THE INFLUENCE OF PERCEIVED ORGANIZATIONAL SUPPORT ON TRANSFER OF TRAINING AND THE CONSEQUENCES OF TRANSFER OF TRAINING ON SERVICE QUALITY AND JOB SATISFACTION: A MALAYSIAN PUBLIC SECTOR CONTEXT

A thesis submitted in fulfillment of the requirement for the degree of
Doctor of Philosophy

by

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DECLARATION

I, **ABDUL RAHIM BIN ZUMRAH** declare that:

This PhD thesis entitled **'The influence of perceived organizational support on transfer of training and the consequences of transfer of training on service quality and job satisfaction: A Malaysian Public Sector Context'**, presents work carried out by myself and does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university.

To the best of my knowledge it does not contain any materials previously published or written by another person except where due reference is made in the text; and all substantive contributions by others to the work presented, is clearly acknowledged.

Signature : …….

Date : …….

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Abstract

The term ‘Transfer of Training’ refers to the consistent application to the workplace of particular knowledge, skills and attitudes learned from undertaking a training activity. The successful transfer of training is influenced by many factors including employees’ characteristics, work environment and learning level after training has been completed. Over the last two decades, researchers have found that a range of specific characteristics of employees and work environment factors can influence the success of transfer of training in the workplace. However, the influence of the social exchange factor in the workplace, known as Perceived Organizational Support (POS), has not been fully explored. In addition, there has been little research conducted to investigate the consequences of transfer of training, particularly on an employee’s job performance and work attitude. Recent researchers have urged to further explore this issue, due to the lack of empirical evidence.

Much of the previous research on transfer of training has been conducted in the context of private sector organizations predominantly based in Western countries, particularly in the United States. Consequently, an understanding of transfer of training issue in other types of organizations, such as public sector organizations, and in other regions, such as Asia and particularly in the Southeast Asia is still limited.

This study has been conducted to addresses these gaps, specifically, exploring the moderating effect of Perceived Organizational Support on the relationship between Perceived Learning and Transfer of Training. The relationship between Transfer of Training and Service Quality and Job Satisfaction and particularly the mediating role of Job Satisfaction is also examined. Finally, this study investigates these relationships in the context of public sector organizations in Malaysia, a developing country in Southeast Asia. The data for this study were collected from three sources: Malaysian public sector employees who attended a basic financial management training program in 2009 and 2010; the employees’ supervisors; and the employees’ colleagues (regarded here as internal customers). The data were analyzed using Structural Equation Modeling. The findings show that Perceived Organizational Support has an important role as predictor of Transfer of Training but not as a moderator as originally proposed. The results also demonstrate a significant relationship between Transfer of Training and Service Quality and Job Satisfaction, although Job Satisfaction does not appear to have a mediating role as originally proposed.

Chapter 1

Introduction

1.1 Research background and problems

An area in training research that has continued to receive the attention of researchers is *transfer of training* (Brown, McCracken & O'Kane 2011). Transfer of training refers to the consistent application of knowledge, skills and attitudes that have been gained during training, to the workplace (Baldwin & Ford 1988; Blume, Ford, Baldwin & Huang 2010). An employee is considered to have transferred the training to his/her workplace when he/she can apply the new learned knowledge, skills and attitudes to their job and this practice becomes consistent over a period of time. Transfer of training is an important topic to study because it has been regarded as a theme that is both valuable to the field of human resource development (HRD) as well as other disciplines (Jeung, Yoon, Park & Jo 2011). It has been also recognized as a key criterion when evaluating a particular training program (Kirkpatrick 1998; Olsen 1998; Pineda 2010; Sofo 2007). A particular training activity is considered successful if the trainees can apply the knowledge, skills and attitudes that they have learned during training to their workplace. On the other hand, if trainees do not apply training outcomes to their workplace, the training goals will not be achieved (Subedi 2004). In addition, transfer of training is an important topic to study because it has been regarded as an important mechanism that enhances the impact of training on employees, resulting in a higher return to organizations from their investment in training (Garavaglia 1993; Leberman, McDonald & Doyle 2006; Zenger, Folkman & Sherwin 2005).

Transfer of training however remains a difficult and often frustrating challenge for organizations (Chiaburu, Sawyer & Throughgood 2010b). Research has shown that the

transfer of the new learned knowledge, skills and attitudes in the workplace is still limited. For example, Saks (2002) conducted a survey among trainers to obtain their perception of the percentage of employees in their organizations who have effectively applied the knowledge, skills and attitudes learned during training. On average, the respondents of the study indicated that around 40% of employees do not transfer the training outcomes immediately after training and this increases to nearly 70% after one year. Another study was conducted among 150 training professionals (e.g., training directors, training personnel, human resource personnel, and training consultants) of various organizations, including manufacturing, service and government in Canada. The objective was to obtain respondents' estimation of the percentage of employees in their organizations who effectively apply and make use of what they learn in training programs on the job immediately after, six months after and one year after attending a training program. On average, the respondents indicated that only 62% of employees had used the new learned knowledge, skills and attitudes immediately after training. This percentage decreased to 44% after six months and continued to decrease to 34% after one year (Saks & Belcourt 2006). A more recent study of 56 trainees indicated that the trainees' transfer performance fell within three weeks after training (Vermeulen & Admiraal 2009).

Consequently, there is a growing interest in understanding the factors that influence transfer of training in the workplace, a point that has been continuously suggested by recent researchers (e.g., Halbesleben, Cox & Hall 2011; Liu & Smith 2011; Prieto & Phipps 2011). An adequate understanding of these factors will help organizations enhance the application of the new learned knowledge, skills and attitudes in the workplace (Holton & Baldwin 2000; Yamkovenko, Holton & Bates 2007), which should consequently enable organizations to reach peak performance (Short 1997). Over the last two decades, researchers have identified a range of factors that have influenced transfer of training including: trainee characteristics (e.g., motivation to transfer, self-efficacy, job involvement, organizational commitment, job satisfaction and personality); work environment (e.g., supervisor support, peer support, top management support, opportunity to transfer, training rewards, organizational learning culture, accountability for transfer, job constraint, job design, organizational training policy, organizational communication and decision-making system); and the learning achieved by the employee as a result of attending training.

Of these factors, the learning achieved by employees following the training is regarded as the most important influence of transfer of training (Curry 1997). Some researchers have argued that the learning achieved by employees is a pre-condition of transfer of training (Olsen 1998; Pineda 2010). Employees who gain new knowledge, skills and attitudes concerning particular training content will at the same time enhance their ability to apply the learned knowledge, skills and attitudes on the job, following training. Although a significant association between learning and transfer of training is widely accepted (Ford, Smith, Weissbein, Gully & Salas 1998; Leach & Liu 2004; Liebermann & Hoffmann 2008; Nijman, Nijhof, Wognum & Veldkamp 2006; Ramirez 2000; Rouiller & Goldstein 1993; Tracey, Hinkin, Tannenbaum & Mathieu 2001; Tziner, Fisher, Senior & Weisberg 2007; Xiao 1996), the strength of the relationship is considered by many to be limited or weak (Alliger, Tannenbaum, Bennett, Traver & Shotland 1997; Blume et al. 2010; Tan, Hall & Boyce 2003; Warr, Allan & Birdi 1999; Warr & Bunce 1995). Accordingly, there is a growing interest in identifying the moderating factors that could strengthen the association between learning and transfer of training (Aguinis & Kraiger 2009; Tan et al. 2003).

Reviews of the transfer of training literature reveal that relatively few studies have examined the factors that may moderate the relationship between learning and transfer of training. One study did, however test the role of supervisor support, peer support and organizational continuous learning culture as moderating factors on the association between learning and transfer of training (Tracey, Tannenbaum & Kavanagh 1995). Due to the paucity of research on this issue, this thesis will help to fill this gap by testing the moderating effect of perceived organizational support (POS) in the relationship between perceived learning and transfer of training. POS has received a great deal of attention in the more recent literature (Dawley, Andrews & Bucklew 2008; Zhang, Farh & Wang 2012), however, researchers have argued that less attention has been paid to investigating the effect of POS on transfer of training (Chiaburu, Dam & Hutchins 2010a). Previous studies have shown that POS can facilitate employees' positive behavior (Jawahar & Carr 2007; Lavelle, McMahan & Harris 2009) and has the ability to reinforce the effect of organizational practices on employees' behavior (Erdogan & Enders 2007; Marler, Fisher & Ke 2009). For these reasons, the association between perceived learning and transfer of training is expected to be stronger with high POS. However, such a moderating effect has not yet been empirically tested in the literature.

Despite the growing interest in understanding the factors that influence transfer of training in the workplace, another important issue that has received little attention by researchers of transfer of training is the consequences of transfer of training, particularly on employees. Recent studies (e.g., Antle, Barbee, Sullivan & Christensen 2009; Burke & Hutchins 2007; Chiaburu et al. 2010b; Tharenou, Saks & Moore 2007; Weldy 2009) have increasingly suggested that the consequences of transfer of training on employees should be further examined. One reason for this is to test the notion, which has been posited by a number of training models, that an expected positive impact of transfer of training on employee job performance will occur (Colquitt, LePine & Noe 2000; Kirkpatrick 1998; Kontoghiorghes 2004; Thayer & Teachout 1995). However, up to now, relatively few research studies have empirically examined the consequences of transfer of training on employees. For example, in the mid-1980s, Noe and Schmitt (1986) found transfer of training was significantly related to educator performance improvement including their fiscal management and relationships with the community. Other studies also found transfer of training was positively related to employees' overall performance including their cleanliness and financial management (Rouiller & Goldstein 1993), teaching competencies (Zayed 1994), and selling performance (Leach & Liu 2004). This study will therefore add to the literature by examining the consequences of transfer of training on service quality. The application of the new learned knowledge, skills and attitudes to the workplace should help employees to improve the quality of service they provide to customers (Sullivan 2002) including the way they communicate and build up relationship with customers (Hyde 2010). This relationship has, however, yet to be empirically tested in the literature.

It is expected that transfer of training can facilitate an employee's positive work attitude in the organization (Griffin 2011; Kirkpatrick 1998). One study in particular indicated that transfer of training was positively related to employees' organizational commitment (Leach & Liu 2004). Recently, scholars such as Chen (2010) have argued that transfer of training could also have a positive impact on employee job satisfaction. Zayed (1994) indicated that the lack of transfer of training may cause employees to be less satisfied. However, to date this notion has lacked empirical evidence in the literature. This study therefore will help to fill this gap by empirically examining the link between transfer of training and job satisfaction to develop a better understanding of the effect of transfer of training on employees.

Reviews of the literature show that recent studies have been interested in assessing the mediating role of job satisfaction. Researchers found job satisfaction can be regarded as an important mechanism that links organizational practices and their impact on employees' work related outcomes. For example, Kim, Tavitiyaman and Kim (2009) found the commitment of management to service was positively related to employee job satisfaction, which in turn improved employees' service behaviors. Similarly, Gazzoli, Hancer and Park (2010) showed that empowering employees increased their job satisfaction and subsequently enhanced customers' appreciation of the service they received. Accordingly, this study expects that transfer of training will positively relate to employees' job satisfaction, which in turn will enhance the quality of service provided.

This study will address the gaps identified earlier by proposing a conceptual framework that includes those factors that affect transfer of training and the consequences of transfer of training on employees. The conceptual framework will be examined in the context of public sector organizations in Malaysia. The rationale for testing the proposed model in the context of public sector organizations in Malaysia is based on the fact that previous studies on transfer of training have mostly been conducted in private sector organizations (Clarke 2002; Mohamed 1994; Schumaker 2004). In previous studies evidence has been presented showing that the factors associated with transfer of training differ significantly between public and private sector organizations (Chen, Holton & Bates 2006; Holton, Chen & Naquin 2003; Yamnill & McLean 2005). One of the reasons for this is due to the fact that public and private sector organizations differ significantly in terms of organizational goals and systems, work values and work motivation (Buelens & Broeck 2007). In addition, previous research on transfer of training has mostly been conducted in Western countries (Subedi 2004), specifically the United States (Klink, Gielen & Nauta 2001; Velada, Caetano, Michel, Lyons & Kavanagh 2007). As a consequence, the main corpus of work on transfer of training has to date referred only to Western cultural contexts and therefore our understanding of transfer of training issues in other contexts, particularly Southeast Asian countries such as Malaysia, is still limited (Baharim 2008).

It has been previously argued that the management theories and concepts, most of which have been developed in the Western context, are not necessarily applicable to Asian countries (Rees & Johari 2010). One explanation for this is the cultural differences between Western and Asian countries (Hofstede & Hofstede 2005), particularly between

Southeast Asian cultures and United States culture (Hofstede 1987). For example, unlike Western countries, Malaysian culture is more collectivistic, respectful of hierarchy and elders, relationship oriented and cooperative rather than competitive (Merriam & Mohamad 2000; Smith 2003; Schermerhorn & Bond 1997; Triandis, Brislin & Hui 1993).

The cultures of a particular country can have a great influence on organization's work culture and practices (Abdullah 1992; Hassi & Storti 2011; Hofstede 1984; Kopelman, Brief & Guzzo 1990) including human resource management practices (Vadivelu & Klein 2011). It has also been noted that the culture of a particular country can also have a significant impact on employee motivation to learn, training performance, self-efficacy and their intention to transfer the training (Pattni & Soutar 2009; Rogers & Spitzmueller 2009). Those individual attributes embedded in cultural norms can influence the success of transfer of training outcomes in the workplace. Therefore it is important to examine the proposed conceptual framework of this thesis from the perspective of Southeast Asian countries, using Malaysia's public sector organizations as an empirical case. Conducting the research in such a context will extend our understanding and provide empirical evidence on the applicability of the theories and concepts that have mostly been developed in the Western context. As Wickramasinghe (2006) argued, the credibility of a particular management concept, model or idea is partly determined by their diffusion and applicability in various contexts and nations.

1.2 Transfer of training research in a public sector organization

Transfer of training is an important issue for all types of organizations including public sector organizations. Public sector organizations actively and continuously invest in employee training in order to enhance their employees' competencies and organizational performance (Allio 2005). For example, in 2008, the government of Malaysia allocated a significant amount of money to train 33,456 public sector employees. The number of public sector employees who received support from the government to attend training increased to 35,080 in 2009 (National Institute of Public Administration (INTAN) Annual Report 2008/2009). However, prior research on transfer of training has mostly focused on private sector organizations such as banks (Kim 2010; Liebermann & Hoffmann 2008), information technology (Marler, Liang & Dolebohn 2006), hotels (Tracey et al. 2001),

restaurants (Rouiller & Goldstein 1993) and the manufacturing and industrial sectors (Lim & Johnson 2002; Tziner et al. 2007; Xiao 1996). While these studies are important, the discussion relating to transfer of training in other types of organizations such as the public sector is still limited. Therefore, it is necessary to conduct a study on transfer of training in public sector organizations due to differences between public and private sectors organizations (Chen et al. 2006; Holton et al. 2003; Yamnill & McLean 2005). One explanation for these differences is that public and private organizations are markedly different in terms of organizational goals and systems, work values and work motivation (Buelens & Broeck 2007).

Literature reviews have shown that there is a growing interest among recent researchers in transfer of training in public sector organizations in both Western and non-Western contexts. In the Western context, Zaniboni, Fraccaroli, Truxillo, Bertolino and Bauer (2011) conducted a study among public sector employees in Italy to examine the antecedents of training motivation and its impact on employee transfer intention. The study found that concepts such as 'learning goal orientation' and job support are two significant predictors of training motivation. The study also found that one dimension of training motivation, expectancy, had a positive and significant effect on employee intention to transfer training. Brown (2005) conducted a study of public sector employees in Canada and examined the effectiveness of distal outcome goals, proximal plus distal outcome goals and being urged to 'do your best' interventions, on employees' transfer performance. The study found that distal outcomes goal intervention (where participants were asked to individually set a specific, difficult goal for the number of times they would use the skills and knowledge gained from training during the next six weeks) was not an effective transfer of training intervention. On the other hand, the study found those employees who received proximal plus distal outcome goals intervention (where participants were asked to individually set a specific, difficult goal for the number of times they would use the skills and knowledge gained from training over the coming two, four and six weeks) and being urged to 'do your best' intervention (where participants were requested to do their best to use the skills and knowledge developed in the training over the coming six weeks) showed better transfer of training.

Machin and Fogarty (2003) conducted a study involving Australian government agency employees in a bid to identify the relationship between trainees' perceptions of in-training

transfer enhancing activities (including over-learning, fidelity, stimulus variability, principles-meaningfulness, self-management activities, relapse prevention, goal setting) and three major outcomes of training: self-efficacy, learning performance and level of trainees' transfer intentions. The study found significant results for most predicted relationships including a strong relationship between self-efficacy and trainees' transfer intentions. On the other hand, the study found insignificant results for some predicted relationships including: firstly, the relationship between learning performance and self-efficacy; and secondly, the relationship between learning performance and transfer intentions. In another study, Phillips (2003) conducted a training evaluation study among public sector managers, professionals, human resource and training directors in the United States. One of the study objectives was to investigate the method applied by those practitioners in evaluating transfer of training. The study found the three most common methods to evaluate employees' transfer of training were based on employees' performance appraisals, observation and supervisor assessment. Short (1997) conducted a study involving employees of one public education institution in the United States, who attended leadership training organized by the institution. The study objectives were to examine the relationship between work group support (supervisor support, peer support, subordinate support) and transfer behavior, and to investigate whether there was a significant difference on transfer behavior between one month and three months following training. The study found work group support explained 22% of the variance of transfer behavior at one month and 30% of the variance of transfer behavior at three months following training after controlling for employee educational level. The study further indicated that there was no significant difference in employee transfer behavior between one month and three month following training.

In the non-Western context, Kaleem, Hilali and Inamullah (2011) studied middle level managers in the public sector in Pakistan to identify the factors that expedite or inhibit the transfer of training. Based on the data that were collected through focused group interviews, a number of factors that influence transfer of training in this context have been identified, including lack of follow up and evaluation on the employees following the training in the workplace, the relevancy of the training content to the employees' current job, the structure, norms and culture of the organization, the adequacy of the resources for transfer the learning, the opportunity provided by the organization for employees to use learning, and the support the employees receive from their immediate supervisor. Yagni,

Goodman, Holton and Bates (2008) conducted a study to validate a classical Arabic version of the Learning Transfer System Inventory (LTSI) among public sector employees in Jordan. They found a number of factors that affected transfer of training, including organizational variables (e.g., peer support, supervisor support, feedback and coaching), personal factors (e.g., motivation to transfer, resistance or openness to change and opportunity to transfer) and training-related factors (e.g., training design and content validity). The study concluded that the classical Arabic version of LTSI was valid for assessing the factors associated with transfer of training in Jordan's public sector. In another study, Hayes and Pulparampil (2001) explored the factors associated with transfer of training in a government training center in India, identifying a number of factors that influenced transfer of training for public sector employees. These factors consisted of the relevance of training, incentive or rewards for transfer, frequent job transfer and support by supervisors and peers. Zayed (1994) examined the effect of work environment factors on transfer of training among public organizations trainers in Egypt. The study found a number of work environment factors that affected transfer of training including organization training policies, organization resources, management involvement, incentives and rewards. Similarly, a study by Mohamed (1994) indicated that other work environment factors influence the generalization and quality of knowledge and skills application of public sector employees in the United Arab Emirates. These constituted job design, social support, positive reinforcement such as salary increase, recognition, promotion and praise, and the fairness of the evaluation of training systems.

Although all these studies are essential to enhancing the understanding of transfer of training, particularly with regard to factors that are linked to transfer of training in public sector organizations, further research on transfer of training in this context is required (Schumaker 2004). This is because the public sector organization in different national contexts may have unique organizational practices influenced by the culture of a particular nation (Abdullah 1992; Hassi & Storti 2011; Hofstede 1984; Kopelman et al. 1990) including human resource management practices (Vadivelu & Klein 2011). Therefore a study among employees of public sector organizations in a particular nation may reveal different factors related to transfer of training (Schumaker 2004). In response to this suggestion, this study investigates the factors that may affect transfer of training and the consequences of transfer of training in the context of public sector organizations in Malaysia.

1.3 Training and transfer of training in the Malaysian public sector

Malaysia is located in Southeast Asia and it consists of thirteen states; Perlis, Kedah, Pulau Pinang, Perak, Selangor, Melaka, Negeri Sembilan, Johor, Pahang, Terengganu, Kelantan, Sabah and Sarawak. The capital city is Kuala Lumpur. In 2010, the total population in Malaysia was 28.3 million of which 91.8 per cent were Malaysian citizens and 8.2 per cent were non-Malaysian citizens. Malaysian citizens consist of the following ethnic groups: Bumiputera (67.4%), Chinese (24.6%), Indians (7.3%) and others (0.7%). These multiple ethnic groups generally practice the same values and culture (Abdullah & Lim 2001). Islam was the most widely professed religion in Malaysia with the proportion being 61.3 per cent. As a multi-cultural nation, other religions embraced included Buddhism (19.8%), Christianity (9.2%) and Hinduism (6.3%) (Population Distribution and Basic Demographic Characteristic Report 2010, Department of Statistics, Malaysia).

The Malaysian government has aimed to make Malaysia a fully developed country by 2020 (Siddiquee 2006). Therefore, the Malaysian government has continuously developed strategies to support this objective. For example, in the Eighth Malaysian Plan (2001-2005), one of the government's foci was to shift the growth strategy from input-driven to knowledge-driven in order to enhance the potential output growth to accelerate structural transformation within the manufacturing and service sectors and to ensure socio-economic stability. During this same period, the government emphasized productivity and efficiency improvements through human resource development activities such as encouraging research as well as utilizing the latest technology, particularly information communication technologies (ICT) (Haslinda, Raduan & Naresh 2007). In the Ninth Malaysian Plan (2006-2010), the Malaysian government placed investment in human capital as the main thrust of its strategy. The aim of the Ninth Malaysian Plan was to develop an efficient and talented workforce to increase overall national productivity and growth (Haslinda et al. 2007). In the latest Tenth Malaysia Plan (2011-2015), the Malaysian government announced the transformation of the public sector as one of the important strategies in this development plan period. The transformation of the public sector is based on the four following principles: delivery through creativity and innovation, emphasis on speed of decision-making and execution, deliver value for money and uphold the highest level of integrity (Tenth Malaysia Plan 2011 - 2015).

Public sector in Malaysia refers to the agencies in the Public Service at the Federal, State and the Local Government levels. Federal agencies consist of ministries, federal departments and federal statutory bodies. State agencies consist of state departments, state statutory bodies and local governments (City, Municipal and District Councils). There are 724 public sector agencies in Malaysia including education, health, security and civil defense and transport sectors (Public Service Department Annual Report 2008). Currently, the Malaysian public sector has a staff strength of 1,244,365 employees (Public Service Department Annual Report 2008). The public sector plays an important role in supporting the government's aims and policies, which include delivering services, handling public enquiries, ensuring public security and safety, and community programs (Chief Secretary to The Government of Malaysia).

Due to this important role, improving public sector service performance has received the attention of the government (Malaysia Administrative Modernisation and Management Planning Unit (MAMPU) Strategic Plan 2008-2012). One important strategy used to enhance public sector service performance is to offer training to public sector employees. The government announced its training plan policy to ensure that all public sector employees are provided with sufficient training by their sectors, according to Public Service Department Service Circular 2005 (Ref. No. 6). To support this policy, the government allocated RM 109.2 million for the training of public sector employees (Public Service Department Annual Report 2009). The government also has developed a training center known as the National Institute of Public Administration (INTAN) to provide training to public sector employees in order to enhance their competencies and service quality of public sectors. In addition, the government has provided support for the establishment of private training agencies in Malaysia as alternative training providers. It has been reported that the Malaysian government had accredited almost two thousand private training providers and institutions (Haslinda et al. 2007).

Reviews of literature have identified that the discussion of training in Malaysia's public sector has focused on two issues: firstly, investigating the factors that influence the success of training; and secondly, examining the consequences of training on public sector employees. In regard to the first issue, one study concluded that there were three factors influencing the success of training: firstly, the training practice factors (e.g., training needs analysis was not performed, lack of planning for training, inappropriate selection of trainer,

some training programs were not relevant to employees' jobs and the training budget was too small); secondly, the job-related factors (e.g., too many procedures and bureaucracy, work load and clashes between work and training time); and thirdly, organizational support factors such as lack of support from top management and immediate supervisor as well as colleagues (Haslinda & Mahyuddin 2009). Other factors such as organizational leadership, ethics and spirituality were also associated with the effectiveness of human resource practices, including training, in Malaysia's public sector (Rees & Johari 2010).

Concerning the second issue, prior studies found public sector employees perceived that their level of knowledge, skills and job performance increased as a result of training (Haslinda & Mahyuddin 2009). Another study found that providing support and sufficient training to public sector employees also reinforced positive work behaviors such as work commitment (Ahmad & Bakar 2003), job satisfaction and decreased their intention to quit the public sector (Gould-Williams & Mohamed 2010).

Although both issues provide a better understanding of training in Malaysia's public sector, another important training issue which has received little attention concerns the discussion on transfer of training (Baharim 2008). This issue is important due to concerns raised over the success of training conducted by Malaysian organizations (Othman & Teh 2003), and in particular the success of training that is provided to Malaysia's public sector employees. This concern is related to the fact that although a vast amount of money has been invested in training, the complaints about public sector employees from the public have increased (Siddiquee 2006). For example, in 2007 the complaints about public sector employees received from the public numbered 5,347 cases and this figure increased by 33.7% in 2008 (Haslinda & Mahyuddin 2009). It would appear the training provided to public sector employees had limited success in decreasing those complaints. One possible explanation is the employees who attended the training do not apply or practice the knowledge, skills and attitudes that they have gained to their workplace, so that they have less ability to improve the service they provided to their customers.

By applying the new learned knowledge, skills and attitudes to the workplace, it is expected that such training would have a greater impact on employees (Garavaglia 1993; Leberman et al. 2006; Zenger et al. 2005). Following this, researchers such as Shaharuddin and Abiddin (2009) have argued that research related to transfer of training in Malaysia's

public sector is very relevant to help overcome this problem. However, research on transfer of training in Malaysia's public sector is still scarce. Only one study by Baharim (2008) has examined the factors that influence public sector employees' motivation to transfer their training. This study found that sharing behavior is positively associated with the formation of personal capacity for transfer, content validity, positive personal outcomes and feedback, which in turn influences employees' motivation to transfer what they have learned in training to their workplace. The study presented in this thesis therefore has been conducted to extend the understanding of the factors that are associated with transfer of training and the consequences of transfer of training on employees in the Malaysian public sector.

1.4 Research questions and aims

This study aims to examine the moderating effect of perceived organizational support in the relationship between perceived learning and transfer of training. The study then investigates the impact of transfer of training on service quality and job satisfaction. This study will also examine the mediating effect of job satisfaction between transfer of training and service quality. Based on these aims, the following research questions are proposed:

a) What factors influence the transfer of training in public sector organizations in Malaysia?

b) Does transfer of training have a positive impact on employees in public sector organizations in Malaysia?

In order to help answer both research questions, five hypotheses are developed:

a) Perceived organizational support has a moderating effect on the relationship between perceived learning and transfer of training, specifically the relationship will be stronger with greater support from the organization.

b) Transfer of training is positively related to service quality.

c) Transfer of training is positively related to job satisfaction.

d) Job satisfaction is positively related to service quality.

e) The relationship between transfer of training and service quality is mediated by job satisfaction.

1.5 Significance of the research

From a theoretical perspective, this study adds to the transfer of training literature by examining the influence of perceived organizational support in the relationship between perceived learning and transfer of training. According to Burke and Hutchins (2008), a discussion on moderating variables has been largely absent in transfer frameworks. Although a positive relationship between perceived learning and transfer of training is widely acknowledged in several empirical studies, this study improves this line of research by examining whether perceived organizational support will strengthen the relationship between perceived learning and transfer of training. The magnitude of the effect of perceived learning on transfer of training may vary as a function of perceived organizational support.

This study provides empirical evidence on the consequences of transfer of training on employees, a theme which is rarely mentioned in the transfer of training literature (Burke & Hutchins 2008; Chiaburu et al. 2010b). Most transfer of training studies have focused on examining the factors that are associated with transfer of training (Ciporen 2010; Holton, Bates & Ruona 2000; Pineda-Herrero, Belvis, Moreno, Duran-Bellonch & Ucar 2011). Previous transfer of training research has not adequately addressed how employees are affected by transfer of training. This study therefore addresses the issue by examining the consequences of transfer of training on employees' service quality and job satisfaction. To date, no study has been identified to address such relationships.

This study discusses transfer of training in public sector organizations in a non-Western context. Generally, prior studies have been conducted mostly in private sector organizations (Clarke 2002; Schumaker 2004) based in the United States (Klink et al. 2001; Velada et al. 2007). This study extends the understanding of transfer of training in

Malaysia's public sector organizations, since the discussion on this issue in this context is still limited in the literature (Baharim 2008).

From a practical perspective, this study provides an additional understanding to organizations on the factors that influence transfer of training. Specifically this study highlights the important role of one of the social exchange aspects in organizations, known as Perceived Organizational Support, on transfer of training. This study also provides empirical evidence about the important role of transfer of training to employees in order to enhance organizational awareness of the transfer of training issue. This will be valuable as most organizations appear less concerned with transfer of training than they do with providing the actual training to their employees (Kraiger, McLinden & Casper 2004; Pineda 2010).

1.6 Research methodology

Five hypotheses have been developed to answer the two major research questions of this study. A survey and cross-sectional approach has been applied to gather data from public sector employees in Malaysia to test the proposed hypotheses. The questionnaires used in this study are based on previously established measures used in published studies. The data on this study is analyzed using structural equation modeling (SEM). All these issues are discussed in detail in Chapter Four, which addresses the research methodology.

1.7 Research outline

This thesis consists of six chapters. The first chapter described the topic's background and the problems to be addressed. Following this, the chapter sets out the aims, research questions and hypotheses of this study. Then, the chapter explains the significance of conducting this research and provides a brief overview about the methodology that will be used in this research. Finally, the chapter provides an overview of the research content.

Chapter Two reviews the literature relating to the factors that affect transfer of training. The chapter begins with an introduction to the concept of training and transfer of training

in order to provide a better understanding of how these two concepts are linked. The chapter then reviews the factors that affect transfer of training. Following this, the chapter introduces and discusses in detail the potential effect of perceived organizational support on transfer of training, specifically on its potential role as a moderator in the relationship between perceived learning and transfer of training. The first hypothesis is proposed at the end of this discussion. Chapter Two also reviews the literature on the consequences of transfer of training for employees. The discussion begins with a general overview of the consequences of transfer of training. The chapter then specifically discusses the impact of transfer of training on service quality. The second hypothesis is proposed at the end of this discussion. Following this, the chapter introduces and discusses in detail the potential mediating effect of job satisfaction in the relationship between transfer of training and service quality. A discussion of the potential effect of transfer of training on job satisfaction and the effect of job satisfaction on service quality is included. Three hypotheses are then proposed at the end of this discussion.

Chapter Three explains the conceptual framework of this study, developed around the five hypotheses proposed in Chapter Two. Throughout the discussion, the chapter provides a brief introduction to each of the constructs (perceived learning, perceived organizational support, transfer of training, job satisfaction, and service quality) that are included in the conceptual framework. Following this, the chapter discusses the relevance of the conceptual framework to the context of this study. The chapter also includes some discussion about the contribution of the conceptual framework to the transfer of training literature.

Chapter Four provides detailed information on the methodology issues in conducting this research in order to test the proposed hypotheses and the conceptual framework of this study. The chapter describes the research design applied in this study and its justification. The chapter further describes the population and the sample of this study, and provides a brief explanation of the training program selected. The chapter also provides a detailed explanation of the procedures in collecting the data and the measurements that were used to measure the variables. Finally, the chapter explains the analysis techniques that are applied to test the proposed conceptual framework and hypotheses.

Chapter Five presents the results of the quantitative analyses. The chapter provides a discussion on the demographics of respondents. The chapter also provides a discussion on the results of the various analyses including the assumptions (e.g., multivariate normality, outliers, linearity, homoscedasticity and multicollinearity), exploratory factor analysis, the measurement model validity including the goodness of fit of the measurement model, the constructs reliability, the constructs convergent validity and the constructs discriminant validity. Following this, the chapter further provides a discussion on the structural model validity, along with the results of the hypotheses testing.

Chapter Six is concerned with the findings presented in Chapter Five. The chapter begins with a summary of the background of this study including the gaps that were found in the literature and the contribution that this study makes to the literature. Following this, the chapter presents an integrated discussion drawing on the findings from Chapter Five, the hypotheses that were developed in Chapter Two and the conceptual framework presented in Chapter Three. The chapter also provides a detailed explanation of the strength of this study and the practical implications for organizations. Finally, the chapter discusses the limitations of this study together with suggestions for future study. The chapter concludes with a summary of the thesis.

Chapter 2

Literature Review

The factors affecting transfer of training and the consequences of transfer of training on employees

2.1 Introduction

This chapter reviews the literature on two issues related to transfer of training: firstly, the factors that affect transfer of training; and second, the consequences of transfer of training on employees. This chapter begins with an introductory discussion on the concept of training and transfer of training, which will help to build an understanding of the link between training and the transfer of training. The chapter then reviews the factors that influence transfer of training. Following this, the chapter introduces and discusses in detail the potential role of perceived organizational support as a moderator on perceived learning—transfer of training relationship. The hypothesis on the role of perceived organizational support as a moderator in the relationship between perceived learning and transfer of training is developed at the end of the discussion.

This chapter further reviews the literature on the issues relating to the consequences of transfer of training. The discussion begins with a brief overview of the consequences of transfer of training to organizations and their employees. Following this, the discussion will focus on the potential link between transfer of training and service quality and job satisfaction. The chapter will also further discuss the mediating role of job satisfaction on

the relationship between transfer of training and service quality. Research hypotheses are developed at the end of each discussion, follow by the conclusion of the chapter.

2.2 Training

Training refers to a planned and systematic effort to provide and enhance employees' knowledge, skills and attitudes related to their job, through learning experiences with a view to working more efficiently (Blanchard & Thacker 2010; Goldstein & Ford 2002). Training involves a systematic process such as an analysis of employee and organization needs, design and development of training, conducting the training, and evaluating the training (Blanchard & Thacker 2010; Burkley & Caple 2004; Santos & Stuart 2003; Stone 2005). Each process is essential and inter-related, which can affect the achievement of training objectives. As an illustration, as a result of training needs analysis (TNA), an organization identifies that most of their call center employees lack knowledge about its products and services. Based on the TNA result, the organization can design and plan a suitable training program for their call center employees including the selection of the training content, the training materials, the training instructor, the venue and duration of the training and the cost of the training. As a consequence of proper planning and design, a particular training program is expected to be managed in a proper way. Following the training, it is likely the organization will conduct an evaluation to see if the desired result they wished to achieve from the training has been realized. Conversely, if the organization does not adequately identify the needs of their employees, the organization might be unable to design and plan an appropriate training program (e.g., identify suitable training contents and training instructors). As a result, even though the organization can still organize training for their employees, it may face difficulty in evaluating the training due to an inability to link the results of training to employees' needs.

Training has been continuously valued as a strategic and important intervention to improve human resources in organizations (Chiaburu & Lindsay 2008; Kraiger et al. 2004; Salas & Cannon-Bowers 2001). Organizations view training as an investment that is expected to provide benefits to them (Haccoun & Saks 1998) such as improved employees' job knowledge (Vidal-Salazar, Hurtado-Torres & Matias-Reche 2011), organizational commitment (Bulut & Culha 2010), job satisfaction (Rowden & Ahmad 2000); work

performance (Arthur, Bennett, Edens & Bell 2003; Edralin 2011), interpersonal skills (Gaudine & Saks 2004), management relationship (Beigi & Shirmohammadi 2011), professional skills (Sofo 2007) and occupational expertise (Evers, Kreijns, Van der Heijden & Gerrichhauzen 2011a). Training also enhances employees' motivation (Marler et al. 2006), morale (Pidd 2004; Roehl & Swerdlow 1999), self-confidence (Sarri 2011) and positive intergroup attitude (Madera, Neal & Dawson 2011). In addition, training heightens employees' loyalty (Huselid 1995) and awareness of ethical (Frisque & Kolb 2008), security (Kim 2010) and diversity issues in organizations (Combs & Luthans 2007). Furthermore, training can improve organizational learning culture (Buhler 2002; Lopez, Peon & Ordas 2006), productivity (Aghazadeh 2007; Dearden, Reed & Reenen 2006), innovation (Chang, Gong & Shum 2011), competitiveness (Guthrie 2001), economic performance (d'Arcimoles 1997) and financial performance (Huselid 1995). Moreover, it has been argued that training can enhance the relationship between the organization and employees due to employees viewing training as the organization's commitment to and recognition of their contribution and excellent performance (Barrett & O'Connell 2001; Lee & Bruvold 2003; Stone 2005).

Recently, scholars such as Blanchard and Thacker (2010) and Leimbach (2010) have argued that providing training does not always produce positive results for employees, an assumption that has been supported by the findings from previous empirical studies. For example, Santos and Stuart (2003) in their study among 167 employees of a financial service organization in the north of England found that there were no changes in the way employees performed their job after attending a training session. A number of studies also found insignificant results when looking at the effect of training on various aspects such as productivity (Ghebregiorgis & Karsten 2007), competency and commitment (Zheng, Morrison & O'Neill 2006), job satisfaction (Galanou & Priporas 2009), communication effectiveness (Tuleja & Roberts 2011) and occupational expertise (Evers, Van den Heijden, Kreijns & Gerrichhauzen 2011b). Furthermore, a study by Nielsen, Randall and Christensen (2010) among employees of elderly care centers in a large Danish local government organization showed there was no significant difference between the intervention group (managers who attended training) and the comparison group (managers who did not receive training) in regard to their leadership behavior. Results showed that although the intervention group managers evaluated the training positively, there was limited change in their behavior and attitudes with regard to transformational leadership.

Similarly, Antle et al. (2009) in their study of 120 child welfare workers in the United States also found there was no difference in skill level between employees who participated in training and those who did not receive training. Finally, a study by Kim (2010) of 212 employees at a financial banking institution in western Pennsylvania, demonstrated that the trainees' level of training knowledge decreased within the two months following the training.

One reason why training may have a limited impact on employees could be due to employees not transferring the knowledge, skills and attitudes that they have gained from training to the workplace (Donovan & Darcy 2011; Grossman & Salas 2011; Lu & Betts 2011). Failure to apply and practice the new learned knowledge, skills and attitudes to the workplace will decrease employees' ability to manage and perform their job in different or more effective ways, resulting in little or no performance improvement. Vellios (2008) in his study among 20 managers of a New York-based healthcare organization identified that issues such as managing poor-performing employees, conflict resolution and communication did not decrease as a result of training. It was identified that the employees who participated in the training did not use their newly acquired skills, which caused them to resort back to old behaviors. The study argued that 70 percent of the participants who participated in a management development training program claimed that they were overwhelmed with day-to-day work and did not have the opportunity to use their newly skills acquired from training.

