4.2.3 Knowledge Sharing Increases Work Quality

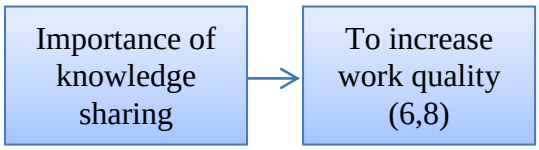

Figure 4.4 Knowledge Sharing to Increase Work Quality

Informant 6 and 8 expressed that knowledge sharing is extremely important to increase work quality. Informant 6 uttered that:

> *"(perkongsian ilmu) sangat penting untuk menambahbaik kualiti kerja…".*
>
> *(Knowledge sharing is very important to improve work quality)*
>
> *(Informant 6)*

In addition to that, Informant 8 mentioned that:

> *"Ini (perkongsian ilmu) satu kemestian kerana dapat meningkatkan lagi mutu kerja…"*
>
> *(The sharing of knowledge is a must as it can increase the quality of work)*
>
> *(Informant 8)*

4.2.4 Knowledge Sharing Enhances Synergy within Work Group

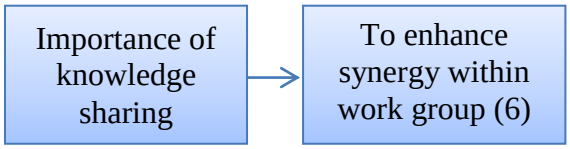

Figure 4.5 Knowledge Sharing to Enhance Synergy Within Work Group

Informant 6 mentioned that the sharing of knowledge enhances synergy among organization members. When being asked how important is knowledge sharing from other experts to her, she revealed that it is extremely important as it improve personal relationships and cooperation among organization members. She said:

> *"(Perkongsian ilmu) sangat penting untuk menambahbaik hubungan dan kerjsama di dalam organisasi".*
>
> *(Knowledge sharing is very important to improve relationships and cooperation among members in the organization)*
>
> *(Informant 6)*

4.3 The Types of Knowledge Shared in a Public Training Institute

For this section, the first question put forward to the informants was whether they are willing to share knowledge with their superior(s), colleagues and trainees. They were also asked on the circumstances of their willingness to share knowledge, and the activities they preferred when sharing with superiors, colleagues and trainees respectively.

Table 4.2 Types of Knowledge Shared in a Public Training Institute

Who are they?	Do you share?	What do you share?	How do you share?
Superiors	Yes	Formal knowledge Informal knowledge	Meeting, discussion, conversation, presentation, feedback, report
Colleagues	Yes	Formal knowledge Informal knowledge	Discussion, conversation, e-mail, meeting, presentation, reading material
Trainees	Yes	Formal knowledge Informal knowledge	Lecture, workshop, discussion, conversation, presentation, question and answer session

Based on Table 4.2, all the informants replied that they are willing to share their area of expertise with superiors, colleagues and trainees. There are two (2) main types of knowledge being shared with others, namely formal knowledge, and informal knowledge. Formal knowledge refers to matters related to one's job or tasks, including research ideas and subject-related knowledge. On the other hand, informal knowledge is knowledge that is not related to one's profession, for

instance current issues, life-skills, and other matters or facts that one's gained through first-hand observation or personal experience.

The details of what kind of knowledge do they share, to what extend are they willing to share knowledge, and how do they prefer to share their knowledge with superiors, colleagues and trainees are included in the following subsections.

4.3.1 Superiors

4.3.1.1 Willingness to Share

All the informants replied that they share formal knowledge with their superior(s). Only one informant (Informant 1) said that he also shares informal knowledge in term of personal experience with his superior. Informant 2, 5 and 8 indicated that they are willing to share their knowledge with superior without limitations, meanwhile Informant 1, 3, 4, 6, 7 and 8 said that they share knowledge appropriately and accordingly. For instance, Informant 6 mentioned that she is willing to share with her superior until both understand and accept the knowledge.

4.3.1.2 Preferences of Knowledge Sharing Activities

With superiors, the majority of informants (Informant 2, 3, 4, 6, 7 and 8) preferred to share their knowledge through discussions. Apart from that, they also

share knowledge through meetings (Informant 1, 3, 6 and 7); conversations (Informant 2, 4, and 6); using feedbacks and reports (Informant 4 and 6); and presentations (Informant 5 and 7).

4.3.2 Colleagues

4.3.2.1 Willingness to Share

All the informants also answered that they share formal knowledge with colleagues. Other than that, the majority of informants (Informant 1, 2, 3, 4, 5, 7 and 8) also share informal knowledge with colleagues. Informant 2, 3, 4, 5 and 8 replied that they have no constraints or circumstances for sharing knowledge with colleagues. Meanwhile, Informant 1, 6 and 7 said they share with colleagues appropriately and accordingly. For instance, Informant 6 mentioned that she is willing to share her knowledge with her colleague until both are able to perform the related task. She said:

> *"Ya, sehingga sama-sama boleh melakukan tugas".*
>
> *(Yes, until both are able to perform the tasks)*
>
> *(Informant 6)*

4.3.2.2 Preferences of Knowledge Sharing Activities

The preferred activities to share knowledge with colleagues are discussions (as mentioned by all the informants); conversations (also stated by all the informants); meetings (Informant 1, 3, 6 and 7); e-mails (Informant 1); and presentations (Informant 7).

4.3.3 Trainees

4.3.3.1 Willingness to Share

When asked about types of knowledge they share with trainees, all the informants responded that they share formal knowledge. Additionally, Informant 1, 2, 3 and 7 said that they also share informal knowledge with their trainees. On their circumstances to share knowledge, Informant 2 and 4 indicate that they have no limitations for sharing knowledge with trainees; while Informant 1, 3, 5, 6, 7 and 8 are willing to share their knowledge appropriately and accordingly. For instance, Informant 1 said he is willing to share his knowledge according to trainee's abilities to learn. Likewise, Informant 5 also stated that the sharing of knowledge with trainees depend on trainee's level of understanding, prior knowledge and needs. She said:

> *"Ya, bergantung kepada tahap pemahaman atau pemikiran peserta kursus, dan berdasarkan keperluan semasa".*

(Yes, depending on trainee's level of understanding or thinking, and based on current needs)

(Informant 5)

In addition to that, Informant 6 stated that she is willing to share with the trainees until they understand and are able to perform related task. She specified that:

"Ya, sehingga (mereka) boleh faham dan boleh menjalankan tugas dengan lancar".

(Yes, until they understand and are able to perform their tasks well)

(Informant 6)

4.3.3.2 Preferences of Knowledge Sharing Activities

The most preferred activity for sharing knowledge with trainees is through lecture as mentioned by Informant 1, 3, 4, 5, 6 and 8. The majority of informants also mentioned that they share knowledge with trainees through discussions (Informant 1, 2, 3, 4, 6, 7 and 8). Other preferred mediums for sharing knowledge with trainees are conversations (Informant 1, 2, 3 and 7) and other training activities such as workshops (Informant 1), Question and Answer sessions (Informant 4), and multi-media presentations (Informant 5).

4.4 The Problems of Knowledge Sharing in a Public Training Institute

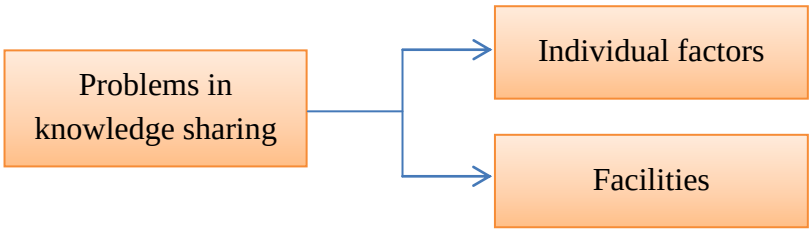

Figure 4.6 The Problems of Knowledge Sharing in a Public Training Institute

In this part, informants were being asked about their perceptions on the factors that may hinder the smooth process of knowledge sharing and their experience in dealing with the barriers when sharing knowledge. Two main categories had been identified as barriers of knowledge sharing, namely individual factors and facilities. The details of each category are included in the following subsections.

4.4.1 Individual Factors

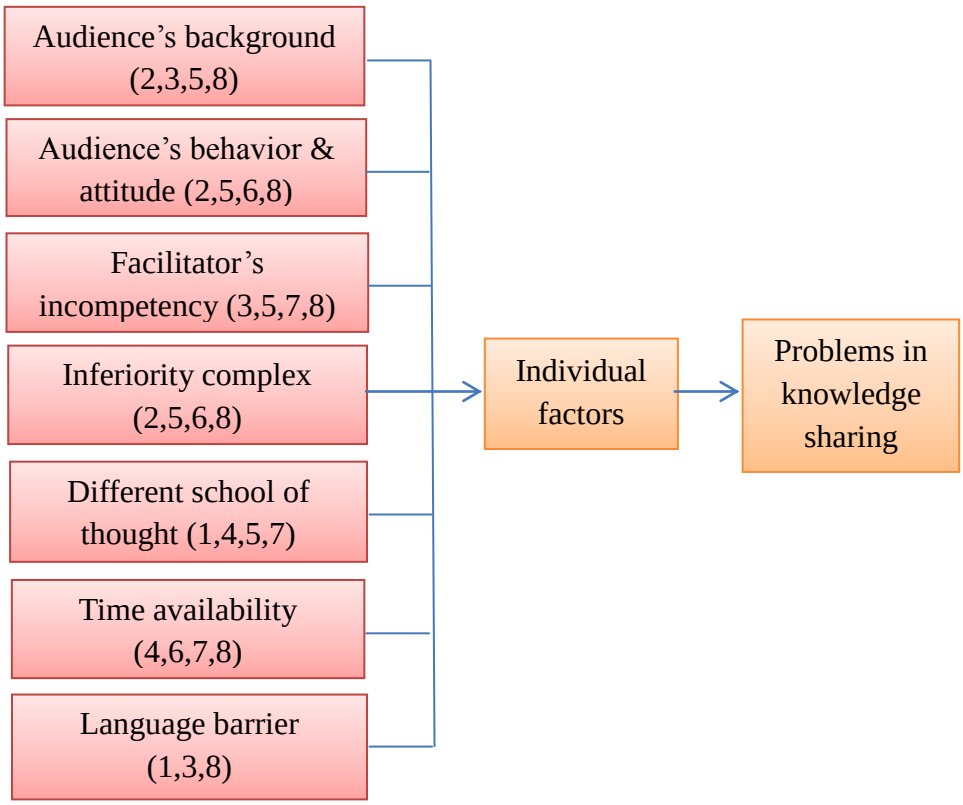

Figure 4.7 Individual Barriers

4.4.1.1 Audience's Background

Informant 2, 3, 5 and 8 perceived trainee's background as one of the major barriers to the smooth process of knowledge sharing. For instance, Informant 2 and 5 both mentioned that differences in education levels and job positions among trainees may hinder knowledge sharing process. In addition, Informant 5 also mentioned about age differences and fussy audience also affects knowledge

sharing flow. The same perception is shared by Informant 3 who mentioned that trainee's background in term of differences in experience levels may hinder the smooth process of knowledge sharing. Whereas, Informant 8 stated that different levels of understanding on the subject matters may also cause interruptions to the smooth process of knowledge sharing.