On the other hand, success in transferring the new learned knowledge, skills and attitudes to the workplace can enhance the achievement of training goals and increase the return on training investment (DeSimone, Werner & Harris 2002). For example, a study by Leach and Liu (2004) involving 445 salespeople in the United States demonstrated that training is related to sales employees' selling performance and organizational commitment through positive transfer of training. Therefore, researchers have argued that in order to enhance the impact of training, organizations should pay attention and give priority to transfer of training in the workplace (Elangovan & Karakowsky 1999; Griffin 2011; Holton et al. 2000). This concept will be discussed further in the following section.

2.3 Transfer of training

Transfer of training is defined as the generalization of new learned knowledge, skills and attitudes to the job context and maintained over a period of time (Baldwin & Ford 1988; Blume et al. 2010). This definition has been used by most researchers, who have studied transfer of training (Frisque & Kolb 2008; Hawley & Barnard 2005; Xiao 1996; Velada et al. 2007). Based on this definition, there are two conditions of transfer of training: firstly, the generalization; and second, the maintenance of newly learned knowledge, skills and attitudes in the workplace. Generalization refers to the extent the new learned knowledge, skills and attitudes gained from training are applied by employees in the workplace. Maintenance refers to the extent the new learned knowledge, skills and attitudes continue to be used in the workplace over a period of time (Baldwin & Ford 1988; Blume et al. 2010). The terms 'transfer of training', 'transfer of learning', 'learning transfer' and 'training transfer' have been used interchangeably in the literature and all refer to the same thing (Baharim 2008; Chen et al. 2006; Kupritz & Hillsman 2011; McDonald 2001).

Transfer of training is a process that occurs after the training is completed (Alliger & Janak 1989; Haslinda & Mahyuddin 2009) and takes place at the employees' workplace (Goldstein & Ford 2002). Therefore, employees might transfer the newly learned knowledge, skills and attitudes in either near transfer or far transfer situations. Near transfer is defined as the tasks and situations within the transfer context, which is a reference to organizations that are highly similar to the training tasks and situations. On the other hand, far transfer refers to the situation where tasks and situations in the training context are quite different from the transfer setting, being the organization itself (Bhatti & Kaur 2010; Blume et al. 2010; Subedi 2004; Sofo 2007). The application of the new learned knowledge, skills and attitudes to the workplace, either at near or far transfer situations, is expected to enhance employees' job performance.

Positive transfer occurs when training improves employees' performance in the workplace following such training. In contrast, negative transfer occurs when a previous training experience inhibits or interferes with an employee's performance in the workplace following training (Curry 1997; Curry, Caplan & Knuppel 1994; Leberman et al. 2006; Pithers 1998; Taylor 2000). Furthermore, zero transfer occurs when the training experience

does not improve the employee's performance when back at work following the training (Curry et al. 1994; Pithers 1998).

2.4 The significance of transfer of training

Generally, the aim of training is to enhance employees' ability to do their jobs. In order to achieve this aim an organization needs to ensure that employees have applied the new learned knowledge, skills and attitudes at the workplace after training is finished. Scholars (e.g., Colquitt et al. 2000; Kirkpatrick 1998; Kontoghiorghes 2004; Roullier & Goldstein 1993; Thayer & Teachout 1995) have conceptually and empirically shown there is a significant relationship between transfer of training and employees' performance improvement. It is argued that employees are motivated to perform well at their jobs when they are able to apply what they have learned during the training (Sullivan 2002). An application of the new learned knowledge, skills and attitudes also provides additional input to employees in managing and performing their work more effectively and efficiently, which in turn enhances how the organization functions. Without transferring the newly learned knowledge, skills and attitudes to the workplace, employees may not be able to improve the quality of their work compared to other employees who do apply the training outcomes to their job (Pineda 2010).

Providing training to employees involves a cost and therefore organizations expect to see a return on their training investment. It has been argued that transfer of training can be a useful tool to highlight the return on investment of training (Axtell, Maitlis & Yearta 1997; Garavaglia 1993; Leberman et al. 2006; Scaduto, Lindsay & Chiaburu 2008). Although the results from a positive transfer of training cannot be quantified, the impact of transfer of training can be observed based on the employees' behavioral changes and their work performance improvement, which explicitly contribute to the organization's performance. According to Gumuseli and Ergin (2002), transfer of training can prevent problems following such training like a decline in performance or motivation leading to a loss for both employee and the organization.

Positive transfer of training can contribute to the development of the organization, through for example, making it a better learning organization (Leberman et al. 2006). The new

knowledge, skills and attitudes that have been learned during training are important assets to organizations. Through positive transfer of training, these new assets can be used and shared among the organization's members and therefore create a positive learning environment.

Due to the significance of transfer of training to employees and organizations, there is a need to understand the factors that may affect this process. This effort is important to enhance transfer of training in the work context (Holton & Baldwin 2000; Yamkovenko et al. 2007). Therefore, the following section will review previous studies of factors that affect transfer of training.

2.5 Factors affecting transfer of training

Merriam and Leahy (2005) argued that transfer of training is a function of the interaction of many factors. If organizations wish to enhance transfer of training, they must understand all the factors that affect this process (Curry 2001; Griffin 2011; Holton et al. 2000). Martin (2010a) also contributes to the discussion by stating that the changes following training will be short-lived if the resources and activities to support transfer of training do not exist. All these arguments indicate that the support from many factors is essential to achieve positive transfer of training in the workplace. Therefore, the majority of studies in the transfer of training literature have focused on identifying those factors that affect it (Ciporen 2010; Holton et al. 2000), helping to provide a better understanding of ways to enhance transfer of training (Donovan & Darcy 2011; Holton et al. 2000; Yamkovenko et al. 2007).

During the last two decades, researchers have developed a number of transfer of training models aimed at providing a theoretical basis for those factors that affect transfer of training (see Baldwin & Ford 1988; Cheng & Hampson 2008; Elangovan & Karakowsky 1999; Thayer & Teachout 1995). Each model proposes a number of potential factors that could affect transfer of training, although some factors within each model are similar. These models have generally argued that trainee characteristics and work environment are the important factors that directly influence transfer of training. Furthermore, the models

have argued that the learning achieved by the employee has a direct impact on transfer of training. These are discussed in more detail below.

2.5.1 Trainee characteristics factor

Researchers have continuously suggested that trainee characteristics have an important role on the success of transfer of training (Baldwin & Ford 1988; Cheng & Hampson 2008; Elangovan & Karakowsky 1999; Thayer & Teachout 1995). Similarly, the training professionals of the American Society of Training and Development (ASTD) in the southern United States also believe that trainees play an important role in facilitating transfer of training (Burke and Hutchins 2008). Indeed, an empirical study among 252 employees and supervisors of the state agency of transportation in the United States indicated that trainee characteristics accounted for most of the variance in the generalization of the training outcomes to workplaces compared to work environment factors (Tesluk, Farr, Mathieu & Vance 1995). One likely explanation for this effect is that trainees are individuals who learn and gain the training knowledge, skills and attitudes. Therefore they are in the best position to know how to suit the learned knowledge, skills and attitudes to their current job. If they are willing to apply the learning outcomes to their job, then most likely they will demonstrate a positive transfer of training at their workplace. However, if they do not want to practice the learning outcomes to their current job, then most likely the transfer of training will not occur.

In previous transfer of training studies, a range of a specific trainee characteristics that influence transfer of training have been identified including motivation to transfer, self-efficacy, job involvement, organizational commitment, job satisfaction and employees personality. The influence of these factors on transfer of training is explained in details below.

Motivation to transfer

Motivation to transfer is defined as the employees' desire, intensity and intended effort to utilize the knowledge, skills and attitudes learned in training to their work situation (Axtell et al. 1997; Holton 2005; Seyler, Holton, Bates, Burnett & Carvalho 1998). Researchers (e.g., Gegenfurtner, Festner, Gallenberger, Lehtinen & Gruber 2009a; Marler et al. 2006) and practitioners (Hutchins & Burke 2007) have argued that motivation to transfer is a requirement for transfer of training to occur in organization. An employee who is motivated to transfer the learned knowledge, skills and attitudes to the workplace after training will establish a goal to transfer, is committed to achieving this goal (Machin & Fogarty 1997) and shows high intent to implement the goal (Yamkovenko & Holton 2010). Employees with high motivation to transfer can also succeed in transferring the new learned knowledge, skills and attitudes to the workplace even if opportunities to transfer are limited (Gegenfurtner, Veermans, Festner & Gruber 2009b). In contrast, employees with inadequate motivation are likely to be poor in mastering the training content and subsequent training performance (Cheng & Ho 2001). They will also face difficulty in transferring the training outcomes to the workplace without motivation to transfer (Bhatti & Kaur 2010).

A number of empirical studies that have been conducted among employees at various type of organizations such as a large service organization (Chiaburu et al. 2010a; Chiaburu & Lindsay 2008), 598 child protection services (CPS) social workers (Curry 1997), 66 front desk employees of a hotel company (Frash, Antun, Kline & Almanza 2010), 198 employees of the information technology division of a large automaker (Kontoghiorghes 2004) and 213 employees of a bank (Liebermann & Hoffmann 2008) have all demonstrated that motivation to transfer positively predicts the transfer of training. Devos, Dumay, Bonami, Bates and Holton (2007) revealed in their study concerning 106 public and private sector employees that motivation to transfer explained 18.5% of variance of transfer of training within one to three months following the training. Axtell et al. (1997) found in their study among non-managerial, technical staff of a multinational organization that motivation to transfer was a key variable in determining the level of transfer of training after one month and after one year following training. Recently, a study among 169 employees of three advanced technology organizations showed that motivation to

transfer had the greatest effect on transfer of training compared to other factors such as supervisor support (Nijman & Gelissen 2011).

Despite the positive findings regarding the relationship between motivation to transfer and transfer of training, one study by Ramirez (2000) of 110 drivers who attended a professional driving training course in the United States, found a negative association between motivation to transfer and transfer of training. The study, however, argued the negative result might be influenced by the limited sample size and the time interval in measuring the transfer of training was short, within only four weeks following training.

Self-efficacy

Self-efficacy refers to employees' faith in their ability to perform successfully in their work (Axtell et al. 1997, p.205). Employees with self-efficacy generally believe that they are able to change their performance when they want or need to (Holton 2005). Those employees with high levels of self-efficacy also show high willingness to expand or develop new skills (London & Smither 1999). Prior studies found trainees with higher levels of self-efficacy were more motivated to train than trainees with less confidence (Chiaburu & Lindsay 2008; Chiaburu & Marinova 2005). Trainees with high self-efficacy also demonstrated better training performance and positive reaction toward training (Hauser, Paul & Bradley 2008; Mathieu, Martineau & Tannenbaum 1993; Tziner et al. 2007).

Researchers have suggested that self-efficacy is a factor that might facilitate transfer of training in the workplace (Cheng & Ho 2001; Tannenbaum, Mathieu, Salas & Cannon-Bowers 1991). This suggestion has received support from a number of empirical studies. For example, studies among 351 health professionals (Pineda-Herrero et al. 2011), 111 employees of a large service organization (Chiaburu et al. 2010a), and 182 employees of a large grocery organization (Velada et al. 2007) showed that the trainees who believed in their capabilities to acquire training knowledge and to transfer that training knowledge have successfully transferred the training knowledge to their work context. Another study, this time among 93 university students, also revealed that the relationship between self-efficacy and transfer performance was evident even after controlling for the level of

knowledge and skill obtained (Ford et al. 1998). This is in line with a study of training practitioners with an average of 15 years of professional experience in training or workplace learning, who also recognized that employee self-efficacy is positively linked to transfer of training (Hutchins & Burke 2007). There are three likely explanations for this effect. First, employees with high self-efficacy are more likely to be active in trying out the training tasks and attempting more difficult and complex tasks (Ford, Quinones, Sego & Sorra 1992). Second, employees with high self-efficacy show a high intention to engage in specific behaviors that would facilitate the transfer of their skills (Machin & Fogarty 2003). Third, employees with high self-efficacy are highly motivated (Combs & Luthans 2007; Chiaburu & Lindsay 2008; Tai 2006) and committed to achieving the transfer goals (Machin & Fogarty 1997).

Despite the identified positive impact of self-efficacy on transfer of training highlighted above, several studies do not support the association between these two variables. For example, Axtell et al. (1997) found in their study among non-managerial, technical staff of a multinational organization in the United Kingdom that self-efficacy was not correlated with transfer of training both at one month and also one year after training. However, their study indicated that self-efficacy did influence transfer of training via motivation. Similarly, a study by Frash et al. (2010) among 66 front desk employees of a United States hotel company also resulted in an insignificant association between self-efficacy and transfer of training. The study argued that the small sample size (N=66) might have affected this link.

Job involvement

Job involvement is defined as the extent to which people are psychologically attached to their jobs (Mathieu & Martineau 1997, p.205). Employees with high job involvement intend to understand their job responsibilities, will put the maximum effort into doing their job well and find ways to continually improve their work performance (Elangovan & Karakowsky 1999; Mathieu & Martineau 1997). Previous studies have found that employee job involvement is positively related to employees' confidence and motivation to learn (Clark, Dobbins & Ladd 1993; Tracey et al. 2001). A study by Noe and Schmitt (1986) indicated that employee job involvement was most strongly related to the

acquisition of key behaviors emphasized in the training program. The study indicated that trainees dedicated to their work acquired more knowledge than trainees who have been psychologically less engaged with their job.

In addition, the literature argues that employee job involvement may have an effect on transfer of training (Elangovan & Karakowsky 1999). An employee who is dedicated to their work will continuously find ways to improve their performance, and subsequently make an effort to transfer the training outcomes to their current job so that their job performance credentials are enhanced (Elangovan & Karakowsky 1999). One empirical study among 239 employees of a private sector health insurance company support this notion, finding that job involvement is significantly linked to the employees' motivation to transfer (Naquin & Holton 2002).

Organizational commitment

Organizational commitment has generally been defined as an attachment to or identification with the organization (Mathieu & Zajac 1990). Highly committed employees will positively think that training will produce or deliver benefits for their development and achievement of organizational goals (Colquitt et al. 2000; Facteau, Dobbins, Russell, Ladd & Kudisch 1995; Tannenbaum et al. 1991). They are also more likely to show high levels of motivation to learn in a training activity organized by the organization (Facteau et al. 1995; Kontoghiorghes 2004; Naquin & Holton 2002) and are motivated to transfer the training outcomes back to their job following the training (Kontoghiorghes 2004; Seyler et al. 1998).

In addition, researchers have suggested that employees' commitment to the organization may affect the transfer of training outcomes in the workplace (Tesluk et al. 1995). This suggestion has been empirically supported by two studies, one concerning 198 employees of the information technology division of a large automaker organization (Kontoghiorghes 2004) and the other of 252 employees and supervisors at a state transportation agency (Tesluk et al. 1995). Both studies demonstrated that employees who were more committed to the organization had successfully transferred the knowledge, skills and attitudes that they learned from training to their job.

Job satisfaction

Job satisfaction refers to employees' emotional affective response to a job or specific aspects of a job (Locke 1976). It has been postulated that those employees who exhibit more positive job attitudes are more motivated to learn (Holton 1996). Egan, Yang and Bartlett (2004) argued employees who have high levels of job satisfaction are motivated to become involved in training activities because they believe by being involved in such activities it will help them to improve their job competencies, which in turn will increase their potential to achieve desired outcomes including promotion and salary increases.

Researcher such as Holton (1996) have continuously argued employees who exhibit more positive job attitudes should produce more positive training outcomes. This is supported by an empirical study of 198 employees working for an information technology division of a large automaker organization. This particular study indicated the more employees are satisfied with their job, the more they are motivated to transfer the training outcomes back to the job (Kontoghiorges 2004). In another study involving 185 teachers who attended a professional training program, it was posited that employees with a higher level of job satisfaction are more likely to apply the training outcomes to their jobs. However, the result of the study shows that job satisfaction is related to transfer of training through its impact on perceived learning (Velada & Caetano 2007). Recently, Jodlbauer, Selenko, Batinic and Stiglbauer (2012) found a significant negative relationship between job dissatisfaction and transfer of training in their study among 220 employees who participated in various training organized by a training institute. Their study further indicated that the more motivated the employees were toward transfer, the less negative is the effect of job dissatisfaction on actual transfer.

Employee personality

Recent researchers have argued that a trainee's dispositional characteristics, which refer to an individual's personal differences and traits, could have an influence on transfer of training. In one study with 252 employees at a large organization, was concluded that an employee's conscientiousness (generally described as being persistent, dependable, and hardworking), related significantly to the employee's intent to transfer, which is defined

here as the extent to which the employee intends to engage in transfer behaviors following training. The study argued that this trait enhanced employees' learning goal orientation and enabled them to cope with any transfer obstacles in their organization, which subsequently drove them to implement the transfer behavior (Yamkovenko & Holton 2010). Similarly, a study among 71 employees of a warehousing and transportation organization who attended professional development training programs also showed that employees who were higher in conscientiousness, agreeableness, and emotional stability were more likely to overgeneralize training transfer (Chiaburu et al. 2010b). Prieto and Phipps (2011) recently proposed that self-monitoring and organizational identification will moderate the effects of personality on learning transfer. Their study argued that individuals who are high self-monitors may want to demonstrate all that they have learned in the training program in order to impress their co-workers and boss. Individuals who strongly identified with a firm are concerned with its well-being and will ensure that they learn and transfer the training back to the workplace to ensure that their organization performs effectively.

Summary

The previous discussion provides a detailed description of the specific employee characteristic factors that can influence transfer of training in the organization. The main studies in this area are summarized in Table 2.1 below. Although there are mixed findings in regard to the level of effect of some of the trainee characteristic factors on transfer of training, such as motivation to transfer and self-efficacy, the findings of previous studies generally demonstrate that employee characteristics do contribute to the success of transfer of training. Importantly, the findings of these studies provide empirical evidence to support a number of transfer of training models that propose trainee characteristics have a significant effect on transfer of training in organizations. However it is interesting to note that the majority of these studies have been conducted in Western countries, particularly the United States.

Table 2. 1: A summary of trainee characteristic factors that influence transfer of training

No.	Factor	Description	Supporting literature—*The context of study*
1.	Motivation to transfer	Refers to employee desire, intensity and intended effort to utilize the knowledge, skills and attitudes learned in training to work situation.	Axtell et al. (1997)—*United Kingdom*; Chiaburu et al. (2010a)—*United States*; Chiaburu & Lindsay (2008)—*United States*; Curry (1997)—*United States*; Devos et al. (2007)—*Belgium*; Frash et al. (2010)—*United States*; Kontoghiorghes (2004)—*United States*; Liebermann & Hoffmann (2008)—*Germany;* Nijman & Gelissen (2011)—*Netherlands*.
2.	Self-efficacy	Refers to employee faith in their ability to perform successfully in their work.	Chiaburu et al. (2010a)—*United States*; Ford et al. (1998)—*United States*; Hutchins & Burke (2007)—*United States*; Velada et al. (2007)—*Portugal*.
3.	Job involvement	Defined as the extent to which employees are psychologically attached to their jobs.	Elangovan & Karakowsky (1999); Naquin & Holton (2002)—*United States*.
4.	Organizational commitment	Defined as an employee attachment to or identification with the organization.	Kontoghiorghes (2004)—*United States*; Sayler et al. (1998)—*United States*; Tesluk et al. (1995)—*United States*.
5.	Job satisfaction	Refers to employee's emotional affective response to a job or specific aspects of a job.	Jodlbauer et al. (2012)—*Austria*; Kontoghiorghes (2004)—*United States*; Velada & Caetano (2007)—*Portugal*.
6.	Employee personality	Refers to employee's dispositional characteristics such as conscientiousness, agreeableness and emotional stability.	Chiaburu et al. (2010b)—*United States*; Yamkovenko & Holton (2010b)—*United States*.

2.5.2 Work environment factor

Work environment has often been referred to as the *transfer climate* (Van den Bossche, Segers & Jansen 2010). Transfer climate encompasses the work environment factors that inhibit, reduce or promote the transfer of training (Lim & Morris 2006; Russ-Eft 2002; Tracey et al. 1995). It has been argued that transfer climate plays a large role as either a supportive tool or barrier to transfer of training (Brown & McCracken 2009; Burke & Hutchins 2008; Hyde 2010). For example, in one recent study with 169 employees of three advanced technology organizations at the Netherlands, it emerged that transfer climate positively affected trainees' motivation to transfer (Nijman & Gelissen 2011). Another study of 252 employees of a large organization in the southeastern United States argued that transfer climate explained much more variance on employees' intent to transfer than dispositional variables such as conscientiousness and extraversion (Yamkovenko & Holton 2010). In addition, a study involving 150 training professionals (e.g., training directors, training personnel, human resource (HR) personnel, and training consultants) from various organizations, including manufacturing, service and government in Canada, found that the transfer climate explained 40% of the variance in transfer of training (Saks & Belcourt 2006). Another study using employees at four electronics companies in Shenzhen, China reported that the transfer climate explained 29% of transfer of training over and above learning performance (Xiao 1996).

Previous studies have identified a range of specific transfer climate factors that affects transfer of training. These factors include supervisor support, peer support, top management support, opportunity to transfer, training reward, organizational learning culture, accountability for transfer, job constraints, job design, organizational training policy, organizational communication and decision-making system. All these factors will be explained in more detail below.

Supervisor support

Supervisor support is defined as the extent to which supervisors support and reinforce the use of training outcomes on the job (Holton et al. 2000). A number of studies of respondents from various organizations have empirically demonstrated that the support

from supervisors positively influenced the employees in transferring the training outcomes to their job settings (Burke & Hutchins 2008; Cromwell & Kolb 2004; Curry 1997; Donovan & Darcy 2011; Lim 1999; Lim & Johnson 2002; Lim & Morris 2006; Nijman & Gelissen 2011; Rodriguez & Gregory 2005; Xiao 1996). One study among 104 employees in one particular workplace, found supervisor support was more important than action planning in influencing transfer of training. The support from the supervisor accounted for 7% of variance in initial transfer, 30% of the variance in frequency of transfer and 12% of the variance in overall transfer (Foxon 1997). Another study using 150 training professionals including training directors, training personnel, HR personnel, and training consultants, reported that supervisor support accounted for 70% of the variance in transfer of training (Saks & Belcourt 2006).

The literature argues that the support from the employee's supervisor is a particularly important element in the transfer of training process because it can positively influence employees' training motivation (Chiaburu & Tekleab 2005; Santos & Stuart 2003; Scaduto et al. 2008), and self-efficacy (Chiaburu et al. 2010a; Tracey et al. 2001). Employees also are willing to engage in learning activities (Bezuijen, Dam, Berg & Thierry 2010) and retain the training materials to their workplace (Kontoghiorghes 2001a) when they have positive support and relationship from their supervisor.

Conversely, a lack of support has been revealed in a number of studies in regard to the association between supervisor support and transfer of training. These studies include: 186 employees of one organization in the United States (Chiaburu & Marinova 2005); 106 employees of public and private sector organizations in Belgium (Devos et al. 2007); 66 front desk employees of a hotel company in the United States (Frash et al. 2010); employees of two European banking organizations (Klink et al. 2001); 220 building trades (plumbing, electrical, carpentry, tiling, plastering and bricklaying) apprentices in Adelaide, Australia (Pidd 2004); 252 employees and supervisors of a state agency of transportation in the United States (Tesluk et al. 1995); and 182 employees of a large grocery organization in Portugal (Velada et al. 2007). Facteau et al. (1995) in their study among 967 managers and supervisors of a state government in the United States found that supervisor support only related to employees' pre-training motivation but had no effect on transfer of training. Another study where non-managerial, technical staff of a multinational organization in the United Kingdom participated indicated that supervisor support did not appear to have a

significant effect on transfer of training both at one month and one year after training (Axtell et al. 1997).

Researchers (e.g., Awoniyi, Griego & Morgan 2002; Clarke 2002; Scaduto et al. 2008) have argued the inconsistency in the literature regarding the link between supervisor support and transfer of training might be due to the variety of measures and different definitions of terms as used by researchers, which could affect the association between these variables.

Peer support

Peer support refers to the extent to which peers reinforce and support the use of training outcomes in the workplace (Holton 2005, p. 45). Peers can show their support by helping and provide assistance to trainees in setting goals to use the training outcomes, improving trainees' motivation and feelings of self-efficacy, and offering positive feedback when the new knowledge, skills and attitudes are being implemented (Hawley & Barnard 2005; Martin 2010; Russ-Eft 2002). Research has shown that those trainees who received performance feedback from their peers following training exhibited better performance than those trainees who attended training programs only (Tews & Tracey 2008). The amount of support received, particularly from trainees' peers also positively affects the trainees' motivation to transfer the training outcomes to their workplace (Kirwan & Birchall 2006).

In addition, the support from peers has been argued as essential for transfer of training (Bates, Holton, Seyler & Carvalho 2000; Hayes & Pumparampil 2001). A lack of acceptance from peers on the application of the new knowledge, skills and attitudes learned from training is regarded as one of common barriers to positive transfer of training (Brown & McCracken 2009). A number of empirical studies among employees from various organizations (e.g., Cromwell & Kolb 2004; Facteau et al. 1995; Lim & Morris 2006; Mohamed 1994; Pineda-Herrero et al. 2011; Velada et al. 2007) have shown that the support from peers positively influences the success of transfer of training. One recent study among 237 managers of a large manufacturing organization demonstrated that the effect size of peer support on transfer of training was substantially larger than that of the

other workplace climate factors such as resource support and opportunity to transfer. The study further indicated that the negative impact of an unfavorable climate (e.g., lack of resources and support and opportunity to transfer) on transfer of training was largely ameliorated by peer support (Martin 2010a).

Despite many studies providing support for the association between peer support and transfer of training, one recent study comprising 66 front desk employees of a hotel company in the United States found that peer support was not significantly related to positive transfer of training (Frash et al 2010). The study noted that the small sample size (N=66) used in the study might have affected the result.

Top management support

Another people—related factor which can have an influence on the transfer of training is support from top management (Hayes & Pulparampil 2001). Previous researchers have stated that in order for learning interventions to be successful, stakeholders including top management, program planners, supervisors, trainers, learners and their co-workers must work together as partners with a common goal (Esque & McCausland 1997; Sullivan 2002). Specifically, Lim and Johnson (2002) and Kim (2004) argued that the involvement of organizational stakeholders such as top management is essential to the process of transforming what is gained from training into performance. Such involvement and commitment from top management can be regarded as treating employees positively, which in turn should deliver positive outcomes to the organization.

A qualitative study among 10 human resource development (HRD) practitioners concluded that top management involvement and interested in training had an influence on the transfer of training (Lim & Johnson 2002). Similarly, Cromwell and Kolb (2004) in their study found that 11% of managers and 27% of trainees from one unit of a large university argued that the lack of understanding, appreciation and support from top management regarding the use of training materials to the workplace was a common barrier to positive transfer of training. The significant relationship between top management support and transfer of training has also been quantitatively verified in one study comprising 598 child protection services (CPS) social workers (Curry 1997) and in another involving 371

trainers at three public sector organizations (Zayed 1994). Indeed, a more recent qualitative and quantitative study of 50 non-academic supervisors at the university who attended a communication skills workshop revealed positive support from top management is one of the main organizational factors that supervisors perceived as facilitating and/or impeding their transfer of learned communication skills (Kupritz & Hillsman 2011).

On the other hand, a quantitative study by Facteau et al. (1995) consisting of 967 managers and supervisors of a state government agency in the United States presented results that indicated top management support was negatively related to employees' pre-training motivation and had no significant relationship with transfer of training. Similarly, a recent study by Khalid, Ashraf, Yousaf and Rehman (2011) among 230 civil servants in Pakistan reveals that the top management support has a positive impact on employees learning performance and improvement of the employees' job performance following the training. However, the study found that the support from the top management was ineffective regarding the transfer of training to the workplace. Both studies note that the results may have been affected by using a single source of data, which may have resulted in overestimating or inflating measures of association (Liebermann & Hoffmann 2008; Machin & Fogarty 1997).

Opportunity to transfer

The literature mentions that employees need to have an opportunity to use the learned knowledge, skills and attitudes after their formal training to facilitate transfer of training (Ford et al. 1992; Marler et al. 2006). This concept is referred to as *opportunity to transfer* and refers to the extent to which employees are provided with or obtain resources and tasks enabling them to use training outcomes on the job (Holton 2005, p. 45). The study by Seyler et al. (1998) showed that opportunity to transfer is significantly related to employees' motivation to transfer. Kirwan and Birchall (2006) argued employees not only demonstrate a desire to transfer the training as a result of the opportunity to transfer given to them, but also the opportunity enhances the employees' ability to transfer their training outcomes.

Two qualitative studies among HRD practitioners (Lim & Johnson 2002) and front-line employees at a University's dining services (Rodriguez & Gregory 2005) concluded that the opportunity for employees to apply what they have learned in training to their jobs was a key factor for the success of transfer of training. Similarly, three quantitative studies reported transfer opportunities as showing the strongest correlation, revealing significant results concerning transfer of training (Devos et al. 2007; Lim & Morris 2006; Pineda-Herrero et al. 2011). Opportunity to transfer has also been regarded as the main reason for high and low transfer (Lim 2000). In one study, 11% of training practitioners recognized the opportunity to transfer as representing best practice to facilitate transfer of training (Burke & Hutchins 2008). Furthermore, in a study using multiple sources of data in a large franchise organization (Rouiller & Goldstein 1993) and 52 retail stores (Tracey et al. 1995), the opportunity to transfer still appeared to directly affect the degree of transfer behavior on the job situation.

On the other hand, a study with 268 respondents who had graduated from a part-time Master of Business Administration (MBA) course in Hong Kong revealed that transfer climate including opportunity to transfer was negatively related to perceived knowledge and skills transfer (Cheng 2000). However, the study argued that the negative results may have emerged due to survey design.

Training reward

Training reward is another work environment factor that affects transfer of training. Empirical studies have shown that an organization's system which rewards employees for using newly acquired knowledge, skills and attitudes on the job enhances employees pre-training self-efficacy and motivation (Tracey et al. 2001). For example, managers who perceived more intrinsic reasons to attend training reported higher levels of motivation to attend and learn from the training programs (Facteau et al. 1995). It has also been found that employees respond better to training if they feel there are benefits for them including intrinsic and extrinsic training rewards such as money or positive feedback (Rodriguez & Gregory 2005), which subsequently influences them to retain the learned knowledge, skills and attitudes over a period of time in the workplace (Zayed 1994).

In addition, perceived training rewards can influence employees' attitude following the training. Chiaburu and Lindsay (2008) argued those employees who believe that performing a specific behavior will lead to a desired outcome such as obtaining a salary increase will have enhanced motivation to transfer, which in turn influences their attitude to applied the new learned knowledge, skills and attitudes to the workplace. Other studies have found employees who perceived training as leading to better performance and higher pay or better promotion prospects showed positive transfer of training in the workplace (Devos et al. 2007; Frash et al. 2010; Zayed 1994). Similarly, prior studies have also indicated that extrinsic rewards such as salary increases and promotion and intrinsic rewards such as managers' recognition and appreciation received by employees for using newly trained skills and behaviors acquired appeared to directly affect transfer of training (Mohamed 1994; Tracey et al. 1995). One study consisting of 102 assistant managers of a large franchise organization found that rewards linked to training accounted for 30% of the variance in predicting transfer of training (Rouiller & Goldstein 1993). Furthermore, another study using 267 employees at a university indicated employees who receive goal setting interventions, reported greater transfer of training when they worked in an environment that provided praise, recognition and credit to those who applied the new knowledge, skills and attitudes to their work (Richman-Hirsch 2001).

Despite the positive effect of training rewards on transfer of training found in the above studies, several other studies reported a lack of support for the link between the two variables. For example, Xiao (1996) in her study among employees of four electronics companies in Shenzhen, China found that training rewards including intrinsic rewards such as verbal praise, and extrinsic rewards such as bonuses, wage increases and promotion, did not appear to be significantly related to individual transfer behaviors. In addition, Cheng (2000) in his study of MBA graduates in Hong Kong reported a negative relationship between transfer rewards and perceived knowledge and skills transfer. A recent study by Donovan and Darcy (2011) also indicated that the financial incentives were seen as not being relevant to the transfer of training, as reported by 314 HRD practitioners in Ireland.

Organizational learning culture

Organizational culture is another critical element of the transfer climate that can facilitate or inhibit transfer of training. A number of researchers have defined an organizational culture which facilitates the transfer of training as an organizational learning culture (Cheng 2000; Elangovan & Karawsky 1999; London & Smither 1999). Organizational learning culture is further identified as being one that supports 'the acquisition of information, the distribution and sharing of learning, and that reinforce and support continuous learning and its application' (Bates & Khasawneh 2005, p.99).

Previous studies have showed that the implementation of an organizational learning culture can help employees apply the knowledge, skills and attitudes that were learned in training to their workplace (Cheng 2000; Tracey et al. 1995). There are four likely explanations for this effect. First, the nature of an organizational learning culture that encourage employees to continuously learn and apply the learn outcomes in the organization context can enhance the potential for employees to transfer the training outcomes (Weldy 2009). Second, the implementation of an organizational learning culture may increase positive work attitude of employees (London & Smither 1999; Palthe & Kossek 2003) such as enhancing their motivation to participate in training (Chiaburu & Tekleab 2005). Third, employees are more willing to retain the knowledge, skills and attitudes learned from training in an organizational culture that provides positive reinforcement when they apply the new learned knowledge, skills and attitudes (Kontoghiorghes 2001a). Fourth, the organizational learning culture enhances the employees' motivation to transfer the new learned knowledge, skills and attitudes to the workplace (Kontoghiorghes 2002).

Accountability for transfer

Recent studies have argued that enhancing employee accountability for transfer is essential to increase transfer of training (Burke & Hutchins 2008; Ford 2009; Longenecker 2004). Burke and Saks (2009) have argued that accountability for transfer could have a significant role in solving the transfer problem in organizations. Accountability for transfer is defined as the degree to which the organization, culture and/ or management expects employees to use the learned knowledge, skills and attitudes on the job and holds them responsible for

doing so (Burke & Saks 2009). Increasing employees' accountability for transfer can be implemented by an organization in various ways such as: specifying the new behaviors or performance that is expected from employees after attending training (Curry 1997; Sofo 2007; Zenger et al. 2005); requesting an employee to make a report or presentation to the supervisors and peers following training (Curry et al. 1994; Ford 2009; Machles 2002); setting up a meeting to review the development plan with the immediate supervisor to create accountability for implementation; and finally incorporating the previous development plans into a formal performance appraisal (Longenecker 2004).

Another approach that could enhance the employees' accountability for transferring the training is through early agreement about what will occur after training (Ford 2009; Sullivan 2002). Without some agreement between the trainees and supervisors about the expected outcomes of training, the desired performance results are likely to be estimated inappropriately (Kim 2004). At the same time, trainees may be more motivated to learn and to transfer the training when they know they are expected to use it immediately after training (Lim & Morris 2006; Kontoghiorghes 2001b; Kontoghiorghes 2002). A qualitative study involving ten training practitioners of a conglomerate organization indicated that the training program was successful because most trainees were assigned projects directly related to the training immediately after the event (Lim & Johnson 2002). Kontoghiorghes (2001a) indicated that trainees preferred to retain the training outcomes if they have a clear understanding of what skills, behaviors, knowledge, or attitudes were needed after the training program.

Job constraint

Constraints inherent in a person's job or position will influence the success or otherwise of transfer of training in the workplace. Such constraints can include training budget restrictions, a lack of internal expert, poor coordination between departments, and a low tolerance for trial and error (Lim & Johnson 2002). Other constraining factors include resistance to change, where prevailing work-group norms are perceived by the trainee to resist or discourage using new skills (Bates et al. 2000), heavy workloads, inadequate materials, time pressures (Clarke 2002; Frash et al. 2010; May & Kahnweiler 2000; Sofo 2007), work crises and constant distractions (May & Kahnweiler 2000). Constraints such

as too frequent transfer between jobs, rigidity of prevailing rules and procedures, and being too busy with existing work tasks have also been cited (Hayes & Pulparampil 2001). One recent study concerning 66 front desk employees at a hotel company indicated that the degree to which the organizational work schedule accommodated the time to utilize newly learnt skills in one's duties significantly affected a positive transfer of training (Frash et al. 2010).

Other work factors

A qualitative study of nurses and resident physicians, who have attended crew resource management (CRM) training concluded that two main factors impacted on transfer of training; open communication and participative decision-making. According to the study, open communication encourages involvement and motivation of team members through a willingness to assist fellow colleagues who attended training. Participative decision-making helps to ensure the trainees feel responsible for achieving the desired goal resulting in the staff becoming more determined to achieve those goals (Halbesleben et al. 2011). Zayed (1994) argues that organization training policies (e.g., trainer selection criteria, the number of trainees in one training course and the procedure of training evaluation in the workplace) can also affect the transfer of training. His study of 371 trainers at three public sector organizations found this factor accounted for 3% of the variance in transfer of training.

Employee job design is another work environment factor that plays an important role in the success of transfer of training. The characteristics of job design that could facilitate or impede the transfer of training are size of the workspace, spatial proximity to peers, furniture flexibility and ergonomic design. These aspects were reported in studies among non-academic supervisors at a university in the United States (Hillsman & Kupritz 2010; Kupritz & Hillsman 2011).

Summary

The previous discussion provides a detailed description on specific work environment factors that have influenced the transfer of training in the organization, to different levels, and are summarized in Table 2.2. The findings of these studies make an essential contribution to our understanding of the transfer of training, albeit in the Western context. Even so it can be seen there is significant empirical evidence to support a number of transfer of training models that relate the work environment with transfer of training. Even though some of these factors, such as supervisor support, peer support, top management support, opportunity for transfer and training rewards, have resulted in inconsistent findings, these are generally due to the use of small sample sizes, source of data and different measurement tools.

Table 2. 2: A summary of work environment factors that influence transfer of training

No.	Factor	Description	Supporting literature—*The context of study*
1.	Supervisor support	The extent to which supervisors support and reinforce the use of training outcomes on the job.	Burke & Hutchins (2008)—*United States*; Cromwell & Kolb (2004)—*United States*; Curry (1997)—*United States*; Donovan & Darcy (2011)—*Ireland*; Hyde (2010)—*United States*; Lim (1999)—*Korea*; Lim & Johnson (2002)—*Korea*; Lim & Morris (2006)—*Korea*; Nijman & Gelissen (2011)—*Netherlands*; Rodriguez & Gregory (2005)—*United States*; Saks & Belcourt (2006)—*Canada*; Xiao (1996)—*China*.
2.	Peer support	The extent to which peers reinforce and support the use of training outcomes on the job.	Cromwell & Kolb (2004)—*United States*; Facteau & Dobbins (1995)—*United States*; Lim & Morris (2006)—*Korea*; Martin (2010a)—*United States;* Velada et al. (2007)—*Portugal*.
3.	Top management support	Refers to the support of top management for the transfer of training process.	Cromwell & Kolb (2004)—*United States*; Curry (1997)—*United States*; Kupritz & Hillsman 2011—*United States*; Lim & Johnson (2002)—*Korea*; Zayed (1994)—*Egypt*.

4.	Opportunity to transfer	The extent to which employees are provided with or obtain resources and tasks on the job, enabling them to use training outcomes in their work duties.	Burke & Hutchins (2008)—*United States*; Devos et al. (2007)—*Belgium*; Lim (2000)—*Korea*; Lim & Johnson (2002)—*Korea*; Lim & Morris (2006)—*Korea*; Rodriguez & Gregory (2005)—*United States*; Rouiller & Goldstein 1993—*United States*; Tracey et al. (1995)—*United States*.
5.	Training reward	Refers to extrinsic reward such as obtaining a salary increase and promotion, and intrinsic rewards such as managers' recognition and appreciation.	Chiaburu & Lindsay (2008)—*United states*; Devos et al. (2007)—*Belgium*; Frash et al. (2010)—*United States*; Richman-Hirsch (2001)—*United States*; Rouiller & Goldstein (1993)—*United States*; Tracey et al. (1995)—*United States*; Zayed (1994)—*Egypt*.
6.	Organizational learning culture	Defined as organizational culture that supports the acquisition of information, the distribution and sharing of learning, and reinforces and supports continuous learning and its application to organizational improvement.	Cheng (2000)—*Hong Kong*; Egan et al. (2004)—*United States*; Tracey et al. (1995)—*United States*; Weldy (2009)
7.	Accountability for transfer	The degree to which the organization, culture and/ or management expect employees to use knowledge and skills gained in training on the job and holds them responsible for doing so.	Burke & Hutchins (2008)—*United States*; Burke & Saks (2009; Longenecker (2004)—*United States*.
8.	Job constraint	Such as lack of internal expertise, lack of coordination between departments, lack of tolerance for trial and error, resistance to change, heavy workloads, inadequate materials and time pressures and too frequent job transfers.	Bates et al. (2000)—*United States*; Clarke (2002)—*United Kingdom*; Frash et al. (2010)—*United States*; Hayes & Pulparampil (2001)—*India*; Lim & Johnson (2002)—*Korea*; May & Kahnweiler (2000)—*United States*.
9.	Other work factor	Such as an open communication, participative decision-making, organization training policy and job design.	Halbesleben et al. (2011)—*United States*; Kupritz & Hillsman (2011)—*United States*; Mohamed (1994)—*UAE*; Zayed (1994)—*Egypt*.

2.5.3 Perceived learning

From an organizational training perspective, learning is defined as the extent to which trainees change their attitudes, improve their knowledge and increase their skills as a result of attending training (Kirkpatrick 1994). Learning is one of the desired outcomes that organizations want to achieve when they invest money in training. Therefore, learning has been regarded as one of the most important criteria in evaluating the success of a particular training program (Griffin 2011; Kirkpatrick 1998; Pineda 2010). In other words, a particular training program is considered successful if there is an improvement of employees' knowledge, skills and attitudes after attending the training.

Learning can be measured in various ways. Some researchers have suggested that learning can be measured by comparing between the test result that was conducted at the beginning of training and the test result at the end of training (Koller, Hardmeier, Michel & Schwaninger 2007; Rogers & Spitzmueller 2009). Learning is considered to have occurred when the trainee's test result at the end of training is greater than their test result at the beginning of training. Some researchers have relied only on measuring learning based on the trainee's test score conducted at the end of training (Ford et al. 1998; Ramirez 2000; Rouiller & Goldstein 1993; Tracey et al. 2001; Tziner et al. 2007; Xiao 1996). This test result can only provide approximate information to the trainer and the organization about the trainee's learning level as there is no comparison test score to assess against (as there would be when a test is also done prior to training). On this basis, if the trainees score high marks in the test, the trainer and the organization can assume that the trainees have adequate understanding about the training contents and vice versa. Alternatively, researchers have measured learning based on the trainees' perceptions after the training session (Ballesteros-Rodriguez, Saa-Perez & Dominguez-Falcon 2011; Barker & Brooks 2005; Galanou & Priporas 2009; Iqbal, Maharvi, Malik & Khan 2011; Khalid et al. 2011; Leach & Liu 2004; McLean & Moss 2003; Sarri 2011). Trainees provide their self-assessment regarding the learning they have achieved after participating in a particular training program. This approach is regarded as an appropriate and applicable method to measure learning based on the assumption that trainees who have gone through the training know exactly the improvement they achieve as a result and therefore are credible persons to provide data on learning (Phillips 1997). Indeed, this method has been continuously applied by researchers of transfer of training studies (Liebermann & Hofmann 2008; Lim

1999; Lim 2000; Lim & Johnson 2002; Marler et al. 2006; Nijman et al 2006; Velada & Caetano 2007; Vermeulen & Admiraal 2009). Thus, for the purpose of this study, learning is defined as the extent to which the employees perceive that they have changed their attitudes, improved their knowledge and increased their skills as a result of attending training.

Organizational training researchers have consistently suggested that the perception of having learned something might have a direct and positive effect on the transfer of training (Baldwin & Ford 1988; Goldstein & Ford 2002; Thayer & Teachout 1995). Other researchers in the training field also posit that learning is a prerequisite for transfer of training to occur in the workplace (Brown & McCracken 2009; Gumuseli & Ergin 2002; Frash et al. 2010; Olsen 1998; Pineda 2010; Xiao 1996; Weldy 2009). The previous indications would suggest that if employees gain new knowledge, skills and attitudes from the training, they are more likely to apply those training outcomes to their job. This assumption has been supported by a number of empirical studies that were conducted in various countries and organizations (Leach & Liu 2004; Liebermann & Hoffmann 2008; Nijman et al. 2006; Ramirez 2000; Rouiller & Goldstein 1993; Tracey et al. 2001; Tziner et al. 2007; Xiao 1996). To illustrate, Ford et al. (1998) conducted a study among 93 university students in the United States who participated in a two-day radar operations training exercise to examine the effect of learning strategies (e.g., metacognitive activity, identical elements, activity level) on multiple learning outcomes (knowledge and skill acquisition, perception of self-efficacy) and transfer performance. The study found two types of learning strategies, metacognitive activity and activity level, were significantly related to the students' knowledge and skills acquisition, whereas the identical element strategy was related to the students' perceptions of self-efficacy. In turn, the three learning outcomes were all found to be significant factors predicting performance in a more complex transfer task.

On the other hand, if employees do not gain new knowledge, skills and attitudes from the training, it is most likely they will not be able to apply the trained knowledge, skills and attitudes to their workplace. This assumption was supported by an empirical study of HRD practitioners at a conglomerate organization in Korea. This study concluded that one of the reasons for low transfer of training was the fact that the HRD practitioners perceived that they lacked a clear understanding of the training contents (Lim 1999; Lim 2000; Lim &

Johnson 2002). Clarke (2010) also provides additional support for this scenario, finding that failure to provide new knowledge in the training session could be the reason for the low impact of the intervention in producing positive changes, namely in the emotional abilities of the trainees in the study.

There are a number of reasons why learning has a positive impact on transfer of training. Firstly, by gaining new knowledge, skills and attitudes from the training, employees are provided with a broader, deeper knowledge and more tools for problem-solving (Garavaglia 1993). As a consequence, the employees will apply the new learned knowledge, skills and attitudes on their job because they believe the application of those training outcomes can help them solve some problems related to their job and also will help them do their job better. Second, gaining new knowledge, skills and attitudes from the training should enhance the employees' ability to use various cognitive and behavioral tactics or strategies to apply their training outcomes to their job even in less supportive work environments (Roberson, Kulik & Pepper 2009). For example, a researcher is still able to apply the new knowledge and skills of a statistical method that he/she learned from training even though they may get less support from his/her colleagues due to their good understanding of the concept and the implementation of the method. Third, by gaining new knowledge, skills and attitudes from the training the employees' intention to practice the new learned knowledge, skills and attitudes to their workplace should increase (Liebermann & Hoffmann, 2008; Marler et al. 2006; Nijman et al. 2006; Warr et al. 1999). For example, employees who frequently feel stressed in the workplace may demonstrate a high intention to apply the techniques gained in stress training to reduce their discomfort.

While many studies have found a significant relationship between learning and transfer of training, others have found insignificant results regarding this association (Hutchins & Burke 2007). For example, a study among 505 supermarket managers from 52 retail stores in the United States, who participated in basic supervisory behaviors and skills training, did not find a significant relationship between the knowledge gained in training with transfer behaviors (Tracey et al. 1995). The study argued that this insignificant result might be due to the measurement issue; the items to measure knowledge focused on different aspects of training, while the items to measure the transfer behaviors referred to another aspect of training. Another study among educators in the United States also found learning had no impact on educators' transfer behavior change following the training (Noe &

Schmitt 1986). The study argued the limited number of samples and the characteristics of the samples as educators might have affected the link between learning and transfer behavior change.

In summary, the previous reviews reveal that there is still ambiguity among researchers regarding the association between learning and transfer of training. Although a number of studies found a significant relationship between learning and transfer of training (Ford et al. 1998; Leach & Liu 2004; Liebermann & Hoffmann 2008; Nijman et al. 2006; Ramirez 2000; Rouiller & Goldstein 1993; Tracey et al 2001; Tziner et al 2007; Xiao 1996), a number of studies reported insignificant results (Noe & Schmitt 1986; Tracey et al. 1995). Moreover, a number of studies have found limited success in empirically demonstrating the relationship between learning and transfer of training. For example, a longitudinal study by Warr et al. (1999) comprising technicians at a group of motor-vehicle dealerships found the correlation between learning and transfer of training was small. A similar result was found in a meta-analysis by Alliger et al. (1997). The magnitude of the relationship between learning and transfer of training was found to be lower than that of Alliger et al. (1997) by Tan et al. (2003) in their study of 283 automotive technicians at a large mid-western company in the United States. A more recent meta-analysis indicated that learning has a small and moderate effect on transfer of training after considering the effect of the same source of data and same measurement context of data (Blume et al. 2010). Based on these findings, it can be argued that an improvement in employees' knowledge, skills and attitudes following training has a limited effect on supporting transfer of training (Frisque & Kolb 2008). It is likely that there are potential moderating factors that may enhance the association between learning and transfer of training (Aguinis & Kraiger 2009; Tan et al. 2003). The following section will discuss the concept of Perceived Organizational Support as a moderator in the relationship between perceived learning and transfer of training.

2.6 Perceived organizational support (POS) as a moderator

Goldstein and Ford (2002) have suggested that work environment characteristics may influence the relationship between learning and transfer of training. They argued that

'a well learned skill may not be applied or maintained on the job due to limited opportunity to apply the skill and the lack of supervisory support' (p. 87).

This notion has been supported by other researchers. For example, Tannenbaum, Cannon-Bowers, Salas and Mathieu (1993) posit that transfer of training is a function of training performance moderated by organizational characteristics such as resource availability. Arthur et al. (2003) proposed that the low effect of learning on transfer behavior in their meta-analysis may be influenced by work environment factors. Accordingly, Aguinis and Kraiger (2009) and Tan et al. (2003) urged further study to extend the existing literature by investigating the moderating effect of work environment factors on the association between learning and transfer of training. According to Burke and Hutchins (2008), 'the moderating variables likely play a larger role in transfer practice' (p. 123). Accounting for the moderating factors should result in better and more fruitful understanding of the transfer process (Mohamed 1994).

In the transfer of training literature, studies have focused mainly on the factors that are conceptually regarded as the organizational transfer climate (Rouiller & Goldstein 1993) as previously discussed and summarized in Table 2.2, i.e. supervisor and peers support, opportunity to transfer and training rewards. Less attention has been paid to investigating the effect of social exchange in the work environment (Scaduto et al. 2008) such as perceived organizational support (POS) on transfer of training (Chiaburu et al. 2010a). Thus, this study is conducted to fills this gap by proposing that perceived organizational support moderates the relationship between perceived learning and transfer of training. Previous studies have demonstrated that POS has the greatest impact (Dawley et al. 2008) and is the most significant determinant of employees' job attitudes and behaviors compared to the support offered by supervisors and co-workers (Leveson, Joiner & Bakalis 2010; Pazy & Ganzach 2009).

POS is defined as the employees' general belief that their work organization values their contribution and cares about their well-being (Eisenberger, Huntington, Hutchison & Sowa

1986; Rhoades & Eisenberger 2002; Wayne, Shore & Liden 1997). This concept adopts a social exchange approach (Eisenberger et al. 1986). The social exchange approach entails unspecified obligations; when one person does another a favor, there is an expectation of some future return (Blau 1964), though exactly when it will occur and in what form is often unclear (Gouldner 1960). In other words, the social exchange approach dictates that people will follow the norm of reciprocity in which people respond to each other in kind—returning benefits for benefits. However, the focus of POS is on the social exchange between an organization and employees (Shelton, Waite & Makela 2010; Wayne et al. 1997). POS underlies employees' inferences concerning their organization's commitment to them, which in turn contribute to the employees' commitment to their organization (Eisenberger et al. 1986).

The employees' level of POS is based on the treatment they received from their organization (Rhoades & Eisenberger 2002) regardless of whether that treatment was explicitly or implicitly promised in the employment contract (Coyle-Shapiro & Conway 2005). The organizational treatment can be either favorable or unfavorable. Favorable treatment received from the organization is valued more by the employees if it is perceived as being given freely rather than forced by external constraints such as changes in a union contract or government policies and regulations. In contrast, unfavorable treatment would result in undesired employee outcomes (Aselage & Eisenberger 2003).

In general, employees will view the organizational treatment based on that given by agents such as supervisors (Eisenberger et al. 1986), organizational policies, norms and culture (Levinson 1965). Therefore, any actions or behaviors of these agents are regarded as actions of the organization itself (Aselage & Eisenberger 2003) and can potentially influence employees' perceived organizational support (Eisenberger et al. 1986). Examples of organizational treatments viewed by employees as affecting the level of POS are: the opportunity to participate and to propose opinions in organizational decision-making (Allen, Shore & Griffeth 2003; Rhoades & Eisenberger 2002), perceived fairness of organization decision-making (Lavelle et al. 2009), a caring and ethical climate in the organization (Filipova 2011), perceived organizational ethics and management safety concerns (Credo, Armenakis, Feild & Young 2010), being treated with dignity and respect by the organization and perceived organizational politics (Rhoades & Eisenberger 2002), perceived procedural justice (Edwards 2009; Tremblay, Cloutier, Simard, Chenevert &

Vandenberghe 2010), perceived supervisor support and quality of leader-member exchange (Chen & Eldridge 2011; Credo et al. 2010; Rhoades & Eisenberger 2002; Shanock & Eisenberger 2006; Wayne et al. 1997), trustworthiness of the manager (Byrne, Pitts, Chiaburu & Steiner 2011), perceived fairness of rewards and recognition (Allen et al. 2003; Edwards 2009; Rhodes & Eisenberger 2002; Wayne et al. 1997), perceived high-commitment to human resource management (HRM) practices in organization (Chiang, Han & Chuang 2011), the opportunity to participate in training and development programs (Allen et al. 2003; Armstrong-Stassen & Ursel 2009; Edwards 2009; Eisenberger, Cummings, Aemeli & Lynch 1997; Rhodes & Eisenberger 2002; Wayne et al. 1997), receiving career mentoring (Chew & Wong 2008), an open communication environment and open team meetings (Edwards 2009), interactional fairness of the workgroup (Lavelle et al. 2009), perceived employer inducement and psychological contract fulfillment (Coyle-Shapiro & Conway 2005). All these findings show that employees tend to perceive favorable organizational experiences as the main determinant of POS.

Although many organizational factors have been identified as predictors of POS, in reality the factors that are associated with POS differ between organizations (Eisenberger et al. 1997; Rhoades & Eisenberger 2002). Eisenberger et al. (1986) found in their study involving 361 employees from various sectors including law, education and manufacturing that the level of employees' perceived organizational support varied considerably from one organization to another. They argued that one of the reasons was due to each organization having a different type of leadership behavior, and that various leadership behaviors would varying levels of influence on perceived organizational support.

A review of the perceived organizational support literature reveals that POS helps employees to cope with negative experiences in their employment relationship. For example, a study of 120 employees at a software development organization in the United States indicated that perceived organizational support moderated the role conflict and emotional exhaustion relationship. According to this particular study the relationship between role conflict and emotional exhaustion was weaker with higher levels of perceived organizational support. The result shows that high levels of support had a buffering effect and mitigated the negative effects of role conflict on emotional exhaustion (Jawahar, Stone & Kisamore 2007). Another study of two groups of employees, 162 manufacturing employees and 669 retail sales employees in the United States, found that POS moderated

the influence of work group tardiness and individual tardiness. Specifically, when POS was low, individual tardiness increased greatly as average group tardiness grew. In contrast, when POS was high, there was little relationship between average group tardiness and individual tardiness (Eder & Eisenberger 2008). Similarly, a study of 887 Protestant church workers in Hong Kong showed that POS can offset the adverse impact of role overload. The study found the relationship between role overload and work-family conflict was weaker when POS was high (Foley, Hang-Yue & Lui 2005). Casper, Martin, Buffardi and Erdwins (2002) in their study of 143 professionally employed mothers with at least 1 pre-school-age child in the United States, found that POS alleviated employees' continuous commitment (referring to employees' commitment to organizations in terms of having no choice) even though they faced high work-family conflict situations in the organization. Kinnunen, Feldt and Makikangas (2008) in their study comprising 1301 managers of trade unions in Finland further indicated a perceived imbalance between effort and reward was positively associated with employees' intention to leave among those reporting a low level of organizational support compared to employees who reported high POS. George, Reed, Ballard, Colin and Fielding (1993) in their study involving 256 nurses in the United States found unfavorable work tasks such as caring for AIDS patients was significantly and positively associated with nurses' negative mood states. However, the result showed that when nurses reported having high POS, the relationship was weaker. Recently, a study by Karatepe (2011) of frontline hotel employees in Turkey, concluded that organizational support as perceived by the employees was an important job resource that mitigated the impact of employees' emotional dissonance and subsequent disengagement in the workplace.

POS can also decrease the impact of organizational negative treatment on employees' positive outcomes. For example, Stamper and Johlke (2003) in their study among 235 salespeople from five firms, found that POS attenuated the negative relationship between role ambiguity and job satisfaction as well as role conflict and intention to stay with the organization. POS helped employees cope with expected role stress associated with their job tasks and motivated employees to remain with the organization, despite many instances of role ambiguity and role conflict. Leather, Lawrence, Beale, Cox and Dickson (1998) in their study of 242 public house licensees in the United Kingdom demonstrated that an unfavorable work environment such as aggressive and violent incidents (e.g., abusive language, shoving, fighting) had a negative effect on employees' well-being, job

satisfaction and organizational commitment. However, the study argued such a negative relationship is dependent upon the level of perceived support that is available to help employees deal with the situation. The study found POS buffers the negative impact of employees' exposure to aggression and violence on the employees.

There is further evidence of the important roles of POS in strengthening the negative effect of organization positive treatment on undesirable employees' behaviors. For example, Biron (2010) in a study of 275 employees at seven organizations (2 government offices, 2 production plants, 2 retail stores and a communications firm) in Israel found a negative association between perceived organizational ethical values (the employees' beliefs concerning what practices are acceptable or appropriate in their organization) and organizational deviance (voluntary behavior that violates significant organizational norms). The result showed that when low levels of POS are present in the context of low perceived ethical values, the level of organizational deviance was high. However, organizational deviance barely occurred under conditions of high POS and high perceived ethical values. Similarly, Perryer, Jordan, Firns and Travaglione (2010) found that POS moderated the relationship between organizational commitment and turnover intention among public sector workers in Australia. These employees were less likely to leave their organization as their levels of commitment increased in conjunction with an increase in support provided by the organization.

There is considerable evidence showing the moderating ability of POS. Most previous studies have verified that POS has the ability to mitigate the negative result of organizational negative treatments—employees' negative behaviors relationship (Casper et al. 2002; Eder & Eisenberger 2008; Foley et al. 2005; George et al. 1993; Jawahar et al. 2007; Karatepe 2011; Kinnunen et al. 2008), while several studies have argued POS can decrease the negative effect of organizational negative treatments—employees' positive behaviors relationship (Leather et al. 1998; Stamper & Johlke 2003). There is also evidence to show that POS can intensify the negative result of organizational positive treatments—employees' negative behaviors relationship (Biron 2010; Perryer et al. 2010). While these studies are important in demonstrating the moderating ability of POS, no study has as yet examined the possibility that POS helps to intensify the effect of perceived learning on transfer of training.

As previously discussed, a basic premise of POS theory implies that an employee's primary resource-based support is his or her organization (Jawahar & Carr 2007); and this support has been found to increase the effects of positive work experiences. For example, Erdogan and Enders (2007) found that perceived organizational support moderated the relationship between leader-member exchange and employee job satisfaction. Employees enjoying good relationships with their supervisors showed more satisfaction with their job when their supervisor had high POS. Marler et al. (2009) also found a significant moderating effect of POS on the positive relationship between managerial pressure (an individual's normative belief concerning their manager's expectation of a specific behavior) and employees' desire to use a new technology within six months of its implementation. Marler et al. (2009) argued those employees with high POS were more sensitive to their managers' expectations and this subsequently enhanced their desire to use the new technology. Zhang, Tsui, Song, Li and Jia (2008) studied middle managers in various Chinese organizations and concluded that the interaction between supervisor support and high quality employment relationship was related to the development of trust. They found that middle managers' trust is much higher in an organization with high supervisor support and a high quality employee-organization relationship. These findings show that employees are willing to expand more effort to fulfill both their own needs and the organization's goals if they receive positive treatment from the organization. Therefore, perceived support from the organization is expected to encourage employees to put greater effort into gaining new knowledge, skills and attitudes during training to achieve better transfer of training outcomes.

On the other hand, if there is perceived to be less organizational support, it is much more likely that employees will make less effort. An empirical study of 257 employees of a media company in the United Kingdom demonstrated how the perception of low organizational support decreased the effort of employees with an internal locus of control to improve their career self-management efforts within the organization as they believed they were less likely to be successful (Sturges, Conway & Liefooghe 2010). Employees also tend to engage in other negative behaviors as a result of an imbalance in the support they receive from the organization. Negative behaviors can include organizational deviance (e.g., arriving late at work and neglecting to follow a superior's instruction) (Akremi, Vanderberghe & Camermann 2010), intention to leave (Chew & Wong 2008; Kinnunen et al. 2008; Liao 2011; Perryer et al. 2010), job stress (Cropanzano, Howes,

Grandey & Toth 1997; Edwards 2009), low career satisfaction (Armstrong-Stassen & Ursel 2009), mistrust in the organization (Lynch, Eisenberger & Armeli 1999), less commitment and demonstrating withdrawal behavior (Eisenberger, Armeli, Rexwinkel, Lynch & Rhoades 2001), decline in the willingness to engage in team work (Shelton et al. 2010) and becoming more alert in monitoring the extent to which organizations are fulfilling the employment contract (Coyle-Shapiro & Conway 2005). Such negative behaviors can be a barrier to employees actively participating in any activity provided by the organization, including training. Accordingly, it is expected that those employees who gain less support from the organization will put less effort into performing well in the training they receive, and be subsequently unable to produce the desired outcomes, such as positive transfer of training.

Alternatively, high levels of POS can create a feeling of obligation among the employees to return their employers' commitment by engaging in behaviors that support organizational goals (Aselage & Eisenberger 2003; Chew & Wong 2008; Eder & Eisenberger 2008). An empirical study by Byrne et al. (2011) and one study by Eisenberger et al. (2001) both concluded that POS leads to increased employees' positive moods, an obligation to engage with behaviors that benefit the organization and show their care about their organization, which in turn is positively related to employees' affective organizational commitment, organizational spontaneity and in-role performance. Jawahar and Carr (2007) in their study of a diverse population of professional employees throughout the United States found that when employees perceive high levels of support from their organization, even the less conscientious individuals feel obligated to and respond in kind toward the organization through contextual performance. The study argued that a high level of POS serves as the necessary impetus to encourage less conscientious employees to engage in contextual performance. Similarly, Lynch et al. (1999) found that wary employees, who generally appear to be less willing to work hard at their jobs, showed greater in-role and extra-role performance with high POS. Therefore, with high POS, there is the potential for employees to fell obligated to achieve positive transfer of training in the workplace following the training as a trade-off for organization commitment (providing budget for training) to them.

POS enhances employees' belief and trust that the organization recognizes and will reward their effort to achieve better performance (Eisenberger et al. 1986; Rhoades & Eisenberger

2002) and if they demonstrate the desired attitudes and behavior (Wayne et al. 1997). It has been argued that when employees trust the organization, they will be more likely to take appropriate actions to enhance their motivation and skill development during the training process (Curry et al. 1994). This positive belief of the organization may also subsequently produce positive attitudes and behaviors that benefit the organization (Aryee, Budhwar & Chen 2002; Podsakoff, Mackenzie, Moormann & Fetter 1990). Therefore, POS is essential to the development of employees' positive attitude and behaviors including affective and normative commitment to the organization (Allen et al. 2003; Chew & Wong 2008; Chiang et al. 2011; Cropanzano et al. 1997; Filipova 2011; Liao 2011; Maertz, Griffeth, Campbell & Allen 2007; O'Driscoll & Randall 1999; Leveson et al. 2010; Settoon, Bennett & Liden 1996; Tremblay et al. 2010; Whitener 2001), job satisfaction (Armstrong-Stassen 1998; Cropanzano et al. 1997; Filipova 2011; Liao 2011; Stamper & Johlke 2003), job involvement (O'Driscoll & Randall 1999), organizational identification (Edwards 2009), career satisfaction (Armstrong-Stassen & Ursel 2009), entrepreneurial behaviour (Zampetakis, Beldekos & Moustakis 2009), work engagement (Kinnunen et al. 2008), intention to remain with organization (Stamper & Johlke 2003), trust (Chiang et al. 2011; Tremblay et al. 2010), self-esteem (Chiaburu et al. 2010a), loyalty (Coyle-Shapiro & Conway 2005), and willingness to work above and beyond the specified requirements of the job (Lavelle et al. 2009; Wayne et al. 1997). It has been shown to contribute to contextual performance, which is defined as discretionary behaviors not formally required by any particular job, but helping to form the social context of all jobs (Jawahar & Carr 2007). Previous studies have demonstrated that some of these attitudes and behaviors enable employees to achieve better learning outcomes from the training they attended (Mathieu, Tannenbaum & Salas 1992; Noe & Schmitt 1986; Tracey et al. 2001).

Based on the discussion, it shows that when employees perceive strong support from their organizations, they tend to engage in positive behavior such as:

- enhancing their beliefs and trust in the organizations,
- creating feelings of obligation to support organizational goals, and
- willingness to expend more effort to fulfill both their personal needs and organizational needs.

Such positive behaviors are expected to encourage employees to put greater effort into gaining new knowledge, skills and attitudes during training, which will subsequently enhance their ability to produce a more positive transfer of training to their workplace. Therefore, it is expected that when employees have high POS, perceived learning will have a stronger positive effect on transfer of training. Thus, the following hypothesis is proposed:

Hypothesis 1:

Perceived organizational support has a moderating effect on the relationship between perceived learning and transfer of training; specifically the association will be stronger when the organization demonstrated greater support.

2.7 Consequences of transfer of training

The potential consequences that transfer of training has on organizations and employees have been explained by Kirkpatrick's (1998) theoretical Four Evaluation Model. This model been widely accepted by researchers and practitioners in the area of training (Goldstein & Ford 2002; Griffin 2011; Santos & Stuart 2003). The reasons for its acceptance include its simplicity (Santos & Stuart 2003) and its ability in helping people think about training evaluation criteria, reactions, learning, behavior and results (Alliger & Janak 1989).

Kirkpatrick's (1998) Four Evaluation Model suggests assessment of training happens at four levels. Level 1 is known as reaction, referring to how well the trainees were satisfied with a particular training program. Level 2 is known as learning, the extent to which trainees change their attitudes, improve their knowledge and increase their skills as a result of attending training. Level 3 is known as behavior, the assessment of the trainees' performance in transferring the knowledge, skills and attitudes that learned in training to their workplace. Finally, Level 4 is known as results, which refer to the assessment of outcomes that the organization gained following the training.

According to Kirkpatrick (1994) each level will affect the next level, an assumption supported by other researchers (e.g., Alliger & Janak 1989; Santos & Stuart 2003; Thompson, Brooks & Lizarraga 2003). The employees' reaction with the training program will have an important influence on their learning level. The employees' learning level will have an important influence on their performance in transferring the learning to the workplace. The application of learning to the workplace is related to the outcomes the organization will obtained following the training. The outcomes here refer to the outcomes at both the organizational level and employees' level.

At the organizational level, researchers (e.g., Ciporen 2010; Lim 1999; Weldy 2009) posit that transfer of training will produce positive results for the organization. The impact of transfer of training can be observed either at the level of organizational unit performance (department) or organization overall performance (Haccoun & Saks 1998), using two types of indicators. These are known as economic or hard indicators (e.g., volume of sales, turnover rate, number of customers, number or errors) and qualitative or soft indicators such as positive working atmosphere and employees being motivated (Alliger et al. 1997; Arthur et al. 2003; Kirkpatrick 1998; Pineda 2010). It has been argued, however, that transfer of training may not directly facilitate organizational performance (Tannenbaum et al. 1993), but rather indirectly. The application of the learned knowledge, skills and attitudes may enhance employees' ability to perform their tasks differently and more efficiently, which in turn can enhance organizational performance (Hyde 2010).

At the employees' level, researchers posit that the successful application of the learned knowledge, skills and attitudes to a job could lead to an improvement in employee performance (Burke & Hutchins 2008; Chen 2010; Colquitt et al. 2000; Kontoghiorghes 2004; Leberman et al. 2006; Thayer & Teachout 1995; Weldy 2009). Researchers indicate that if employees do not positively transfer the new learned knowledge, skills and attitudes to the job site, neither the employee nor the organization profits from training (Curry 1997; Curry 2001; Elangovan & Karakowsky 1999). Owing to the potential effect of transfer of training on employee job performance, some researchers have called for further research on the effect of transfer of training on employees' performance (e.g., Antle et al. 2009; Burke & Hutchins 2007; Chiaburu et al. 2010b; Facteau et al. 1995; Tharenou et al. 2007; Weldy 2009; Xiao 1996; Yusof 2011). This is where studies on the transfer of training literature are lacking and more are needed. As most studies have been more concerned

with identifying the factors that enhance the transfer of training to the workplace, little time has been spent an investigating the consequences of transfer of training (Ciporen 2010; Holton et al. 2000). This study will fill this gap by empirically examining the impact of transfer of training on employees' performance. Specifically, since the scope of this study is employees of public sector organizations where the main output is service (Azmi, Ahmad & Zainuddin 2009; Clarke 2002; Schumaker 2004), this study will examine the relationship between transfer of training and service quality. This theme is discussed further in the following section.

2.8 The consequence of transfer of training on service quality

Service quality is generally viewed as a customer's overall evaluation of the service provided to them (Kandampully, Juwaheer & Hu 2011). The customer's overall evaluation is based on their assessment of a number of service-related attributes such as tangibles, reliability, responsiveness, assurance and empathy (Parasuraman, Zeithaml & Berry 1988). Tangibles refer to the physical facilities, equipment, and appearance of employees. Reliability refers to employee ability to perform the promised service reliably and accurately. Responsiveness refers to the employee's willingness to help customers and provide prompt service. Assurance refers to the knowledge and courtesy of employees and their ability to inspire trust and confidence. Empathy refers to caring, individualized attention the employee provides to his or her customers (Parasuraman et al. 1988; Zeithaml, Parasuraman & Berry 1990). These five dimensions of service quality have been adapted and applied by many studies examining service quality in various contexts (Malhotra & Mukherjee 2004). However, several researchers (e.g., Babakus & Boller 1992; Schneider & Bowen 1993; Zerbe, Dobni & Harel 1998) argue that the dimensionality of service quality may still depend on the organization itself due to each organization providing different types of services to different types of customers, who have different expectations of the service they require.

Service quality is regarded as a critical success factor of service organizations (Avcikurt, Altay & Ilban 2011). This is due to the belief that service quality can deliver positive effects to their internal customers (i.e. the organizations' employees) and external customers, the people outside the organization who receive their services. Lai (2006) and

Ramayah, Samat and Lo (2011) found employees feel satisfaction with their job when they provide good service to the organization's customers. Successfully providing a quality service can decrease employees' intention to quit the organization (Batt 1999; Slatten, Svensson & Savaeri 2011), and sustain the image of the organization (Kandampully et al. 2011). Quality service provision can also help improve organizational performance (Agus, Baker & Kandampully 2007; Cook & Verma 2002) including increasing return on investment, financial performance, sales growth, productivity and decreasing customer complaints (Ramayah et al. 2011).

In regard to external customers, researchers have found excellent service quality can subsequently increase customers' positive perceptions toward the organization (Kim & Damhorst 2010), such as happiness, pleasure, excitement (Gracia, Bakker & Grau 2011), satisfaction (Agus et al. 2007; Clemes, Gan & Ren 2011; Glaveli & Karassavidou 2011; Huang, Hsu & Chan 2010; Ting 2004) and trust (Hyun 2010). Providing excellent service quality also influences the customers' behavior to continuously receive service from the service organization (Kim & Damhorst 2010; Kim, Kim, Myoung & Lee 2010) and remain loyal to it (Batt 1999; Gracia et al. 2011; Ismail, Haron, Ibrahim & Isa 2006). The previous findings clearly show the essential nature of service quality to service organization. Accordingly, researchers have further explored the factors that can influence service quality.

Many factors have been identified as influencing service quality, which can be categorized into two subcategories: employee factors and organizational factors. In regard to the first factor, a number of studies have found that employees' job behavior such as organizational citizenship behavior (Morrison 1996), job satisfaction (Glisson & Hemmelgarn 1998), loyalty (Glaveli & Karassavidou 2011) and organizational commitment (Hung 2006) have a positive influence on service quality. One recent study further indicates that employee role clarity, which is referred to as the degree to which an employee's receives and understands the information required to do their job positively, is related to service quality (Slatten et al. 2011). These findings provide evidence that employee characteristics have a significant effect on service quality. However, the majority of previous studies tend to regard organizational factors as more important determinant of service quality. The organizational factors that have an influence on service quality include:

- the support from management and supervisors including the provision of feedback, respect for employees, fairness in providing resources and time for quality (Batt 1999; Zeithaml et al. 1990),
- positive employee involvement climate (Mathe & Slevitch 2011),
- positive transfer climate such as obtaining support from supervisor and peers to apply the new learned knowledge and skills in the workplace (Bennett, Lehman & Forst 1999),
- positive work group relationships, for example with peers (Batt 1999),
- constructive team culture; which is refers to the cultures that promote positive, proactive behavior and encourage interactions (Glisson & James 2002),
- positive service climate such as adequate staff, equipment, technology, role clarity, cooperation, personalization, less role overload, conflict and emotional exhaustion (Glisson & Hemmelgarn 1998; Scheider & Bowen 1993; Scheider, Bowen, Ehrhart & Holcombe 2000; Sergeant & Frenkel 2000),
- market orientation, which refers to the organization's strategy to offer products or services that meet customers' demands with an effective customer-orientation service process (Ramayah et al. 2011).

Several researchers found that high quality service support provided by internal staff (Gracia, Cifre & Grau 2010) and other departments (Hartline & Jones 1996; Sergeant & Frenkel 2000) also contributes to service quality. Furthermore, researchers believe service quality can be improved through human resource management practices. Such practices include appropriate manpower planning, recruitment and selection, training and development, job design, pay and rewards, performance appraisal, career development system, managerial coaching and empowerment (Chand 2010; Scheider & Bowen 1993; Slatten et al. 2011; Tsaur & Lin 2004; Zerbe et al. 1998; Zeithaml et al. 1990).

Although many organizational factors have been identified with service quality, one important and essential factor is training. As Mosahab, Mahamad and Ramayah (2011) indicate, 'in order to enhance service quality, training is an important task that cannot be neglected' (p. 93). Where there is much contact between employees and customers, the level of service quality depends on employees skills in producing services to customers (Kotler & Armstrong 2008; Li, Yang & Wu 2008; Roehl & Swerdlow 1999). Prior studies in various service industries including the banking, hotel and health industries indicate that

training is positively and significantly related to service quality (Schneider & Bowen 1993). Similarly, a recent study by Beigi and Shirmohammadi (2011) concerning employees at five branches of a large public sector bank in Iran also found that the employees who participated in an emotional intelligence training program showed improvement in all service quality dimensions (reliability, responsiveness, assurance and empathy). Support for this can be found in a study with 439 hotel employees in India, which indicated that training showed the highest correlation with service quality than other human resource practices such as recruitment, selection, manpower planning and pay system (Chand & Katou 2007).

One possible explanation for these results is that training provides an opportunity for employee to continuously learn (Batt 1999). This opportunity allows employees to directly upgrade their knowledge, skills, abilities and professionalism which they require to meet the needs of customers, and respond better to customers' requirements (Chand 2010; Ismail et al. 2006; Keltner 1995; Rodriquez & Gregory 2005; Tay 2008; Tsai & Tang 2008). Training also leads to the provision of knowledge about the products and services offered by the organization and involves communicating to employees the best ways to deliver services, such as how to deal with angry customers (Johnson 1996; Keltner 1995). Moreover, training leads to the development of an employee commitment to service quality (Sun, Hsu & Wang 2011) and the development of a positive service climate (Gracia et al. 2010; Mathe & Slevitch 2011; Schneider, Wheeler & Cox 1992). All these competencies are essential to improved customer satisfaction, affective commitment, customers' repurchase intention (Kim & Ok 2010) and the customer-service organization relationship (Keltner 1995), which subsequently affect customers' perceptions of the overall service quality (Gracia et al. 2010; Hartline & Jones 1996). Without sufficient competencies, it is unlikely that employees will be motivated to perform services at the highest levels (Berry & Parasuraman 1992).

While it has been generally accepted that training will lead to higher levels of service quality, the literature does not lend its full support to this relationship. For example, a study by Zerbe et al. (1998) consisting of 452 airline employees in the United States highlighted that there is a significant relationship between employees' perceptions of human resource management (HRM) practices (e.g., leadership, rewards, career opportunities, performance appraisal and work demands) and employees' display of

positive behavior toward customers. However, no relationship was found between satisfaction with training and service behavior in this study. Similarly, Cook and Verma (2002) in their study of 147 employees of a large bank in Hong Kong found that training provided by the organization was not related to any dimension of service quality. Recently, Hung (2006) studied 316 people working in the hotel industry in Taiwan, and indicated that a more positive employee perception of HRM practices (e.g., planning, staffing, appraisal, and compensation) would stimulate increased organizational commitment and in turn service performance. However, the study reported a negative relationship between perceptions of training and service performance. Based on these findings, it can be argued that training itself is not enough to enhance service quality. As Grossman and Salas (2011) stated, although employees may gain new knowledge, skills and attitudes through training programs, the impact of such training alone is not sufficient for it to be considered effective. Researchers (e.g., Aguinis & Kraiger 2009; Curry, McCarragher & Dellmann-Jenkins 2005; Olsen 1998; Shaharuddin & Abiddin 2009; Tharenou et al. 2007) have argued that training will deliver positive outcomes only if employees have transferred the learned knowledge, skills and attitudes to their job.