4.4.1.2 Audience's Behavior and Attitudes

Informant 2, 5, 6 and 8 mentioned that another individual factor that hinders knowledge sharing in the training institute is trainee's negative behavior and attitudes towards knowledge sharing. For example, Informant 2 answered that ignorance and disrespectful audience contribute to knowledge sharing failure. He said:

> *"Bila mereka tidak ambil peduli dan merendahkan kita".*
>
> *(When they ignore and look down upon us)*
>
> *(Informant 2)*

Likewise, Informant 5 and 6 also mentioned about audience's negative attitude as a barrier in knowledge sharing process. The same opinion was also shared by Informant 8 who mentioned that rejection and negative reactions from audience hinders knowledge sharing process. He stated:

"Pandangan, pengetahuan serta ilmu yang dikongsikan tidak diterima dan diperlekehkan oleh orang lain".

(Views and knowledge that we intend to share are rejected and lightly taken by others)

(Informant 8)

4.4.1.3 Facilitator's Incompetency

The smooth process of knowledge sharing is also affected by facilitator's incompetency as mentioned by Informant 3, 5, 7 and 8. Informant 3 specified that one's facilitating skills is important in knowledge sharing process. According to him, lack of facilitating skills affects the smooth process of knowledge sharing. Informant 5 also mentioned that facilitator's incompetency may affect knowledge sharing process. According to her, a facilitator must be ready for any possible questions from trainees and must know how to handle the situation in the case that he or she is not able to provide immediate answers. Likewise, both Informant 7 and 8 answered that facilitator's lack of in-depth knowledge in related subject matters hinders the smooth process of knowledge sharing.

4.4.1.4 Inferiority Complex

Another factor that affects knowledge sharing process as captured from Informant 2, 5, 6 and 8 is inferiority complex. For instance, Informant 2 and 5 both mentioned that the smooth process of knowledge sharing relies on facilitator's confidence in delivering his or her knowledge especially when

dealing with more knowledgeable and experienced audience. Meanwhile, Informant 6 mentioned that one's intention to share knowledge may be deteriorated because he or she is worried that his or her opinion may not be accepted by others and perceived as showing-off. Informant 8 also highlighted that knowledge sharing is affected by one's assumption that others will reject his or her ideas.

4.4.1.5 Different School of Thought

Informant 1, 4, 5 and 7 mentioned that different school of thought among individuals is another factor that deters knowledge sharing process. To them, different opinion is constructive if individuals are able to accommodate others' views and could reach mutual understanding. However, problems may arise when there is lack of tolerance among individuals who hold different ways of thinking. For example, Informant 4 mentioned that:

> *"…dalam perbincangan formal kadangkala berlaku berlainan pandangan…jalan penyelesaiannya ialah dengan mencari titik persamaan".*
>
> *(Sometimes there are different opinion occur during formal discussion…the problem could be solved by professing mutual understanding)*
>
> *(Informant 4)*

Likewise, Informant 1 also stated that different school of thought is a barrier of knowledge sharing. He also mentioned that he overcome the problem by

initiating further discussions, as well as trying to listen and understand other's point of view. He stated that:

> *"Selain berbincang lanjut, saya akan berusaha untuk mendengar serta memahami pendapat yang disampaikan".*
>
> *(Apart from further discussions, I would try to listen and understand other's opinion)*
>
> *(Informant 1)*

4.4.1.6 Time Availability

Lack of time for sharing knowledge due to busy work schedule and commitments to fulfil more urgent tasks is also seen as a factor that hinders the smooth process of knowledge sharing as stated by Informant 4, 6, 7 and 8. For instance, Informant 4 mentioned that being busy and time limitation restricts knowledge sharing to take place actively. Thus, she suggests that time management is important to ensure that there is sufficient time allocated for various knowledge sharing activities at work and when conducting training. In addition to that, Informant 7 added that inappropriateness of time is a factor that limits knowledge sharing.

4.4.1.7 Language Barrier

Language is undeniably important as a communication medium, as well as for delivering teaching and learning in a training institute that caters a diverse

target group. Consequently, language barrier limits the desirable effects of knowledge sharing activities as stated by Informant 1, 3 and 8.

4.4.2 Facilities

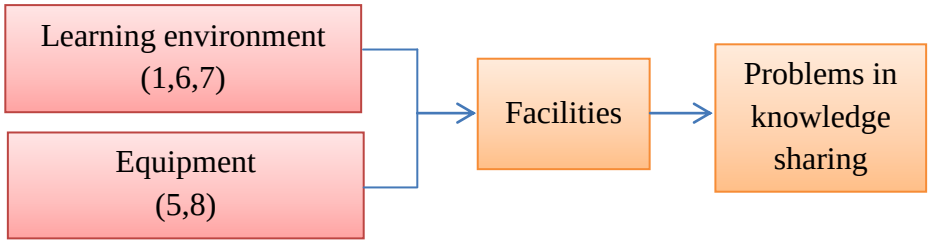

Figure 4.8 Facility Barriers

4.4.2.1 Learning Environment

Conducive learning environment is important for smooth knowledge sharing process, as stated by Informant 1, 6 and 7. For instance, Informant 1 mentioned that interruptions of learning process easily happen when the training room is too crowded, or when there is a huge number of audience attending the training at once. Informant 6 and 7 also identified that inappropriate place for knowledge sharing activities is a problem to be solved in order to encourage more knowledge sharing activities.

4.4.2.2 Equipment

Informant 5 and 8 indicated that adequate and well-functioning equipment is another factor needed for knowledge sharing activities to take place. Informant 5 mentioned that interruptions occur when presentation slides or the computer is not functioning. Informant 8, who is frequently involved as training secretariat is also concerned that equipment such as computer and LCD projector are important to ensure the smooth process of training and knowledge sharing activities. Thus, he perceived that equipment failure and deficiency may affect knowledge sharing process.

4.5 Ways to Promote Knowledge Sharing in a Public Training Institute

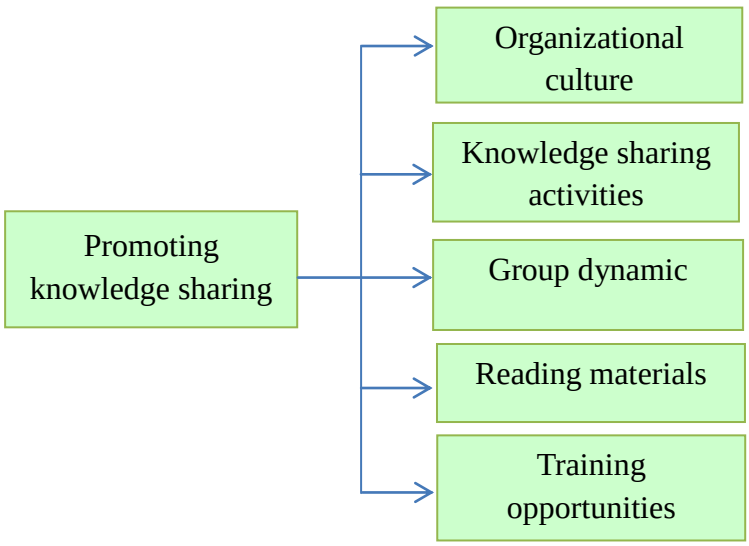

Figure 4.9 Promoting Knowledge Sharing in a Public Training Institute

In this section, informants were being asked for their suggestions on the ways to promote knowledge sharing in a public training institute. They suggested that knowledge sharing culture, knowledge sharing activities, provision of reading materials and group dynamic as four main factors that the organization and its knowledge community must look into to better promote knowledge sharing. Each factor will be detailed out in the following subsections.

4.5.1 Organizational Culture

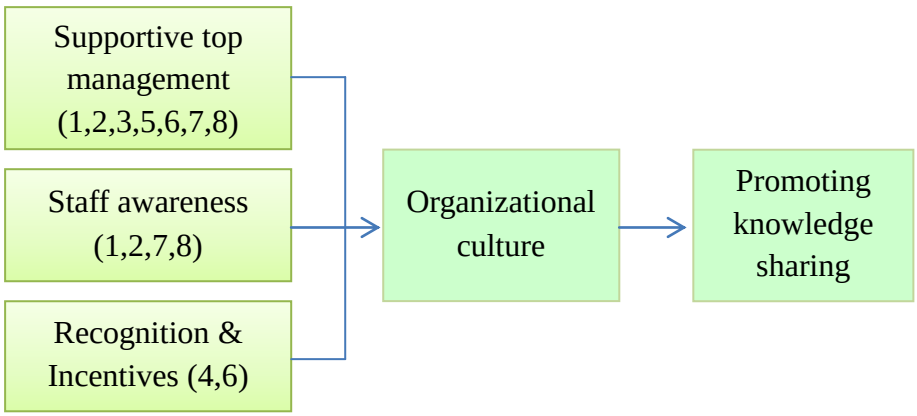

Figure 4.10 Organizational Culture to Promote Knowledge Sharing

The informants suggested that organizational culture that incorporates supportive top management, staff awareness, and recognition and incentive-based are favorable towards promoting knowledge sharing in a public training institute.

4.5.1.1 Supportive Top Management

The majority of informants (Informant 1, 2, 3, 5, 6, 7 and 8) mentioned that supportive top management is a crucial factor to promote knowledge sharing. For instance, Informant 5 said that support from the top management is important as they are the decision makers:

> *"Sokongan pihak pengurusan atasan adalah amat penting kerana mereka yang membuat keputusan yang akan diikuti oleh kumpulan sokongan".*
>
> *(Support from the top management is very important because they are the decision makers and will be followed by the supporting staff)*
>
> *(Informant 5)*

4.5.1.2 Staff Awareness

Informant 1, 2, 7 and 8 perceived that staff awareness is another important factor to promote knowledge sharing in the training institute. Informant 7, for instance said that staffs' awareness is needed to compliment the management roles. Informant 1 also expressed the same opinion by saying:

> *"Galakan daripada pihak pengurusan dan juga kesedaran daripada kalangan pekerja betapa pentingnya perkongsian ilmu secara langsung menggalakkan lagi perkongsian ilmu".*
>
> *(Support from the top management as well as employees' awareness on the importance of knowledge sharing would enhance knowledge sharing practices)*
>
> *(Informant 1)*

4.5.1.3 Recognition and Incentives

Informant 4 and 6 suggested that recognition and incentives are useful to encourage knowledge sharing behavior in the training institute. Informant 4 said:

> *"... persekitaran berasaskan insentif juga penting kerana ia boleh memberi dorongan untuk menyebarkan ilmu".*
>
> *(Incentive-based environment is also important as it can encourage people to disseminate knowledge)*
>
> *(Informant 4)*

Likewise, Informant 6 mentioned:

> *"(Persekitaran) berasaskan insentif...kerana rasa didorong dan dihargai".*
>
> *(Incentive-based environment…because people will feel encouraged and appreciated)*
>
> *(Informant 6)*

4.5.2 Knowledge Sharing Activities

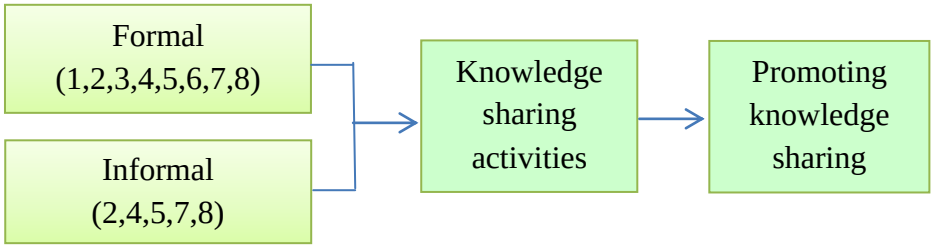

Figure 4.11 Activities to Promote Knowledge Sharing

Both formal and informal activities are important to promote knowledge sharing in the training institute, as perceived by the informants.