Transfer of training has been recognized as a mechanism to improve the impact of training on employees' performance (Aguinis & Kraiger 2009; Kim 2004; Nielsen et al. 2010). Other researchers (e.g., Colquitt et al. 2000; Kontoghiorghes 2004; Kontoghiorghes 2002; Thayer & Teachout 1995) also believe that transfer of training could lead to better employee job performance. However, relatively few researchers have empirically examined such a relationship, even though results indicate there is a positive relationship between transfer of training and employees' job performance. For example, a study of 102 assistant managers working in a large fast-food restaurant franchise in the United States showed transfer behavior was related to later ratings of the assistant managers' job performance (Rouiller & Goldstein 1993). Zayed (1994) in his study of 371 trainers at public organizations in Egypt found the application of the learned knowledge and skills to the workplace enhanced the teaching competencies of the trainers. Other positive effects on employee performance that have been found include links between transfer behavior and performance improvement (Noe & Schmitt 1986) and a positive influence of skills transfer on sales employees' selling performance (Leach & Liu 2004).

Indeed, a meta-analysis by Colquitt et al. (2000) demonstrated that transfer of training explained 35% of the variance in job performance. Since transfer of training is directly related to employees' job performance, this study predicts that if employees positively apply the newly learned knowledge, skills and attitudes to the workplace, they will be able to deliver a quality service to their customer, since service quality is regarded as an indicator of employee performance, in the service organizations (Berry & Parasuraman 1992; Brown & Lam 2008; Dyer & Reeves 1995; Parasuraman, Zeithaml & Berry 1985). Thus, the following hypothesis is proposed:

Hypothesis 2: Transfer of training is positively related to service quality.

2.9 Job satisfaction as a mediator

Job satisfaction is one of the most studied employee attitudes in organizational research primarily due to the intuitive nature of the construct's importance (Bai, Brewer, Sammons & Swerdlow 2006; Testa & Mueller 2009; Vieira 2005). It is associated with a number of meaningful outcomes such as enhanced employees' pride in their workplace (Arnett, Laverie & Mclane (2002), loyalty (Glaveli & Karassavidou 2011), self-esteem (Back, Choong-Ki-Lee & Abbott 2011), organizational commitment (Back et al. 2011; Bai et al. 2006; Lee, Nam, Park & Lee 2006; Sergeant & Frenkel 2000; Yousef 2002), work performance (Suliman 2007) and team performance (Politis 2006). Job satisfaction can also resolve negative or disturbed psychological states such as anxiety, low self-esteem (Glisson & Hemmelgarn 1998), and other negative work behaviors such as an intention or desire to leave (Filipova 2011; Jawahar & Hemmasi 2006; Koster, Grip & Fouarge 2011; Shields & Ward 2001), turnover (Eby, Freeman, Rush & Lance 1999), absenteeism (Sagie 1998) and job burnout (Griffin, Hogan, Lambert, Turker-Gail & Baker 2010).

Reviews of the literature reveal that recent studies have focused on investigating the role of job satisfaction as a mediator. Job satisfaction has been identified as a mediator in a number of different relationships:

- leader member exchange and employee work outcomes (Cheung & Wu 2012),

- perceived support in employee development and employee intention to quit (Koster et al. 2011),
- empowerment and customers' perceived service quality (Gazzoli et al. 2010),
- organizational justice and organizational commitment, turnover intention (Elanain 2010),
- time demands of work and turnover intention (Wickramasinghe 2010),
- employer satisfaction and customer satisfaction (Evanschitzky, Groening, Mittal & Wunderlich 2011),
- management service initiatives and employees' service behaviors (Kim et al. 2009),
- organizational learning culture and organizational commitment (Wang 2007),
- salary and employee commitment (Luna-Arocas & Camps 2007),
- perceptions of justice and work performance (Suliman 2007),
- self-leadership behaviors and team performance (Politis 2006), and
- organizational support and turnover intention (Jawahar & Hemmasi 2006).

Owing to the potential ability of job satisfaction to act as a mediator, this study will investigate the mediating effect of job satisfaction on the relationship between transfer of training and service quality. Recent researchers such as Tremblay et al. (2010) argue there is a need to investigate the mediating factor between HRM practices and employees' performance. Similarly, others have urged further research on the mediating effect of employee work attitude on the relationship between training and performance outcomes (Antle et al. 2009; Chand & Katou 2007; Tharenou et al. 2007). In line with these suggestions, this study will investigate the mediating effect of job satisfaction on the relationship between transfer of training and service quality as the performance outcome, as this relationship has not yet been empirically tested in the literature.

2.9.1 The consequence of transfer of training on job satisfaction

Job satisfaction is defined as 'how people feel about their jobs and different aspects of their jobs. It is the extent to which people like or dislike their jobs' (Spector 1997, p. 2). The definition explicitly explains the important role of the organization itself in the development of an employee's job satisfaction.

Previous researchers have looked at various organizational factors that may influence an employee's job satisfaction as summarized in Table 2.3. These findings show that work environment factors are important determinants of employees' job satisfaction (Abdulla, Djebarni & Mellahi 2011).

Table 2. 3: Summary of organizational factors that influence job satisfaction

No.	Factor	Supporting literature
1.	Perceived organizational support	Cropanzano et al. (1997); Gould-Williams & Mohamed (2010)
2.	Perceived support from organization in terms of competence development	Koster et al. (2011)
3.	High involvement work systems in organization	Zatzick & Iverson (2011)
4.	Organization's internal communication system	Carriere & Bourque (2009)
5.	Organizational learning culture	Wang (2007)
6.	Constructive team culture	Glisson & James (2002)
7.	Work-family culture	Baral & Bhargava (2010)
8.	Positive perception of management and working environment	Arnett et al. (2002)
9.	Participative management style	Kim (2002)
10.	Leader's behavior	Politis (2006)
11.	Supervisor support	Baral & Bhargava (2010); Borgogni, Russo & Latham (2011); Sergeant & Frenkel (2000)
12.	Effective communication with supervisor	Back et al. (2010); Kim (2002)
13.	Supervisory family support and leader–member exchange	Bagger & Li (2011)
14.	Employer satisfaction	Evanschitzky et al. (2011)

15.	Supervisor satisfaction	Eby et al. (1999)
16.	Pay satisfaction	Eby et al. (1999); Luna-Arocas & Camps (2007)
17.	Job enrichment	Luna-Arocas & Camps (2007)
18.	Extrinsic (e.g., pay, benefits such as pensions) and intrinsic (e.g., well-being, professional development) rewards	Back et al. (2010); Fletcher (2001); Kim et al. (2009); Lee et al. (2006); Testa & Mueller (2009)
19.	Organizational trust	Gould-Williams & Mohamed (2010)
20.	Organizational justice	Suliman (2007)
21.	Empowerment	Gazzoli et al. (2010); Kim et al. (2009)
22.	Perceived performance fairness	Poon (2004)
23.	Received feedback	Eby et al. (1999); Lam & Zhang (2003)
24.	Job characteristics such as job variety, autonomy and task autonomy	Lam & Zhang (2003); Thomas, Buboltz & Winkelspecht (1993)
25.	Number of subordinates	Droussiotis & Austin (2007)
26.	Team support and group collective efficacy	Borgogni et al. (2011)
27.	Technology availability	Sergeant & Frenkel (2000)
28.	Employment level	Traut, Larsen & Feimer (2000)
29.	Career mentoring	Lo & Ramayah (2011)
30.	Perceived organizational politics	Cropanzano et al. (1997)

Another organizational factor that can improve employee job satisfaction is training. Providing employees with learning opportunities can decrease any instances of negative or poor psychological functioning such as job stress, and enhance their commitment to, and satisfaction with, their job (Mikkelsen, Saksvik, Eriksen & Ursin 1999). Recent empirical studies conducted among employees from various service organizations showed that training was positively related to job satisfaction (Abdulla et al. 2011; Back et al. 2011; Gould-Williams 2004; Gould-Williams & Mohamed 2010; Lee et al. 2006).

There are a number of reasons why training has a positive impact on job satisfaction. First, training can make employees more qualified and job proficient (Lee & Bruvold 2003; Li et al. 2008). Second, training can enhance an employee's ability to adjust successfully to

organizational change (Traut et al. 2000). Third, training can deliver a strong message to employees that the organization is concerned about their needs and development, which ultimately creates a positive effect on job satisfaction (Kim et al. 2009).

Therefore, training has been regard as more important than other organizational factors (e.g., challenging job, friendly co-workers, and job security) in enhancing job satisfaction (Lam & Zhang 2003). Although a number of studies such as those by Ardts, Velde and Maurer (2010) and Shields and Ward (2001) found negative relationships between participation in training and job satisfaction, one study conducted a few years ago involving 301 employees of nine organizations in the United States and Canada found that satisfaction with training accounted for 55 percent of the variance in overall job satisfaction (Schmidt 2007).

Chen (2010) recently stated there is a potential for employees to feel satisfied with their work if they positively transfer the training outcomes to the workplace. It can be argued that the application of training outcomes can enhance the employees' abilities to perform their work more effectively, which in turn will affect their level of satisfaction. According to Allen and Velden (2001), employees who feel that they have sufficient skills to do a more demanding job show a degree of high satisfaction with their job. On the other hand, an inability to utilize many skills and abilities in one's work has been identified as a predictor of lower job satisfaction (Aletraris 2010). In addition, a number of studies provide support for the positive effect of transfer of training on employee work attitude. For example, a study using 445 sales employees of a life insurance company in the United States demonstrated that transfer of training was positively related to employees' organizational commitment (Leach & Liu 2004). Another study by Curry et al. (2005) of 416 child protection services caseworkers in the United States also revealed that both little and highly experienced employees who develop plans for the application of training outcomes, show greater loyalty to their organization. Based on the above discussion, the present study predicts that positive transfer of training will promote job satisfaction.

Hypothesis 3: Transfer of training is positively related to job satisfaction.

2.9.2 The impact of job satisfaction on service quality

Satisfied employees are likely to exhibit various desired behaviors including the ability to deliver a high quality of service. The relationship between job satisfaction and service quality has been suggested by The Cycle of Success model (Schlesinger & Heskett 1991). This model proposes that employee satisfaction, which is influenced by extensive training, leads to increased service quality, which in turn leads to customer loyalty, continuity in relationship with customer and increased profit margins. Other scholars have also stated that job satisfaction is critical in delivering high service quality, as satisfied customers can only be created by satisfied employees (Malhotra & Mukherjee 2004).

Previous studies of employees in various sectors such as hotels (Kim et al. 2009), service shops (Yee, Yeung & Cheng 2008), banking (Malhotra & Mukherjee 2004) and franchise services (Evanschitzky et al. 2011) all show job satisfaction is positively related to service quality. A recent study of restaurant employees also indicated that empowered and satisfied employees significantly influenced how customers perceived the service quality of the restaurant they were eating at (Gazzoli et al. 2010). Furthermore, Wangenheim, Evanschitzky and Wunderlich (2007) found that the relationship between job satisfaction and customer satisfaction (e.g., service quality, price satisfaction, quality of assortment) was statistically significant for all types of employees, regardless of their degree of interaction with customers. However, their study also found that the link between job satisfaction and customer satisfaction was stronger for employees who had high levels of interaction with customers compared to employees who were not directly involved with customers.

A recent meta-analysis revealed that job satisfaction accounted for between six and ten percent of total variance in service quality (Brown & Lam 2008). There are two possible explanations for this association. Firstly, highly satisfied employees may be more willing to engage in positive and helpful behaviors that lead to better service quality (Lee et al. 2006) and customer trust (Bradford, Crant & Phillips 2009). Second, job satisfaction leads to employees' intentions to keep performing their required job tasks well, which in turn affects their actual behavior such as commitment to customer service, cooperation with fellow employees and commitment to the organization (Arnett et al. 2002).

While the relationship between job satisfaction and service quality appears to be self-evident, the existing research has some limitations. The first limitation is that the results of previous studies regarding the association between job satisfaction and service quality focus mainly on the context of service organizations that are business oriented (Kotler & Armstrong 2008; Vermeeren, Kuipers & Steijn 2011). These include hotels (Kim et al. 2009; Lee et al. 2006), service shops (Yee et al. 2008), banking (Malhotra & Mukherjee 2004), restaurants (Gazzoli et al. 2010), markets (Bradford et al. 2009) and the retail industry (Wangenheim et al. 2007). Accordingly, recent studies by Gazzoli et al. (2010) and Lee et al. (2006) have urged further research on the relationship between job satisfaction and service quality to be done in other contexts such as the public sector. The public sector has specific characteristics such that it and private service organizations cannot necessarily be managed in the same way (Vermeeren et al. 2011). Following this, the nature of interactions between employees and customers (Brown & Lam 2008) and the performance of service quality may also vary between these two types of organizations (Clemes et al. 2011). One possible explanation for this is that public and private service organizations focus on different types of customers (Zeithaml et al. 1990) and provide different types of services to their customers (Bowen & Schneider 1988). In fact they have quite a different orientation of service; public sector organizations provide service for social benefit, while private service organizations provide service with the aim to earn profits (Agus et al. 2007). It has been noted that the quality of service as perceived by customers is different for various service organizations, i.e. financial services (e.g., banks, insurance company), professional services (e.g., consulting, accounting firms), hotels and utilities. This difference is due to each service organization having a different work nature, target market and management approach (Meyer, Chase, Roth, Voss, Sperl, Menor & Blackmon 1999). One recent study by Huang et al. (2010) argued that different types of customers value service quality in varying ways. Their study found that Chinese respondents tended to rate a tour guide's service performance lower than foreign respondents.

The previous discussion show the service quality can be influenced by the characteristics of the organization and customers. Therefore, examining the association between job satisfaction and service quality in the public sector context is essential for improving our understanding of the relationship.

A second limitation deals with the fact that the previous studies measured service quality mostly based on external customers' perspectives (Finn, Baker, Marshall & Anderson 1996; Kettinger & Lee 1994; Slatten et al. 2011; Vermeeren et al. 2011). The accuracy of the results could be limited due to employees interacting with different customers on a daily basis (Zeithaml et al. 1990). External customers also have limited time and opportunity to evaluate the quality of service they receive which can force them to rely heavily on tangible cues (e.g., physical setting of the organization and the appearance of organization employees) and not directly related to the quality of service itself (Bowen & Schneider 1988). Subsequently, Lai (2006) and Slatten et al. (2011) urge further study to evaluate service quality from the perspective of the organization's employees (i.e., internal customers), which appears to have been done by relatively few studies (e.g., Cook & Verma 2002; Glisson & James 2002; Slatten et al. 2011). Providing excellent service quality to the organization's employees should also positively affect the quality of service that the organization provides to external customers (Gracia et al. 2010). In addition, measuring employees' service quality based on internal employee perceptions can provide more accurate results of service quality. This is due to the fact that internal employees receive service from particular employees on a regular basis. In contrast, external customers may meet the employees once a year or once in their life as they have a choice to go to other organizations that provide similar services (Finn et al. 1996; Lai 2006). Consequently, internal employees should be able to observe the service performance more than external customers do and they can see it from a different angle (Lai 2006).

The previous discussion shows the limitations of measuring service quality from the perspective of external customers compared to that of internal customers, which may produce a more accurate assessment of service quality. Therefore, examining the association between job satisfaction and service quality that measures service quality based on internal employees' perspectives is essential. It will enhance our understanding of the relationship.

Based on the discussion in subsections 2.9.1 and 2.9.2, the present study proposes that transfer of training is expected to have a positive relationship with job satisfaction. Job satisfaction is then predicted to have a positive relationship with service quality. These perspectives are necessary and sufficient to establish the mediation effect (Kenny, Kashy & Bolger 1998). Accordingly, this study proposes that job satisfaction can mediate the

transfer of training and service quality relationship. Thus, the following hypotheses are proposed:

Hypothesis 4: Job satisfaction is positively related to service quality.

Hypothesis 5:

Job satisfaction is a mediator between the transfer of training and service quality.

2.10 Conclusion

This chapter has provided a detailed discussion on two important issues related to transfer of training: firstly, the factors that influence the transfer of training; and secondly, the consequences of transfer of training on the employee.

In regard to the first issue, this chapter has reviewed the findings of previous studies and identified a range of factors that influence transfer of training. These factors include motivation to transfer, self-efficacy, job involvement, organizational commitment, job satisfaction, personality, supervisor support, peer support, top management support, opportunity to transfer, training reward, organizational learning culture, accountability for transfer, job constraint, job design, organizational training policy, organizational communication and decision-making system. Although the influence of these factors on transfer of training is well justified, this chapter reveals that there is relatively limited understanding of the influence of social exchange factors in the workplace on transfer of training. Social exchange factors refer to the employees' general belief that their work organization values their contribution and cares about their well-being, and is referred to here as Perceived Organizational Support (POS). The potential influence of POS on the success of transfer of training requires further study because its impact on employees has been strongly noted in this field of scholarly research. This has been well depicted in the literature, particularly in regard to its role as a moderator to increase the effects of positive work experiences on employees. Therefore, as previously discussed in this chapter, this study posits that perceived organizational support will have a moderating effect on the relationship between perceived learning and transfer of training, specifically stating that the association will be stronger with greater support from the organization.

In regard to the second issue, this chapter has demonstrated that there appears to be little attention given by previous studies to further investigate the consequences of transfer of training, particularly on employees. Only a small number of studies have investigated this issue, providing some empirical evidence for the impact of transfer of training on employees' specific job performance. While these findings are important, this chapter reveals that there is relatively little understanding about the consequences of transfer of training on employees' service quality and employees' job satisfaction. As previously

discussed, this study posits that transfer of training will have positive consequences on employees' service quality and job satisfaction.

Furthermore, the discussion has revealed there is a need to further examine the association between job satisfaction and service quality in the context of public sector organizations and from the perspectives of employees. Consequently, this study will examine the association between job satisfaction and service quality using internal customers' evaluation of service provided. It is expected that job satisfaction will mediate the relationship between transfer of training and service quality. This overall relationship (transfer of training—job satisfaction—service quality) has not been empirically examined by previous researchers.

Finally, it is evident that the most studies of transfer of training have been conducted in Western countries, particularly in the United States (see Tables 2.1 and 2.2). While these studies are important, there is still a relatively limited understanding of transfer of training issues in other nations, particularly in the context of Eastern countries. This study has developed a conceptual framework that includes the five hypotheses proposed in this chapter, which will develop our understanding of the factors affecting transfer of training and the consequences of transfer of training on employees' service quality and job satisfaction from the perspective of a Eastern developing country, i.e. Malaysia. Specifically it examines Malaysian public sector organizations. The conceptual framework of this study will be explained in more detail in Chapter 3.

Chapter 3

The Conceptual Framework

3.1 Introduction

Based on the discussion and hypotheses developed in the previous chapter, this chapter describes the conceptual framework used in this study. This chapter begins with a detailed explanation of the conceptual framework and briefly describes each of the constructs (i.e. perceived learning, perceived organizational support, transfer of training, job satisfaction, and service quality) that are included in the conceptual framework, summarizing the key components from Chapter 2. This chapter also provides discussion about the relevance of the conceptual framework to the context of this study, the public sector in Malaysia. Finally, the chapter concludes by highlighting the contribution of the conceptual framework to the literature, especially to the transfer of training literature.

3.2 The Conceptual Framework

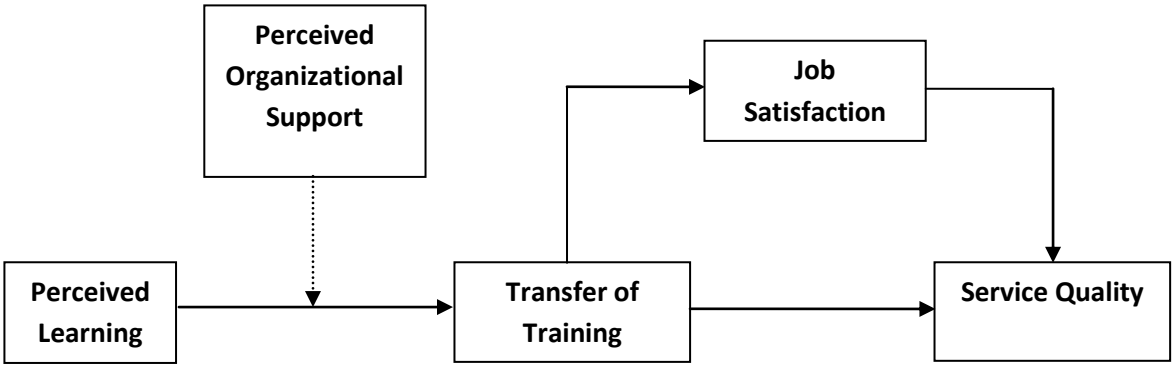

Figure 1: The conceptual framework

Figure 1 depicts the conceptual framework for this study as consisting of five constructs: perceived learning; perceived organizational support; transfer of training; job satisfaction and service quality. This framework illustrates the relationships between the five hypotheses proposed in Chapter 2.

Hypothesis 1: Perceived organizational support has a moderating effect on the relationship between perceived learning and transfer of training, specifically the association will be stronger with greater support from the organization.

Hypothesis 2: Transfer of training is positively related to service quality.

Hypothesis 3: Transfer of training is positively related to job satisfaction.

Hypothesis 4: Job satisfaction is positively related to service quality.

Hypothesis 5: Job satisfaction is a mediator between the transfer of training and service quality.

The conceptual framework includes the factors identified for this study that influence transfer of training and the consequences of transfer of training for employees. The following sections discuss in detail the conceptual framework as it applies to this study.

3.2.1 Perceived organizational support as moderator

Working from the left of Figure 1, the conceptual framework proposes that perceived learning has a direct effect on the transfer of training. This proposed relationship is based on the notion that employees who perceive that they have gained new knowledge, skills and attitudes from the training they have attended, should be able to apply them to their workplace. The assumption is that when employees undergo training they are more motivated to apply it when they return back to their workplace, if they think they have actually learned something of use from it (Marler et al. 2006; Nijman et al. 2006; Warr et al. 1999). At the same time, if they have a good understanding of the knowledge, skills and attitudes that were taught during the training, they should also be in a position post-training to identify the parts of their job where new knowledge, skills and attitudes can be employed. According to Yusof (2011), the ability of the employee to identify appropriate situations in the workplace for the application of learned knowledge, skills and attitudes are essential elements of successful transfer of training.

On the other hand, the relationship between perceived learning and transfer of training also means that if employees do not gain any new input (referring to the knowledge, skills and attitudes that are taught during the training) from the training they have attended, then they are not able to demonstrate these attributes in their workplace. As Brown et al. (2011) argue, an employee cannot transfer the training without first learning the training content. For example, an apprentice baker will not be able to produce good bread if he/she does not understand all the key aspects of bread making they have been taught. These would include things such as the choice of ingredients for the selection of flavor, the skill of mixing and kneading the dough, the temperature required to bake the bread and the procedure to operate the oven. This assumption is in line with other scholars such as Kirkpatrick (1998) and Goldstein and Ford (2002), who argue that the trained knowledge, skills and attitudes must be learned and retained by employees before they can be applied to the work context.

Moving forward, the conceptual framework proposes that the association between perceived learning and transfer of training could be greater if the association is supported by the organization. Although employees may gain new knowledge, skills and attitudes from the training sessions, the characteristics of the employees' workplace may influence transfer of training outcomes (Goldstein & Ford 2002). Since the application of the new

learned knowledge, skills and attitudes takes place within the employee's work context, the link between perceived learning and transfer of training can be expected to be moderated by the employees' work environment (Aguinis & Kraiger 2009; Arthur et al. 2003).

Goldstein and Ford (2002) suggested there are particular work environment that can foster positive transfer of training following the learning intervention, including the support from the supervisor and the opportunity provided for employees to apply the training outcomes in their job. For example, a research fellow may participate in a structural equation modeling (SEM) training workshop to enhance her ability to analyze the research data using the current advanced statistical methods. At the end of the training, she shows a clear understanding of the concepts of the statistical method and has the ability to apply the method based on her completion of the exercises conducted throughout the training. However, when she returns to the workplace, her superior prefers to analyze the data using standard statistical methods. Indeed, her organization does not provide the SEM software, which minimizes the opportunity for her to apply the knowledge and skills learned from the training. In this example, it can be seen that although the research fellow has gained the knowledge and skills related to SEM, she is unable to apply the SEM knowledge and skills because she received little support from her supervisor and organization. Another work environment that could affect the transfer of training outcomes following the learning intervention is that of organizational continuous learning culture (Tracey et al. 1995). Using the previous example, even though the research fellow has gained new knowledge and skills from the SEM training, as the organization, and particularly her managers and colleagues, show negative reinforcement and low acceptance of the application of the SEM method, it is likely there will be a decrease in her morale and motivation. Subsequently the transfer of the SEM knowledge and skills will not occur.

The model put forward in this study proposes that the level of organizational support perceived by an employee will influence the transfer of any training received by that employee. This work environment characteristic is known as perceived organizational support (POS) and it is expected that employees will produce greater application of training outcomes to their workplace when the perceived support from the organization is higher. POS is defined as the employees' general belief that their work organization values their contribution and cares about their well-being (Eisenberger et al. 1986). Following social exchange theory, when employees perceive that their organizations have

demonstrated those above practices, they are more likely to feel obligated to engage in behaviors that are beneficial to their organizations (Eisenberger et al. 1986; Eisenberger et al. 2001). The application to the workplace of the knowledge, skills and attitudes learned from training can be seen as one behavior that is beneficial to organizations (Leach & Liu 2004). Therefore, it is likely when employees perceived high levels of support from their organizations, they feel valued and appreciated by the organization and consequently will put greater effort into demonstrating positive transfer of training as a return for their employer's commitment (i.e. investing money for employees to attend training). Thus for employees who experience high levels of perceived learning and organizational support, there is likely to be a greater impetus and encouragement for them to demonstrate positive transfer of training when they return to their workplace following the training.

On the other hand, when employees perceived low organizational support, this general perception and belief may affect employees' attitudes and behaviors toward the organization. Employees tend to engage in and demonstrate undesired behaviors as a result of any imbalance in support they receive from the organization. Such undesired behaviors include neglecting to follow their superior's instruction (Akremi et al. 2010), less commitment to the organization (Eisenberger et al. 2001) and mistrust of the organization (Lynch et al. 1999). In the context of training, such inappropriate behaviors could be demonstrated through less interest to perform on the job, the knowledge, skills and attitudes that are gained from training. For example, James has been sent by his organization to participate in a training event organized by an external training consultant. Following the training, James demonstrates an improvement in the quality of his work, compared to other employees at the same level but who did not get the opportunity to participate in the training. However, when it comes to the increment period, James realizes that his salary increment is the same as other employees, when he believed that after undertaking the training his salary increment would increase. As a result, James may perceive that his organization does not value his contribution appropriately and consequently, he might begin to work inconsistently and even revert back to performance levels prior to the training.

The above discussion suggests that it is likely for employees to transfer new knowledge, skills and attitudes from training to the workplace, in line with the level of support they receive from the organization. Therefore, the conceptual framework proposed that

perceived organizational support will moderate the relationship between perceived learning and transfer of training.

To empirically test these relationships a series of established measures from the literature have been used to collect data from both employees and their supervisors. Perceived learning measures the respondents' perceptions of the improvement of knowledge, skills and attitudes they gained as a result of training event they have attended, using four items adopted from Curry (1997). Perceived organizational support measures the respondents' general belief concerning the extent to which the organization thinks highly of their contribution and promotes their welfare, using eight items adopted from Eisenberger, Cummings, Armeli and Lynch's (1997) study. Transfer of training measures the respondents' perceptions of their subordinates' (who participated in the training session) performance in applying to the workplace the new knowledge, skills and attitudes that have been learned, using six items adopted from Xiao (1996). The list of the items of each measure (perceived learning, perceived organizational support and transfer of training) and the justification of the measure selection will be discussed in detail in Chapter 4.

3.2.2 Consequences of transfer of training on service quality

The conceptual framework further proposes that transfer of training can have a direct impact on service quality. This proposition is supported by the training literature which suggests the application of knowledge, skills and attitudes learned from training to the workplace should lead to positive improvement in the employees' job performance (Colquitt et al. 2000; Griffin 2011; Kirkpatrick 1994). In the context of this study— it is noted that in public sector organizations, the main activity is to provide services to people. Therefore, using the conceptual framework it is proposed that the application of the knowledge, skills and attitudes gained from training should have a direct effect on the quality of service provided by employees to their customers. This proposition is in line with other scholars of organizational training such as Sullivan (2002) who proposed that transfer of training might have a positive impact on service quality. The assumption is that when employees apply new knowledge, skills and attitudes to their job following the training, they will demonstrate better abilities and competencies in performing their tasks (Zayed 1994). In the case of the public sector or other service organizations, employees

with higher ability and competency levels will demonstrate them through the provision of quality service in their interactions with customers.

For example, imagine a scenario where new staffs members at an university's international student department have undertaken training to provide an understanding of the various cultures among the student cohorts they will encounter. They are also given various skills or techniques on how to deal with students from such backgrounds. Following the training, we can expect the staffs to provide quality service to the university students if they implement the knowledge and skills they have been taught during the training. The rationale is that they have been provided with appropriate knowledge and skills so they can feel more confident and comfortable in dealing and interacting with the students. If however, they do not practice the knowledge and skills learned, it is likely they will experience difficulties in their interactions with students from various countries and backgrounds. Therefore, the conceptual framework explains how the application of the knowledge, skills and attitudes gained from training can directly affect the quality of service provided by employees.

3.2.3 Job satisfaction as mediator

The conceptual framework further proposes that transfer of training can also have a direct effect on job satisfaction. The conceptual framework asserts that an employee who applies the knowledge, skills and attitudes learned in training to their workplace will feel greater satisfaction with their job. This assumption is in line with recent researchers such as Chen (2010). Kirkpatrick (1994) further explains that the application of knowledge, skills and attitudes learned during training is a prerequisite for organizations to gain positive outcomes from their investment in training such as improving employees' work attitudes. Job satisfaction is described as how an individual feels about their job and is one factor in developing a positive work attitude. For this behavior to be displayed, employees must have sufficient job competencies for them to be able to carry out their job responsibilities successfully. As Allen and Velden (2001) argued, having sufficient competencies that suit a particular job is an important factor in creating job satisfaction. Transfer of training should help employees improve their job competencies (Zayed 1994) as the application of the new learned knowledge, skills and attitudes provides new insight that enriches the

employees' existing competencies. This in turn, makes them more satisfied in doing their job. As the employees feel they are adequately prepared to fulfill the duties of their position they will perceive that they are suited to the job and are performing well. If, however, an employee does not feel they are capable of undertaking any tasks within their job description then this can influence their perceptions toward their job (e.g., the job is not suitable for them). Thus, the conceptual framework proposes that transfer of training might have a direct effect on employees' job satisfaction.

Finally, in the framework developed, the model proposes that job satisfaction is related to service quality. This suggestion is in line with other researchers such as Malhotra and Mukherjee (2004) and Schlesinger and Heskett (1991) who argue that job satisfaction is a requirement for service quality. Employees who have positive perceptions about their job are more likely to provide service that meets their customers' expectations. There are two likely explanations for this effect. First, when employees are satisfied with their current job, they are more willing to fulfill their job responsibilities as stated in their job description (Arnett et al. 2002; Lee et al. 2006). Second, highly satisfied employees should be more committed to help the organization to achieve organizational goals (Lee et al. 2006). They also tend to engage in behavior that is beneficial to the organization (Back et al. 2010). For example, an employee who is happy with their work may take time to help a lost visitor to find where they supposed to be even though doing so is not strictly within his/her job duties. Actions such as this create an overall sense of goodwill and thus enhance the customer's experience of service quality. On the other hand, unsatisfied employees might demonstrate undesired attitudes such as anxiety and low self-esteem (Glisson & Hemmelgarn 1998), which can result in negative perceptions among customers toward them and their organizations. Thus, the conceptual framework proposed that job satisfaction will have a direct effect on employees' service quality.

To empirically measure service quality it is important to gauge the respondents' perceptions of how they rate the service level experience that is delivered to them. In this study the respondents' perceptions will be based on the four service dimensions which are reliability, responsiveness, assurance and empathy, that consist of eighteen-items adopted by Parasuraman, Zeithaml and Berry (1988). The proposed job satisfaction scale will measure the respondents' perceptions of their feelings about their job, using three items adapted from the Michigan Organizational Assessment Questionnaire Satisfaction

Subscale developed by Cammann, Fichman, Jenkins and Klesh (1979). The list of the items in each measure (service quality and job satisfaction) and the justification for the measure selection will be discussed in detail in the next Chapter 4.

3.3 Malaysian public sector as a context of study

Malaysia is located in Southeast Asia and it is aiming to be a developed country by the year 2020. To achieve this vision, one of the Malaysian government's strategies is the continual professional development of employees, particularly the employees of the public sector. For example, in the Eighth Malaysian Plan (2001-2005), one of the government's strategic plans was to enhance the productivity and efficiency improvement through human resource development activities. In the Ninth Malaysian Plan (2006-2010), the focus moved to the development of an efficient and talented workforce. Most recently, in the Tenth Malaysian Plan (2011-2015), the government has stated a strategic goal to be the transformation of the public sector, with a focus on enhancing the integrity and quality of work of its employees.

The public sector in Malaysia has a significant role in facilitating and implementing the government agenda and policies. For this reason, the Malaysian government has spent significant sums of money on the development of public sector employees by developing a training centre for the public sector—The National Institute of Public Administration (INTAN) and provides scholarships to public sector employees to enhance their academic qualifications and competencies. It also provides support for the establishment of private training agencies in Malaysia, as alternative training providers to the public sector. Therefore, a study related to training in the Malaysian public sector is relevant because training is regarded as an important intervention for the development of employees in this context (Gould-Williams & Mohamed 2010). In addition, this study will extend the understanding of training, particularly on the issue of transfer of training in the Malaysian public sector, which at this point in time appears to have received less attention from previous researchers (Baharim 2008).

In the Malaysian public sector, one of the notable cultural elements is high power distance, which basically an emphasis on hierarchy (Abdullah & Lim 2001). Employees in this

context also are more participative and egalitarian (Othman & Teh 2003), have an emphasis on harmonious relationships (Hofstede 1987), display a high level of trust in each other and team work (Gould-Williams & Mohamed 2010). Othman and Teh (2003) regard this kind of culture as vertical collectivism. Vertical collectivism is a form of collectivism where individuals see themselves as a part of an in-group where there are differences in status. This is typical of Malaysia in comparison to other countries especially Western countries (Hofstead, Hofstead & Minkov 2010). It would appear that employees of the Malaysian public sector have a close attachment or engagement with the environment where they work. They also tend to build a strong relationship with their organization (Hofstead et al. 2010). Having such good engagement and a strong relationship with the organization can be a great motivator, which can positively improve employees' perceptions of their organization and encourage them to engage in behavior that is beneficial to the organization (Eisenberger et al. 1986). Therefore, one of the aims of this study is to understand the perceptions of Malaysian public sector employees of their organization and how this perception may affect them in regard to employing the knowledge, skills and attitudes that they have learned in training in their workplace duties. Specifically, it is expected that when the employees in this context perceive that their organization highly values their contribution and cares about their well being, this will influence them to actively apply what they have learned in training to their workplace following the training they have received.

One of the core business activities of the public sector in Malaysia is to provide services to the Malaysian population in various aspects including education, security, health, transportation and welfare. The Malaysian government believes one of the mechanisms necessary to produce quality service is by providing adequate training to public sector employees. This is justified based on the number of public sector employees who received training at INTAN, which has shown a steady increase every year (National Institute of Public Administration, INTAN Annual Report 2008/2009). While training has been regarded as one of a number of important factors to improve service quality in this context, this study believes transfer of training is the mechanism that links training and service quality. In other words, this study posits the view that public sector employees can produce quality service to their customers following the training because they have applied the knowledge, skills and attitudes that they learned in training, thereby improving interactions with their customers. For example, customers of the Malaysian public sector come from

various ethnic groups including Malay, Chinese, Indian as well as foreigners. As a result, the Malaysian government has continuously offered communication skills courses including English, Cantonese, Arabic and Japanese (National Institute of Public Administration, INTAN) to public sector employees with the objective of enhancing their communication ability so that they can interact well with various customers, especially those from foreign countries. It is likely that if the public sector employees can apply those communication skills in their daily tasks, this will create a more positive service environment that customers appreciate.

In addition to service quality, the Malaysian government is also concerned with the satisfaction of public sector employees. This can be observed through a number of initiatives introduced by the government. For example, in November 2002, the Malaysian government introduced a new pay plan for the public sector employees known as the Malaysian Remuneration System (SSM). One of the objectives of this plan was to increase the satisfaction among the public sector employees in terms of better salary and promotion prospects (Siddiquee 2006). Recently, the government approved 12 incentives and new compensations for the benefits of all public sector employees including improvement to maternity leave benefits, appointment of a travel insurance company to provide travel insurance to public sector officers travelling overseas for personal matters, time-off for public sector employees who donate blood, and housing allowance payments to public sector employees who had previously been provided with sub-standard housing in rural areas (Public Service Department Annual Report 2009). Those incentives, which have been provided by the government, seem to had a positive impact on employees. A recent comparative study between the public sector employees in England and Malaysia revealed that Malaysian public sector employees are more satisfied with their jobs compared to public sector employees in England. The study suggested one of the reasons that contributed to the high levels of satisfaction among the Malaysian public sector employees is the training opportunities provided by the government (Gould-Williams & Mohamed 2010). In addition to the opportunity for training, this study believes the application of the knowledge and skills that are learned in training to the workplace also contribute to employees' job satisfaction in this context. It is argued that employees may feel happier with their job if they positively transfer the training outcomes to their workplace because the application of the trained knowledge and skills will help them to increase their ability to perform their job.

Job satisfaction is an important work attitude that facilitates various outcomes that benefit both employees and organization, and job satisfaction has been regarded as an important requirement for service quality. In other words, if employees show satisfaction with their job, they will be able to demonstrate quality service to their customers. The significant and positive link between job satisfaction and service quality has been demonstrated internationally, specifically in service organizations that are profit oriented such as banks, restaurants, markets, hotels, service shops and the general retail industry (Bradford et al. 2009; Gazzoli et al. 2010; Kim et al. 2009; Lee et al. 2006; Malhotra & Mukherjee 2004; Wangenheim et al. 2007; Yee et al. 2008). This study believes such a link between job satisfaction and service quality can also be generalized to the context of non-profit service organizations such as the public sector, including the public sector in Malaysia. As the level of job satisfaction among the Malaysian public sector employees is considered high (Gould-Williams & Mohamed 2010), it is essential to further understand whether or not such work attitudes contribute to the quality of service that employees provide to their customers. This can enhance the understanding of the relationship between job satisfaction and service quality in the context of the public sector, since discussions of the association in such contexts are still limited, as argued by recent researchers such as Gazzoli et al. (2010) and Lee et al. (2006).

Based on the discussion, the proposed conceptual framework is relevant to be tested in the context of the Malaysian public sector. The findings of this study can enhance our understanding on the issues related to training, specifically the factors that influence transfer of training in this context. In addition, by testing the conceptual framework in this context more can be learned about the consequences of transfer of training on public sector employees in Southeast Asian countries, particularly on their service quality and job satisfaction, which at this time appears to not have been empirically examined. Furthermore, findings from this study can extend the discussion on the association between job satisfaction and service quality in the context of other non-profit service organizations.

3.4 The contribution of the conceptual framework

The contribution of the conceptual framework to the literature, particularly to the transfer of training literature can be seen from five aspects.

First, the conceptual framework provides a new insight into transfer of training literature by investigating the effect of the social exchange factor in the workplace known as perceived organizational support. Specifically, the conceptual framework is unique because it examines the moderating effect of perceived organizational support on the relationship between perceived learning and transfer of training. As summarized in Table 2.2 in the previous Chapter 2, a range of work environment factors that influence transfer of training have been identified by previous studies. While these studies are important, there is still limited understanding of how employees' general beliefs regarding their work organization valuing their contribution and caring about their well-being influences employees to transfer the new learned knowledge, skills and attitudes to their workplace (Chiaburu et al. 2010a). In addition, there are a growing number of calls to assess moderating factors between learning and transfer of training, so that the impact of the former on the latter can be improved (Aguinis & Kraiger 2009; Tan et al. 2003). The conceptual framework addressed these gaps by investigating the moderating effect of perceived organizational support on the relationship between perceived learning and transfer of training, where the association between perceived learning and transfer of training is expected to be greater when perceived organizational support is high.

Second, the conceptual framework extends the existing literature by hypothesizing about the consequences of transfer of training on employees' performance. As discussed previously in Chapter 2, although the association between transfer of training and employees' performance has been empirically examined by a number of previous studies, they are generally focused on different aspects of job performance such as teaching competencies (Zayed 1994), selling performance (Leach & Liu 2004) and general work performance (Noe & Schmitt 1986; Rouiller & Goldstein 1993). Unlike previous studies, the conceptual framework is unique because it tests the consequences of transfer of training on a specific indicator of public organization employees' performance, i.e. service quality.

Third, researchers such as Griffin (2011) and Kirkpatrick (1998) have continuously suggested that the employees' work attitudes could be enhanced if they apply to the workplace the knowledge, skills and attitudes that are learned in training. However, as noted earlier, research that examines the consequences of transfer of training on employees' work attitudes is relatively scarce in the literature (Leach & Liu 2004). Recent researchers have suggested that the potential effect of transfer of training on employees' job satisfaction has to be considered (Chen 2010), which this conceptual model explores.

Fourth, the conceptual framework will lead to a better understanding of the association between job satisfaction and service quality. As explained previously in Chapter 2, while the relationship between the variables has been empirically established, our knowledge of this issue is limited to studies mainly in the context of service organizations that are business or profit oriented. The conceptual framework presented here, however, examines the association between job satisfaction and service quality in public sector organizations. As the focus in the public sector is on service delivery, rather than profit, it is expected that the measure of service quality used in this study will perform differently to other industries (Carrillat, Jaramillo & Mulki 2007). Therefore, the findings of this study will extend the understanding of the association between job satisfaction and service quality in public organizations especially in the context of Southeast Asian developing countries. The conceptual framework also is unique because the data on service quality will be sought from employees' perspectives in their capacity as internal customers, as opposed to previous studies which tended to measure service quality based on external customers' perspectives.

Finally, the conceptual framework contributes to the discussion in the literature on the mediating role of job satisfaction. As discussed previously, job satisfaction has been regarded as a mechanism that links the effect of various organizational practices (e.g., empowerment, organizational justice, rewards, organizational learning culture, self-leadership behavior, and organizational support) on employees' outcomes (e.g., service quality, organizational commitment, turnover intention, service behaviors, and work performance). The conceptual framework will contribute to this discussion by investigating the role of job satisfaction as a mediator in the relationship between transfer of training and service quality, which to date has not yet been empirically tested in the literature.

3.5 Conclusion

This chapter has provided a detailed explanation of the conceptual framework of this study. There are five constructs include in the conceptual framework which are perceived learning, perceived organizational support, transfer of training, job satisfaction and service quality. The relationships between the constructs have been explained and justified in detail in this chapter. This chapter also has justified the rationale of testing the conceptual framework in the context of the public sector in Malaysia, a developing country in Southeast Asia. Finally, the chapter briefly described five areas in which the conceptual framework contributes to the literature, particularly that of the transfer of training literature. The following Chapter 4 will describe the methodology adopted in this study to empirically test the conceptual framework described in this chapter.

Chapter 4

Research Methodology

4.1 Introduction

This chapter provides details of the methodological issues in conducting this research in order to test the conceptual framework, discussed previously in Chapter 3. The chapter begins with an explanation of the research design applied in this study and its justification. Following this is a description of the population and the sample used in this study, and a brief explanation of the training program selected. The chapter also provides a detailed explanation of the procedures in collecting the data and the measurements used to evaluate the variables under examination. Finally, the chapter outlines the analytical techniques that were applied to test the hypotheses.

4.2 Research design

This study utilizes a survey research and cross-sectional data methodology. According to Sekaran and Bougie (2010), using surveys or questionnaires is an efficient data collection strategy when the researcher knows exactly what is required and how to measure the variables of interest (p.197). This approach also enables researchers to generalize the findings from a sample of responses to the sample population (Creswell 1994). In addition, researchers in the field of transfer of training (e.g., Bates et al. 2000; Chiaburu & Lindsay 2008; Egan 2008; Liebermann & Hoffmann 2008; Mohamed 1994; Nijman et al. 2006; Nijman & Gelissen 2011; Mayer, Dale, Fraccastoro & Moss 2011; Yamnill & McLean 2005; Zaniboni et al. 2011) have consistently used this approach in their studies due to its

methodological effectiveness in assessing the statistical relationships among the variables of interest (Brown et al. 2011).

4.3 Population and sampling

The population of this study consists of employees of public sector organizations in Malaysia who participated in training activities organized by the main campus of the National Institute of Public Administration (INTAN) in 2009 and 2010. The public sector in Malaysia comprises 724 government agencies including education, health, security and civil defense and transport sectors (Public Service Department Annual Report 2008). The choice of population was based on the limited empirical research that has been conducted on public sector organizations in developing countries (Subedi 2004). As noted previously, the majority of transfer of training studies have been conducted in Western countries especially in the United States (Velada et al. 2007), and mainly in private sector organizations (e.g., Chiaburu & Lindsay 2008; Gegenfurtner et al. 2009a; Liebermann & Hoffmann 2008; Tziner et al. 2007).

Purposive sampling technique has been used to select the sample for this study. This technique was chosen since this study focuses on a specific target group (Sekaran & Bougie 2010) and it is noted that it has been applied by previous transfer of training studies (e.g., Baharim 2008; Bates et al. 2000; Burke & Hutchins 2008; Chen et al. 2006; Enos, Kehrhahn & Bell 2003; Hillsman & Kupritz 2010; Holton et al. 2003; Kaleem et al. 2011; Martin, Brooks, Gayford, Hall & Whitfield 2011; Velada, Caetano, Bates & Holton 2009). Many empirical studies show that the support or obstacle factors of transfer of training are significantly different across training types (Chen et al. 2006; Holton et al. 2003; Yamnill & McLean 2005). This is due, in part, to the fact that each training type has its own specific content and objectives, which may influence the transfer of training (Laker & Powell 2011). Using the trainees of one specific type of training as the study sample has been applied by most of the empirical transfer of training research (e.g., Brown et al. 2011; Hyde 2010; Kaleem et al. 2011; Kauffeld & Lehmann-Willenbrock 2010; Kupritz & Hillsman 2011; Liebermann & Hoffmann, 2008; Lim 1999; Lim & Johnson 2002; Short 1997; Tracey et al. 2001; Sookhai & Budworth 2010; Switzer, Nagy & Mullins 2005; Thompson et al. 2003; Zayed 1994). As Chen et al. (2006) have argued ‘most of the

empirical transfer of training research is limited to one specific type of training' (p.7). Therefore for the purpose of this study only those who participated in basic financial management training programs at the INTAN main campus in 2009 and 2010 were selected as participants in this study. A basic financial management training program was chosen because the participants of the training are responsible for managing financial activities in their respective sectors. Therefore it is expected that the participants will immediately apply the newly learned knowledge, skills and attitudes at their workplace following the training as opposed to other types of training, such as communication and leadership development, which require more time for the application to become apparent (Santos & Stuart 2003). A total of 270 participants were identified (National Institute of Public Administration, INTAN) along with their supervisors and colleagues for this study.

Providing a sufficient time interval following training is important for the success of transfer of training (Cromwell & Kolb 2004). Data for this study were collected from March to April 2011, giving an interval of between four and twenty-four months following training. This period is deemed to be appropriate to ensure participants have the opportunity to use or apply the new learned knowledge, skills and attitudes to their workplace and this has been applied by previous transfer of training studies by Nijman et al. (2006) and Nijman and Gelissen (2011). The longer assessment period also provides opportunities for the supervisors to observe a change in the trainees' performance (Short 1997). Indeed, a significant number of previous studies in this area collected data on transfer of training beyond three month period following training (Arthur et al. 2003). According to Curry (1997) when the level of transfer of training was measured within 3 months following the training, some of the participants showed a low rate of transfer because they did not have time to review the training materials or plan for their use. At only one month post-training, this is even more pronounced with almost no differences being found in employee activity (Cromwell & Kolb 2004; May & Kahnweiler 2000).

4.4 Training programs evaluated

The training program evaluated in this study was the *Basic Financial Management Training Program*. There are three main objectives of this program with the first being to provide and enhance the participants' knowledge and understanding of procedures related

to financial aspects of government departments. The second objective is to develop the participants' skills in financial management and the third, to increase awareness among the participants' of the importance following correct procedures in financial management in government. The training program is organized by the main campus of the National Institute of Public Administration (INTAN). INTAN is a training centre that provides Malaysian government employees with various types of training relating to language and communication, leadership, finance, information technology, professional development, quality and human resource development. The main aim of INTAN is to enhance the development of human capital in the public sector. Specifically, the focus of INTAN is to develop talented and "thinking civil servants" with the aim of creating public sector officers who are knowledgeable, skilled, creative and innovative. INTAN also has the role of developing the right attitudes towards public sector transformation (National Institute of Public Administration, INTAN).

4.5 Data collection procedures

Prior to the collection of data, the researcher received an official approval letter from the Director of Economic Planning Unit, Malaysia (Appendix A), the Director of INTAN (Appendix B) and the University of South Australia (UniSA) Ethics Committee (Appendix C). The Economic Planning Unit, Malaysia, is the government agency under the Prime Minister's Department that has the authority to give permission to conduct research in Malaysia including the public sector. An approval letter from INTAN enabled the researcher to access the list of employees who attended basic financial management training programs in 2009 and 2010. The approval letter from the UniSA Ethics Committee ensured this study meets the requirements of the National Statement on Ethical Conduct in Human Research.

Data were collected from three sources. The main focus of the study is the group of public sector employees who attended a basic financial management training program in 2009 and 2010 (employees), the employees' supervisors and employees' colleagues who work in the same sector with the employees (internal customers). The survey included measures of perceived learning, perceived organizational support, transfer of training, job satisfaction and service quality. These five survey measures were based on reliable and valid measures

previously used and reported in the literature. These five survey measures also have been reviewed by two individual experts in the human resource management field for further content validity (Cavana, Delahaye & Sekaran 2001).

The employees received a questionnaire that contained a research information sheet and questions to measure perceived learning, perceived organizational support and job satisfaction (Appendix D). It is argued that the employees themselves are credible persons who can provide data on perceived learning because they are the individuals who had go through the training and know exactly the level of improvement they achieved as a result of the training (Phillips 1997). The employees also are the best source of information to measure perceived organizational support (Bal, Chiaburu & Jansen 2010) and job satisfaction (Spector 1997).

The employees' supervisors received a questionnaire that contained a research information sheet and questions to measure transfer of training (Appendix E). According to Arthur et al. (2003), Phillips (1997) and Ramirez (2000), the supervisor is the best source of data to measure transfer of training of a subordinate. Collecting transfer of training data from the employees' supervisors can validate the transfer result (Axtell et al. 1997) as they know the daily performance of their employees in detail and can assess whether changes have been achieved following the training (Garavaglia 1993; Olsen 1998; Pineda 2010). This approach can also decrease the potential for common method variance, which is a common limitation in a number of previous studies in transfer of training research (Blume et al. 2010; Burke & Hutchins 2007). Indeed, assessing the employees' transfer of training through their supervisors' survey feedback has been applied by a number of previous transfer of training studies (e.g., Bates et al. 2000; Gaudine & Saks 2004; Ramirez 2000; Short 1997; Tuleja & Roberts 2011; Tziner et al. 2007) as well as by training practitioners (Olsen 1998; Phillips 2003).

The employees' colleagues are regarded for the purposes of this study as internal customers. They received a questionnaire containing a research information sheet and questions to evaluate service quality (Appendix F). Measuring service quality based on internal employees' perception has been applied in a number of previous studies by Cook and Verma (2002), Glisson and James (2002) and Slatten et al. (2011), as it can provide a more accurate assessment of the quality of service provided by employees to their

customers. Internal customers experience service provision from the employees on a daily basis and therefore should be able to observe the employees' service quality more than external customers (Lai 2006).

An arbitrary code number was assigned to each survey in order to associate the feedback received from the employees, the employees' supervisors and the employees' colleagues.

Surveys were anonymous and delivered personally to the employees and their supervisors. Assistance from the employees' supervisor was then sought to distribute the internal customer survey to the relevant employees (i.e. the employees' colleagues) in the organization. It was decided to deliver the survey personally because the respondents (the employees and their supervisors) were located in a local area and the researcher had obtained approval to meet them (Cavana et al. 2001; Sekaran & Bougie 2010). This approach also allowed the researcher to control the conditions under which questionnaires were completed to ensure they were completed by the actual respondents and to reduce opportunities of shared responses (Thomas & Smith 2003). In addition, the researcher could collect the completed responses within a short period of time (Cavana et al. 2001). Furthermore, evidence from previous studies indicates that this method produces higher response rates in this type of context (Tay 2008). The researcher scheduled appointments with the respective sectors to meet the employees and their supervisors. A brief description of the study was presented including the study aims and background. Furthermore the issue of anonymity, confidentiality and voluntary participation were highlighted. This approach is useful for clarifying any doubts respondents may have concerning the questionnaire and subsequently could motivate them to offer frank answers (Liu & Ding 2011; Sekaran & Bougie 2010). The employees, their supervisors and their colleagues were informed that they could withdraw from the study at any time without the need to give any explanation. Each respondent was provided with an envelope to put the completed survey in and directly submit to the researcher. According to previous researchers (e.g., Cook & Verma 2002; Liao 2011; Yamnill & McLean 2005), requesting respondents to place the complete questionnaire in an envelope and then seal it can ensure anonymity and confidentiality. The researcher was at the respective department throughout the process of distributing the survey and collecting the completed survey.

4.6 Surveys development process

The questionnaire was designed in English and translated into the Malaysian national language. To ensure the accuracy of translation, this was done by a professional translator at the Malaysian Translation Institute (*Institut Terjemahan Negara Malaysia*). This institute was established by the Malaysian government to deal with matters relating to translation at all levels. The use of the translated version was to increase the readability among the participants (Bates & Khasawneh 2005) and increase the likelihood the instrument would operate in a new target culture much as it did in the original culture in which it was developed (Velada et al. 2009).

A pilot study was conducted involving 29 respondents from the target population. Hair, Money, Samouel and Page (2007) argue that using 29 sample participants is sufficient to conduct a pilot test. This pilot test was conducted to ensure that the translated instructions, questions and scale items were clear and well understood by the respondents (i.e. there was no ambiguity in the questions), no problems with the wording or measurement and helped to rectify any inadequacies before administering the questionnaire to the actual respondents, thereby reducing any potential for bias (Pallant 2007; Sekaran & Bougie 2010; Velada et al. 2009). A pilot test can provide reliability value of the measurement, which can be assessed based on Cronbach's coefficient alpha result, with higher results indicating greater reliability (Pallant 2007). Hair, Celsi, Money, Samouel and Page (2011) recommend a minimum level of coefficient alpha of 0.70. In addition, conducting a pilot study can provide information of content validity of the translated instrument (Creswell 2009; Velada et al. 2009). Establishing the validity of the survey helps to identify whether an instrument is appropriate for use in this study (Creswell 2009).

The pilot study result showed that the alpha values for the five measures exceeded the cut-off point of 0.70. Specifically, the alpha values for the measures are 0.75 for perceived organizational support, 0.76 for job satisfaction, 0.84 for perceived learning, 0.94 for service quality and 0.95 for transfer of training. In addition, most of the pilot test sample agreed the questionnaire was readable and easy to understand, needing on average 10 minutes to answer all the questions provided. According to Punch (2003), a questionnaire taking less than 20 minutes to complete is more desirable. Some minor modifications were made to the items re the service quality variables based on the comments and suggestions

from respondents in order to better suit the context of this study. Overall, no problems were detected with the questionnaire and therefore the survey was finalized. The following section discusses the measures of this study in detail.

4.7 Measures

Five measures have been used in this study to test the proposed hypotheses. These include measures of perceived learning, perceived organizational support, transfer of training, job satisfaction and service quality. The five survey measures were assessed using multiple-item scales, based on reliable and valid measures previously used and reported in the literature. All the five measures indicate the level to which the respondents (employees, the employees' supervisors and the employees' colleagues) agree with each statement by using a seven-point Likert-type scale, where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree, and 7 = strongly agree.

4.7.1 Perceived learning

Perceived learning is measured by four items developed by Curry (1997) as follows:

PL1. As a result of the training, I substantially increased my knowledge on the topic.

PL2. As a result of the training, I have developed new skills.

PL3. The training has affected some of my attitudes concerning this topic area.

PL4. As a result of the training, I have better conceptualization of what I already do on the job.

The four items are applicable to measure perceived learning in the context of public sector organizations (Curry 1997). These four items have also been empirically used in previous studies with a reliability of 0.84 in the studies by Curry (1997), Curry and Chandler (1999) and Curry et al. (2005) and 0.83 in the study by Curry, Donnenwirth and Lawler (2010).

4.7.2 Transfer of training

Transfer of training is measured using six items developed by Xiao (1996). They are:

TOT1. Using the new knowledge, skills and attitudes from the training has helped him/her improve his/her work.

TOT2. He/she can accomplish his/her job tasks faster than before training.

TOT3. He/she has accomplished his/her job tasks faster than before training.

TOT4. He/she can accomplish the job tasks better by using new knowledge, skills and attitudes acquired from the training course.

TOT5. The quality of his/her work has improved after using new knowledge, skills and attitudes acquired from the training course.

TOT6. He/she makes fewer mistakes in the job activities when using the new knowledge, skills and attitudes that learned in training.

The six items are applicable to measure transfer of training in the context of Asian countries (Xiao 1996). This instrument also has been used in previous studies and yielded reliability of: 0.89 in the study by Awoniyi et al. (2002), 0.84 in the study by Chiaburu and Tekleab (2005), 0.83 in the study by Scaduto et al. (2008) and 0.76 in the study by Chiaburu et al. (2010a).

4.7.3 Perceived organizational support (POS)

POS is measured using Eisenberger, Cummings, Armeli and Lynch's (1997) short version of the Survey of Perceived Organizational Support (SPOS). This version of the POS contains 8 items which are shown below:

POS1. My organization cares about my opinions.

POS2. My organization really cares about my well being.

POS3. My organization strongly considers my goals and values.

POS4. Help is available from my organization when I have a problem.

POS5. My organization would forgive an honest mistake on my part.

POS6. If given the opportunity, my organization would take advantage of me.

POS7. My organization shows very little concern for me.

POS8. My organization is willing to help me when I need a special favour.

This short version of POS was selected because it contains 8 items that load highly on the main POS factor as reported in the scale's source article by Eisenberger et al. (1986) (Kinnunen et al. 2008). This version can also be applied to a wide variety of organizations (Eisenberger et al. 1997) in the context of Asian countries (Liao 2011; Zhang et al. 2011). Additionally, this version has been applied in recent studies, which show high internal reliability: 0.99 in the study by Suazo and Stone-Romero (2011); 0.93 in the study by Byrne et al. (2011); 0.88 in the study by Liu and Ding (2011); 0.86 in the study by Liao (2011), 0.84 in the study by Zhang et al. (2011); 0.92 in the study by Akremi et al. (2010); 0.82 in the study by Biron (2010); and 0.85 in the study by Kinnunen et al. (2008). Although this version only contains 8 items out of 36 original items, researchers such as Rhoades and Eisenberger (2002) argue it does not appear problematic because the original scale is unidimensional and has high internal reliability (p.699). One of the reasons for not using the entire 36-item measure is the concern about survey length (Konrad, Cannings & Goldberg 2010). According to Punch (2003), the length of a questionnaire can affect the people's level of cooperation when responding to the questionnaire.

4.7.4 Job satisfaction

Job satisfaction is measured by a three-item scale adapted from the Michigan Organizational Assessment Questionnaire Satisfaction Subscale developed by Cammann, Fichman, Jenkins and Klesh (1979), which are shown below:

JS1. In general, I like working here.

JS2. In general, I don't like my job.

JS3. All in all I am satisfied with my job.

This measure is selected due to it being simple and short but significant in measuring an employee's overall job satisfaction (Spector 1997) and has been widely used in various research settings (Golden & Veiga 2005). In addition, this measure has been tested in the context of public sector organizations (e.g., DeHart-Davis & Pandey 2005) and applied by previous transfer of training studies (e.g., Egan et al. 2004). For these reasons, this measure is regarded as suitable for and relevant to this study. Coefficient alpha reliability for this instrument was reported to be 0.89 (Tepper 2000), 0.88 (Allen 2001), 0.85 (Golden & Veiga 2005), 0.87 (Dehart-Davis & Pandey 2005), 0.82 (Fox, Spector, Goh & Bruursema 2007) and 0.88 (Bagger & Li 2011).

4.7.5 Service quality

Service quality is measured using the customer perceptions component of the SERVQUAL instrument developed by Parasuraman, Zeithaml and Berry (1988). Although some researchers have suggested that is important to make a comparison between customer expectation and perceptions of service in measuring service quality (Parasuraman, Berry & Zeithaml 1991), this method has a number of limitations as reported in a number of studies (e.g., Peter, Churchill & Brown 1993; Teas 1993). To alleviate the limitations associated with the comparison method, several researchers in the area of service quality suggests to used the customer perceptions only on the component of the SERVQUAL instrument to explain the customer perceive service quality (Stafford, Prybutok, Wells & Kappelman 1999). This method has been applied in recent studies (e.g., Chand 2010; Durvasula, Lysonski & Mehta 2005; Kandampully et al. 2011).

The SERVQUAL instrument is employed in this study because this is the pre-eminent instrument for assessing service quality (Carrillat et al. 2007; Huang et al. 2010; Kettinger & Lee 1994; Lai 2006). In addition, this study uses the scale due to its relevance in

measuring the service quality of not-for-profit organizations such as public organizations (Zeithaml et al. 1990) in the general context of Asian countries (Kim et al. 2010), and specifically in the Malaysian context (John, Yatim & Mani 2010; Ismail et al. 2006).

In this study, views of the employees' service quality have been sought from internal customers, being the employees' colleagues who work in the same sector and have experience in receiving services from the employees. The nature of the work of employees participating in this study is mostly about engaging and interacting with internal employees rather than external customers. They provide services concerning the financial aspects to other employees in their sector rather than external customers in their daily task. For these reasons, internal employees are regarded as relevant persons to measure the employees' level of service quality (Bowen & Schneider 1988; Reynoso & Moores 1995; Stauss 1995). As Zeithaml et al. (1990) argued, 'in service organizations everyone is responsible for quality. Some employees provide internal services in that their customers are inside the organization' (p.136).

There are five dimensions of service quality proposed by the original scale: tangible, reliability, responsiveness, assurance and empathy. These dimensions consist of twenty-two items. Due to the nature of this study, to measure service quality from the employee perspective, only four dimensions (reliability, responsiveness, assurance, empathy) consist of eighteen-items have been used. The dimension 'tangibles' have been excluded from this study because they do not affect employees' perceptions of service quality (Finn et al. 1996; Kettinger & Lee 1994; Lai 2006). The other four dimensions have been regarded as the primary measures of service quality from the employee perspective (Gazzoli et al. 2010; Jiang, Klien & Car 2002; Lai 2006), including the Malaysian context (John et al. 2010). The items of each these four dimensions are:

sq_1. When he/she promises to do something by a certain time, he/she does so.

sq_2. When I have problems, he/she is sympathetic and reassuring.

sq_3. He/she is dependable.

sq_4. He/she provides services at the time he/she promises to do so.

sq_5. He/she keep their work accurately.

sq_6. He/she does not tell others exactly when services will be performed.

sq_7. I do not receive prompt service from him/her.

sq_8. He/she is not always willing to help others.

sq_9. He/she is too busy to respond to other requests promptly.

sq_10. I can trust him/her.

sq_11. I feel safe in my transactions with him/her.

sq_12. He/she is polite.

sq_13. I get adequate support from him/her to do my jobs well.

sq_14. He/she does not give me individual attention.

sq_15. He/she does not give me personal attention.

sq_16. He/she does not know my needs.

sq_17. He/she does not have my best interests at heart.

sq_18. He/she does not have operating hours convenient to all their customers.

Note: Questions 1-5 (reliability), 6-9 (responsiveness), 10-13 (Assurance), 14-18 (Empathy)

Coefficient alpha reliability for these four dimensions were reported to be: 0.83 (reliability), 0.82 (responsiveness), 0.81 (assurance) and 0.86 (empathy) in the study of Parasuraman et al. (1988); 0.88 (reliability), 0.89 (responsiveness), 0.87 (assurance) and 0.88 (empathy) in the study of Cook and Verma (2002); 0.88 (reliability, responsiveness, assurance, empathy) in the study by Malhotra and Mukherjee (2003); 0.96 (reliability, responsiveness, assurance) and 0.84 (empathy) in the study by Azmi et al. (2009); and 0.81 (reliability), 0.81 (responsiveness), 0.90 (assurance) and 0.86 (empathy) in the study by Chand (2010).

4.8 Data analysis

The proposed research framework (see Figure 1) was tested with the structural equation modelling (SEM) technique using AMOS 17, which allowed assessment of how well the model fitted the data of this study. SEM enables the analysis of latent variables and their relationships simultaneously without measurement error, which produces an accurate result (Nachtigall, Koehne, Funke & Steyer 2003). Indeed, SEM is recognized as an essential analytical approach in management research (Williams, Vandenberg & Edwards 2009), particularly in conducting transfer of training research (Cheng 2001; Chiaburu et al. 2010b; Egan 2008). This study applied the six steps of SEM as suggested by Hair, Black, Babin and Anderson (2010). These six stages are as follows:

Step 1: Defining individual constructs

As discussed previously in this chapter, the five survey measures used in this study are based on reliable and valid measures previously used and reported in the literature. Perceived learning measures the respondents' perceptions of the improvement of knowledge, skills and attitudes they gained as a result of the training event they attended, using four items developed by Curry (1997). Transfer of training measures the respondents' perceptions of their subordinates' (who participated in training) performance in applying to the workplace the new knowledge, skills and attitudes that they learned from training, using six items developed by Xiao (1996). Perceived organizational support measures the respondents' general belief concerning the extent to which the organization thinks highly of their contribution and promotes their welfare, using eight items of Eisenberger, Cummings, Armeli and Lynch's (1997) short version of the Survey of Perceived Organizational Support (SPOS). Job satisfaction measures the respondents' perceptions of their feeling about their jobs, using a three-item scale adapted from the Michigan Organizational Assessment Questionnaire Satisfaction Subscale developed by Cammann, Fichman, Jenkins and Klesh (1979). Service quality measures the respondents' perceptions of how well they evaluate the service level delivered to them, using eighteen items of SERVQUAL scale developed by Parasuraman, Zeithaml and Berry (1988). All five measures have been pre-tested and indicated satisfactory results.

Step 2: Developing the overall measurement model

In this stage, each latent construct (perceived learning, transfer of training, perceived organizational support, job satisfaction and service quality) included in the model is identified and the measured indicator variables (items) are assigned to latent constructs. All the latent constructs were tested together in one measurement model to verify the relationship between the indicators of different constructs (Cheng 2001; Hair et al. 2010). This approach can also confirm the validity and unidimensionality of the constructs in the context of this study (Hair et al 2010), as applied in the recent study by Gracia et al. (2010).

Prior to the development of the measurement model, a number of statistical assumptions were tested including multivariate normality, outliers, linearity, homoscedasticity and multicollinearity (Hair et al. 2010; Kline 2005; Tabachnick & Fidell 2007). The assumptions are important to be tested because any violation of these assumptions could affect the validity of the results (Schreiber, Nora, Stage, Barlow & King 2006; Schumacker & Lomax 1996). Multivariate normality was examined based on the multivariate kurtosis value as it can severely affect tests of variance and covariances (Byrne 2010; Vermeeren et al. 2011). The normal multivariate kurtosis value is 5, where values exceeding 5 are indicative of data that are nonnormally distributed (Bentler 2005). Outliers were examined based on the assessment of multivariate outliers, the cases that had extreme scores on two or more variables (Kline 2005) based on the squared Mahalanobis distance (D^2) value. The cases are deemed outliers if the Mahalanobis distance value exceeds the critical chi-square value (Pallant 2011). The assumptions of linearity and homoscedasticity were checked by examining a scatterplot of the standardized residuals (Bates, Holton & Burnett 1999; Pallant 2011; Tabachnick & Fidell 2007), while the assumption of multicollonearity was examined following the procedure suggested by Gujarati and Porter (2009), which was based on eigenvalues. In addition, the assumption of multicollinearity was also assessed based on the correlation matrix, with correlations above 0.90 confirming the violation of this assumption (Tabachnick & Fidell 2007).

To further purify the research constructs of this study, an exploratory factor analysis (EFA) was conducted on the constructs of perceived learning, perceived organizational support, transfer of training and job satisfaction. This practice has been applied by a number of

previous transfer of training studies prior to conducting a confirmatory factor analysis (e.g., Baharim 2008; Tracey et al. 1995). While the constructs (perceived learning, perceived organizational support, transfer of training and job satisfaction) have been applied by a number of previous studies, they were not yet verified in the context of Malaysia. It is argued that every country including Malaysia has its own unique culture, and the culture of a country may have an impact on employee responses (Pearson & Chong 1997). Therefore, it is essential to explore the interrelationships among the items of each construct in this new context. The four constructs were analyzed individually, as practiced by several studies (e.g., Baharim 2008; Chiaburu & Tekleab 2005; Galanou & Priporas 2009) based on the three steps of conducting EFA as suggested by Pallant (2011). The three steps are as follows:

Step 1: Assessment of the suitability of the data for EFA

Prior to performing the EFA, the suitability of the data for EFA was assessed based on the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity value. The minimum value 0.6 for KMO and a significant value (p<0.05) for Bartlett's Test of Sphericity justified that the study's sample size is adequate for factor analysis (Field 2009; Hair et al. 2010).

Step 2: Factor extraction

This step involves determining the smallest number of factors that can be used to best represent the interrelationships among the set of items. This study applied the principal components analysis technique to identify (extract) the number of underlying factors. The magnitude of eigenvalue was used to extract the number of underlying factors. Only factors with an eigenvalue of 1.0 or more were retained for further investigation (Hair et al. 2010; Pallant 2011). In addition, the results of the parallel analysis were also considered in order to decide the number of factors that should be retained. The factors (which have eigenvalue of 1.0 or more) are retained if those factors' eigenvalues exceed the parallel analysis value (Pallant 2011).

Step 3: Factor rotation and interpretation

Following the determination of the number of factors, the factors are rotated using the varimax rotation approach to assess the loading pattern of each item on the factors. The loading here refers to the correlation of the item and the factor. The cut-off point for item loading apply in this study was 0.40. According to some scholars (e.g., Hair, Anderson, Tatham & Black 1998; Hair et al. 2010), in a sample of 222 respondents, a factor loadings of 0.40 and above is required for significance. In this study, if a particular item has more than one significant loading or has a cross-loading of 0.35 or greater (Lai & Kapstad 2009), the item should be eliminated because of the potential for it to represent more than one concept or factor (Hair et al. 2010). In addition to factor loadings, the items of the factor are assessed based on the items' communality value, which refers to the amount of variance accounted for by the factor for each item (Hair et al. 2010). Only items that have a communality value of 0.30 and above are retained. A particular item is regarded as not having a good fit with the other items in its component if its communality value is less than 0.30 (Pallant 2011). Furthermore, Cronbach's alpha is used to measure the extent to which the multiple items for a latent construct belong together. A Cronbach's alpha value of 0.70 was used as the cut-off point (Hair et al. 2011).

For the construct service quality, a confirmatory factor analysis was conducted. The reason for is that this construct has already been verified in the context of this study by a number of studies (e.g., Agus et al. 2007; Azmi, Ahmad & Zainuddin 2008; Azmi et al. 2009; Ismail et al. 2006). However, it is still essential to assess how well the 18 items define the four dimensions of service quality based on the data of this study. The CFA results (Table 4.1) show that values for 17 items loading on their corresponding dimensions were high (ranging from 0.628—0.946) with good model fit (χ^2=261.731, *df*=113, χ^2/*df*=2.316, CFI=.958, RMSEA=.077, SRMR=.032). However, one item (sq_6) was deleted because of low loading value = 0.383 (Ballesteros-Rodriguez et al. 2011; Hair et al. 2010). Table 4.1 also shows that the four dimensions displayed good internal reliability ranging from 0.54 to 0.79. Following the subscale aggregation approach as used in prior organization management and human resource management studies (e.g., Chand 2010; Durvasula et al. 2005; Gracia et al. 2010; Kandampully et al. 2011; Lertwannawit & Gulid 2011), the mean scores of each dimensions were calculated and used as indicators of the latent variable

service quality in the full measurement and structural model (Hair et al. 1998; Hair et al. 2010).

Table 4. 1: Standardized measurement coefficients for service quality items resulting from Confirmatory factor analysis (CFA)

	Item	Loading	Dimension	AVE (α)
sq_1.	When he/she promises to do something by a certain time, he/she does so	0.799	Reliability (REL)	0.74 (0.93)
sq_2.	When I have problems, he/she is sympathetic and reassuring	0.759		
sq_3.	He/she is dependable	0.931		
sq_4.	He/she provides services at the time He/she promises to do so	0.908		
sq_5.	He/she keep their work accurately	0.887		
sq_7.	I do not receive prompt service from him/her (R)	0.709	Responsive (RES)	0.54 (0.76)
sq_8.	He/she is not always willing to help others (R)	0.858		
sq_9.	He/she is too busy to respond to other requests promptly (R)	0.628		
sq_10.	I can trust him/her	0.912	Assurance (ASS)	0.79 (0.94)
sq_11.	I feel safe in my transactions with him/her	0.946		
sq_12.	He/she is polite	0.795		
sq_13.	I get adequate support from him/her to do my jobs well	0.890		
sq_14.	He/she does not give me individual attention (R)	0.808	Empathy (EMP)	0.74 (0.93)
sq_15.	He/she does not give me personal attention (R)	0.829		
sq_16.	He/she does not know my needs (R)	0.877		
sq_17.	He/she does not have my best interests at heart (R)	0.881		
sq_18.	He/she does not have operating hours convenient to all their customers (R)	0.913		

Notes: N = 222, χ^2=261.731, *df*=113, χ^2/*df*=2.316, CFI=.958, RMSEA=.077, SRMR=.032. All items are significant at ($p < 0.001$). AVE= average variance extracted, α= cronbach alpha.

Step 3: Designing a study to produce empirical results

This study applied maximum likelihood estimation (MLE) as the estimation technique to test the measurement model and the structural model. This is the most common SEM estimation procedure, which provides valid and stable results with the sample size of this study (Hair et al. 2010).

Step 4: Assessing measurement model validity

The assessment of the measurement model validity is based on the overall model fit and construct validity. In regard to the overall model fit, this study followed the recommendations of Hair et al. (2010) and Tabachnick and Fidell (2007), which have been applied in recent studies (e.g., Bordia, Restubog, Bordia & Tang 2010; Ito 2003; Stewart, Volpone, Avery & McKay 2011) for selecting which fit indices to examine and report. The model fit is assessed based on values of chi-square (χ^2), degrees of freedom (*df*), χ^2/df, comparative fit index (CFI) and root mean square error of approximation (RMSEA). Combinations of these elements provide sufficient unique information to evaluate a model fit (Hair et al. 2010). A well-fitting model will have the χ^2/df smaller than 2 (while scores between 2 and 5 are acceptable), CFI values that are 0.95 or higher and RMSEA below 0.08 (Hair et al. 2010; Tabachnick & Fidell 2007; Williams et al. 2009). In addition, the value of the standardized root mean residual (SRMR) also is used to assess the model fit, where a value less than 0.10 is considered a good model (Hair et al. 2010; Williams et al. 2009). SRMR is useful for comparing fit across models and is frequently used by management researchers (Schumacker & Lomax 1996; Williams et al. 2009). The combination of multiple fit indexes (based on values of χ^2, degrees of freedom (*df*), χ^2/df, CFI, RMSEA and SRMR) has been applied in recent studies (e.g., Beausaert, Segers & Gijselaers 2011; Gegenfurtner et al. 2009a; Hamwi, Rutherford & Boles 2011) and is used in this study to justify the overall model fit.

To assess construct validity, this study examines the convergent and discriminant validity of the constructs. Convergent validity is the extent to which the construct is positively correlated with other measures of the same construct (Hair et al. 2011). The construct convergent validity is examined based on three criteria: (1) the loading estimates are statistically significant; (2) the loading estimate should be at least 0.50 for loading estimates to be regarded as a good item; and (3) the result of average variance extracted (AVE) should equal or exceed 50 percent (Ballesteros-Rodriguez et al. 2011; Hair et al. 2010). Discriminant validity is the extent to which the construct does not correlate with other measures that are different from it (Hair et al. 2011). The construct discriminant validity is examined by comparing the square root of AVE estimates for each construct with the interconstruct correlations with that factor. The discriminant validity is confirmed

if the square roots of AVE estimates are greater than the corresponding interconstruct correlations estimates (Hair et al. 2010).