4.5.2.1 Formal Activities

All the informants mentioned that formal activities like meetings, discussions, trainings, seminars, team buildings, in group activities, workshops, dialogues, and knowledge sharing sessions are beneficial in promoting knowledge sharing culture.

4.5.2.2 Informal Activities

Informant 2, 4, 5, 7 and 8 also highlighted that informal activities are as important as formal activities in promoting knowledge sharing. They mentioned informal discussions among team members and colleagues are useful particularly to deliver information and share informal knowledge. For example, Informant 5 mentioned that conversation among colleagues over lunch break in the office pantry could also lead to informal knowledge sharing. Other than that, activities like sports and games are also said to be beneficial by the informants. Additionally, Informant 8 also mentioned about active participation in informal activities organized by the staff welfare and sports club are also useful for him and his colleagues to exchange and share knowledge.

4.5.3 Group Dynamic

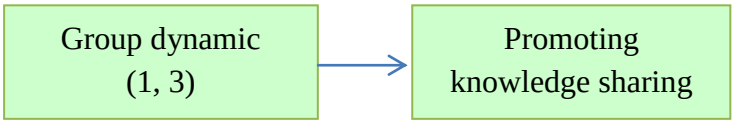

Figure 4.12 Group Dynamic to Promote Knowledge Sharing

Informant 1 and 3 mentioned about the suitable number of group members in training activities also determine the effectiveness of knowledge sharing. Informant 3 suggested the suitable number of trainees in a group should be about 10 to 15 people to increase trainees' ability to learn and at the same time promote more knowledge sharing between them. Informant 1 also mentioned that knowledge sharing is not effective if the number of trainees is too large.

4.5.4 Provision of Reading Materials

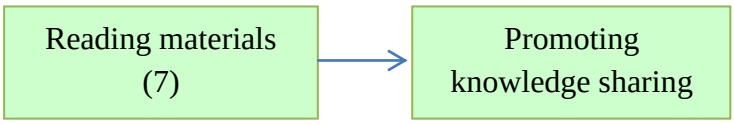

Figure 4.13 Reading Materials to Promote Knowledge Sharing

Informant 7 opined that provision of academic reading materials in the resource room is another factor that could promote knowledge sharing. She said that the books and other references are useful for the trainers and staff to prepare for knowledge sharing activities (i.e. teaching, meetings, and presentations).

4.5.5 Training Opportunities

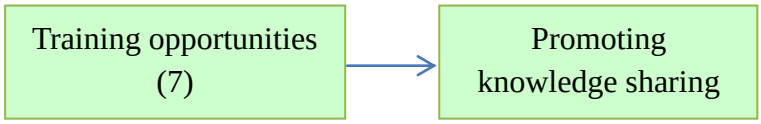

Figure 4.14 Training Opportunities to Promote Knowledge Sharing

Informant 7 said that training opportunities offered to staff are beneficial as another way to promote knowledge sharing. According to her, through training, staff can gain more knowledge and therefore are able to share the knowledge with others. She also explained that the institute offers various training opportunities of in-house and outside the organization.

4.6 The personality traits of knowledge sharers in a public training institute

In this section, data provided by informants through the self-assessment and peer-assessment of personality were computed and presented as mean scores according to each personality traits dimension. The scores were translated into the following Table 4.3 and Chart 4.1.

Table 4.3 Informants' Personality Test Scores

Informant	Extraversion	Agreeable-ness	Conscientious-ness	Neuroticism	Openness
1	3.4	4.2	4.2	2.6	3.7
2	3.4	4.2	3.8	2.5	3.5
3	3.3	3.7	3.6	2.8	3.4
4	3.3	4.0	3.8	2.5	3.6
5	3.5	3.8	4.1	2.8	3.5
6	3.7	3.9	3.6	2.5	3.4
7	4.2	4.8	4.7	1.4	4.0
8	3.4	3.9	3.6	2.7	3.4
Mean	3.5	4.1	3.9	2.5	3.5

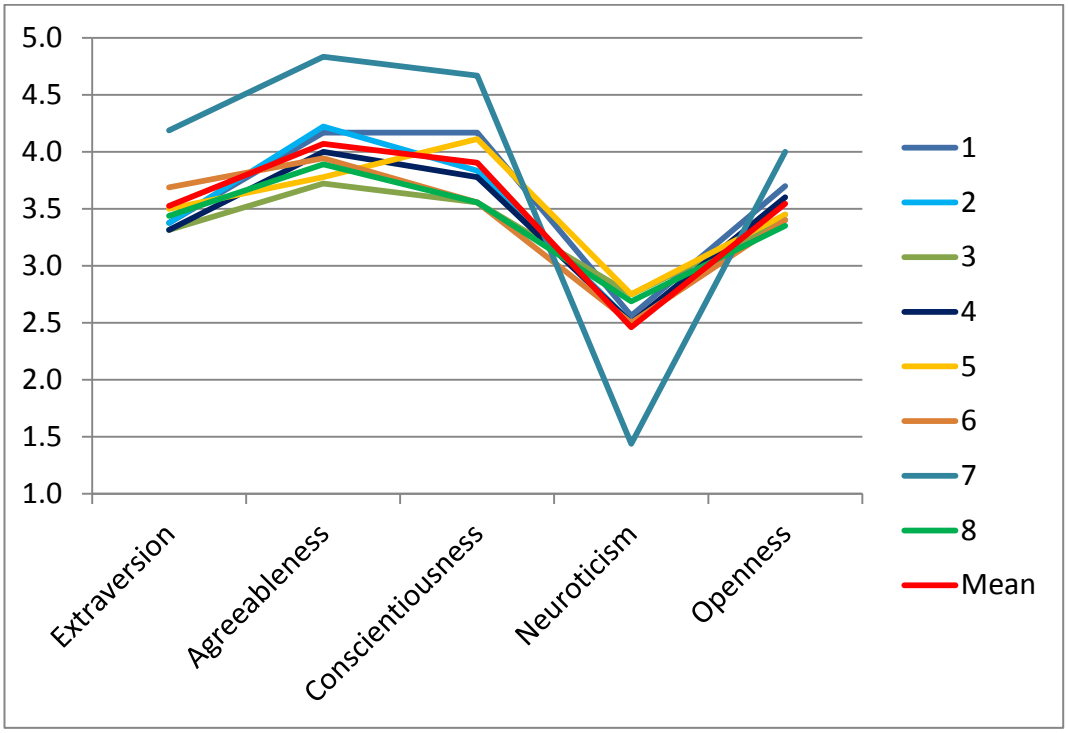

Chart 4.1 Informants' Personality Traits

Based on Table 4.3 and Chart 4.1, the highest mean was in agreeableness, followed by conscientiousness, extraversion, openness and neuroticism. In agreeableness dimension, the mean score was 4.1; three informants (Informant 1, 2 and 7) scored above the mean. In conscientiousness dimension, the mean score was 3.9; three informants (Informant 1, 5 and 7) scored above the mean. In extraversion dimension, also three informants (Informant 5, 6 and 7) scored similar or above the mean. Meanwhile, in openness dimension, the mean was 3.5; five informants (Informant 1, 2, 4, 5 and 7) scored similar or above the mean. Lastly, in neuroticism dimension, the mean was 2.5; four informants (Informant 1, 3, 5 and 8) scored above the mean.

The summary of score for each of the informant is in the following subsections. The higher they score in extraversion, agreeableness, conscientiousness and openness, the more positive attitude is predicted towards knowledge sharing; meanwhile, the higher they score in neuroticism means the more negative emotions does the person has, which indicates negative relationships with knowledge sharing.

4.6.1 Informant 1

Informant 1 is high in agreeableness, conscientiousness and openness, and low in neuroticism and extraversion. Based on his highest score in agreeableness, this informant has the tendency towards cooperation and good interpersonal relationships with others; which contribute to knowledge sharing intention.

4.6.2 Informant 2

Informant 2 is high in agreeableness and openness, and low in neuroticism, extraversion and conscientiousness. Based on the score, this informant also has the tendency to collaborate with others and positive attitude towards learning activities. Having a low score in neuroticism indicates that he is not likely to be affected emotionally. He is also an introvert and low in conscientiousness, which may indicate that he is most probably task-oriented person, reserved, prefer being around smaller group of people, and perhaps less organize (as oppose to conscientiousness). The later characteristics however seems do not influence his knowledge sharing behavior, as he responded in the survey that he is willing to share knowledge with others, vice versa.

4.6.3 Informant 3

Informant 3 is low in extraversion, agreeableness, conscientiousness and openness, and high in neuroticism. This score contradicts with scores obtained by the majority of informants; which indicate that he is an introvert, aloof, and less persevering. Other than that, he is probably conventional (as oppose to openness), and prone to distress and insecurity (conscientiousness). Having this type of personality predicts that he is less likely to share knowledge with others. However, contradict to the score in personality test; he consistently replied that he has the positive attitude towards knowledge sharing in the survey. Therefore, the

assumption is made that knowledge sharing culture and work demand in the institute influence him to share his knowledge with others as well.

4.6.4 Informant 4

Informant 4 is high in openness and neuroticism dimensions, and low in extraversion, conscientiousness and agreeableness. The high score in openness dimension (e.g. curious, creative, imaginative) indicate that Informant 4 has a positive attitude towards learning and engage in learning activities, which is a strong predictor of knowledge sharing. In contradict, she is also high in neuroticism, which relate to fear, anxiety and depression. However, similar with all other informants, in the survey questionnaire Informant 4 also consistently answered that she has a positive attitude towards knowledge sharing; which means that her personality does not affect her intention to share knowledge.

4.6.5 Informant 5

Informant 5 is high is conscientiousness, extraversion and openness, and low in agreeableness and neuroticism. The score indicate that Informant 5 is competence, reliable, responsible, organized, and achievement oriented. She is also an extravert (e.g. sociable, active, and talkative), as well as open to new experience, which are the strong predictors of knowledge sharing.

4.6.6 Informant 6

Informant 6 is high in extraversion, and low in agreeableness, conscientiousness, neuroticism and openness. High scores for extraversion and agreeableness (e.g. helpful, trusting) indicate that she also have the characteristics of a knowledge sharer.

4.6.7 Informant 7

Informant 7 is high in agreeableness, conscientiousness, openness and extraversion, and low in neuroticism; the personality that is highly related to knowledge sharing behavior.

4.6.8 Informant 8

Informant 8 is low in extraversion, agreeableness, conscientiousness and openness, and high in neuroticism. Similar to Informant 3, this informant scores contradict to the characteristics of knowledge sharer predictor. However, it is assumed that his personality does not influence his behavior in knowledge sharing, as he also replied consistently that he appreciates knowledge sharing activities with others in the organization.

4.7 Summary

This chapter presents the research findings based on the data gathered form the informants. Informants' demographic background and their personality traits were also explained. Next chapter provides discussions, summary of findings and recommendations of the study.

CHAPTER FIVE

DISCUSSION, SUMMARY AND RECOMMENDATIONS

5.0 Introduction

This chapter provides an overall picture of the study. It also contains summary of all the chapters in this report and detail discussion on the research findings as reported in the previous chapter, as well as recommendations for future researchers and the organizations. The chapter ends with a conclusion.

5.1 Discussion on Research Findings

5.1.1 The Importance of Knowledge Sharing in a Public Training Institute

Based on the research findings, there are four main importance of knowledge sharing in a public training institute, namely contribution to knowledge reservoir, for continuous development, to increase work quality, and to enhance synergy within the workgroup.

There are several other advantages of knowledge sharing found by previous researchers in their respective studies. For instance, knowledge sharing is

important to retain knowledge and and prevent knowledge lost when individuals who have the expertise leave the organization (Gurteen, 1999; Sandhu, Jain & Ahmad, 2011; and Zhang, Li & Shi, 2005 as cited in Ismail & Mohammad Yusof, 2008; Cong & Pandya, 2003 as cited in Abdul Manaf & Ahmad Marzuki, 2009). Additionally, some other benefits of knowledge sharing captured in previous studies are reducing time in the work process, reducing costs, and improvement of customer services (Skyrme, 2000 as cited in Akhavan, Rahimi & Mehralian, 2013).

5.1.1.1 Knowledge Sharing Contributes to Knowledge Reservoir

From the findings, knowledge sharing is said to be important as it contributes to knowledge reservoir in the training institute. The knowledge reservoir includes generating new knowledge, adding value to current knowledge, updating current knowledge, and dissemination of knowledge amongst the organization members and its knowledge community. This finding is supported by several previous studies.

Joji (2013) in her study on knowledge sharing among expatriates in a local public higher learning institution also found that knowledge sharing is important to generate new knowledge as it helps them to update current knowledge, generate new knowledge and enrich current knowledge. This finding is also supported by Gurteen (1999) who stated that knowledge sharing “make knowledge productive”.

The finding on knowledge sharing is important to improve work quality is also supported by previous studies that discovered knowledge sharing to enhance performance and improve work quality within organizations (Azudin, Ismail & Taherali, 2009; Cheng, Ho & Lau, 2009). In addition to that, Nordin, Daud and Meor Osman (2012) found that the process of knowledge sharing is important to disseminate valuable knowledge effectively and efficiently; which also support the research finding.

5.1.1.2 Knowledge Sharing for Continuous Development

Knowledge sharing is also found to be important for continuous development among personnel in a local public training institute, in term of professional and personal development. This finding is supported by previous research by Joji (2013) who discovered that knowledge sharing is important in helping people grow professionally and personally. Professional and personal development is both important for individuals to improve work performance (Azzudin, Ismail & Taherali, 2009).

5.1.1.3 Knowledge Sharing to Increase Work Quality

Knowledge sharing is also important in a public training institute to improve work quality. This finding is supported by Azudin, Ismail and Taherali (2009). Knowledge sharing can greatly improve work quality, decision making skill,

problem solving as well as competency that will benefit the organization (Cheng, Ho & Lau, 2009).

5.1.1.4 Knowledge Sharing to Enhance Synergy within Work Group

Another benefit of knowledge sharing is to enhance synergy within the work group in a public training institute. As mentioned by Fullwood, Rowley and Delbridge (2013) organization members' positive attitudes towards knowledge sharing are related to their belief that knowledge sharing would improve and extend individual's relationships with colleagues. In other words, knowledge sharing improves interpersonal relationships among organization members and builds trust among them. Azudin, Ismail and Taherali (2009) also mentioned that informal communication like conversation over lunch hour builds trust and strengthens relationships between organization members.

This finding is also consistent with Gurteen (1999), where sharing knowledge is a "synergistic process" in which people get more than what they put in. Sharing knowledge not only helps others to learn, but the sharer also gain insights and benefit from it. Nordin, Daud and Meor Osman (2012) said that lack of communication skills, lack of time to share knowledge and lack of trust could become barriers to knowledge sharing.

The findings is also supported by the Theory of Planned Action which suggests that a person's behavioral intention is based upon attitude toward the

behavior, subjective norm, and perceived behavior control; which explained that the internal factors (such as individual differences, information, skills, abilities, and emotion), and external factors (such as time involvement, cooperation with others, and financial limitations) are related to one's attitude toward the behavior (i.e. Ajzen, 1991, as cited in Nordin, Daud and Meor Osman (2012).

5.1.2 The Types of Knowledge Shared in a Public Training Institute

Based on the findings, formal and informal knowledge are shared in the training institute. Formal knowledge is shared through various work-related activities like meetings, trainings, presentations, feedbacks and reports. Meanwhile, informal knowledge is shared through discussions, conversations, social interactions, as well as sports and games.

The findings is supported by Raducanu (2012), that training, games, interpersonal communication and face-to-face discussions are activities often used to share knowledge in organizations. Other than that, documentation, databases, storytelling, seminar presentations, mentoring, meetings, interaction through information technology are the methods used for sharing knowledge in organizations (Akhavan & Rahimi, 2013). In addition, Raducanu (2013) also mentioned that social interaction, supported by the organization such as coffee breaks, after work food and drinks are useful to foster mutual trust among organization members.

Theory of Planned Behavior could be used to explain this finding, as mentioned by Nordin, Daud and Meor Osman (2012) that "the importance of knowledge sharing behavior is it provides a link between the individual and the organization by moving knowledge, and will then be converted into competitive value to the organization".

5.1.3 The Problems of Knowledge Sharing in a Public Training Institute

There are two main problems faced in knowledge sharing process in a public training institute, which are individual factors and facilities. Other than those factors, there are other problems in knowledge sharing practices found in previous studies. Riege (2005) mentioned about technological barriers that could affect the smooth process of knowledge sharing.

Despite that the use of technology is undeniably important in today's context, technology was not perceived as a problem in this study. The possible reason to explain why IT usage is not seen as critical in this training institute is considering the size of organization is small, and they preferred to use other methods of knowledge sharing (i.e. face-to-face interactions) rather than using IT for the same purpose. There is also the possibility that the IT system in the training institute is adequate for current needs of the organization members.

Another factor that could be a problem in knowledge sharing as mentioned by Riege (2005) is organizational barriers, which deals with knowledge

management strategies, leadership, managerial direction, corporate culture, communication flows etc. The possible reason of why these factors are not found in this study is possibly due to the small size of the organization, as well as the fact that it is a young organization (less than seven years), and that the institute is a branch office, in which most of the organizational issues including corporate strategies are under the responsibility of the main office.

5.1.3.1 Individual Factors

The problems related to individual factors are the major constraints faced by the staff when sharing their knowledge. Trainee's background, trainee's attitudes and behavior, facilitator's incompetency, inferiority complex, different school of thought, language barrier, and time availability were factors that affect knowledge sharing discovered in this study.

Some of the factors are supported by previous research; Riege (2005) mentioned that among the individual factors that could become barriers to knowledge sharing are differences in demographic profiles (i.e. experience levels, age differences, education levels, cultural differences), low awareness of the value and the benefits of knowledge sharing, lack of time to share knowledge, lack of contact time and interactions between knowledge sources and recipients, lack of trust in the accuracy and credibility of knowledge being shared, and language barrier.

Social Cognitive Theory could be used to explain individual factors that become barriers in knowledge sharing as this theory argues that the mind of individual is a tool that guide one's step towards formulating expectations, abilities and outcomes; which mean, individuals may not share their knowledge if they are not sure of their capabilities and the outcomes of the knowledge they are supposed to share (Bandura, 1989, as cited in Okyere-Kwakye & Md Nor, 2011).

Meanwhile, the problems related to facilitator's incompetency, inferiority complex and different school of thought were not found in previous literatures. Since there are little study that have been conducted on knowledge sharing practices in a local public training institute or in organizations that have the similar functions with it (i.e. training centers), this findings can be considered as a new finding in the field of study. The issues were not captured in any of the literature cited in this paper because most of the studies were conducted in organizations and universities, which might have different problems than what is found in this population.

5.1.3.2 Facilities

Another problem faced during knowledge sharing in a public training institute as found in this study is in term of facilities, namely unconducive learning environment and equipment problems. This finding is also supported by Riege (2005) that physical environment and layout of work areas (in this case is layout of training rooms), and inadequate equipment are among the listed barriers

to knowledge sharing. In addition, organizations must be prepared to provide adequate resources to support knowledge sharing (Davernport, 1994 as cited in Smith & McKeen, 2002), as knowledge sharing could be enhanced if the infrastructure is upgraded (Sohail & Daud, 2009).

5.1.4 Ways to Promote Knowledge Sharing in a Public Training Institute

There are five main factors that are helpful to better promote knowledge sharing in a public training institute as found in this study. They are organizational culture, knowledge sharing activities, provision of reading materials, training opportunities, and group dynamic.

5.1.4.1 Organizational Culture

Organizational culture that support knowledge sharing is important to promote knowledge sharing in a public training institute. The culture mentioned by informants includes supportive top management, staff awareness and incentive system to encourage knowledge sharing.

Supportive top management plays a major role in promoting knowledge sharing in organizations as found in previous studies (Smith & McKeen, 2002; McDermott & O'Dell, 2002). Smith and McKeen (2002) mentioned that management plays a critical role in leading knowledge sharing efforts by example, and pay attention on how to change organizational culture into one that regards

knowledge sharing is important to motivate people to share knowledge. The authors highlighted that "to motivate people to change (their attitude toward knowledge sharing), there must be a compelling vision which is clearly linked to the organization's strategy and ongoing management intention to how well the change is occurring". It is also found that people actively engaged in sharing knowledge have direct support from their immediate supervisor (McDermott & O'Dell, 2001), which means, superiors must play their role to encourage knowledge sharing.

In addition to that, Riege (2005) also mentioned that staff awareness and organizational culture that provide sufficient support for sharing practices are important to enable knowledge sharing. Okyere-Kwakye and Md Nor (2011) also stated that employees participation in knowledge sharing are important to ensure the success of knowledge sharing practices within the organization. They stated that "when employees are not participating in sharing their knowledge among themselves in the organization, then the knowledge effort become a fiasco. When knowledge is not shared in the organization then the benefits of knowledge will not be actualized".