Step 5: Specifying the structural model

Following confirmation of the measurement model the structural model is specified by assigning relationships from one construct to another based on the conceptual framework developed previously in Chapter 3.

For the interaction hypothesis, the independent variable (perceived learning; X) and the moderator (perceived organizational support; Z) were centered prior to creating the interaction terms (presented as *plpos* in Figure 5 in Chapter 5) to minimize potential problems of multicollinearity (Cortina, Chen & Dunlop 2001). This technique has been applied in recent management studies (e.g., Chiaburu & Tekleab 2005; Liao 2011; Liu & Ding 2011; Liu & Smith 2011; Rojas & Camarero 2008; Stewart et al. 2011). The interaction term then becomes the indicator of a latent product construct (presented as *interact* in Figure 5 in Chapter 5), with the loading and error terms for the indicator of latent product determined using the equations provided by Ping (1995):

$$\lambda_{x:z} = (\lambda_{x1}+\lambda_{x2})(\lambda_{z1}+\lambda_{z2}) \quad (1)$$

$$\theta_{\varepsilon x:z} = (\lambda_{x1}+\lambda_{x2})^2 VAR(X)(\theta_{\varepsilon z1}+\theta_{\varepsilon z2})+(\lambda_{z1}+\lambda_{z2})^2 VAR(Z)(\theta_{\varepsilon x1}+\theta_{\varepsilon x2})+ (\theta_{\varepsilon x1}+\theta_{\varepsilon x2})(\theta_{\varepsilon z1}+\theta_{\varepsilon z2}) \quad (2)$$

where $\lambda_{x:z}$ is the factor loading and $\theta_{\varepsilon x:z}$ is the error term for the indicator of the latent product comprised of two latent variables X and Z, with indicators x1,x2,x3,x4 and z1,z2,z3,z4,z5,z6,z7,z8, respectively. The λ and θ values in the equations represent the factor loadings and error terms of the items comprising the latent variables X and Z and are taken from a measurement model. VAR (X) and VAR (Z) are the construct variances of X and Z taken from the phi matrix of the same measurement model (Richardson, Yang, Vanderberg, DeJoy & Wilson 2008).

This procedure has been recognized as appropriate for analyzing a continuous moderator variable in SEM (Williams, Edwards & Vanderberg 2003). The procedure is a straightforward approach to the analysis of moderator effects, which recovers parameter values well (Cortina et al. 2001) and has been utilized in recent studies (e.g., Lee & Peccei 2007; Richardson et al. 2008; Rojas & Camarero 2008; Seo & Barrett 2007; Vlachos, Tsamakos, Vrechopoulos & Avramidis 2009; Zhou & Poppo 2010).

Step 6: Assessing the structural model validity

At this stage, the structural model's validity is examined using the same criteria as the measurement model, described above. Following this, the individual parameter estimates that represent each specific hypothesis are examined. According to Hair et al. (2010), the proposed framework is considered valid to the extent that the parameter estimates are statistically significant and in the predicted direction. If the model fits the data and the parameter estimates are significant and in the predicted direction, assessing the structural model's validity can be concluded and the results reported (Tabachnick & Fidell 2007).

4.9 Conclusion

This chapter has provided detailed information on the methodological issues in order to test the conceptual framework used in this research. The issues concerning research design, the population and the sample of this study, the data collection procedure and the measurement of the variables of this study have been addressed.

An explanation of the analysis techniques that will be applied to test the hypotheses developed previously in Chapter 2 has also been provided. Detailed discussion on the analysis results, particularly the result of analysis of assumptions, exploratory factor analysis, measurement model validity and structural model validity will be provided in the next chapter of the thesis (Chapter 5). Throughout the discussion, the conceptual framework will be tested in order to examine whether the hypotheses are supported or not by the data of this study. Chapter 5 also will provide demographics information about the respondents and other aspects of their profile.

Chapter 5

Analysis Results and Findings

5.1 Introduction

The previous chapter explained the analysis techniques that were applied to test the conceptual framework and hypotheses of this study, and this chapter will discuss the findings of these analyses. The chapter begins with a discussion on the respondents' demographic details and their profiles. Following this, the chapter presents the results of the analysis including the result of analysis of assumptions, exploratory factor analysis, and the result of confirmatory factor analysis including the goodness of fit of the measurement model, the construct reliability, the construct's convergent validity and the constructs discriminant validity. Finally, a discussion on the structural model validity will be presented, along with the results of the hypotheses testing.

5.2 Data Screen

As previously explained in Chapter 4, the surveys were delivered personally to 270 public sector employees in Malaysia who participated in a basic financial management training program organized by the National Institute of Public Administration (INTAN) main campus in 2009 and 2010, their supervisors and colleagues. Assistance from the employees' supervisors was sought to distribute the survey of service quality to the related employees (the employees' colleagues) in the organization. Of the total sample, 251 surveys from the employees, 251 surveys from the employees' supervisor and 697 surveys from employees' colleagues (internal customers) were collected. Another 19 employees who had participated in the training were not available during the period of data collection

(March to April 2011) for a number of reasons such as maternity leave, study leave, had resigned from the public sector or had been transferred to another public sector agency.

In screening the data, 27 cases showed incomplete responses or missing values. Therefore, all the 27 cases with missing values were deleted. Deleting the incomplete responses or cases with missing values was argued as the safest method because it is not prone to Type I errors, where a true null hypothesis was incorrectly rejected (Allison 2002). This approach also is more likely can produce accurate estimates of standard error, confidence interval and p-values of the analysis (Allison 2002), and in line with previous transfer of training studies (e.g., Bates et al. 1999; Frash & Maclaurin 2010; Naquin & Holton 2002; Yamkovenko & Holton 2010), recent human resource management studies (e.g., Liao 2011; Hung 2006; Zatzick & Iverson 2011) and more recent organizational studies (e.g., Biron 2010; Erdogan & Enders 2007; Filipova 2011; Hyun 2010; Perryer et al. 2010). Furthermore, the results from the squared Mahalanobis distance (D^2) showed multivariate outliers for two cases which have been deleted (Pallant 2011). Deleting the cases that show outliers has also been done by previous transfer of training studies (e.g., Pidd 2004) and other human resource management studies (e.g., Ballesteros-Rodriguez et al 2011; Whitener 2001).

After deleting the 27 incomplete surveys and 2 outliers, the complete and usable surveys totaled 222, both from employees and their supervisors (response rate was 82 per cent), and 624 surveys from employees' colleagues. The final sample size exceeds the minimum sample size required to analyze the proposed model using the structural equation model technique (Hair et al. 2010). The complete total of respondents represents 81 public sector organizations in Malaysia (Appendix G). The following section will provide a detailed explanation of the demographic details and profiles of people in the sample.

5.3 The Sample Demographic and Profile

The following sections describe each respondent's demographic and profile characteristics.

5.3.1 Employees' demographic and profile details

Table 5.1 summarizes the demographic profile of employees. The sample comprised 222 employees. 68 per cent (N = 151) of the employees were female and 32 per cent (N = 71) were male. In terms of age, 41.9 per cent (N = 93) were between 20 and 29 years of age, 36.5 per cent (N = 81) were between 30 and 39, 7.6 per cent (N = 17) were between 40 and 49 and the remaining 14 per cent (N = 31) were between 50 and 60. Information about education qualifications revealed that 60 per cent (N = 133) of the employees were university graduates, while the remaining 40 per cent (N = 89) had secondary school certificate level qualifications. The majority of the employees were married (66.7 per cent, N = 148), while the remaining 33.3 per cent (N = 74) were single. In terms of employment history, 68.5 per cent (N = 152) of the employee sample have worked in public sector organizations ranging from 1 to 9 years, 15.3 per cent (N = 34) worked in the public sector between 10 and 19 years, and the remaining 16.2 per cent (N = 36) worked in public sector organizations for more than 20 years.

The demographic data of employees reveal that the majority of them who attended the training are still young (78.4% under the age of 40) and have limited experience of working in public sector organizations (68.5% of them have worked in public sector for less than 10 years). This could explain their participation in the training, where they wanted to enhance their competencies or skills in the financial systems as used by the Malaysian public sector.

Table 5. 1: Demographic and Profile Details of Employees

Characteristic	Frequency	Percentage	Cumulative Percentage
Gender			
Male	71	32.0	32.0
Female	151	68.0	100.0
Age			
20-29 years old	93	41.9	41.9
30-39 years old	81	36.5	78.4
40-49 years old	17	7.6	86.0
50-60 years old	31	14.0	100.0
Education			
Completed secondary	89	40	40
Completed university diploma	95	42.8	82.8
Completed university degree	31	14.0	96.8
Completed postgraduate degree	7	3.2	100.0
Status			
Single	74	33.3	33.3
Married	148	66.7	100.0
Employment history			
1-9 years	152	68.5	68.5
10-19 years	34	15.3	83.8
20-29 years	19	8.5	92.3
30-39 years	17	7.7	100.0

5.3.2 Employees' supervisors demographic and profile details

Table 5.2 illustrates the demographic profile of employees' supervisors. The sample consisted of 222 supervisors. 51.4 per cent (N = 114) of the supervisors were female and 48.6 per cent (N = 108) were male. In terms of age, 20.7 per cent (N = 46) were between 20 and 29 years of age, 26.6 per cent (N = 60) were between 30 and 39, 21.6 per cent (N = 48) were between 40 and 49 and the remaining 31.1 per cent (N = 68) were between 50 and 60. The information about education qualifications revealed that 78.8 per cent (N = 175) of the supervisors were university graduates, while the remaining 21.2 per cent (N = 47) have secondary school certificate qualifications. Most of the supervisors were married (77.9 per cent, N = 173), while the remaining 22.1 per cent (N = 49) were single. In terms of employment history, 38.7 per cent (N = 86) of the supervisor have worked in public sector organizations between 1 and 9 years, 20.3 per cent (N = 45) worked between 10 and 19 years, and the remaining 41 per cent (N = 91) have worked in public sector organizations for more than 20 years.

The demographic data concerning employees' supervisors shows that most of the supervisors are experienced; 61.3% having work in Malaysian public sectors for more than ten years. The majority of them also are educated (78.8 per cent were university graduates). Based on their experience and level of education, they can be regarded as qualified persons able to provide feedback on their employees' transfer of training performance.

Table 5. 2: Demographic and Profile Details of Employees' Supervisors

Characteristic	Frequency	Percentage	Cumulative Percentage
Gender			
Male	108	48.6	48.6
Female	114	51.4	100.0
Age			
20-29 years old	46	20.7	20.7
30-39 years old	60	26.6	47.3
40-49 years old	48	21.6	68.9
50-60 years old	68	31.1	100.0
Education			
Completed secondary	47	21.2	21.2
Completed university diploma	63	28.4	49.6
Completed university degree	80	36.0	85.6
Completed postgraduate degree	32	14.4	100.0
Status			
Single	49	22.1	22.1
Married	173	77.9	100.0
Employment history			
1-9 years	86	38.7	38.7
10-19 years	45	20.3	59.0
20-29 years	40	18.0	77.0
30-39 years	51	23.0	100.0

5.3.3 Employees' colleagues' demographic and profile details

Table 5.3 details the demographic profiles of employees' colleagues. The sample consisted of 624 employees. 69.7 per cent (N = 435) of the employees' colleagues sample were female and 30.3 per cent (N = 189) were male. In terms of age, 45.7 per cent (N = 285) were between 20 and 29 years of age, 31.4 per cent (N = 196) were between 30 and 39, 11.5 per cent (N = 72) were between 40 and 49 and the remaining 11.4 per cent (N = 71) were between 50 and 60. The information about education qualifications revealed that 59.5 per cent (N = 371) of the employees' colleagues were university graduates, while the remaining 40.5 per cent (N = 253) have secondary school certificates. The majority of the employees' colleagues sample were married (66.5 per cent, N = 415), while the remaining 33.5 per cent (N = 209) were single. In terms of employment history, 63.6 per cent (N = 397) of the employee colleagues sample have worked in public sector organizations between 1 and 9 years, 19.4 per cent (N = 121) of them have worked between 10 and 19 years, and the remaining 17 per cent (N = 106) have worked in public sector organizations for more than 20 years.

The demographic data concerning employees' colleagues demonstrated that the feedback of service quality was received from various levels of employees; young and senior employees, experienced and less experienced employees. The feedback received from the range of employees' colleagues could help in generating accurate conclusions of the service quality provided by employees to their colleagues.

Table 5. 3: Demographic and Profile Details of Employees' Colleagues

Characteristic	Frequency	Percentage	Cumulative Percentage
Gender			
Male	189	30.3	30.3
Female	435	69.7	100.0
Age			
20-29 years old	285	45.7	45.7
30-39 years old	196	31.4	77.1
40-49 years old	72	11.5	88.6
50-60 years old	71	11.4	100.0
Education			
Completed secondary	253	40.5	40.5
Completed university diploma	244	39.1	79.6
Completed university degree	117	18.8	98.4
Completed postgraduate degree	10	1.6	100.0
Status			
Single	209	33.5	33.5
Married	415	66.5	100.0
Employment history			
1-9 years	397	63.6	63.6
10-19 years	121	19.4	83.0
20-29 years	53	8.5	91.5
30-39 years	53	8.5	100.0

Overall, the total respondents for this study are 1068 (including 222 employees, 222 employees' supervisors and 624 employees' colleagues). Out of the 1068 respondents who completed the survey, 65.5% were female and 34.5% were male. Although the percentage of male participants was lower than female, this figure represents the typical ratio of the workforce in Malaysia's public sector (The Congress of Unions of Employees in Public Service).

5.4 Analysis of the Assumptions

As discussed in Chapter 4, prior to testing the measurement model, a number of statistical assumptions were tested, including multivariate normality, outliers, linearity, homoscedasticity and multicollinearity (Hair et al. 2010; Kline 2005; Tabachnick & Fidell 2007). It is important that these assumptions are tested because any violation of them could affect the validity of the results (Schreiber et al. 2006; Schumacker & Lomax 1996). The following sections discuss the analysis of each assumption.

5.4.1 Multivariate normality

In assessing the first assumption, multivariate normality, the focus is on the value of kurtosis, in particular the multivariate kurtosis because it can severely affect tests of variance and covariances (Byrne 2010). The standardized kurtosis index in a normal distribution has a value of 3 (Byrne 2010), while the normal multivariate kurtosis value is 5, where values exceeding 5 are indicative of data that are nonnormally distributed (Bentler 2005). Table 5.4 below shows that the multivariate kurtosis value is 16.537 suggestive of nonnormality in the sample. Despite this, the effect of this violation is low due to the sample size of this study, which at 222 is considered large. Researchers have argued that with a large sample (200 and more), the effect of nonnormal data on the result can be minimized (Hair et al. 2010; Tabachnick & Fidell 2007). Indeed, the violation of this assumption is not problematic because the kurtosis of all items shows univariate normality (below 3).

Table 5. 4: Assessment of normality

Variable	Min	Max	Skew	c.r.	Kurtosis	c.r.
RES	3.000	7.000	-.328	-1.996	-.344	-1.046
Plops	-20.124	43.736	1.401	8.521	2.727	8.295
EMP	3.280	7.000	-.559	-3.401	.109	.332
ASS	3.500	7.000	-.600	-3.650	.132	.403
REL	3.000	7.000	-.857	-5.212	.987	3.003
JS3	2.000	7.000	-.983	-5.982	.838	2.549
JS1	3.000	7.000	-.984	-5.984	1.039	3.161
POS1	3.000	7.000	-.457	-2.779	-.415	-1.263
POS2	2.000	7.000	-.863	-5.252	.935	2.844

Variable	Min	Max	Skew	c.r.	Kurtosis	c.r.
POS3	2.000	7.000	-.632	-3.847	.266	.808
POS4	2.000	7.000	-.500	-3.039	.184	.558
POS5	2.000	7.000	-.456	-2.777	-.116	-.353
POS8	2.000	7.000	-.521	-3.168	.012	.037
PL1	4.000	7.000	-.420	-2.557	.465	1.414
PL2	4.000	7.000	-.550	-3.344	.836	2.544
PL3	4.000	7.000	-.632	-3.846	.528	1.605
PL4	4.000	7.000	-.479	-2.916	-.134	-.408
TOT6	3.000	7.000	-.778	-4.731	1.002	3.047
TOT5	3.000	7.000	-.785	-4.777	1.041	3.165
TOT4	4.000	7.000	-.654	-3.979	.544	1.654
TOT3	3.000	7.000	-.539	-3.276	.090	.274
TOT2	4.000	7.000	-.593	-3.608	.272	.826
TOT1	4.000	7.000	-.376	-2.288	.255	.775
Multivariate					75.278	16.537

5.4.2 Outliers

The second assumption is concerned with outliers, which represents cases whose scores are substantially different from all the others in a particular set of data (Byrne 2010). This assumption is important to assess because it can influence the parameter estimates (Schumacker & Lomax 1996). The assessment of this assumption is based on the assessment of multivariate outliers, the cases that have extreme scores on two or more variables (Kline 2005) based on the squared Mahalanobis distance (D^2) value for each case. The cases are considered outliers if the squared Mahalanobis distance value exceeds the critical chi-square value, which in this case is 49.728—using an alpha level of 0.001 as suggested by Tabachnick and Fidell (2007). A look at Table 5.5 shows there are six cases (observation numbers 194, 182, 151, 110, 179, 149) having squared Mahalanobis distance values exceeding the critical chi-square value. Pallant (2011) suggests a further investigation of the Cook's Distance value of the identified cases before taking any action. Cook's Distance value provides diagnostics around whether those cases have any undue influence on the results. The cases with Cook's Distance values larger than 1 constitute a potential problem (Tabachnick & Fidell 2007). An inspection of the value of Cook's Distance shows its maximum value is 0.110, which is less than 1, suggesting there are no major problems and therefore the six cases were retained (Pallant 2011).

Table 5. 5: Observations farthest from the centroid (Mahalanobis distance)

Observation number	Mahalanobis d-squared	p1	p2
149	55.278	.000	.039
179	55.224	.000	.001
110	54.808	.000	.000
151	54.181	.000	.000
182	54.040	.000	.000
194	53.723	.000	.000
125	45.840	.003	.000
171	45.511	.003	.000
116	45.500	.003	.000
164	45.094	.004	.000
191	45.006	.004	.000
82	44.900	.004	.000
147	44.612	.004	.000
137	43.813	.006	.000
214	42.958	.007	.000
6	42.498	.008	.000

5.4.3 Linearity and Homoscedasticity

The third assumption relates to linearity and homoscedasticity of residuals. The linearity of the relationship between dependent and independent variables represents the degree to which the change in the dependent variable is associated with the independent variable (Hair et al. 1998). Homoscedasticity refers to the assumption that the dependent variable exhibits equal levels of variance across the range of predictor variables (Hair et al. 2010). The assumptions of linearity and homoscedasticity were checked by examining a scatterplot of the standardized residuals (Pallant 2011; Tabachnick & Fidell 2007). Figure 2 below highlights the scatterplot, indicating that the scores are concentrated in the centre (along the 0 point), further indicating that the assumptions for linearity and homoscedasticity have been met (Pallant 2011).

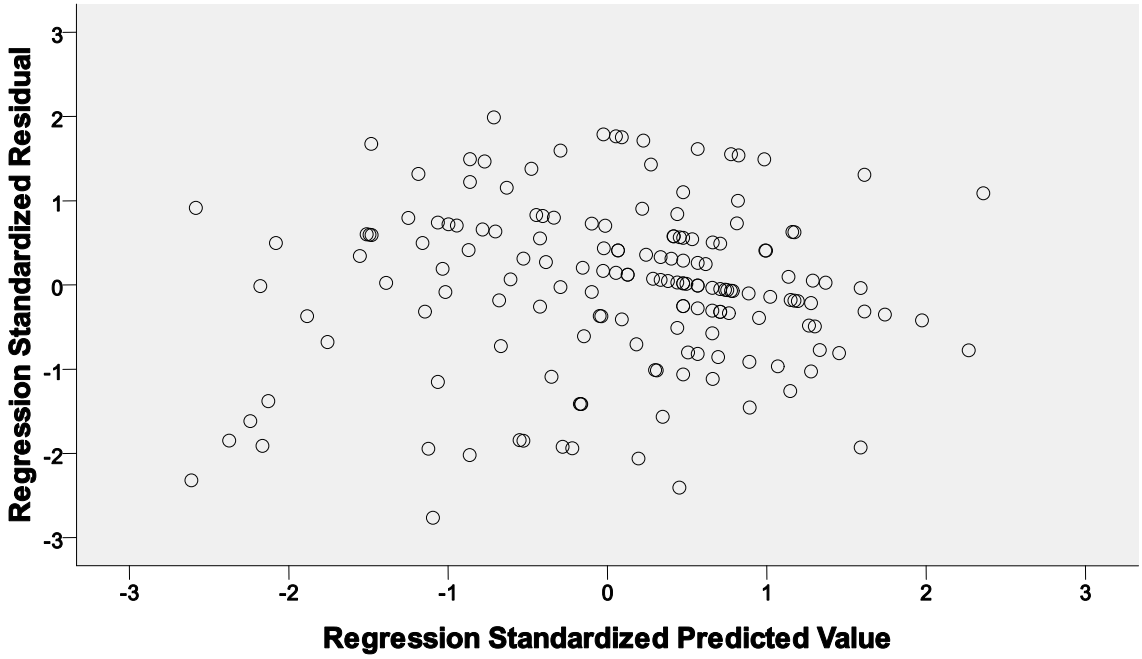

Figure 2: Scatterplot of the standardized residuals

5.4.4 Multicollinearity

The fourth assumption is multicollinearity. Multicollinearity is a problem that shows the variables tested are too highly correlated (Tabachnick & Fidell 2007). The assessment of multicollinearity is based on eigenvalues, which are determined from the AMOS sample moment output, which indicates the smallest eigenvalue is 0.134 and the largest eigenvalue is 6.196. According to Gujarati and Porter (2009), the calculation of *k* value can determine the possibility of mutlicollinearity, if *k* is between 100 and 1000 there is moderate to strong multicollinearity based on the following procedure:

$$k = \frac{\text{Maximumeigenvalue}}{\text{Minimumeigenvalue}}$$

The result shows the *k* value is 46.24 (6.196/0.134) suggesting this study does not have a serious collinearity problem (Gujarati & Porter 2009). Further assessment on the correlation matrix (Table 5.6) reveals no correlation above 0.90, thus confirming that there is no violation of this assumption (Tabachnick & Fidell 2007).

Table 5. 6: Correlation matrix

Variable	*PL*	*POS*	*TOT*	*JS*	*SQ*
PL					
POS	0.407				
TOT	0.254	0.269			
JS	0.421	0.655	0.218		
SQ	-0.003	0.172	0.174	0.068	

Notes: PL = perceived learning; POS = perceived organizational support; TOT = transfer of training; JS = job satisfaction and SQ = service quality.

5.5 Exploratory Factor Analysis

An exploratory factor analysis (principal component analysis) with Varimax rotation was conducted on the items for the constructs perceived learning, perceived organizational support, transfer of training and job satisfaction. Applying principal component analysis with Varimax rotation was deemed an appropriate approach for exploring the interrelationship among a set of items, as it has previously been used by a number of transfer of training studies (e.g., Baharim 2008; Tracey et al. 1995) and organizational studies (e.g., Abdulla et al. 2011; Toker 2011). As explained previously in Chapter 4, prior to performing principal component analysis, the suitability of data for factor analysis was assessed based on the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity value. If the results meet the requirement of both assessments, the next step is to determine the number of factors that can be used to best represent the interrelationships among the set of items. Following the determination of the number of factors, these factors are rotated using Varimax rotation to assess the loading pattern of each item on the factors. The following sub-sections provide a detailed discussion of the EFA outcome for the constructs perceived learning, perceived organizational support, transfer of training and job satisfaction.

5.5.1 Perceived learning construct

Perceived learning comprises four items which asked the respondents about their perceptions of the improvement of knowledge, skills and attitudes they gained as a result of the training event they had attended. As shown in Table 5.7, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was 0.802, exceeding the recommended value of 0.6. The Bartlett's Test of Sphericity $\chi^2(6) = 390.873$, $p<0.001$, also reached statistical significance. Both results indicate that the collected data was suitable for factor analysis.

Table 5. 7: The KMO and Bartlett's Test for Perceived Learning

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.802
Bartlett's Test of Sphericity	Approx. Chi-Square	390.873
	Df	6
	Sig.	0.000

The result for the principal component analysis (Table 5.8) revealed the presence of only one component with an eigenvalue exceeding 1 (2.792), explaining 69.803% of the variance respectively. This was further supported by the results of Parallel Analysis, which depicted only one component with an eigenvalue exceeding the criterion value from Parallel Analysis (see Table 5.9). Both results confirm the unidimensionality of the perceived learning construct.

Table 5. 8: Total Variance Explained for Perceived Learning

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.792	69.803	69.803	2.792	69.803	69.803
2	.540	13.509	83.313			
3	.351	8.779	92.092			
4	.316	7.908	100.000			

Extraction Method: Principal Component Analysis.

Table 5. 9: Comparison of Eigenvalues from Principal Component Analysis and Criterion Values from Parallel Analysis for Perceived Learning

Component	Eigenvalue from PCA	Criterion Value from Parallel Analysis
1	2.792	1.155
2	0.540	1.039
3	0.351	0.955
4	0.316	0.852

PCA= Principal Component Analysis.

Table 5.10 shows the factor loadings of the four items. All items have factor loading above the minimum significant loading 0.40, ranging from 0.802 to 0.872. None of the items has more than one significant loading (cross-loading). In addition, each item has communality value that exceeds the cut-off point 0.30 (Pallant 2011). Furthermore, the four items show high internal consistency with a Cronbach Alpha value 0.854 which is well above the recommended level of 0.70. This shows that the four items measuring the same underlying construct, and therefore all four items are retained for confirmatory factor analysis.

Table 5. 10: Factor Loading for Perceived Learning Items

Items	Loading	Communalities	Cronbach Alpha
PL1	0.802	0.644	0.854
PL2	0.872	0.760	
PL3	0.803	0.645	
PL4	0.862	0.743	

5.5.2 Perceived Organizational Support Construct

The perceived organizational support construct comprises eight items which asked the respondents about their general beliefs concerning the extent to which the organization thinks highly of their contribution and promotes their welfare. As shown in Table 5.11, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was 0.874, exceeding the recommended value of 0.6. The Bartlett's Test of Sphericity $\chi^2(15) = 618.411$, $p<0.001$, also reached statistical significance. Both results indicate that the collected data is suitable for factor analysis.

Table 5. 11: The KMO and Bartlett's Test for Perceived Organizational Support

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.874
Bartlett's Test of Sphericity	Approx. Chi-Square	618.411
	Df	15
	Sig.	0.000

The result of the principal component analysis (Table 5.12) revealed the presence of only one component with an eigenvalue exceeding 1 (3.682), explaining 61.373% of the variance respectively. This result was gained after dropping two out of the eight items (item POS6 and item POS7) due to low factor loading (less than 0.40) and high cross-loading (more than 0.35). The result for the principal component analysis was further supported by those for Parallel Analysis, which showed only one component with an eigenvalue exceeding the criterion value from Parallel Analysis (Table 5.13). Both results confirm the unidimensionality of the adjusted perceived organizational support construct.

Table 5. 12: Total Variance Explained for Perceived Organizational Support

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.682	61.373	61.373	3.682	61.373	61.373
2	.718	11.959	73.332			
3	.545	9.083	82.415			
4	.457	7.614	90.029			
5	.313	5.210	95.238			
6	.286	4.762	100.000			

Extraction Method: Principal Component Analysis.

Table 5. 13: Comparison of Eigenvalues from PCA and Criterion Values from Parallel Analysis for Perceived Organizational Support

Component	Eigenvalue from PCA	Criterion value from parallel analysis
1	3.682	1.234
2	0.718	1.114
3	0.545	1.032
4	0.457	0.957
5	0.313	0.878
6	0.286	0.785

PCA= Principal Component Analysis.

Table 5.14 shows the factor loadings of the six items. All items have factor loading above the minimum significant loading 0.40, ranging from 0.693 to 0.861. Each item has communality value that exceeds the cut-off point 0.30. Furthermore, the six items show high internal consistency with a Cronbach Alpha value of 0.871 which is well above the recommended level of 0.70. This demonstrates that the six items measure the same underlying construct. Subsequently, these six items were used for confirmatory factor analysis.

Table 5. 14: Factor Loading for Perceived Organizational Support Items

Items	Loading	Communalities	Cronbach Alpha
POS1	0.752	0.565	0.871
POS2	0.782	0.611	
POS3	0.861	0.742	
POS4	0.853	0.727	
POS5	0.693	0.480	
POS8	0.747	0.558	

5.5.3 Job Satisfaction Construct

Job satisfaction comprises three items which asked the respondents about their perceptions and feelings about their jobs. As shown in Table 5.15, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was 0.650, exceeding the recommended value of 0.6. The Bartlett's Test of Sphericity $\chi^2(3) = 138.067$, $p<0.001$, also reached statistical significance. Both results indicate that the collected data is suitable for factor analysis.

Table 5. 15: The KMO and Bartlett's Test for Job Satisfaction

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.650
Bartlett's Test of Sphericity	Approx. Chi-Square	138.067
	Df	3
	Sig.	0.000

The result of the principal component analysis (Table 5.16) reveals the presence of only one component with an eigenvalue exceeding 1 (1.921), explaining 64.022% of the variance respectively. This is further supported by the results of Parallel Analysis, which shows only one component with an eigenvalue exceeding the criterion value from Parallel Analysis (Table 5.17). Both results confirm the unidimensionality of the job satisfaction construct.

Table 5. 16: Total Variance Explained for Job Satisfaction

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.921	64.022	64.022	1.921	64.022	64.022
2	.658	21.924	85.946			
3	.422	14.054	100.000			

Extraction Method: Principal Component Analysis.

Table 5. 17: Comparison of Eigenvalues from PCA and Criterion Values from Parallel Analysis for Job Satisfaction

Component	Eigenvalue from PCA	Criterion value from parallel analysis
1	1.921	1.104
2	0.658	0.996
3	0.422	0.900

PCA= Principal Component Analysis.

Table 5.18 shows the factor loadings of the three items. All items have factor loadings above the minimum significant loading 0.40, ranging from 0.722 to 0.840. None of the items has more than one significant loading (cross-loading). Each item also has a communality value that exceeds the cut-off point 0.30 (Pallant 2011). However, the three items have a Cronbach Alpha value 0.670 which is below the recommended level of 0.70. Further assessment of the Inter-Item Correlation Matrix (Table 5.19) shows that all values are positive, indicating that the three items are measuring the same underlying characteristics (Pallant 2011). Moreover, the outcome for the Corrected Item-Total Correlation values in the Item-Total Statistics (Table 5.20) shows that each item has a value greater than 0.30, indicating that each item is measuring the same construct as a whole (Pallant 2011; Hair et al. 2011). Therefore, these three items are retained for confirmatory factor analysis.

Table 5. 18: Factor Loading for Job Satisfaction Items

Items	Loading	Communalities	Cronbach Alpha
JS1	0.834	0.695	0.670
JS2	0.722	0.521	
JS3	0.840	0.705	

Table 5. 19: Inter-Item Correlation Matrix

	JS1	JS2	JS3
JS1	1.000	.391	.578
JS2	.391	1.000	.403
JS3	.578	.403	1.000

Table 5. 20: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
JS1	11.46	4.539	.553	.364	.546
JS2	11.75	2.796	.447	.200	.725
JS3	11.56	3.985	.551	.371	.504

5.5.4 Transfer of Training Construct

Transfer of training comprises six items which asked the respondents about their perceptions of their subordinate (who has participated in training) performance in applying to the workplace the new knowledge, skills and attitudes that were learned from training. As shown in Table 5.21, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was 0.890, exceeding the recommended value of 0.6. The Bartlett's Test of Sphericity $\chi^2(15) = 859.600$, $p<0.001$, also reached statistical significance. Both results indicate that the collected data is suitable for factor analysis.

Table 5. 21: The KMO and Bartlett's Test for Transfer of Training

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.890
Bartlett's Test of Sphericity	Approx. Chi-Square	859.600
	Df	15
	Sig.	0.000

The result of the principal component analysis (Table 5.22) reveals the presence of only one component with an eigenvalue exceeding 1 (4.190), explaining 69.828% of the variance respectively. This was further supported by the results of Parallel Analysis, which shows only one component with an eigenvalue exceeding the criterion value from Parallel Analysis (5.23). Both results confirm the unidimensionality of the transfer of training construct.

Table 5. 22: Total Variance Explained for Transfer of Training

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.190	69.828	69.828	4.190	69.828	69.828
2	.546	9.100	78.928			
3	.428	7.138	86.066			
4	.370	6.169	92.235			
5	.258	4.305	96.540			
6	.208	3.460	100.000			

Extraction Method: Principal Component Analysis.

Table 5. 23: Comparison of Eigenvalues from PCA and Criterion Values from Parallel Analysis for Transfer of Training

Component	Eigenvalue from PCA	Criterion value from parallel analysis
1	4.190	1.222
2	0.546	1.115
3	0.428	1.031
4	0.370	0.959
5	0.258	0.885
6	0.208	0.789

PCA= Principal Component Analysis.

Table 5.24 shows the factor loadings of the six items. All items have factor loadings above the minimum significant loading 0.40, ranging from 0.786 to 0.869. None of the items has more than one significant loading (cross-loading). In addition, each item has communality value that exceeds the cut-off point 0.30 (Pallant 2011). Furthermore, the six items illustrate high internal consistency with a Cronbach Alpha value of 0.913 which is well above the recommended level of 0.70. Since the six items are measuring the same underlying construct all six items are retained for confirmatory factor analysis.

Table 5. 24: Factor Loading for Transfer of Training Items

Items	Loading	Communalities	Cronbach Alpha
TOT1	0.799	0.638	0.913
TOT2	0.853	0.727	
TOT3	0.855	0.732	
TOT4	0.849	0.720	
TOT5	0.869	0.755	
TOT6	0.786	0.617	

5.6 Confirmatory Factor Analysis

Following the exploratory factor analysis, all the constructs of this study; perceived learning, perceived organizational support, transfer of training, job satisfaction and service quality were further assessed using confirmatory factor analysis (CFA) in AMOS 17. CFA is the appropriate statistical technique to test the extent to which the measured variables (items) load on prespecified constructs representing the data of this study (Byrne 2010; Hair et al. 2010; Hurley, Scandura, Schriesheim, Brannick, Seers, Vandenberg & Williams 1997). In this way, CFA can provide a confirmatory test on how well the observed variables define the latent variables of interest (Schumacker & Lomax 1996). CFA provides the statistical analysis in terms of goodness-of-fit and allows for the estimation of standard errors and the calculation of significance tests for the factor loadings (Hair et al. 2010). Each latent construct (i.e. perceived learning, transfer of training, perceived organizational support, job satisfaction and service quality) included in the model is identified and the measured indicator variables (items) are assigned to latent constructs as shown in Figure 3.

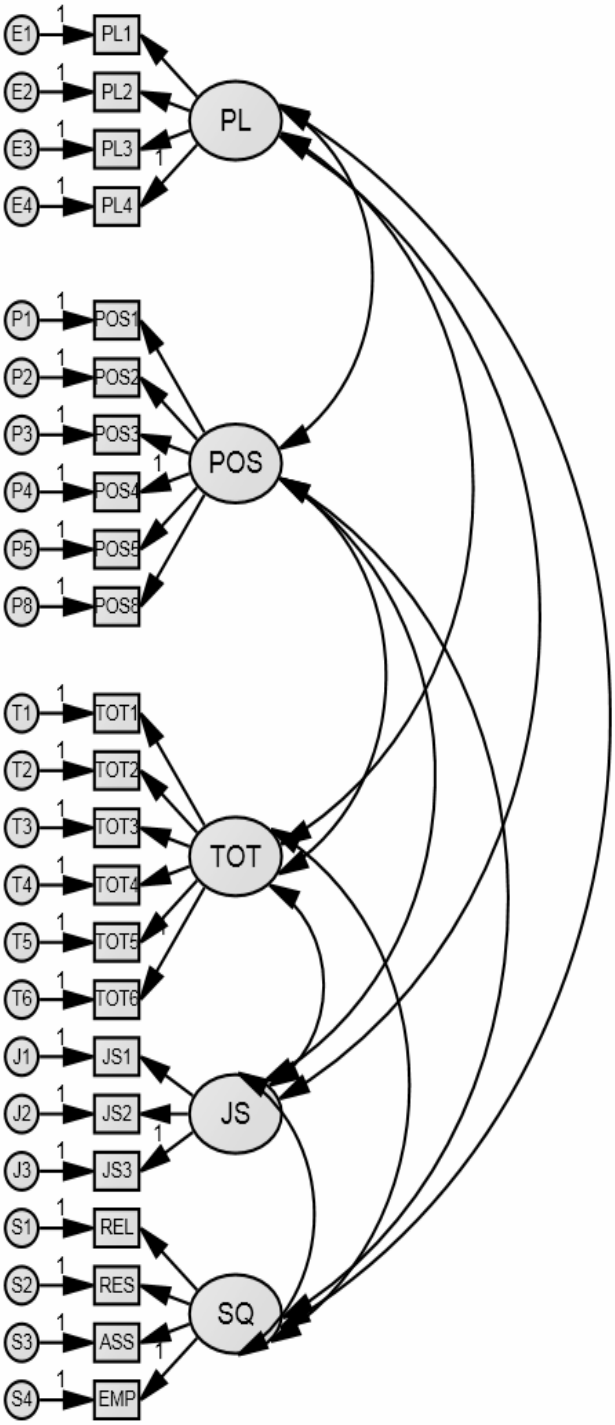

Figure 3: Full measurement model

According to the results derived from the confirmatory factor analysis (Table 5.25), the overall model χ^2 is 401.422 with 220 degrees of freedom. The p-value associated with this result is 0.000. The normed χ^2 is 1.825, chi-square value divided by the degrees of freedom (401.422/220=1.825). The normed χ^2 value is smaller than 2.0, which suggests an acceptable fit for the CFA model. In addition to the normed χ^2 results, the value for the root mean square error of approximation (RMSEA) is 0.061, which does not exceed 0.08. The RMSEA value therefore provides additional support for model fit. The standardized root mean square residual (SRMR) also provides additional support for model fit with a value of 0.055, which does not exceed 0.10. However, the result concerning the comparative fit index (CFI) is 0.93, below the acceptable value of model fit, which is 0.95 and therefore suggesting that the initial model may need to be modified.