Incentive, on the other hand is another factor to motivate people to share their knowledge (Kathiravelu, Abu Mansor & Kenny, 2013; Lee & Lim, 2013; Cheng, Ho & Lau, 2009; Smith & McKeen, 2002; McDemott & O'Dell, 2001). Some researchers also suggested rewards system to be implemented in organizations to motivate people to share their expertise. Cheng, Ho and Lau

(2009) stated that personal factors like recognition as experts in the relevant field of study, as well as group identity and self-esteem are important considerations determining people's passion to share knowledge. Meanwhile, Riege (2005) mentioned that unfair recognition and accreditation discourages knowledge sharing activities.

Consistent with the findings, McDermott and O'Dell (2001) stated that reward and recognition is another way to make the importance of knowledge sharing visible. Smith and McKeen (2002) also stated that rewards, recognition and incentives are crucial in order to embed knowledge sharing practices in organizations. Fathi et al., (2011) as cited in Fullwood and Delbridge (2013) indicated that efficient reward practice is important in promoting knowledge sharing.

The finding on incentive and recognition could be explained by Social Exchange Theory, which argues that people will try to maximize profits and minimize the cost in their endeavour; by which the benefit of this behavior is normally intangible and based on the expectation of the future outcome (Okyere-Kwakye & Md Nor, 2011).

5.1.4.2 Knowledge Sharing Activities

Both formal and informal activities are important in promoting knowledge sharing in a public training institute. The explanation on preferred activities for

sharing knowledge is explained in the earlier part of this discussion to answer the second specific objective of this study. It is also important to highlight the finding that informal activities are nevertheless important in knowledge sharing practices, as a valuable avenue for knowledge sharing occurs during social interactions (Azudin, Ismail & Taherali, 2009).

5.1.4.3 Provision of Reading Materials

Availability of reading materials is another factor that encourages knowledge sharing in a public training institute. This is consistent with previous study by Nonaka (1994) who mentioned that documentation of knowledge is a critical factor to enable knowledge transfer. In other words, provision of reading materials and related documents are useful to support knowledge sharing.

5.1.4.4 Training Opportunities

Training opportunities is also important to promote knowledge sharing in a public training institute. A regular training including team building is useful in overcoming barriers related to lack of trust, faith and fear (Jain, 2005, as cited in Chen, Sandhu & Jain, 2009). Knowledge from the training sessions attended can also be disseminated to other members through "story telling" (knowledge sharing) session (Faul & Kemly, 2004, as cited in Chen, Sandhu & Jain, 2009).

5.1.4.5 Group Dynamic

Group dynamic is also important to enable knowledge sharing in a public training institute. This finding is also consistent with Riege (2005), that the size of group is also important to ensure that it is manageable and therefore could enhance contact and facilitate ease of sharing.

5.1.5 The Personality Traits of Knowledge Sharers in a Public Training Institute

Table 5.1 Characteristics of the Traits in the Five Factor Personality Model

Trait	Characteristics
Extraversion	Sociable, talkative, enthusiastic and assertive.
Agreeableness	Generous, trustful, cooperative and forgiving.
Conscientiousness	Careful, self-disciplined, hardworking, dependable and reliable.
Neuroticism	Negative emotions such as anxiety, anger or guilt.
Openness (or openness to change)	Imaginative, creative and curious.

Source: Adapted from Hislop (2009).

Previous literatures (Matzler et al., 2008; Amayah, 2011; Abdul Manaf & Ahmad Marzuki, 2009) consistently associated extraversion, agreeableness, conscientiousness and openness to change with knowledge sharing. Meanwhile, neuroticism does not have any positive relationship with knowledge sharing.

Openness to experience is the strongest predictor of knowledge sharing, while openness to experience also has been consistently to be positively associated with knowledge sharing intention (Matzler et al., 2008).

Another personality trait that has positive relationship with knowledge sharing is extraversion (Wang et al., 2011 as cited in Amayah, 2011). Conscientiousness, which is known as a good predictor of work performance, was also found to be related to knowledge sharing (Matzler et al., 2008). Meanwhile, agreeable person (high in agreeableness), is naturally inclined to help others, so their tendency is towards cooperation and collaboration rather than competitiveness (Witt et al., 2002 as cited in Abdul Manaf & Ahmad Marzuki, 2009). Neuroticism, on the other hand negatively affects knowledge sharing (Fang & Liu, n.d.; Abdul Manaf & Ahmad Marzuki, 2009).

Based on the findings, personality traits of knowledge sharers in a public training institute vary. The majority of informants are high in agreeableness, conscientiousness, extraversion and openness. Referring to Table 5.1, high scores in these dimensions predict that the majority of them are willing to share knowledge with others. Other than that, the majority of them are low in neuroticism, which predicts that they are generally having positive emotions.

However, it is found that the results for two of the informants are not consistent with their peers'. Informant 3 and 8 scored low in all dimensions associated to knowledge sharing; and on the other hand, both of them also scored

high in neuroticism, in which it contradict with scores obtained by the rest of informants. This finding indicates the possibility that not all the staff in the institute is knowledge sharer. Another possible explanation is their personality does not affect knowledge sharing behavior; in which the strong culture of knowledge sharing embedded in the organization assured that every member shares their knowledge, regardless of individual personality or characteristics.

5.2 Research Summary

Chapter 1 provides an introduction into the research area. It explains the need to conduct the study and explains the research objectives and research questions that guide the study. It also provides conceptual and operational definition of terms used throughout the study. The five research questions are what are the importance of knowledge sharing, what are the types of knowledge being shared by the staff, what are the problems faced by the staff during knowledge sharing, how to promote knowledge sharing, and what are the personality traits of knowledge sharers in a public training institute.

Chapter 2 provides a review on past studies that are related to the field of study. The past studies consistently highlighted several importance of knowledge sharing, which are knowledge sharing contributes to knowledge reservoir, knowledge sharing improves performance and work quality, and knowledge sharing retains expert knowledge in the organizations. There were numerous

studies that have been conducted in the field of knowledge sharing, but none of it was conducted in a public training institute.

Chapter 3 explains the methodology of this study. It elaborates on the research design, population, sample, sampling technique, as well as data collection method data collection procedure, research instrument, validity and reliability measures, data analysis procedure, and the research timeline for completing the study.

Chapter 4 elaborates the research findings generated based on the data provided by the informants through open-ended survey and personality tests conducted. The findings are elaborated according to the research questions. Figures and tables are used to demonstrate and facilitate reader's understanding on the discussions.

Chapter 5 provides comprehensive discussion on the research findings. Most of the findings are consistent with findings from previous studies. A few new findings were also established, which contribute to the body of knowledge. This chapter also includes the contributions and limitations of the study, followed by recommendations for future researchers and the top management. The chapter ends with an overall conclusion.

5.3 Contributions of Study

5.3.1 To the Body of Knowledge

This study contributes to the literature resources in the field of knowledge sharing, particularly in a public training institute. This study also fills some research gaps identified in previous studies.

5.3.2 To the Practitioners

The practitioners can make use of the findings on the importance of knowledge sharing to promote more knowledge sharing activities in their organizations. Likewise, the findings on problems related to knowledge sharing can be used to improve the practices and to find the solutions accordingly. The findings on ways to promote knowledge sharing are also beneficial to the organization to improve the knowledge sharing practices. Additionally, the findings on personality traits of knowledge sharers in the context of a public training institute can also be used by the practitioners to identify potential individuals according to their personality dimensions related to knowledge sharing behavior.

5.3.3 To Methodological

The research methodology and instruments used in this study can be adopted by future researchers to study knowledge sharing in various organizations. It is also recommended that future researchers include more questions to measure variety of situations concerning individual's personality according to the organizational requirements.

5.3.4 To the Policy

The findings and recommendations provided are useful to similar organizations (training institutes) in developing strategy and policy related to knowledge sharing. The organizations can also make use of the findings to assist in future recruitment and job placement so that they can manage their human resources more effectively and efficiently according to employees' characteristics and strengths.

5.4 Limitations of Study

5.4.1 Methodological Limitations

There are several methodological limitations of this study. The main limitation is in term of method of data collection. Self-report instruments may not reach in-depth coverage of the issue. The richness of the data is depending on how

detailed is the explanations; whereas some informants might face difficulties to explain their ideas in written form. Thus, there is a possibility that some important information was not highlighted extensively.

Other than that, the population of this study is limited to a single small-sized organization. Thus, the findings might not represent the practices in bigger organizations. Additionally, in term of location, this study is conducted in a local organization in Sarawak. Hence, the findings might not reflect the same issue situated in other locations, for example other states in Malaysia or in other countries.

Apart from that, the coverage of this study is limited as there were constraints in term of time. Thus, it does not explore some other aspects of knowledge sharing.

5.4.2 Topical Limitations

This study limits to the specific topic and only focuses on knowledge sharing in a public training institute. It also does not explore other dimensions of knowledge sharing and its relations with personality traits, for example the influence or effects of personality to knowledge sharing practices in the organization.

5.5 Recommendations

5.5.1 For Future Researchers

Recommendations for future researchers are:

i. To investigate different aspects such as the flow of knowledge sharing or the application of knowledge sharing in work process;

ii. To conduct study in a bigger population to get a better insight of the practice in different organizations;

iii. To conduct study in a private training institution to find out the similarity or differences of the practice between the two sectors. The comparisons are also beneficial for public and private organizations to adopt the best practice and for continuous improvement; and

iv. To conduct study using different methodology, that is using a mixed-method approach to get a clearer picture of the practice by providing statistical indications, while enabling in-depth study on the subject matter.

5.5.2 For Top Management

Recommendations for the top management of the studied organization are as the following:

i. To introduce a written policy on knowledge sharing. The policy will be useful to increase awareness among organization members and to guide the management in implementing and monitoring activities related to knowledge sharing;

ii. To implement incentives that encourage knowledge sharing in the hope that the staff are more motivated to share knowledge when their efforts are recognize by the management;

iii. To provide ICT infrastructure and technical support to promote knowledge sharing. Technology usage is rapidly increasing, therefore as a public training institute that deals with people including the younger generations, the organization must move forward to compliment the emergent needs of their clients;

iv. To offer more training opportunities to the staff so that they become knowledgeable and competent workers. Knowledge sharing could also be enhanced by encouraging their teaching staff to participate in forums, seminars, colloquiums and open discussions; as well as

organizing such activities in the organization that involve experts from various fields;

v. To encourage social networks through formal and informal knowledge sharing activities, as well as strengthens existing network especially with other organizations that have the same functions. This network is important for knowledge exchange and collaboration.

6. Conclusion

This study explored the knowledge sharing practices in a local public training institute. The data obtained from the informants was analyzed to answer the research questions developed for this study. This study has successfully identified the importance of knowledge sharing in a public training institute. It also identified the types of knowledge being shared in the public training institute, as well as how do they share the knowledge. Other than that, it also has identified the problems in knowledge sharing and thereafter provided detail explanation on how to promote knowledge sharing in a public training institute. Finally, it also has successfully uncovered the personality traits of knowledge sharers in a public training institute.