Table 5. 25: Full measurement model Confirmatory Factor Analysis Goodness-of-Fit Statistics

Statistics	Value
Chi-square χ^2 (*p*-value)	401.422 (p<0.000)
Degree of freedom (*df*)	220
Normed Chi-square (χ^2 /*df*)	1.825
Root mean square error of approximation (RMSEA)	0.061
Comparative fit index (CFI)	0.93
Standardized root mean residual (SRMR)	0.055

In examining the standardized loading estimates in Table 5.26 it can be observed that the standardized loading estimates of one indicator under the job satisfaction construct, where JS2 is 0.482, which is below the 0.50 cut-off value of a good item (Hair et al. 2010). The squared multiple correlations (SMC) value of this indicator is also very low (0.23). The SMC value explains how well an item measures a construct (Hair et al. 2010). In addition, although this indicator's (JS2) loading estimate is significant, Critical Ratio (CR)>1.96 (see Table 5.27), the inclusion of this indicator produces a less satisfied value on the job satisfaction construct average extracted variance (AVE) and the construct reliability. The AVE value is 0.41 and the reliability is 0.67. Both values are below the minimum acceptable values, 0.50 for AVE and 0.70 for reliability to indicate adequate convergence (Hair et al. 2010). In contrast, when this indicator (JS2) is deleted, the AVE of the job satisfaction construct is 0.56 and the reliability is 0.73, which exceeds the minimum acceptable value. Therefore, the indicator JS2 is deleted.

Table 5. 26: Standardized Factor Loading Estimates

Indicator	Construct	Estimated loading
PL4	PL	0.812
PL3	PL	0.726
PL2	PL	0.827
PL1	PL	0.731
POS5	POS	0.609
POS4	POS	0.818
POS3	POS	0.837
POS2	POS	0.745
POS1	POS	0.696
POS8	POS	0.688
TOT6	TOT	0.730
TOT5	TOT	0.837
TOT4	TOT	0.817
TOT3	TOT	0.828
TOT2	TOT	0.829
TOT1	TOT	0.750
JS3	JS	0.794
JS2	JS	0.482
JS1	JS	0.748
EMP	SQ	0.771
ASS	SQ	0.914
RES	SQ	0.706
REL	SQ	0.875

Table 5. 27: Unstandardized Factor Loading Estimates

Indicator	Construct	Estimated loading	Standard Error	Critical Ratio (CR)
PL4	PL	1.000		
PL3	PL	0.879	0.079	11.083
PL2	PL	0.897	0.070	12.742
PL1	PL	0.773	0.069	11.182
POS4	POS	1.000		
POS3	POS	0.896	0.064	13.932
POS2	POS	0.843	0.070	12.009
POS1	POS	0.718	0.065	11.017
POS5	POS	0.754	0.080	9.264
POS8	POS	0.779	0.072	10.858
TOT6	TOT	1.000		
TOT5	TOT	1.166	0.095	12.289
TOT4	TOT	1.110	0.093	11.977
TOT3	TOT	1.254	0.103	12.142
TOT2	TOT	1.163	0.096	12.167
TOT1	TOT	0.933	0.085	10.953
JS3	JS	1.000		
JS2	JS	0.888	0.141	6.300
JS1	JS	0.786	0.090	8.776
EMP	SQ	1.000		
ASS	SQ	1.142	0.079	14.397
RES	SQ	0.980	0.091	10.820
REL	SQ	1.041	0.075	13.889

Note: The significant level of the factor loading is based on the value of Critical Ratio (CR). The minimum critical ratio value of 1.960 is required for the factor loading to be significant (Byrne 2010).

Researchers such as Schreiber et al. (2006) suggest it is important to consider the information provided in modification indices (MI) when assessing the measurement model in order to derive the best indicators of latent variables prior to testing a structural model. This assumption is in line with other scholars such as Byrne (2005) and Schriesheim (cited in Hurley et al. 1997). However, according to Byrne (2005), the information provided by the modification indices should have some theoretical basis or be supported by empirical research before it can be considered to suggest respecification of the measurement model. Examination of the modification indices (Table 5.28) suggested two large MI which are an error covariance between the second indicator (RES) and the fourth indicator (EMP) of service quality, and error covariance between the second indicator (TOT2) and the third indicator (TOT3) of transfer of training. Further examination of the first error covariance suggests that the error covariance is reasonable as argued and reported in previous studies

by Parasuraman et al. (1991) and Parasuraman, Zeithml and Berry (1994). The second error covariance between TOT2 and TOT3 suggests redundancy due to content overlap. Item TOT2 asks the respondent whether his/her staff **can** accomplish their job tasks faster than before training; and item TOT3 asks the respondent whether his/her staff **has** accomplished their job tasks faster than before training. These questions are very similar and there appears to be an overlap of content between these two items in the context of this study. On the basis of the previous rationale, the measurement model was reestimated with the error covariance between item RES and item EMP, and between item TOT2 and item TOT3 are specified as a free parameter as shown in Figure 4, providing the final measurement model.

Table 5. 28: The Modification Indices Result

Covariances			M.I.	Par Change
S2	<-->	JS	5.014	0.071
S2	<-->	POS	5.265	-0.066
S3	<-->	S1	6.667	0.024
S3	<-->	S2	8.956	-0.047
S4	<-->	S1	8.056	-0.040
S4	<-->	S2	55.498	0.156
J1	<-->	S2	5.401	0.062
J2	<-->	TOT	4.843	-0.110
J2	<-->	POS	8.834	-0.190
J2	<-->	P8	5.790	-0.153
J3	<-->	POS	4.765	0.078
J3	<-->	PL	6.227	-0.077
T1	<-->	J1	4.558	0.045
T3	<-->	T2	26.787	0.084
T5	<-->	J2	7.806	-0.119
T5	<-->	T2	9.645	-0.045
T6	<-->	J2	5.508	-0.116
T6	<-->	T2	6.039	-0.042
T6	<-->	T5	17.716	0.071
P1	<-->	JS	8.432	0.096
P2	<-->	P8	6.108	-0.075
P2	<-->	P5	8.255	-0.103
P3	<-->	J1	5.389	-0.056
P3	<-->	P2	9.027	0.070
P4	<-->	P8	5.931	0.072
P4	<-->	P5	5.035	0.078
E1	<-->	P8	4.262	0.046
E2	<-->	T6	4.149	-0.033
E3	<-->	S1	4.106	-0.030
E3	<-->	S3	5.982	0.036
E3	<-->	T4	13.422	-0.065
E3	<-->	E1	6.357	-0.045

By excluding the one item (JS2) and allowing for the suggested error covariance to be freely estimated, the modified model was tested again. The modified measurement model (Figure 4) fits the data relatively well. The results of the final confirmatory factor analysis (Table 5.29) indicate the overall model χ^2 is 259.603 with 197 degree of freedom. Although the p-value associated with this result is still significant at the 0.002, the normed χ^2 decreased from 1.825 to 1.318. The normed χ^2 value is still smaller than 2.0, which suggests an acceptable fit for the CFA model. In addition to the normed χ^2 results, the value for root mean square error of approximation (RMSEA) has decreased from 0.061 to 0.038, which does not exceed 0.08, thus providing additional support for model fit. The standardized root mean square residual (SRMR) also provides additional support for model fit, in that it has decreased from 0.055 to 0.047, which does not exceed 0.10. The result of comparative fit index (CFI) shows an increase from 0.93 to 0.98, which suggests a much better fit and exceeds the suggested cut-off value 0.95 (Hair et al. 2010; Tabachnick & Fidell 2007; Williams et al. 2009).

Table 5. 29: Final Measurement Model Confirmatory Factor Analysis Goodness-of-Fit Statistics

Statistics	**Value**
Chi-square χ^2 (*p*-value)	259.603 (p<0.002)
Degree of freedom (*df*)	197
Normed Chi-square (χ^2 /*df*)	1.318
Root mean square error of approximation (RMSEA)	0.038
Comparative fit index (CFI)	0.98
Standardized root mean residual (SRMR)	0.047

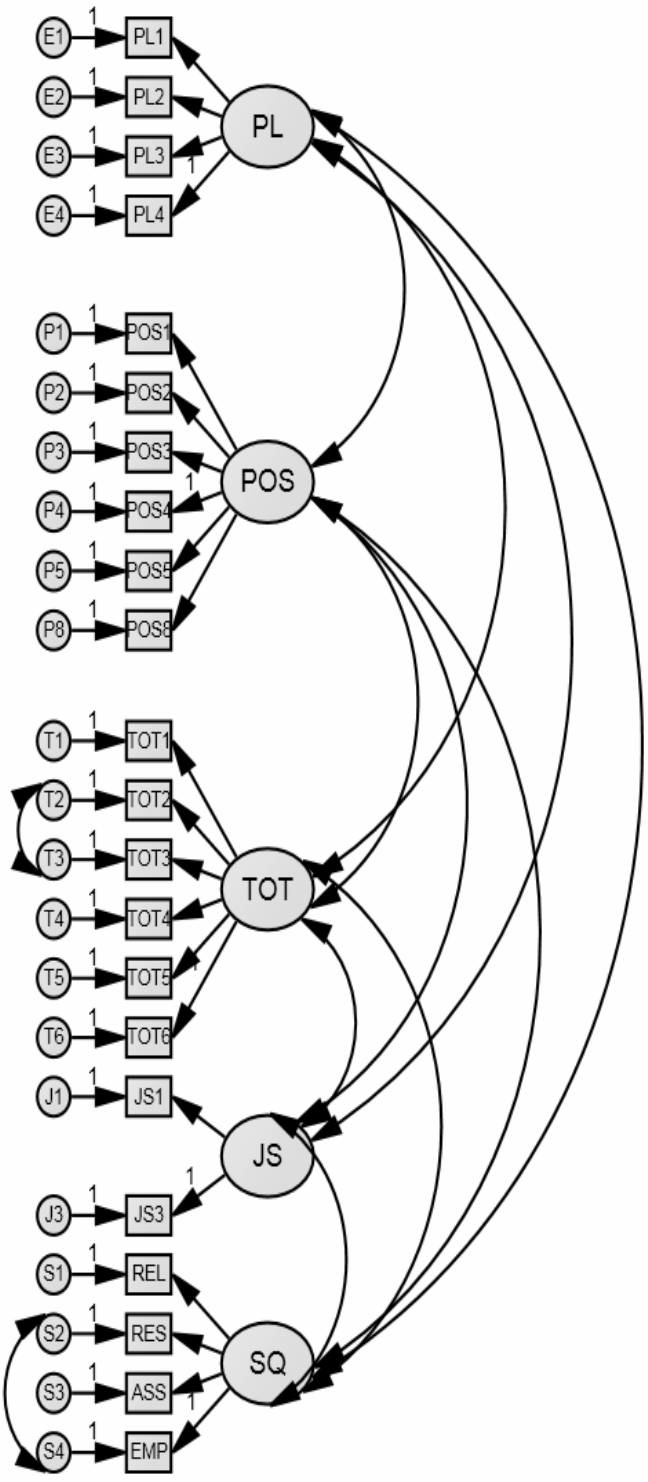

Figure 4: Final measurement model

Table 5.30 shows the factor loadings of the measurement indicators ranging from 0.610 to 0.942. The indicators of each construct also show good efficacy for measuring the constructs, with average variance extracted (AVE) exceeding 0.50 and the Cronbach alpha value and the composite reliability achieving acceptable values, above 0.70 (Hair et al. 2010). All indicators are statistically significant with critical ratio (CR) values exceeding 1.96 as shown in Table 5.31.

Table 5. 30: Standardized measurement coefficients resulting from CFA

	Perceived Learning	Perceived Organizational Support	Transfer of Training	Job Satisfaction	Service Quality
Cronbach α	0.85	0.87	0.91	0.73	0.89
Composite reliability	0.86	0.88	0.91	0.73	0.88
Average variance extracted (AVE)	0.60	0.54	0.63	0.58	0.65
Item abbreviation					
PL1	0.731				
PL2	0.827				
PL3	0.726				
PL4	0.812				
POS1		0.696			
POS2		0.744			
POS3		0.836			
POS4		0.818			
POS5		0.610			
POS8		0.691			
TOT1			0.750		
TOT2			0.777		
TOT3			0.777		
TOT4			0.825		
TOT5			0.864		
TOT6			0.752		
JS1				0.736	
JS3				0.785	
REL					0.875
RES					0.645
ASS					0.942
EMP					0.724

Notes: N = 222, $\chi 2$=259.603, df=197, $\chi 2$/df=1.318, CFI=0.98, RMSEA=.038, SRMR=.047. All item loading are significant ($p<0.001$)

Table 5. 31: Unstandardized Factor Loading Estimates

Indicator	Construct	Estimated loading	Standard Error	Critical Ratio (CR)
PL4	PL	1.000		
PL3	PL	0.879	0.079	11.186
PL2	PL	0.896	0.073	12.308
PL1	PL	0.773	0.070	11.091
POS4	POS	1.000		
POS3	POS	0.895	0.065	13.737
POS2	POS	0.840	0.072	11.752
POS1	POS	0.718	0.066	10.815
POS5	POS	0.754	0.079	9.485
POS8	POS	0.781	0.071	11.075
TOT6	TOT	1.000		
TOT5	TOT	1.168	0.088	13.332
TOT4	TOT	1.088	0.089	12.269
TOT3	TOT	1.142	0.099	11.501
TOT2	TOT	1.057	0.093	11.414
TOT1	TOT	0.907	0.082	11.120
JS3	JS	1.000		
JS1	JS	0.782	0.104	7.518
EMP	SQ	1.000		
ASS	SQ	1.255	0.096	13.041
RES	SQ	0.952	0.071	13.484
REL	SQ	1.109	0.088	12.664

Note: The significant level of factor loading is based on the value of Critical Ratio (CR). The minimum critical ratio value of 1.960 is required for the factor loading to be significant (Byrne 2010).

Table 5.32 shows that the square root of AVE of each construct exceeds the coefficient representing its correlation with other constructs and therefore indicating discriminant validity (Hair et al. 2010). For example, the square root AVE of the perceived learning construct (0.775) exceeds the intercorrelation between transfer of training and perceived learning (0.254). In addition, Table 5.32 shows the correlation matrix and descriptive statistics for the research variables in the model. The variable means (*M*) range from 5.36 to 6.04, while the standard deviations (*SD*) for the variables range from 0.59 to 0.84. Table 5.32 also depicts most of the correlations between the constructs are positive, with the values ranging from -0.003 to 0.655. This provides an initial test of the research hypotheses. All correlations were lower than 0.90 suggesting less probability of multicollinearity (Tabachnick & Fidell 2007) and that the measures are suitable for further analysis to test the proposed hypotheses.

Table 5. 32: Means, standard deviation, correlation matrix and square root of AVE.

Variable	*M*	*SD*	*PL*	*POS*	*TOT*	*JS*	*SQ*
PL	6.04	0.59	**0.775**				
POS	5.36	0.72	0.407***	**0.737**			
TOT	5.90	0.64	0.254**	0.269***	**0.792**		
JS	5.87	0.84	0.421***	0.655***	0.218*	**0.761**	
SQ	5.50	0.66	-0.003	0.172*	0.174*	0.068	**0.805**

Notes: PL = perceived learning; POS = perceived organizational support; TOT = transfer of training; JS = job satisfaction and SQ = service quality. The square root of AVE value mark with bold.
* = p<0.05 , ** = p<0.01 , *** = p<0.001

Overall, the discussion of this section provides evidence to support the validity of the measurement model, both for convergent and discriminant validity. In addition, the final measurement model fits relatively well and meets the requirements of several fits indices. Subsequently, it is now opportune to further examine the structural model's validity. In the next section, the test results of the proposed hypotheses are reported.

5.7 Structural model validity

Following the confirmation of the measurement model validity, the structural model is specified by assigning relationships from one construct to another based on the conceptual framework that was developed in Chapter 3 as shown below in Figure 5. The following hypotheses can now be tested:

H1: Perceived organizational support has a moderating effect on the relationship between perceived learning and transfer of training, specifically the association will be stronger with greater support from the organization.

H2: Transfer of training is positively related to service quality.

H3: Transfer of training is positively related to job satisfaction.

H4: Job satisfaction is positively related to service quality.

H5: The relationship between transfer of training and service quality is mediated by job satisfaction.

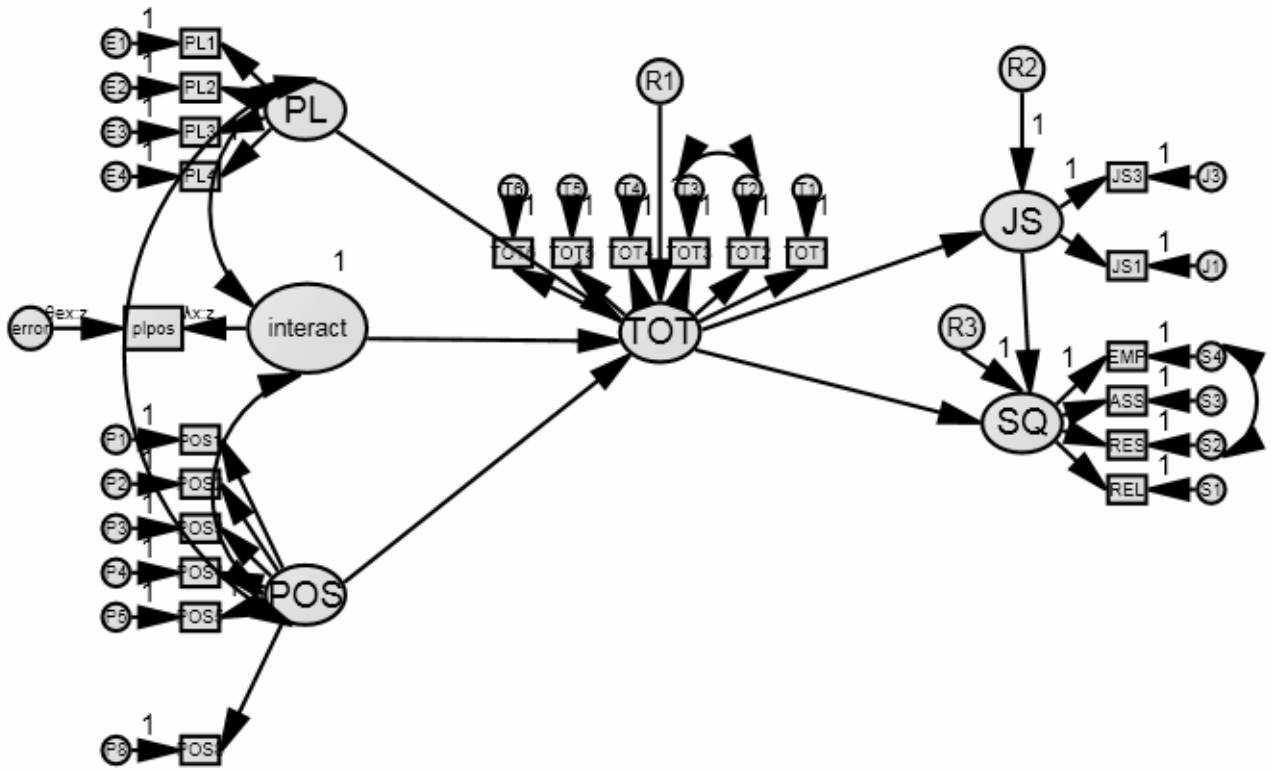

Figure 5: Structural model

The information in Table 5.33 shows that the structural model χ^2 is 350.754 with 220 degrees of freedom. The p-value associated with this result is 0.000. The normed χ^2 is 1.594. The normed χ^2 value is smaller than 2.0, which suggests an acceptable fit for the structural model. In addition to the normed χ^2 results, the value for the root mean square error of approximation (RMSEA) is 0.052, which does not exceed 0.08. The RMSEA value therefore provides additional support for model fit. The standardized root mean square residual (SRMR) also provides additional support for model fit with a value of 0.093, which does not exceed 0.10. The result of the comparative fit index (CFI) is 0.951, which exceeds the satisfactory cut-off value of 0.95 (Hair et al. 2010; Tabachnick & Fidell 2007; Williams et al. 2009). All the fit indices suggest a reasonable fit between the model and the data. Because of the reasonable fit, no model modification was attempted (Tabachnick & Fidell 2007). Although the modification indices (Appendix H) suggest additional paths to be added to the model to improve the model fit, recent researchers such as Williams et al. (2009) have argued this is not a good practice as models revised in this manner typically do not cross-validate well. Therefore, this study does not make other model modifications as the original model shows a relatively good fit of the data.

Table 5. 33: Structural model Goodness-of-Fit Statistics

Statistics	Value
Chi-square χ^2 (*p*-value)	350.754 (p<0.000)
Degree of freedom (*df*)	220
Normed Chi-square (χ^2 /*df*)	1.594
Root mean square error of approximation (RMSEA)	0.052
Comparative fit index (CFI)	0.951
Standardized root mean residual (SRMR)	0.093

As the structural model of this study manifests a relatively good fit of the data, the proposed hypotheses can be tested (Schumacker & Lomax 1996). Table 5.34 presents the estimated unstandardized and standardized structural path estimates. Hypothesis 1 predicted POS would moderate relationships between perceived learning and transfer of training. The result shows that the effect of the interaction between these two variables on transfer of training was not statistically significant (coefficient= -0.080, Critical Ratio=1.544), and therefore does not provide support for Hypothesis 1. However, the result shows that perceived learning (coefficient= +0.168, Critical Ratio=2.032, p<0.05) and

perceived organizational support (coefficient= +0.206, Critical Ratio=2.472, p<0.05) have a positive and significant effect on transfer of training.

The transfer of training variable has a significant positive impact on service quality (coefficient = +0.175, Critical Ratio=2.264, p<0.05), thus supporting Hypothesis 2. The effect of transfer of training on job satisfaction is also significant and positive (coefficient = +0.242, Critical Ratio=2.210, p<0.05), confirming Hypothesis 3. Hypothesis 4 predicted job satisfaction would have a positive relationship with service quality. The result shows that the relationship between these two variables is in the hypothesized direction (coefficient= +0.003). However, the relationship is not statistically significant (Critical Ratio=0.040) thereby Hypothesis 4 is not supported. Consequently, the fifth hypothesis, suggesting that the relationship between transfer of training and service quality is mediated by job satisfaction, is not supported (Baron & Kenny 1986).

Table 5. 34: Structural Parameter Estimates for Structural Model

Hypo-Thesis	Path	Unstandardized Parameter Estimate	Standard Error	Critical Ratio	Standardized Parameter Estimate
H1	PL ---> TOT	0.156	0.077	2.032	0.168
	POS ---> TOT	0.191	0.077	2.472	0.206
	plpos ---> TOT	-0.045	0.029	-1.544	-0.080
H2	TOT ---> SQ	0.171	0.075	2.264	0.175
H3	TOT ---> JS	0.285	0.129	2.210	0.242
H4	JS ---> SQ	0.003	0.069	0.040	0.003

Note: The significant level of the relationships was based on the value of Critical Ratio. The minimum critical ratio value of 1.960 was require for the relationship to be significant at p<0.05 (Byrne 2010).

Figure 6 illustrates the final model with parameter estimates, with only the parameter estimates for the significant paths being shown.

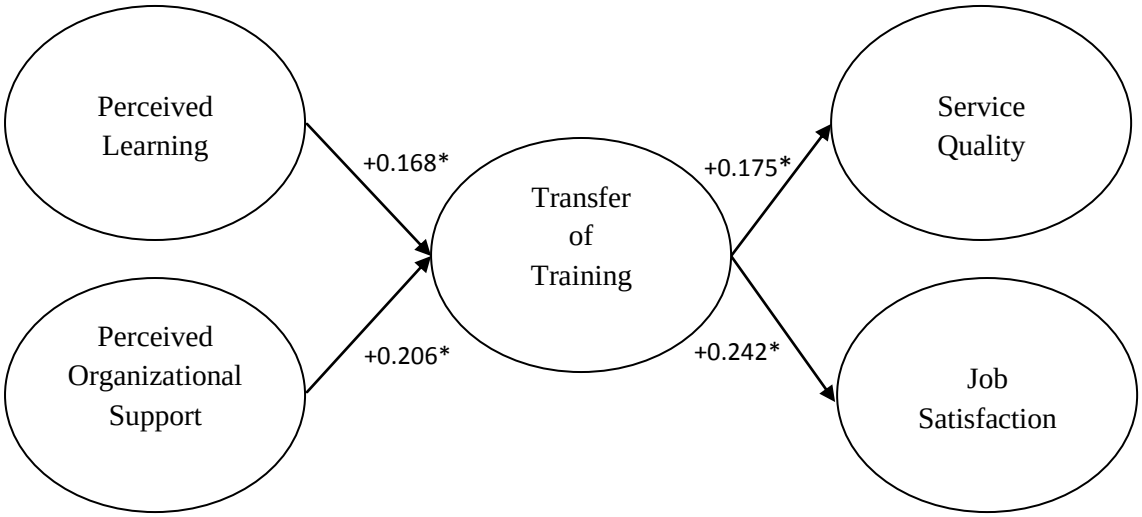

Figure 6: The Final Structural Model

Note: Model statistics: (χ^2=350.754, *df*=220, χ^2/*df*=1.594, CFI=.951, RMSEA=.052, SRMR=.093).
* = p < 0.05.

5.8 Conclusion

This chapter presents the results of the analyses of this study. The findings of this analysis confirm the validity of the constructs used in this study. The results from the structural model analysis indicate that the conceptual framework is partially supported by the data as summarized below in Table 5.35. The results further indicate that perceived organizational support has an important role as a predictor to transfer of training but not as a moderator as proposed in this study. The proposed relationship between transfer of training and service quality and job satisfaction is strongly supported by the data. However, the proposed relationship between job satisfaction and service quality is not supported by the data. A detailed discussion on the findings of this chapter is provided in the next Chapter 6. Through the discussion a number of conclusions are drawn and suggestions are made for management and future research.

Table 5. 35: Summary of the Hypotheses Tests

Hypotheses	Analysis Result	Finding
H1: Perceived organizational support has a moderating effect on the relationship between perceived learning and transfer of training, specifically the association will be stronger with greater support from the organization.	Not supported	1) Perceived organizational support has a positive and significant direct effect on transfer of training. 2) Perceived learning has a positive and significant direct effect on transfer of training.
H2: Transfer of training is positively related to service quality.	Supported	Transfer of training is positively and significantly related to service quality.
H3: Transfer of training is positively related to job satisfaction.	Supported	Transfer of training is positively and significantly related to job satisfaction.
H4: Job satisfaction is positively related to service quality.	Not supported	Job satisfaction is positively but not significantly related to service quality.
H5: The relationship between transfer of training and service quality is mediated by job satisfaction.	Not supported	The relationship between transfer of training and job satisfaction is significant but the relationship between job satisfaction and service quality is not significant.

Chapter 6

Discussion and conclusion

6.1 Introduction

This chapter discusses the results of the analysis presented in Chapter 5. The chapter begins with a brief review of the background of this study including the gaps that were identified in the literature, which provided the impetus for this study. Following this, the chapter presents an integrated discussion on the analysis results in Chapter 5, together with the hypotheses developed in Chapter 2 and the conceptual framework described in Chapter 3. The chapter also highlights the strengths of the thesis along with a discussion on the practical implications for the management of organizations. Finally, the chapter addresses the limitations of this study together with suggestions for future study. The chapter concludes with a summary of the thesis.

6.2 Background Context

The discussion of transfer of training in the literature has generally focused on identifying the factors that affect the transfer of training in the workplace. Researchers have identified a range of factors that affect transfer of training including supervisor support, peer support, organizational learning culture, motivation for transfer and many more factors as discussed previously in detail in the Chapter 2. However, the discussion of how employees' general belief that their work organization values their contribution and cares about their well-being (perceived organizational support), affects transfer of training has received less attention in the literature. One recent study has been conducted in this regard but it examined the effect of perceived organizational support on employee self efficacy,

learning orientation and motivation to transfer, rather than specifically on the transfer of training to the workplace (Chiaburu et al. 2010a). Through the examination of the impact of perceived organizational support on transfer of training, this study contributes to the research in this area. Specifically, this study investigates the moderating role of perceived organizational support on the relationship between perceived learning and transfer of training. Researchers such as Aguinis and Kraiger (2009) and Tan et al. (2003) have suggested the need for further research to investigate the potential moderators of the relationship between learning and transfer of training. Previous studies have investigated the moderating role of supervisor support, peer support and organizational continuous learning culture as moderating factors on the association (Tracey et al. 1995). Through the examination of perceived organizational support as a moderator between perceived learning and transfer of training, this research provides an additional perspective on understanding the transfer process in organizations.

Another important discussion in the literature that focuses on transfer of training examines the consequences of transfer of training on the employee. For example, Rouiller and Goldstein (1993) found transfer behavior is related to subsequent ratings of job performance in their study of assistant managers in a large franchise organization in the United States. Zayed (1994) found the application of learned knowledge and skills to the workplace enhanced teaching competencies of trainers in public organizations in Egypt. Another study by Noe and Schmitt (1986) of educators in the United States also indicated that the respondents' transfer behavior following training was significantly related to their performance improvement. Similarly, Leach and Liu (2004) found the application of knowledge and skills learned from training positively influenced a group of sales employees' selling performance and their work commitment. The study presented here adds to the discussion on this issue by investigating the consequences of transfer of training on employee service quality and job satisfaction. Through the investigation of consequences of transfer of training on employee service quality and job satisfaction, this study provides another perspective on the effect of transfer of training on employees.

It has been identified that many of the previous studies on transfer of training have been conducted in private sector organizations (Clarke 2002; Mohamed 1994; Schumaker 2004) that are based in the Western context (Klink et al. 2001; Subedi 2004; Velada et al. 2007). Although these earlier empirical studies were instrumental in shaping our understanding of

transfer of training related issues, it is not enough to understand transfer of training in other contexts. Researchers such as Rees et al. (2010) and Wicramasinghe (2006) have suggested conducting studies in different contexts to test the applicability of management concepts including transfer of training that have been mostly developed in Western context. To address this issue, this study is based on public sector employees in Malaysia, a developing country in Southeast Asia.

The significant effect of job satisfaction on service quality has been empirically justified by a number of studies (e.g., Kim et al. 2009; Lee et al. 2006; Yee et al. 2008; Malhotra & Mukherjee 2004; Gazzoli et al. 2010; Bradford et al. 2009; Wangenheim et al. 2007). However, the understanding of this link is limited to the context of service organizations that are business oriented such as hotels, banks and restaurants. Previous studies also tend to measure service quality from the perspective of external customers, which has a number of limitations as discussed in previous Chapter 2. This study adds to the discussion by investigating the relationship between job satisfaction and service quality in the context of public sector organizations, using internal customers (i.e. employees' colleagues) as respondents to measure service quality.

The above review highlights the gaps that were identified in the literature. To help address these gaps, a conceptual framework has been developed that includes factors that were identified to influence transfer of training and also manifested themselves as the consequences of transfer of training on employees. Specifically, the conceptual framework proposed that perceived organizational support would moderate the relationship between perceived learning and transfer of training. At this point it was proposed that transfer of training would have a direct impact on service quality and job satisfaction and job satisfaction would reciprocate by influencing service quality.

This thesis makes five contributions and particularly to the transfer of training literature. First, this study investigates and empirically tests the moderating role of perceived organizational support on the relationship between perceived learning and transfer of training. Second and third, this study is the first study to investigate the consequences of transfer of training on service quality and job satisfaction, particularly from the perspective of public sector organizations in Malaysia. Fourth, this study will further lead to a better understanding of the association between job satisfaction and service quality in the context

of public sector organizations. Fifth, this study extends the understanding of transfer of training issues as they relate to the factors that affect employees in a non-Western context, i.e. Malaysia, a developing country in Southeast Asia.

6.3 Discussion of Findings

6.3.1 Perceived organizational support as a moderator in the relationship between perceived learning and transfer of training

The conceptual framework developed in this study predicted that perceived organizational support will moderate the relationship between perceived learning and transfer of training. This study argued that the relationship between perceived learning and transfer of training will be stronger with greater organizational support received by employees. This assumption is in line with other researchers such as Goldstein and Ford (2002) who suggested that although learning impacts on transfer of training, the intensity of the transfer of training will be based on the characteristics of employees' work environment.

However, this prediction was not supported by the analysis. One possible explanation could be the employees in public sector organizations in Malaysia regard the support from the organization as the primary factor rather than as a supplementary factor that influences them in applying the new learned knowledge, skills and attitudes to their workplace. This is based on the analysis result showing that perceived organizational support has the same role with perceived learning while also being a significant predictor to transfer of training. This result suggests employees who have positive perceptions that their organization values their contribution and care about their well-being, positively applied the knowledge, skills and attitudes that they learned in training to their workplace following the training. This is consistent with the cultural orientation of the Malaysian people where people are interdependent within their groups, which in this case is their organization (Merriam & Mohamad 2000). It means that any action taken by the organization can affect the attitude and behavior of people inside the organization. Previous studies in similar contexts to this study revealed the attitude of the organizational agents such as supervisors is an important factor that enhances the employee motivation to transfer what they have learned in training to their job (Baharim 2008).

The significant result between perceived organizational support and transfer of training is an important finding that has not been empirically determined previously in training literature, which extends the research by Chiaburu et al. (2010a) who found a positive relationship between perceived organizational support and employee training self-efficacy and motivation to transfer. This finding provides support for the social exchange approach, suggesting that where employees perceive the support from their organization, then feel an obligation to engage with behaviors that benefit the organization (Byrne et al. 2011; Eisenberger et al. 2001) and are also willing to expend more effort to fulfill their needs and organizational goals (Marler et al. 2009). Such feelings or attitudes encourage employees to return their employers' training investment by applying the training outcomes to their job to achieve better performance.

Additionally, the result of this study suggests that perceived learning is positively related to transfer of training, which is consistent with previous research that indicated employees who learned and gained new knowledge, skills and attitudes from the training they have attended are able to transfer the new learned knowledge, skills and attitudes to the workplace (Ford et al. 1998; Marler et al. 2006; Tziner et al. 2007). The findings presented here provide additional empirical evidence to the literature. The use of a sample drawn from the Malaysian public sector provides cross-validation of past empirical findings related to the positive effect of learning on transfer of training that previously has looked at respondents in a Western private sector setting.

Another possible explanation related to the insignificant result of the moderating effect of perceived organizational support on the perceived learning—transfer of training relationship is the interaction of other work environment factors that can influence the transfer process after the learning intervention occurred. For example, the opportunity provided by the organization for transferring the learning and the related support from an employee's supervisor are two factors that may also influence how the transfer of training is effected (Goldstein & Ford 2002). The perception of employees that they will get the opportunity and support from their supervisor to apply the new learned knowledge, skills and attitudes on their job, could enhance their motivation to learn and master the learning content and subsequently demonstrate positive transfer of training (Bezuijen et al. 2010; Seyler et al. 1998).

Another factor that might influence the transfer process after the learning intervention in the public sector organizations is the existence of a continuous learning culture (Tracey et al. 1995). An employee who works in an organizational culture that encourages employees to be involved in decision-making processes and provides positive reinforcement when they apply the new learned knowledge and skills is likely to gain better knowledge and skills from the learning intervention they attended than an employee who works in an organization lacking a learning culture (Kontoghiorghes 2001a).

The above explanations warrant more investigation in future research. More specifically, while the moderating effect of perceived organizational support was found to be statistically not significant in the current research context (i.e. the public sector organizations in Malaysia), the question arises as to whether this factor would have a significant moderating effect in other workplace settings (i.e. public sector organizations in other countries and private sector organizations). This could be possibly due to different organizations having different types of leadership behaviors and management styles (Eisenberger et al. 1986). For example, the top management of varied organizations may apply different approaches in demonstrating their trust, respect, dignity and recognition to their employees. The management of different organizations also may have different perspectives in considering their employees' opinions in decision-making processes. Research shows that such leadership attributes will affect employees' perceptions of the organization (Allen et al. 2003; Byrne et al. 2011; Rhoades & Eisenberger 2002).

In addition, the cultural gap that has been noticeable between countries (Hofstede & Hofstede 2005), could also influence the individual's perceived organizational support (Zhang et al. 2011), their behavior and attitude toward training (Hassi & Storti 2011) and also influence an organization's work culture and practices (Abdullah 1992; Hofstede 1984). Furthermore, the different effects between the public and private sectors organizations on transfer of training have also been noted (Chen et al. 2006; Holton et al. 2003; Yamnill & McLean 2005) as the two types of organizations are significantly different in terms of organizational goals and systems, work values and work motivation (Buelens & Broeck 2007). Therefore, further study is essential to examine the moderating effect of perceived organizational support on the relationship between perceived learning and transfer of training to validate the finding of this study in different contexts.

6.3.2 Consequences of transfer of training on service quality and job satisfaction

The conceptual framework developed in this study further predicted that transfer of training would have a direct and positive relationship with service quality. This study argues that employees who apply the knowledge, skills and attitudes that they learned in training to their workplace, will be able to demonstrate quality service to their customers.

The results from analysis of the data indicate that a significant and positive relationship exists between transfer of training and service quality. The findings support the proposed model of the consequences of transfer of training in terms of contributing to employee service quality. This result suggests that the application of knowledge, skills and attitudes that are learned from training can facilitate employees to perform the promised service dependably and accurately (reliability), create positive willingness to help their colleagues (internal customer) and provide prompt service (responsiveness), improve the knowledge and courtesy of employees and their ability to inspire trust and confidence (assurance) and heighten the employees' caring and individualized attention toward their colleagues (internal customer) in the organization (empathy). The finding is another important outcome that has not been empirically determined previously in training literature, which suggests beneficial performance outcomes of positive transfer of training. This finding responds to calls for research on the influence of transfer of training on employee performance and helps to clarify and support previous research indicating that the improvement in employees' performance can be achieved by implementing in the workplace knowledge, skills and attitudes learned from training (Leach & Liu 2004; Noe & Schmitt 1986; Rouiller & Goldstein 1993; Zayed 1994). Specifically, this study extends the literature by providing empirical evidence that transfer of training has a positive impact on employee service quality in the context of the public sector.

In addition, the conceptual framework of this study predicted that transfer of training would have a direct and positive relationship with job satisfaction. The results of the analysis presented here indicate that a significant and positive relationship exists between transfer of training and job satisfaction. This provides support for the conceptual framework of this study implying that when employees have positively used and applied the knowledge, skills and attitudes that they learned from training, it subsequently affects

their satisfaction toward their job. The finding provides empirical evidence on the positive impact of transfer of training on employee job satisfaction, as expected by recent researchers such as Chen (2010). The application of the new learned knowledge, skills and attitudes enhance the employees' ability to do a variety of tasks. Previous studies have indicated that employees who feel that they have sufficient knowledge and skills to do a variety of jobs show higher levels of job satisfaction (Allen & Velden 2001). The finding presented here extends the research by Leach and Liu (2004) who found positive transfer of training significantly and positively influences employee commitment toward the organization.

6.3.3 Job satisfaction as a mediator in the relationship between transfer of training and service quality

As presented in the conceptual model the transfer of training was expected to have a positive relationship with job satisfaction and job satisfaction was predicted to have a positive relationship with service quality. These perspectives are necessary and would be sufficient to establish a mediation effect (Kenny et al. 1998). Accordingly, this study proposed that job satisfaction would mediate the transfer of training and service quality relationship.