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Appendix 1

RESEARCH INSTRUMENT

Knowledge Sharing Practices in a Local Public Training Institute

I, Annie Liaw (12030029), a postgraduate student from the Faculty of Cognitive Sciences and Human Development in Universiti Malaysia Sarawak (UNIMAS), through this qualitative study, attempt to explore knowledge sharing practices in a local public training institute.

This Research Instrument consists of Informed Consent Form, Research Survey Questionnaire and Personality Test. I would like to seek your consent to be an informant for this study. Please take your time to read and understand the Research Instrument.

The survey and personality test may take 40 to 60 minutes of your time. Follow-up interview will be conducted if required. All information provided will be kept confidential and will not be used for any purpose other than this study. It is important that you provide your best opinion and answer the questions honestly and truthfully.

Thank you.

For any enquiries, please contact me:

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INSTRUMEN KAJIAN

Amalan Perkongsian Ilmu di Sebuah Institut Latihan Awam Tempatan

Saya, Annie Liaw (12030029), merupakan pelajar pasca siswazah dari Fakulti Kognitif Sains dan Pembangunan Manusia di Universiti Malaysia Sarawak (UNIMAS), melalui kajian kualitatif ini ingin menyelidik amalan perkongsian ilmu di sebuah institut latihan awam tempatan.

Instrumen Kajian ini mengandungi Borang Maklumat Persetujuan, Soalan Survei dan Ujian Personaliti. Saya ingin mendapatkan persetujuan tuan/puan sebagai informan dalam kajian ini. Sila ambil masa untuk membaca dan memahami Instrumen Kajian ini.

Survei dan ujian personaliti ini mengambil masa antara 40-60 minit untuk dilengkapkan. Temubual lanjut mungkin diadakan sekiranya diperlukan. Semua maklumat yang diberi akan disimpan sebagai rahsia dan tidak akan digunakan untuk tujuan selain kajian ini. Adalah penting supaya tuan/puan memberikan jawapan yang terbaik mengikut pandangan tuan/puan, serta memberi jawapan yang betul dan jujur.

Sekian, terima kasih.

Untuk sebarang pertanyaan, sila hubungi saya:

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Appendix 2

INFORMED CONSENT FORM

Research Title: Knowledge Sharing Practices in a Local Public Training Institute
Researcher: Annie Liaw (Matric No. 12030029)
E-mail address: annie_liaw@yahoo.com
Tel: 019-8379278

Thank you for agreeing to participate in this study. This form details the purpose of this study, a description on the involvement required and your rights as a participant.

PURPOSE OF THE STUDY

- To study knowledge sharing practices in a public training institute.

PROCEDURES

- The survey consists of two parts. Part 1 will take 30-40 minutes of your time; and Part 2 will take approximately 15-20 minutes.
- You are allowed to complete the survey at any time of your convenience and return the completed survey within one week from the date stated in this form.
- There may be a follow up interview sessions if needed to help the researcher to further understand the information given.

POTENTIAL RISKS AND DISCOMFORTS

- There are minimal risks for participating in this survey. However, there may be emotional discomforts when answering questions about personal experiences.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR ORGANIZATION

- To gain knowledge in the subject matter and could contribute to improvement in promoting knowledge sharing and managing diverse organization.

CONFIDENTIALITY

- Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only

with your permission. All data will be kept confidential and only those directly involved with the research will have access to them.

PARTICIPATION AND WITHDRAWAL

- Your participation in this study is completely voluntary. You may refuse to participate entirely or withdraw at any time without consequences of any kind. In the event you choose to withdraw from the study, all information you provide will be destroyed and omitted from the final paper.
- The researcher may withdraw you from this research if circumstances arise which warrant doing so.

INQUIRIES

- You are encouraged to ask questions or raise concerns at any time about the nature of the study or the methods I used. Please contact me at any time at the e-mail address or telephone number given above.

SIGNATURE

I, _____ have read, understood, and received a copy of this consent form. By signing this consent form I certify that I agree to participate in this study as an informant.

Signature Date

Participant

Signature Date

Researcher

BORANG MAKLUMAT PERSETUJUAN

Tajuk Kajian: Amalan Perkongsian Ilmu di Sebuah Institut Latihan Awam Tempatan

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Terima kasih atas persetujuan anda untuk terlibat dalam kajian ini. Borang ini memberi penjelasan mengenai tujuan kajian, penyertaan serta hak-hak anda sebagai peserta.

TUJUAN KAJIAN

- Untuk mengkaji amalan perkongsian ilmu di sebuah institut latihan awam.

PROSEDUR

- Survei terdiri daripada dua bahagian. Bahagian pertama akan mengambil masa anda selama 30-40 minit; manakala bahagian kedua mengambil masa kira-kira 15-20 minit.
- Anda dibenarkan melengkapkan survei pada bila-bila masa mengikut kelapangan anda dan mengembalikan borang survei yang telah dilengkapkan dalam masa seminggu dari tarikh yang tercatat pada borang ini.
- Temubual susulan mungkin dibuat sekiranya diperlukan oleh penyelidik untuk memahami lebih lanjut maklumat yang telah diberi.

RISIKO DAN KETIDAKSELESAAN

- Risiko untuk menyertai survei ini adalah minima. Bagaimanapun, terdapat kemungkinan berlaku ketidakselesaan dari segi emosi semasa anda menjawab soalan yang berkaitan dengan pengalaman peribadi.

MANFAAT KEPADA PESERTA DAN/ATAU ORGANISASI

- Untuk mendapatkan pengetahuan dalam bidang yang dikaji serta menyumbang kepada penambahbaikan dalam mempromosikan perkongsian ilmu dan pengurusan organisasi yang berbilang latar belakang.

KERAHSIAAN

- Sebarang maklumat yang diperolehi berkaitan kajian ini yang boleh mendedahkan diri anda akan dikekalkan sebagai rahsia dan akan

didedahkan hanya dengan kebenaran daripada anda. Semua data akan disimpan sebagai rahsia dan hanya pihak yang terlibat secara langsung dengan kajian ini boleh mengakses data tersebut.

PENYERTAAN DAN PENARIKAN DIRI

- Penyertaan anda dalam kajian ini adalah secara sukarela. Anda boleh menolak untuk menyertai sepenuhnya kajian ini atau menarik diri pada bila-bila masa tanpa sebarang syarat. Sekiranya anda membuat keputusan menarik diri dari kajian, semua maklumat yang telah diberi akan dilupuskan dan dikeluarkan dari laporan akhir.
- Penyelidik berhak mengeluarkan anda dari kajian jika terdapat sebarang sebab yang membenarkan berbuat demikian.

PERTANYAAN

- Anda digalakkan mengemukakan soalan atau pertanyaan pada bila-bila masa mengenai kajian ini ataupun kaedah penyelidikan yang digunakan. Anda boleh menghubungi saya melalui e-mel atau telefon seperti yang tertera di atas.

TANDATANGAN

Saya, _____ telah membaca, memahami dan menerima salinan borang ini. Dengan menandatangani borang perakuan ini, saya mengesahkan bahawa saya bersetuju untuk menyertai kajian ini sebagai informan.

Tandatangan _____ Tarikh _____

Peserta

Tandatangan _____ Tarikh _____

Penyelidik

Appendix 3

RESEARCH SURVEY QUESTIONNAIRE
SOALAN SURVEI KAJIAN

KNOWLEDGE SHARING PRACTICES IN A LOCAL PUBLIC TRAINING INSTITUTE
AMALAN PERKONGSIAN ILMU DI SEBUAH INSTITUT LATIHAN AWAM TEMPATAN

This open-ended survey is divided into two (2) parts, Part A and Part B. This survey takes about 30 to 40 minutes per session.
Soalan survei jawapan terbuka ini terbahagi kepada dua (2) bahagian, Bahagian A dan Bahagian B. Survei ini mengambil masa antara 30 hingga 40 minit bagi setiap sesi.

PART A / BAHAGIAN A

Warm-up Questions / *Soalan Pembukaan*

1. How long have you been working in this organization?
   Berapa lama anda telah bekerja dalam organisasi ini?

2. What is your area of expertise?
   Apakah bidang kepakaran anda?

3. Is your area of expertise similar to what you are doing at work (the course you are teaching/your main tasks)?
   Adakah bidang kepakaran anda sama dengan kerja yang dilakukan (kursus yang diajar/tugas utama anda)?

4. Can you please describe your job?
   Bolehkah anda menerangkan mengenai perkerjaan anda?

Situational Questions / *Soalan Situasi*

Research Question 1: The importance of knowledge sharing in public training institute.
Soalan Kajian 1: Kepentingan perkongsian ilmu di institut latihan awam.

1. Is knowledge sharing a must for your job? Why?
   Adakah perkongsian ilmu merupakan satu kemestian bagi pekerjaan anda? Mengapa?

   _____

   _____

2. How often do you share your knowledge with others?
   Berapa kerapkah anda berkongsi ilmu dengan orang lain?

   _____

3. Do others (your colleagues and superior) share their expert knowledge with you? Why?
   Adakah orang lain (rakan setugas dan pegawai atasan) berkongsi ilmu kepakaran mereka dengan anda? Mengapa?

   _____

   _____

4. How important is knowledge sharing from other experts to you? Why?
   Bagaimanakah pentingnya perkongsian ilmu daripada pakar yang lain kepada anda? Mengapa?

   _____

   _____

Research Question 2: The flow of knowledge sharing in public training institute.
Soalan Kajian 2: Aliran perkongsian ilmu di institut latihan awam.

1. Are you willing to share your knowledge in area of your expertise with your:
   Adakah anda sanggup berkongsi ilmu dalam bidang kepakaran anda dengan:

	If yes, to what extent? *Jika ya, sejauh mana?*	If no, why? *Jika tidak, kenapa?*
Superior *Pengawai atasan*		
Colleague *Rakan setugas*		
Training participant *Peserta kursus*		

2. What kind of knowledge (work-related, personal, research idea, etc.) are you willing to share with your:
   Apakah jenis ilmu (berkaitan kerja, peribadi, idea penyelidikan, dsb.) yang anda sanggup kongsikan dengan:

Superior *Pegawai atasan*	
Colleague *Rakan setugas*	
Training participant *Peserta latihan*	

3. How do you prefer (discussions, lecture, conversation, etc.) to share your knowledge as stated above, with your:
   Bagaimana anda memilih (perbincangan, ceramah, perbualan, dsb.) untuk berkongsi ilmu seperti dinyatakan di atas dengan:

Superior *Pegawai atasan*	
Colleague *Rakan setugas*	
Training participant *Peserta latihan*	

Research Question 3: The problems of knowledge sharing in public training institute.
Soalan Kajian 3: Masalah-masalah perkongsian ilmu di institut latihan awam.

1. What are the problems you faced when sharing your knowledge?
   Apakah masalah-masalah yang dihadapi apabila anda berkongsi ilmu?

   _____

   _____

2. How do you deal with those problems?
   Bagaimana anda menyelesaikan masalah-masalah tersebut?

3. What are the factors that hinder the smooth process of knowledge sharing?
   Apakah faktor-faktor yang menghalang kelancaran proses perkongsian ilmu?

4. In what circumstances are you not willing to share your knowledge?
   Dalam keadaan bagaimana yang anda tidak sanggup berkongsi ilmu?

5. Have you ever faced any circumstances where others are not willing to share their knowledge with you? Please explain.
   Pernahkah anda mengalami keadaan yang mana orang lain tidak mahu berkongsi ilmu dengan anda? Sila jelaskan.

Reseach Question 4: Promoting knowledge sharing in public training institute.
Soalan Kajian 4: Menggalakkan perkongsian ilmu di institut latihan awam.

1. What kind of environment facilitates knowledge sharing (incentive based, supportive top management, etc.)? Why?
   Persekitaran bagaimana yang mendorong perkongsian ilmu (berasaskan insentif, sokongan pihak pengurusan tertinggi, dsb.)? Mengapa?

2. What activities do you perceive to be beneficial in promoting knowledge sharing (training, seminars, etc.)? Why?
   Apakah aktiviti yang anda fikirkan bermanfaat untuk menggalakkan perkongsian ilmu (latihan, seminar, dsb.)? Mengapa?

3. In your opinion, is there any organization's policy that help promotes knowledge sharing? Please explain.
   Pada pendapat anda, adakah sebarang polisi dalam organisasi yang menggalakkan perkongsian ilmu? Sila jelaskan.

PART B: DEMOGRAPHIC INFORMATION
BAHAGIAN B: MAKLUMAT DEMOGRAFI

Unit / *Unit:*

Gender / *Jantina:*

Marital Status / *Status Perkahwinan:*

Highest Education / *Pendidikan Tertinggi:*

Age / *Umur:*

Ethnicity / *Kaum:*

Religion / *Agama:*

If there are any comments or suggestions, please use the space provided below.
Sekiranya ada sebarang komen atau cadangan, sila gunakan ruang yang disediakan di bawah.

Thank you for your participation.
Terima kasih atas penyertaan anda.

Appendix 4

PERSONALITY TEST
UJIAN PERSONALITI

This test is divided into two (2) parts, Part A and Part B. Each part consists of 44 questions. It takes about 15 to 20 minutes of your time.
Ujian ini terbahagi kepada dua (2) bahagian, Bahagian A dan Bahagian B. Setiap bahagian mengandungi 44 soalan. Ia mengambil masa antara 15 hingga 20 minit.

PART A: To be completed by informant
BAHAGIAN A: Untuk dilengkapkan oleh informan

The following statements concern your perception about yourself in a variety of situations. Please indicate the strength of your agreement with each statement, utilizing the following scale:
Pernyataan-pernyataan berikut memerlukan persepsi anda mengenai diri sendiri dalam pelbagai situasi. Sila nyatakan darjah persetujuan anda bagi setiap pernyataan tersebut dengan menggunakan skala berikut:

1	2	3	4	5
Strongly disagree / *Sangat tidak setuju*	Disagree / *Tidak setuju*	Neutral / *Neutral*	Agree / *Setuju*	Strongly agree / *Sangat setuju*

There are no "right" or "wrong" answers, so select the number that most reflects you on each statement.
Tidak ada jawapan yang "betul" atau "salah", sila pilih nombor yang menggambarkan pilihan anda bagi setiap pernyataan.

I see myself as someone who...
Saya melihat diri saya sebagai seorang yang…

1 ...is talkative
...banyak bercakap

1 2 3 4 5

2 ...tends to find fault with others
...cenderung menyalahkan orang lain

1 2 3 4 5

3 ...does a thorough job
...membuat kerja dengan teliti sehingga selesai sepenuhnya

1 2 3 4 5

4 ...is depressed, blue
...tertekan, bersedih

1 2 3 4 5

5 ...is original, comes up with new ideas
…mempunyai idea-idea baru

1 2 3 4 5

6 ...is reserved
…suka menyendiri

1 2 3 4 5

7 ...is helpful and unselfish with others
...suka menolong orang lain dan tidak mementingkan diri

1 2 3 4 5

8 ...can be somewhat careless
…kadangkala cuai

1 2 3 4 5

9 ...is relaxed, handles stress well
...tenang,menangani stres dengan baik

1 2 3 4 5

10 ...is curious about many different things
...ingin mengetahui perkara yang pelbagai

1 2 3 4 5

11 ...is full of energy
...penuh bertenaga

1 2 3 4 5

12 ...starts quarrels with others
...memulakan pertelingkahan dengan orang lain

1 2 3 4 5

13 ...is a reliable worker
...seorang pekerja yang dapat dipercayai

1 2 3 4 5

14 ...can be tense
…kemungkinan boleh tertekan

1 2 3 4 5

15 ...is ingenious, a deep thinker
...bijak, berfikiran jauh

1 2 3 4 5

16 ...generates a lot of enthusiasm
...memberi semangat dan minat mendalam

1 2 3 4 5

17 ...has a forgiving nature
...mempunyai sifat pemaaf

1 2 3 4 5

18 ...tends to be disorganized
...cenderung kepada tidak teratur

1 2 3 4 5

19 ...worries a lot
...sering risau

1 2 3 4 5

20 ...has an active imagination
...mempunyai imaginasi yang aktif

1 2 3 4 5

21 ...tends to be quiet
...cenderung untuk berdiam diri

1 2 3 4 5

22 ...is generally trusting
...*secara umumnya percaya kepada orang lain*

1 2 3 4 5

23 ...tends to be lazy
...bersikap malas

1 2 3 4 5

24 ...is emotionally stable, not easily upset
...*stabil dari segi emosi, tidak mudah bersedih*

1 2 3 4 5

25 ...is inventive
...*berdaya cipta*

1 2 3 4 5

26 ...has an assertive personality
...*mempunyai personaliti yakin diri*

1 2 3 4 5

27 …can be cold and aloof
...boleh bersikap dingin dan menjauhkan diri

1 2 3 4 5

28 …preserves until the task is finished
...meneruskan sehingga sesuatu tugasan selesai

1 2 3 4 5

29 …can be moody
...boleh bersikap suram dan tidak ceria

1 2 3 4 5

30 …values artistic, aesthetic experiences
...*menghargai pengalaman-pengalaman yang bersifat kesenian dan keindahan*

1 2 3 4 5

31 …is sometimes shy, inhibited
...*kadangkala malu dan segan*

1 2 3 4 5

32 …is considerate and kind to almost everyone
...bertimbangrasa dan baik terhadap semua orang

1 2 3 4 5

33 **...**Does things efficiently
...melakukan tugasan dengan efisyen (cekap)

1 2 3 4 5

34 …remains calm in tense situations
...kekal tenang dalam situasi yang tegang

1 2 3 4 5

35 …prefers work that is routine
...lebih menyukai tugas-tugas rutin

1 2 3 4 5

36 …is outgoing, sociable
...suka bergaul dan bersosial

1 2 3 4 5

37 …is sometimes rude to others
...kadangkala bersikap kasar dengan orang lain

1 2 3 4 5

38 **...**makes plan and follow through with them
...membuat perancangan dan mengikutnya sehingga selesai

1 2 3 4 5

39 …gets nervous easily
...mudah gementar

1 2 3 4 5

40 …likes to reflects, play with ideas
...suka menilai semula dan mencuba pelbagai idea

1 2 3 4 5

41 …has few artistic interest
...kurang meminati kesenian

1 2 3 4 5

42 ...Likes to cooperate with others
...suka bekerjasama dengan orang lain

1 2 3 4 5

43 …is easily distracted
...tumpuan mudah terganggu

1 2 3 4 5

44 …is sophisticated in art, music, or literature
...menjiwai kesenian, muzik dan kesusasteraan

1 2 3 4 5

PART B: To be completed by a colleague
BAHAGIAN B: Untuk dilengkapkan oleh seorang rakan sekerja

The following statements concern your perception about your colleague in a variety of situations. Please indicate the strength of your agreement with each statement, utilizing the following scale:
Pernyataan-pernyataan berikut memerlukan persepsi anda mengenai rakan sekerja anda dalam pelbagai situasi. Sila nyatakan darjah persetujuan anda bagi setiap pernyataan tersebut dengan menggunakan skala berikut:

1	2	3	4	5
Strongly disagree / *Sangat tidak setuju*	Disagree / *Tidak setuju*	Neutral / *Neutral*	Agree / *Setuju*	Strongly agree / *Sangat setuju*

There are no "right" or "wrong" answers, so select the number that most reflects you on each statement.
Tidak ada jawapan yang "betul" atau "salah", sila pilih nombor yang menggambarkan pilihan anda bagi setiap pernyataan.

I see my colleague as someone who...
Saya melihat rakan sekerja saya sebagai seorang yang…

1 ...is talkative
...banyak bercakap

1 2 3 4 5

2 ...tends to find fault with others
...cenderung menyalahkan orang lain

1 2 3 4 5

3 ...does a thorough job
...membuat kerja dengan teliti sehingga selesai sepenuhnya

1 2 3 4 5

4 ...is depressed, blue
...tertekan, bersedih

1 2 3 4 5

5 ...is original, comes up with new ideas
…mempunyai idea-idea baru

1 2 3 4 5

6 ...is reserved
…suka menyendiri

1 2 3 4 5

7 ...is helpful and unselfish with others
...suka menolong orang lain dan tidak mementingkan diri

1 2 3 4 5

8 ...can be somewhat careless
…kadangkala cuai

1 2 3 4 5

9 ...is relaxed, handles stress well
...tenang,menangani stres dengan baik

1 2 3 4 5

10 ...is curious about many different things
...ingin mengetahui perkara yang pelbagai

1 2 3 4 5

11 ...is full of energy
...penuh bertenaga

1 2 3 4 5

12 ...starts quarrels with others
...memulakan pertelingkahan dengan orang lain

1 2 3 4 5

13 ...is a reliable worker
...seorang pekerja yang dapat dipercayai

1 2 3 4 5

14 ...can be tense
…kemungkinan boleh tertekan

1 2 3 4 5

15 ...is ingenious, a deep thinker
...bijak, berfikiran jauh

1 2 3 4 5

16 ...generates a lot of enthusiasm
...memberi semangat dan minat mendalam

1 2 3 4 5

17 ...has a forgiving nature
...mempunyai sifat pemaaf

1 2 3 4 5

18 ...tends to be disorganized
...cenderung kepada tidak teratur

1 2 3 4 5

19 ...worries a lot
...sering risau

1 2 3 4 5

20 ...has an active imagination
...mempunyai imaginasi yang aktif

1 2 3 4 5

21 ...tends to be quiet
...cenderung untuk berdiam diri

1 2 3 4 5

22 ...is generally trusting
...*secara umumnya percaya kepada orang lain*

1 2 3 4 5

23 ...tends to be lazy
...bersikap malas

1 2 3 4 5

24 ...is emotionally stable, not easily upset
...*stabil dari segi emosi, tidak mudah bersedih*

1 2 3 4 5

25 ...is inventive
...*berdaya cipta*

1 2 3 4 5

26 ...has an assertive personality
...*mempunyai personaliti yakin diri*

1 2 3 4 5

27 …can be cold and aloof
...boleh bersikap dingin dan menjauhkan diri

1 2 3 4 5

28 …preserves until the task is finished
...meneruskan sehingga sesuatu tugasan selesai

1 2 3 4 5

29 …can be moody
...boleh bersikap suram dan tidak ceria

1 2 3 4 5

30 …values artistic, aesthetic experiences
...*menghargai pengalaman-pengalaman yang bersifat kesenian dan keindahan*

1 2 3 4 5

31 …is sometimes shy, inhibited
...*kadangkala malu dan segan*

1 2 3 4 5

32 …is considerate and kind to almost everyone
...bertimbangrasa dan baik terhadap semua orang

1 2 3 4 5

33 **...**Does things efficiently
...melakukan tugasan dengan efisyen (cekap)

1 2 3 4 5

34 …remains calm in tense situations
...kekal tenang dalam situasi yang tegang

1 2 3 4 5

35 …prefers work that is routine
...lebih menyukai tugas-tugas rutin

1 2 3 4 5

36 …is outgoing, sociable
...suka bergaul dan bersosial

1 2 3 4 5

37 …is sometimes rude to others
...kadangkala bersikap kasar dengan orang lain

1 2 3 4 5

38 **...**makes plan and follow through with them
...membuat perancangan dan mengikutnya sehingga selesai

1 2 3 4 5

39 …gets nervous easily
...mudah gementar

1 2 3 4 5

40 …likes to reflects, play with ideas
...suka menilai semula dan mencuba pelbagai idea

1 2 3 4 5

41 …has few artistic interest
...kurang meminati kesenian

1 2 3 4 5

42 ...Likes to cooperate with others
...suka bekerjasama dengan orang lain

1 2 3 4 5

43 …is easily distracted
...tumpuan mudah terganggu

1 2 3 4 5

44 …is sophisticated in art, music, or literature
...menjiwai kesenian, muzik dan kesusasteraan

1 2 3 4 5

Appendix 5

WARM UP QUESTIONS & RESEARCH QUESTION 1 (IMPORTANCE OF KS)

Inform-ant	Service Period	Expertise	Expertise similar	Job description	Is KS a must?	Frequency	Do others share?	Importance of KS from others
1	5 years	Training, TOT, financial	some are related	Training management, teaching, research	yes, KS is very important to expand knowledge, gain experience, become experts & help others to gain the same benefit.	occasionally in formal sessions & daily in informal activities	Yes, always, KS enables us learn new things and help in our daily work/tasks	Exposure & sharing from other experts are very important to increase our knowledge.
2	6.5 years	Training, adult learning, rural management, rural tourism, TOT	yes	Training management, teaching	yes, to carry on the knowledge so that the knowledge & skills are beneficial to others.	almost everyday	yes, occasionally. As we have our own strengths and weaknesses, sharing from others enable us to improve.	Very important. Knowledge is unlimited; there are always new things to learn every day.
3	3 years	Training, rural management	yes	Training management, teaching	yes, to improve skills related to work	occasionally	yes, KS is easier than other forms of knowledge acquisition	Important, to generate ideas.
4	2 years	Training, rural management	yes	Training management, teaching	yes, it is a must to current knowledge and to generate new knowledge.	occasionally, from time to time.	yes, through KS we can understand various knowledge that are useful in performing our tasks & responsibilities.	Important to improve & update current knowledge and skills, as well as to learn new knowledge.

5	6 years	Office management, secretarial	yes	Provide administrative support including filing and record management, prepare letters and memos, dealing with appointments and meeting arrangements.	yes, KS is useful & beneficial to update & improve current knowledge, and to distribute information from time to time.	occasionally	yes, we have agreed to participate and take turn to share our expertise in formal KS session. KS also happen informally especially during tea break or lunch time.	Important, so we can get details, further explanation & guides on other fields that we are not familiar with. KS is also important in developing knowledgeable worker.
6	1 year	Administration (registry & leave management)and financial (payroll)	some are related	Administration, financial, human resource management.	yes, improve current knowledge and generate ideas among colleagues.	almost everyday	yes, to add value to current knowledge.	very important to improve work quality, enhance good relationships and promote cooperation among organization members.
7	9 months	Management and administration	yes	Administration, financial, training management and human resource management	yes, to generate ideas in decision making process.	daily	yes, knowledge sharing among experts is useful to solve work related issues/problems.	Important. KS widen my perspective to improve own work performance.
8	5 years	General works, training facilitator	yes	Deliver mail and documents, prepare training handouts, make photocopies, making up rooms for training and meeting, as training secretariat	yes. KS is a must to improve work quality, gain new knowledge and to improve knowledge.	daily	yes, they always offer help and willing to guide me whenever we work together.	very important, especially among colleagues as we spent most time together.

RESEARCH QUESTION 2 (KS PRACTICES)

Inform-ant	1A share w superior	1B share w colleague	1C share w participant	2A knowledge share w superior	2B knowledge shared w colleague	2C knowledge shared w participant	3A medium w superior	3B medium w colleague	3C medium w participant
1	yes, appropriately	yes, appropriately	limit to their abilities	work-related, experience in other organizations	work-related, personal, life-skills	subject-related, personal experience	meeting	discussion, conversation, e-mail, meeting	lecture, workshop, discussion, conversation
2	yes, no limit	yes, no limit	yes, no limit	work-related (ideas)	work-related, personal, life-skills, current issues	subject-related, personal experience, current issues	discussion & conversation	discussion & conversation	discussion & conversation
3	yes, appropriately	yes, no limit	yes, appropriately	work-related	work-related, personal	subject-related, personal experience	meeting, discussion	meeting, discussion & conversation	lecture, discussion, conversation
4	yes, appropriately	yes, no limit	yes, no limit	work & research-related, self improvement	work-related, personal, life-skills, current issues	subject-related, life-skills	discussion, conversation, feedback	discussion & conversation	lecture, question & answer session, discussion
5	yes, no limit	yes, no limit	yes, appropriately (depend on their level of understanding, prior knowledge & needs)	work-related	work-related, personal, life-skills	subject-related	multi-media presentation	discussion & conversation	lecture, multi-media presentation

6	yes, until both understand and accept	yes, until being able to perform related task	yes, until training objective is achieved & able to perform related task	work-related	work-related	work-related	discussion, conversation, report, meeting	discussion, conversation, meeting	discussion, lecture
7	yes, appropriately	yes, appropriately	yes, appropriately	work-related	work-related, personal experience	work & research-related, personal experience	discussion, meeting, presentation	discussion, meeting, conversation, presentation	discussion & conversation
8	yes, appropriately	yes, no limit	yes, appropriately	work-related	work-related, life-skills	work-related	discussion	discussion, conversation & informal activities	discussion, lecture

RESEARCH QUESTION 3 (PROBLEMS IN KS)

Informant	problems in KS	dealing w problems	factors hindering KS	unwilling to share circumstances	experience
1	different opinion	initiate further discussion, listen to other's opinion & rationalize	disagreement, external factors (audience readiness, room setting, noisy environment, facilities etc), too many audience, communication problem (language barrier)	when the situation is tense, when feel that the subject matter is already known to others	yes, when we are not yet known to others & they are not confidence in what we try to share or deliver.
2	mind-setting (when people put barrier to KS)	proceed with sharing appropriate knowledge	differences in term of academic qualifications, job positions & individual characteristics	uninterested audience & rejection	not yet
3	when audience's expectation is higher than what we are capable to share, different level of understanding, language barrier, lack of facilitating skills	continuous training, equip oneself with relevant and up-to-date knowledge & information, practice facilitating skills	facilitating skills (when dealing with audience w different background), language barrier	sensitive issues that might relates to other community or personal values	yes, people ignore and think that the subject is not important.
4	different opinion	negotiation	time availability (occupied w work & inappropriate time to share knowledge)	when the subject is too personal	not yet, most of the time people like to share knowledge & generate ideas
5	when unexpected questions are being asked, audience are more experienced in the subject, different opinion, rejection	to be well prepared, refer to other experts, open for discussion, ask others' opinion	Equipment problem (presentation slides or PC not functioning), audience behavior (readiness, rejection, not interested), mood, generation gap.	when dealing w difficult audience, people who are more experienced or holding higher position	yes, when others are reluctant to share as they feel that they are not making profit out of KS or that it is a lost for them if they share w others.
6	misunderstood by others as showing off knowledge	explain the pros and cons of each action.	time availability & inappropriate place	when dealing w slow learner & people w negative thinking	not yet, people are normally willing to share work-related & new knowledge

7	in depth knowledge in subject matter, audience prior knowledge	acquire knowledge from various sources (through training, reading, observation)	time availability (limited & inappropriate time), environment, place	when relate to destructive issues & disagreement among organization members	not yet.
8	time availability, lack of knowledge, inadequate facility & equipment, language barrier	discussion to get mutual understanding, get help from others to explain	time availability, level of knowledge	when people reject and disrespect opinion & knowledge we share	not yet, most people are supportive and listen to one another's opinion

RESEARCH QUESTION 4 (PROMOTING KS)

Informant	environment facilitates KS	beneficial activities	organization's policy
1	supportive top management, employees awareness	training, meeting, discussion, formal KS session	no specific policy, but KS is widely practiced & encouraged through various mechanisms such as sharing reading materials through email, morning prayer & lectures
2	encouragement from the management, employees support & participation	seminar, team building, KS session	not sure, but current environment highly anticipate KS practices, sometimes KS happens spontaneously through discussions and conversations related to work or daily life.
3	supportive management, policy & group structure	training, in group activities & games	not aware of any policy, but I think we are towards that move in order to achieve organizational vision & mission.
4	knowledge culture & incentive based to motivate people	training, seminar, workshop, discussion, conversation, sports	yes, staff are given platforms (morning prayer & management meeting) to present information from meetings or programs attended; there is also a session for KS once a month; & staff club activities also promote KS.
5	supportive top management	training, seminar, workshop, informal activities like conversation among colleagues during tea break & lunch.	yes, as a training institute, this organization is towards becoming a resource centre. Therefore, staff are encouraged to share knowledge to become knowledgeable workers.

6	Incentive-based & supportive top management	training, seminar, workshop, dialogue	yes, staff who attended external meeting/course/seminar are required to present & report their participation in the management meeting or morning prayer; staff take turn to present a topic in KS session initiated once a month.
7	supportive top management, employees awareness & participation	formal & informal activities promote KS such as meeting, seminar, training, conversation, discussion	yes, by providing a reading room w academic reading materials & through presentation in KS sessions. Other than that, the management also ensure that all staff fulfill at least 7 days of attending training in a year so that they have sufficient knowledge and hence could contribute to KS in their work or in personal life.
8	supportive top management, cooperation & team work among staff	in-house training, team building, informal activities which involve conversation, socialize with colleagues or club activities after office hours	yes, through training of trainers and in-house training programs, which I think should be organized more frequent in the future.