However, this prediction was not supported by the analysis. Although the results of the data analysis have revealed a significant and positive link between transfer of training and job satisfaction, it also found that job satisfaction is positively but not significantly related to service quality of employees in the Malaysian public sector organizations context. In other words, the results suggest that while the application of knowledge, skills and attitudes gained from training to the workplace has a positive impact on employee job satisfaction, the level of employee job satisfaction does not contribute significantly to the quality of service they provided to their customers. The non-significant relationship between job satisfaction and service quality is quite contrary to previous research findings (e.g., Kim et al. 2009; Lee et al. 2006; Yee et al. 2008; Malhotra & Mukherjee 2004; Gazzoli et al. 2010; Bradford et al. 2009; Wangenheim et al. 2007) who have found significant and positive links between job satisfaction and service quality. One possible explanation for the non-significant relationship between job satisfaction and service quality

reported here is the potential presence of other important variables which may also impact on the Malaysian public sector employee service quality. It could be that particular organizational practices might contribute a greater influence on the quality of service provided by public sector employees in Malaysia rather than the characteristics of the employees. For example, human resource practices such as competency-based career development (Azmi et al. 2009) and competency-based pay (Azmi et al. 2008) are two areas in the organizational environment that could influence the level of service quality.

The competency-based career development practice was applied in the Malaysian public sector to ensure each employee has sufficient competencies in performing their current tasks, and at the same time to prepare them for future tasks or positions (Azmi et al. 2009). This practice is implemented in this context through activities such as conducting career development programs to gauge employees' potential, strengths and weaknesses, developing job assignments for employees to improve their performance in their existing jobs, providing training to preparing employees to advance to other assignments in the future as well as providing structured mentoring program for them (Azmi et al. 2009). Such activities may have a greater impact on employees compared to the effect of job satisfaction, due to the activities enhancing employees' self-development, motivation and job competencies, which in turn would enable them to do their tasks better (i.e. providing quality service to their customers). Similarly, the implementation of competency-based pay could influence the level of employees' service quality in this context more than job satisfaction. Competency-based pay is a practice that rewards employees' based on their capabilities and competencies (Azmi et al. 2008). The implementation of this practice will encourage employees to continuously involve in development activities provided by their organization, in order to enhance their job capability and competency, and as a consequence, their job performance (i.e. quality service) can be improved.

Future study may account for these factors, especially in investigating the factors that influence service quality. These factors are not considered in this study due to its focus on investigating the consequences of transfer of training on employees' performance and work attitude. In fact, the impacts of both factors on service quality in the Malaysian public sector context have been verified by a number of studies (e.g., Azmi et al. 2008; Azmi et al. 2009).

Alternatively, the non-significant relationship between job satisfaction and service quality might simply mean the relationship is mediated by other variables (Judge, Thoresen, Bono & Patton 2001). In other words, there is another intervening factor between job satisfaction and service quality. For example, the role of organizational commitment may have some influence in this relationship that is not accounted for in the model. In a study by Testa (2001) it was found that job satisfaction had a significant effect on employees' service effort through the employee organizational commitment. Another study suggested that job satisfaction might have an effect on customer evaluation of service delivery (e.g., customer satisfaction, service quality) through the employees' prosocial service behaviors such as extra-role customer service (Bettencourt & Brown 1997). Both examples show that the impact of job satisfaction on service quality may be mediated by other employee characteristics factor. Therefore, future study might consider the mediating factor when investigating the effect of job satisfaction on employees' performance outcomes.

Finally, this study utilized the views of internal customers in assessing the level of service quality provided by the employees in question, rather than those of external customers as seen in a number of other studies (e.g., Kim et al. 2009; Wangenheim et al. 2007; Yee et al. 2008). It has been noted previously that the views provided by external customers and internal customers could be different in assessing the quality of service provided by employees (Bowen & Schneider 1988; Lai 2006). As described in Chapter 2, the duration of time and opportunity to evaluate service quality performance are two indicators that contribute to the different views between internal and external customers. In the context of this study, the assessment of internal customers (i.e. employees' colleagues) on service quality may be lower than the assessment provided by external customers because they received service from those employees (who participated in training) regularly and have adequate opportunity to observe the employees' overall service attributes. Conversely, the assessment of service quality provided by external customers could be higher due to they may rely heavily on tangible aspects (e.g., physical setting of the organization and the appearance of the employees), as the time and opportunity to look at overall employees service attributes are limited. The potential different assessment score given by internal and external customers could affect the strength of the relationship between job satisfaction and service quality. However, further research is necessary to determine the stability of this assumption. Therefore, perhaps the different perspective on service quality utilized in this study accounts for the contrary result presented here.

6.3.4 Malaysian Public Sector as the Context of the study

The development of public sector employees has received significant attention by the Malaysian government in recent years. Providing adequate training is perceived by the government as a mechanism to produce highly competent employees who demonstrate a high level of integrity. This strategy should help the government to achieve the mission to upgrade Malaysia as a developed country by 2020. Therefore, it is highly relevant to examine the relationship between training and the different positive outcomes desired in this context. As noted previously, a number of authors have stated that human resource management practices vary between Western and non-Western, and between public and private sector organizations.

In general, the employees of the public sector in Malaysia appear to have a close relationship with their organization or sector including their colleagues and those at the managerial or executive level. The employees in this context have recognized the support from their organization as an important and valuable factor that can influence their attitude and behavior toward their job (Abdullah 1992; Schermerhorn 1994). Therefore, one of the aims of this study was to investigate how this perceived organizational support influences employees in regard to transferring to the workplace, the knowledge, skills and attitudes that they have learned in training. This study has clearly identified that employees who consider their organization as supportive in term of recognizing their contribution and caring about their well being, have demonstrated positive outcomes following the training by transferring what they have learned in training to their workplace.

The quality of service provided by public sector employees is also the major focus of the Malaysian government. The government has emphasized this aspect to ensure that each new policy initiative, including those relating to important areas of development such as education, health, welfare and security, which is introduced by the government can be implemented as smoothly and efficiently as planned.

Another focus of the Malaysian government is the general satisfaction of public sector employees. The government has continuously made adjustments to their benefits and welfare in order to make the prospect of employment in the public sector as attractive as possible. By providing important benefits the public sector can attract and retain talented staff and improve the level of satisfaction of existing staff. It is assumed that highly

satisfied employees will deliver positive and desirable outcomes to the organization such as providing quality service to the people. Therefore, evaluating the effect of transfer of training on service quality and job satisfaction among employees in this context should help managers in such organizations to better understand how the role of training works for them. The quantitative analysis of the survey results has revealed that the application of newly gained knowledge, skills and attitudes post-training is positively and significantly linked to public sector employees' service quality and job satisfaction.

By examining the influence of perceived organizational support on transfer of training and the consequences of transfer of training on employees' service quality and job satisfaction, this study provides useful insights about training practices in Malaysia's public sector in general.

6.4 Strengths of the Research

One limitation that is cited in many studies of the transfer of training is that the data is collected from one source—using the same respondents to gain data on variables of interest (e.g., Chiaburu et al. 2010a; Chiaburu & Lindsay 2008; Jodlbauer et al. 2012). This limitation may cause possible problems of common method variance that may inflate observed relationships between variables (Tracey et al. 1995; Velada et al. 2007), which subsequently will raise the question of the results' validity (Cheng & Ho 2001). However, by collecting data from multiple sources such as that done in this thesis such problems can be avoided (Blume et al. 2010; Burke & Hutchins 2007; Cascio 2011) and provide more robust analysis (Cheng & Ho 2001).

A second major strength of this study is that it examines simultaneously the effect of transfer of training variables (perceived learning and perceived organizational support) on transfer of training, and the consequences of transfer of training on employee service quality and job satisfaction, from an international context using Malaysian public sector employees as the sample of study. By integrating the factors influencing transfer of training and the consequences of transfer of training, this study can verify the role of transfer of training as an important mechanism that enhances the impact of training on employees. By studying a large cohort of employees who undertook the same training

activity, it is possible to build a more comprehensive picture of how the transfer of training is not only influenced by particular factors, but also how and under what conditions, it contributes to positive outcomes for the organization.

Third, the data of this study has been collected from employees of the public sector in Malaysia, a developing country in Southeast Asia. The findings from this study can prove valuable in expanding the scope of existing research studies on transfer of training at the international level. Currently there is a limited understanding of how the application of knowledge, skills and attitudes that are gained from training impacts on employee performance and work attitude in non-Western contexts. This study contributes to this understanding and provides empirical evidence for the positive effect of transfer of training on employee service quality and job satisfaction, in the context of Malaysian public sector organizations.

6.5 Theoretical Implications of the Research

This study provides empirical evidence of the direct effect of perceived organizational support on transfer of training, particularly in the Malaysian public sector context. The result supports the importance of perceived organizational support in producing positive work behavior and performance found in other studies (Lavelle et al. 2009; Maertz et al. 2007; Wayne et al. 1997) and demonstrates the applicability of this management concept to non-Western settings, and to the public sector more generally.

The study also extends the literature by providing empirical evidence of positive consequences of transfer of training on employee service quality and job satisfaction. To the knowledge of the researcher, no studies have been conducted previously to empirically examine those associations, particularly in the Malaysian public sector organizations context. Therefore, this study extends the discussion and understanding on factors that influence transfer of training and its impact on employee at non-Western context, which is public sector organizations in Malaysia, a developing country in Southeast Asia.

6.6 Practical Implications of the Research

Organizations make significant investments in training their staff to undertake tasks more efficiently and effectively. Providing training to staff has a number of other benefits as well, such as improving job satisfaction (Gould-Williams & Mohamed 2010) and employee loyalty (Huselid 1995). Due to the important investment decisions involved in planning and resourcing such training efforts, understanding how to maximize the positive outcomes is an important managerial need. It is important for managers to understand that there are a number of factors that influence how training is applied in the workplace over and above structural issues such as planning, organizing and budgeting for training.

How employees perceive the way the organization values them and their contribution to the workplace, and cares about their well-being is an important aspect that need attention from organizations. Such values and caring can be shown up by considering the employees' opinions, supporting their career goals, considering their welfare as a person and as an employee and providing support or help to them when they face a problem (Eisenberger et al. 1997). Organizations in which such support is evident and widely given should see better outcomes from the training they provide to employees and therefore greater returns on their training investment. From the study presented here it can be seen that high levels of support from the organization (e.g., valuing of employees' contributions and welfare) plays an essential role in the success of transfer of training in the workplace.

In regard to the training practice itself, organizations need to ensure that the employees do actually gain new knowledge and skills from a particular training activity they have attended, whether it is organized by the organization or an external entity. To this end it is important to ensure that the training program is relevant and related to their current job description and/or future job development, and it is facilitated by trainers who are both knowledgeable and experienced in a particular training content. The result of this study suggests that if the knowledge and skills gained from training has an essential contribution to make to the employee's job, they are more likely to apply this newly learned content to their workplace.

Furthermore, supervisors and managers should actively focus on, encourage and promote the transfer of training in their organization. The findings of this study show that the opportunity and ability of an employee to apply the new learned knowledge and skills at

the workplace is significantly related to both the employee's effectiveness in service delivery and their attitude towards the job. Thus, an ongoing evaluation of employees who have attended training programs including receiving feedback from their supervisors over time is strongly recommended to ensure that employees apply what they have learned. Including the transfer performance as one of the criteria of the employee's performance appraisal is one mechanism that can encourage employees to produce positive transfer of training.

Organizations should look for other ways to encourage employee to transfer their learned knowledge and skill in the workplace. Providing an opportunity for the employee to share their learned knowledge and skills with their colleagues during a departmental meeting, for example, can encourage them to review and practice what they have recently learned.

6.7 Limitations and Suggestions for Future Research

One limitation of this study is that the data were collected at one point of time, applying a cross-sectional design methodology. Although researchers such as Chiaburu and Lindsay (2008) indicate that this design is commonly used in training research, some view the collection of data at one point of time make it difficult to draw inferences of causality (Dysvik & Kuvass 2008) and limiting the explanatory power of the results (Gegenfurtner et al. 2009a). Therefore, undertaking a longitudinal study in this area would assist in validating the current findings. While beyond the scope of this study, a longitudinal designed study may provide more robust findings on which to base causal inferences (Chiaburu et al. 2010a; Lopez et al. 2006).

In addition, this study applies a quantitative research design where the data were collected through a questionnaire survey. Future studies should consider collecting deeper qualitative data from their respondents. The use of both qualitative and quantitative methods would provide an opportunity for more in-depth and richer explanations of why employees transfer the training outcomes to the workplace and how the transfer of training affects their job performance and work attitude (Brown et al. 2011).

There are also limitations that need to be placed on the generalizability of this study beyond the current organization where it was conducted. The data of this study was collected from public sector organizations in Malaysia and more specifically, the population that undertook the basic financial management training program. Clearly, replication is necessary to test the relationships reported here. Thus, future studies could replicate the proposed conceptual framework used here in other types of organizations such as private sector organizations or by using different training courses. As the factors associated with transfer of training can differ significantly between the public and private sectors organizations and across training types (Chen et al. 2006; Holton et al. 2003; Yamnill & McLean 2005), continued research across different organizational settings will only enhance the understanding of training in the workplace. This will help to build a greater understanding of the role of the proposed factors in affecting and sustaining application of training outcomes to the workplace and the consequences of this transfer of training on the employee. There is a myriad of different training content, forms (e.g., lecture, behavioral modeling) and purposes which may arouse different attitudes, and will likely have differing effects on the transfer of training (Gegenfurtner et al. 2009a; Mathieu & Martineau 1997). In addition, by testing the variables in different settings such as private sector organizations, a more consistent view of their functions on transfer of training and the impact of transfer of training on employees could be obtained (Cheng & Ho 2001).

In the present study, three observed indicators were used to measure job satisfaction. Future studies may use other established job satisfaction measurements that have more observed indicators such as that developed by Spector (1985). The non-significant relationship between job satisfaction and service quality found in this study can be further validated using such a job satisfaction measurement that contains more specific aspects of employee job satisfaction. This measurement was not used in this study because of the concern about the survey length. The length of questionnaire can affect the level of cooperation of people in responding to the questionnaire (Punch 2003).

Data regarding the employee transfer of training was obtained from the employee's immediate supervisor. Such evaluation should produce accurate information regarding the employee performance in transferring the learned knowledge, skills and attitudes into their job (Axtell et al. 1997). However, it is possible that the supervisor's assessment could be affected by a variety of factors associated with the supervisors themselves, including

personality traits, their personal and professional relationship with the employee, power struggles in the organization, conflicts and differing interests (Chiaburu et al. 2010b; Tziner 2002). If such biases exist, future research studies could improve this area by seeking feedback from multiple sources such as the employees, their supervisors and their peers in collecting data related to transfer of training to gain a more accurate assessment of employee's transfer of training (Endres & Kleiner 1990; Taylor, Russ-Eft & Taylor 2009). By receiving feedback from multiple sources the researcher can cross-validate the responses and look for personal biases from individual respondents.

This study has focused on the impact of transfer of training on employees and the quality of service they provide in public organizations in Malaysia. Due to the limited amount of research in the context, the results of this study can be regarded as tentative until further similar studies are conducted. Future study could re-examine the identified relationships in related context such as financial services organizations (e.g., banks, insurance company), professional services organizations (e.g., consulting, accounting firms) and hotels and utilities organizations in non-Western countries. The same elements in contrasting working environments may differentially impact on the transfer of training (Clarke 2002) and the nature of service quality provided by employees (Clemes et al. 2011).

As the context of this study was specially Malaysia, the culture of the society is highlighted by demonstrations of respect to leader and organization (Smith 2003). Due to the presence of such cultural norms in the research setting, it is possible that responses may have been subject to the effects of social desirability or other response biases. Although some effort has been taken by this study to reduce this social desirability bias by developing an anonymous survey (Evanschitzky et al. 2011), future research may expand the scope of study to other countries and may also adopt cross-cultural perspectives.

6.8 Summary

This study disseminates essential knowledge to enhance our understanding of the relationship between perceived learning, perceived organizational support, transfer of training, job satisfaction and service quality in a non-Western context, specifically in the Malaysian public sector. This study has also provided empirical evidence on the

importance of perceived organizational support as well as perceived learning to the success of transfer of training in the workplace. Employees who perceive that they have gained and learned new knowledge, skills and attitudes from the training they have attended, should be able to apply the new knowledge, skills and attitudes to their workplace following the training. Additionally, when employees perceive that their organization values their contribution highly and cares about their well being, this general perception can positively influence employees to apply to their workplace any knowledge, skills and attitudes that they have learned while undertaking training. Although the findings are limited to the context of public sector organizations in Malaysia, they can be a reference for other organizational types and assist them to maximize the outcomes from the training investment they make in their employees.

Furthermore, this study provides empirical evidence of the positive consequences of transfer of training on employee service quality and job satisfaction. Employees who apply what they have learned in training to their workplace are more likely to demonstrate high quality outcomes. In the context of this study these outcomes were manifested in the level of service quality they provide to other staff members. At the same time, by applying what they have learned in training to their workplace, employees are more likely to have higher levels of satisfaction with their job. This finding demonstrates that training can be regarded as an important input to organizations in order to enhance their employees' job performance and work attitude. In other words, through the positive transfer of training, organizations not only attain positive returns on their training investment but also improve the performance and the work attitude of the organization's employees.

Overall, the findings of this study extend our existing understanding of factors that influence transfer of training and the consequences of transfer of training on employees. From an organizational perspective it is important to provide effective learning experiences for employees and actively value and care for them and provide opportunities to apply what they have learned. These factors should enhance the successful transfer of training, which in turn can improve both the employees' level of service quality and personal job satisfaction.

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APPENDIX A:
AN OFFICIAL APPROVAL LETTER FROM THE DIRECTOR OF ECONOMIC PLANNING UNIT (EPU), MALAYSIA

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Tarikh:
Date: May 5, 2010

Abdul Rahim Bin Zumrah
126/10 Brooklyn Park
Marion Rd,
5032 Adelaide, Australia.
Email:

APPLICATION TO CONDUCT RESEARCH IN MALAYSIA

With reference to your application, I am pleased to inform you that your application to conduct research in Malaysia has been *approved* by the **Research Promotion and Co-Ordination Committee, Economic Planning Unit, Prime Minister's Department.** The details of the approval are as follows:

Researcher's name	:	**ABDUL RAHIM BIN ZUMRAH**
Passport No. / I. C No:		**820202-14-5739**
Nationality	:	**MALAYSIAN**
Title of Research	:	**"TRANSFER OF TRAINING: KEY FACTORS THAT AFFECT ITS AFFECTIVENESS AND ITS IMPACT TO EMPLOYEE' ATTITUDE AND BEHAVIORS"**

Period of Research Approved: **3 YEARS**

2. Please collect your Research Pass in person from the Economic Planning Unit, Prime Minister's Department, Parcel B, Level 1 Block B5, Federal Government Administrative Centre, 62502 Putrajaya and bring along two (2) passport size photographs. You are also required to comply with the rules and regulations stipulated from time to time by the agencies with which you have dealings in the conduct of your research.

3. I would like to draw your attention to the undertaking signed by you that you will submit without cost to the Economic Planning Unit the following documents:

a) A brief summary of your research findings on completion of your research and before you leave Malaysia; and

b) Three (3) copies of your final dissertation/publication.

4. Lastly, please submit a copy of your preliminary and final report directly to the State Government where you carried out your research. Thank you.

Yours sincerely,

(MUNIRAH ABD. MANAN)
For Director General,
Economic Planning Unit.
E-mail: munirah@epu.gov.my
Tel: 88725281
Fax: 88883961

ATTENTION

This letter is only to inform you the status of your application and **cannot be used as a research pass**.

APPENDIX B:
AN OFFICIAL APPROVAL LETTER FROM THE DIRECTOR OF NATIONAL INSTITUTE OF PUBLIC ADMINISTRATION (INTAN), MALAYSIA

INSTITUT TADBIRAN AWAM NEGARA (INTAN)
JABATAN PERKHIDMATAN AWAM MALAYSIA
BUKIT KIARA, JALAN BUKIT KIARA, 50480 KUALA LUMPUR
Tel: 03-20847777 (20 talian) http://www.intanbk.intan.my

Ruj. Tuan (*Your Ref*):
Ruj. Kami (*Our Ref*): INTAN PPKP:100-74/32(
Tarikh (*Date*): 12 March 2010
Tel: 03-20847372
Fax: 03-20921512
E-Mail: osk@intanbk.intan.my

Mr. Abdul Rahim Zumrah
School of Management
North Terrace Adelaide
University of South Australia
South Australia 5000
AUSTRALIA.

Dear Sir,

RESEARCH ON "FACTORS AFFECTING THE TRANSFER OF KNOWLEDGE AMONG PUBLIC SECTOR EMPLOYEES IN MALAYSIA"

I hereby refer to your letter dated 29th January 2010 regarding the above matter.

2. Please be informed that you may proceed to collect necessary data for your research in this institution. For further contact and arrangements, you can communicate with Mr. Mohamad Hamzi b. Abdul Azziz (Senior Programme Coordinator) either through phone (603-20847221) or e-mail to hamzi@intanbk.intan.my.

3. We also hope that you could share the findings of the research with this institution, if possible, as reference for future studies.

Thank you.

Yours sincerely,

(OOI SEONG KANG)
p.p. Director
National Institute of Public Administration (INTAN)
Public Service Department (PSD)
MALAYSIA.

APPENDIX C:
AN APPROVAL LETTER FROM THE UNIVERSITY OF SOUTH AUSTRALIA (UNISA) ETHICS COMMITTEE

Human Ethics: Application approved

no_reply@unisa.edu.au

To: Zumrah, Abdul Rahim - zumay001
Cc: ; ; - ;
Jie Shen

Tuesday, November 09, 2010 1:09 AM

Dear Applicant

Re: Ethics protocol "Transfer of training: Key factors affecting its effectiveness and its impact on employees' work attitude and behavior"

Thank you for submitting your ethics protocol for consideration. Your protocol has been considered by the E2 Committee Review Group. I am pleased to advise that your protocol has been granted ethics approval and meets the requirements of the National Statement on Ethical Conduct in Human Research. Please note that the E2 Committee Review Group's decision will be reported to the next meeting of the Human Research Ethics Committee for endorsement.

Please regard this email as formal notification of approval. Ethics approval is always made on the basis of a number of conditions detailed at http://www.unisa.edu.au/res/forms/docs/humanresearchethics_conditions.doc; it is important that you are familiar with, and abide by, these conditions. It is also essential that you conduct all research according to UniSA guidelines, which can be found at http://www.unisa.edu.au/res/ethics/default.asp

Please note, if your project is a clinical trial you are required to register it in a publicly accessible trials registry prior to enrolment of the first participant (e.g. Australian New Zealand Clinical Trials Registry http://www.anzctr.org.au/Survey/UserQuestion.aspx) as a condition of ethics approval.

Best wishes for your research.

Vicki Allen
Executive Officer
UniSA's Human Research Ethics Committee
CRICOS provider number 00121B
This is an automated email and cannot be replied to.
Please direct your query to the relevant person.

APPENDIX D:
QUESTIONNAIRE TO THE EMPLOYEES
(ENGLISH AND BAHASA MALAYSIA VERSIONS)

UNIVERSITY OF SOUTH AUSTRALIA
City West Campus, North Terrace, Adelaide, SA, 5000



Questionnaire A

INFORMATION TO THE RESPONDENT

Dear participant,

My name is ABDUL RAHIM ZUMRAH, a PhD candidate at the School of Management, University of South Australia, Australia. My research examines the factors that influence transfer of training and the impacts of transfer of training on employee in the Malaysian public sector. I would appreciate it if you would complete this survey. Your participation is the key to the success of this research.

The time to complete this survey is about 10 minutes. Please answer all the questions.

There is no right or wrong answer. You are expected to answer all the questions based on your experiences and perceptions.

All that information you provide will be treated confidentially, so please do not write down your name on this questionnaire.

Please put the complete questionnaire in the envelope provided, seal it and directly return it to the researcher.

If you have any question, please contact me at zumay001@mymail.unisa.edu.au for verification.

Thank you in advance.

Yours sincerely,

(ABDUL RAHIM ZUMRAH)

Part 1

Instruction: Please **CIRCLE** the following demographical information about yourself.

1. Gender:
a) Male
b) Female

2. Education:
a) Secondary school and below
b) Diploma / Certificate
c) Undergraduate
d) Master
e) Ph.D

3. Marital status:
a) Single
b) Married

Part 2

Instruction: Please **FILL IN** the following demographical information about yourself.

1. Please write your age in years here: ..... years old. (*For example: **50** years old*).

2. Please write your work experience in years here: ..... years. (*For example: **10** years*).

3. Please write the sector/department/ministry you are working below:

.....
*(For example: **Ministry of High Education**).*

Part 3

Instruction: Based on your experience of attending the "**Basic Financial Management training**" at National Institute of Public Administration Malaysia (INTAN) Malaysia, to what extent do you agree with the following statements. For each statement, please **CIRCLE ONLY ONE NUMBER** (1, 2, 3, 4, 5, 6 or 7) that corresponds to your opinion.

		Strongly disagree 1	Disagree 2	Slightly disagree 3	Neutral 4	Slightly agree 5	Agree 6	Strongly agree 7
1.	As a result of the training, I have substantially increased my knowledge on the topic.	1	2	3	4	5	6	7
2.	As a result of the training, I have developed new skills.	1	2	3	4	5	6	7
3.	The training has affected some of my attitudes concerning this topic area.	1	2	3	4	5	6	7
4.	As a result of the training, I have better conceptualization of what I already do on the job.	1	2	3	4	5	6	7

Part 4

Instruction: Based on your experience, to what extent do you agree with the following statements about your **job** in general. For each statement, please **CIRCLE ONLY ONE NUMBER** (1, 2, 3, 4, 5, 6 or 7) that corresponds to your opinion.

		Strongly disagree 1	Disagree 2	Slightly disagree 3	Neutral 4	Slightly agree 5	Agree 6	Strongly agree 7
1.	All in all I am satisfied with my job.	1	2	3	4	5	6	7
2.	In general, I don't like my job.	1	2	3	4	5	6	7
3.	In general, I like working here.	1	2	3	4	5	6	7

Part 5

Instruction: Based on your experience, to what extent do you agree with the following statements about your **organization** in general. For each statement, please **CIRCLE ONLY ONE NUMBER** (1, 2, 3, 4, 5, 6 or 7) that corresponds to your opinion.

		Strongly disagree 1	Disagree 2	Slightly disagree 3	Neutral 4	Slightly agree 5	Agree 6	Strongly agree 7
1.	My organization cares about my opinions.	1	2	3	4	5	6	7
2.	My organization really cares about my well being.	1	2	3	4	5	6	7
3.	My organization strongly considers my goals and values.	1	2	3	4	5	6	7
4.	Help is available from my organization when I have a problem.	1	2	3	4	5	6	7
5.	My organization would forgive an honest mistake on my part.	1	2	3	4	5	6	7
6.	If given the opportunity, my organization would take advantage of me.	1	2	3	4	5	6	7
7.	My organization shows very little concern for me.	1	2	3	4	5	6	7
8.	My organization is willing to help me when I need a special favour. .	1	2	3	4	5	6	7

Your cooperation is needed to ensure all the above statements have been answered in each page. Your cooperation is highly appreciated.
Thank You.

UNIVERSITY OF SOUTH AUSTRALIA
City West Campus, North Terrace, Adelaide, SA, 5000

Soal selidik A

MAKLUMAT KEPADA PESERTA KAJIAN

Tuan/puan,

Saya ABDUL RAHIM ZUMRAH, pelajar PhD di Fakulti Pengurusan, University of South Australia, Australia. Kajian saya adalah untuk mengenalpasti faktor-faktor yang mempengaruhi pemindahan latihan dan kesan pemindahan latihan ke atas para pekerja sektor awam di Malaysia. Jasa baik tuan/puan adalah diperlukan untuk melengkapkan soal selidik ini kerana penglibatan tuan/puan adalah kunci kepada kejayaan kajian ini.

Anggaran masa untuk menjawab semua soalan di dalam soal selidik ini adalah lebih kurang 10 minit. Sila jawab semua soalan di dalam soal selidik ini.

Tiada jawapan yang benar atau salah. Tuan/puan diminta untuk menjawab soalan-soalan di dalam soal selidik ini berdasarkan pengalaman dan persepsi tuan/puan.

Segala maklumat yang diberikan adalah dianggap sulit. Tuan/puan diminta untuk tidak menulis nama tuan/puan pada soal selidik ini.

Sila masukkan soal selidik yang telah sempurna dijawab ke dalam sampul surat yang disediakan, lekatkan pembuka sampul surat tersebut dan kembalikan semula terus kepada saya.

Sekiranya tuan/puan mempunyai persoalan berkaitan soal selidik ini, sila hubungi saya di ..... atau email: zumay001@mymail.unisa.edu.au

Terima kasih.

Yang benar,

(ABDUL RAHIM ZUMRAH)

Bahagian 1

Arahan: Sila **BULATKAN** maklumat berkaitan latar belakang tuan/puan bagi setiap pernyataan di bawah.

1. Jantina:
a) Lelaki
b) Perempuan

2. Pendidikan:
a) SPM
b) Diploma / Sijil
c) Ijazah Sarjana Muda
d) Sarjana/ Master
e) PhD

3. Status perkahwinan:
a) Bujang
b) Berkahwin

Bahagian 2

Arahan: Sila **ISIKAN** maklumat latar belakang tuan/puan diruangan yang disediakan.

1. Umur: ..... tahun. (*Contoh: **50** tahun*).

2. Pengalaman kerja: ..... tahun. (*Contoh: **10** tahun*).

3. Sila nyatakan sektor, jabatan atau kementerian di mana tuan/puan bertugas sekarang di bawah:

   .....
   *(Contoh: **Kementerian Kewangan**).*

Bahagian 3

Arahan: Berdasarkan pengalaman tuan/puan menghadiri kursus-kursus latihan, anjuran Institut Tadbiran Awam Negara (INTAN), sila berikan penilaian tuan/puan terhadap pernyataan di bawah. Bagi setiap pernyataan, sila **BULATKAN HANYA SATU NOMBOR** (1, 2, 3, 4, 5, 6 atau 7)berdasarkan penilaian tuan/puan.

		Sangat tidak setuju 1	Tidak setuju 2	Agak tidak setuju 3	Neutral 4	Agak setuju 5	Setuju 6	Sangat setuju 7
1.	Setelah menghadiri kursus tersebut, saya dapat meningkatkan pengetahuan tentang topik-topik yang diajar di dalam kursus berkenaan.	1	2	3	4	5	6	7
2.	Setelah menghadiri kursus tersebut, saya mendapat kemahiran baru.	1	2	3	4	5	6	7
3.	Kursus tersebut memberi kesan kepada sikap saya terhadap topik yang diajar.	1	2	3	4	5	6	7
4.	Setelah menghadiri kursus tersebut, saya dapat memahami dengan baik tentang aspek-aspek kerja yang saya lakukan dalam kerja saya.	1	2	3	4	5	6	7

Bahagian 4

Arahan: Sila berikan penilaian terhadap pekerjaan semasa tuan/puan. Bagi setiap pernyataan, sila **BULATKAN HANYA SATU NOMBOR** (1, 2, 3, 4, 5, 6 atau 7)berdasarkan penilaian tuan/puan.

		Sangat tidak setuju 1	Tidak setuju 2	Agak tidak setuju 3	Neutral 4	Agak setuju 5	Setuju 6	Sangat setuju 7
1.	Secara keseluruhan, saya berpuas hati dengan pekerjaan semasa saya.	1	2	3	4	5	6	7
2.	Secara amnya, saya tidak menyukai pekerjaan semasa saya.	1	2	3	4	5	6	7
3.	Secara amnya, saya suka bekerja di sini.	1	2	3	4	5	6	7

Bahagian 5

Arahan: Berdasarkan pengalaman tuan/puan sebagai pekerja, sila berikan penilaian terhadap organisasi di mana tuan/puan bertugas sekarang. Bagi setiap pernyataan, sila **BULATKAN HANYA SATU NOMBOR** (1, 2, 3, 4, 5, 6 atau 7)berdasarkan penilaian tuan/puan.

		Sangat tidak setuju 1	Tidak setuju 2	Agak tidak setuju 3	Neutral 4	Agak setuju 5	Setuju 6	Sangat setuju 7
1.	Organisasi saya memberi perhatian terhadap pandangan saya.	1	2	3	4	5	6	7
2.	Organisasi saya mengambil berat tentang kebajikan saya.	1	2	3	4	5	6	7
3..	Organisasi saya amat mempertimbangkan matlamat dan nilai murni saya.	1	2	3	4	5	6	7
4.	Organisasi saya sedia membantu apabila saya mempunyai masalah.	1	2	3	4	5	6	7
5.	Organisasi saya akan memaafkan kesilapan yang tidak disengajakan oleh saya.	1	2	3	4	5	6	7
6.	Jika diberi kesempatan, organisasi saya akan mengeksploitasi saya.	1	2	3	4	5	6	7
7.	Organisasi saya kurang mengambil berat mengenai saya.	1	2	3	4	5	6	7
8.	Organisasi saya akan membantu saya ketika saya memerlukan pertolongan tertentu.	1	2	3	4	5	6	7

Kerjasama tuan/puan amat diperlukan untuk memastikan agar kesemua soalan di dalam soal selidik ini telah dijawab. Jasa baik tuan/puan di atas perkara ini amat dihargai dan diucapkan jutaan terima kasih.
Terima kasih.

APPENDIX E:
QUESTIONNAIRE TO THE EMPLOYEES' SUPERVISOR (ENGLISH AND BAHASA MALAYSIA VERSIONS)

UNIVERSITY OF SOUTH AUSTRALIA
City West Campus, North Terrace, Adelaide, SA, 5000



Questionnaire B

INFORMATION TO THE RESPONDENT

Dear participant,

My name is ABDUL RAHIM ZUMRAH, a PhD candidate at the School of Management, University of South Australia, Australia. My research examines the factors that influence transfer of training and the impacts of transfer of training on employee in the Malaysian public sector. I would appreciate it if you would complete this survey. Your participation is the key to the success of this research.

In your envelope, there are two sets of questionnaires:

Set (B) is for you to complete in your role as a supervisor of Employee A.

Set (C) is to be completed by the subordinates in your sector/department/ministry.

Please pass on the questionnaire to 5 employees who are working closely with Employee A.

The time to complete this survey is about 10 minutes. Please answer all the questions.

There is no right or wrong answer. You are expected to answer all the questions based on your experiences and perceptions.

All that information you provide will be treated confidentially, so please do not write down your name on this questionnaire.

Please put the complete questionnaire in the envelope provided, seal it and directly return it to the researcher.

If you have any question, please contact me at zumay001@mymail.unisa.edu.au for verification.

Thank you in advance.

Yours sincerely,

(ABDUL RAHIM ZUMRAH)

Part 1

Instruction: Please **CIRCLE** the following demographical information about yourself.

1. Gender:
a) Male
b) Female

2. Education:
a) Secondary school and below
b) Diploma / Certificate
c) Undergraduate
d) Master
e) Ph.D

3. Marital status:
a) Single
b) Married

Part 2

Instruction: Please **FILL IN** the following demographical information about yourself.

1. Please write your age in years here: ..... years old. (*For example: **50** years old*).

2. Please write your work experience in years here: ..... years. (*For example: **10** years*).

3. Please write the sector/department/ministry you are working below:

   .....

   *(For example: **Ministry of High Education**).*

Part 3

Instruction: Please provide your comments on Employee A's performance regarding the application of the knowledge and skills learned from the "Basic Financial Management" training programs, organized by National Institute of Public Administration Malaysia (INTAN) Malaysia. For each statement, please **CIRCLE ONLY ONE NUMBER** (1, 2, 3, 4, 5, 6 or 7) that corresponds to your opinion.

		Strongly disagree 1	Disagree 2	Slightly disagree 3	Neutral 4	Slightly agree 5	Agree 6	Strongly agree 7
1.	Using the new knowledge and skills acquired from the training has helped him/her improve his/her work.	1	2	3	4	5	6	7
2.	He/she can accomplish his/her job tasks faster than before training.	1	2	3	4	5	6	7
3.	He/she has accomplished his/her job tasks faster than before training.	1	2	3	4	5	6	7
4.	He/she can accomplish the job tasks better by using new knowledge and skills acquired from the training course.	1	2	3	4	5	6	7
5.	The quality of his/her work has improved after using new knowledge and skills acquired from the training course	1	2	3	4	5	6	7
6.	He/she makes fewer mistakes in the job activities when using the new knowledge and skills that learned in training	1	2	3	4	5	6	7

Your cooperation is needed to ensure all the above statements have been answered in each page. Your cooperation is highly appreciated.
Thank You.

UNIVERSITY OF SOUTH AUSTRALIA
City West Campus, North Terrace, Adelaide, SA, 5000



Soal Selidik B

MAKLUMAT KEPADA PESERTA KAJIAN

Tuan/puan,

Saya ABDUL RAHIM ZUMRAH, pelajar PhD di Fakulti Pengurusan, University of South Australia, Australia. Kajian saya adalah untuk mengenalpasti factor-faktor yang mempengaruhi pemindahan latihan dan kesan pemindahan latihan ke atas para pekerja sektor awam di Malaysia. Jasa baik tuan/puan adalah diperlukan untuk melengkapkan soal selidik ini kerana penglibatan tuan/puan adalah kunci kepada kejayaan kajian ini.

Di dalam sampul surat ini terdapat 2 set soal selidik:
Set (B) adalah untuk dijawab oleh tuan/puan sebagai penyelia kepada pekerja A.
Set (C) adalah untuk dijawab oleh pekerja-pekerja di sektor, jabatan atau kementerian tuan/puan. Sila edarkan soal selidik Set (C) ini kepada 5 orang pekerja yang kerap berurusan dengan pekerja A.

Anggaran masa untuk menjawab semua soalan di dalam soal selidik ini adalah lebih kurang 10 minit. Sila jawab semua soalan di dalam soal selidik ini.

Tiada jawapan yang benar atau salah. Tuan/puan diminta untuk menjawab soalan-soalan di dalam soal selidik ini berdasarkan pengalaman dan persepsi tuan/puan.

Segala maklumat yang diberikan adalah dianggap sulit. Tuan/puan diminta untuk tidak menulis nama tuan/puan pada soal selidik ini.

Sila masukkan soal selidik yang telah sempurna dijawab ke dalam sampul surat yang disediakan, lekatkan pembuka sampul surat tersebut dan kembalikan semula terus kepada saya.

Sekiranya tuan/puan mempunyai persoalan berkaitan soal selidik ini, sila hubungi saya di ..... atau email: zumay001@mymail.unisa.edu.au

Terima kasih.

Yang benar,

(ABDUL RAHIM ZUMRAH)

Bahagian 1

Arahan: Sila **BULATKAN** maklumat berkaitan latar belakang tuan/puan bagi setiap pernyataan di bawah.

1. Jantina:
a) Lelaki
b) Perempuan

2. Pendidikan:
a) SPM
b) Diploma / Sijil
c) Ijazah Sarjana Muda
d) Sarjana/ Master
e) PhD

3. Status perkahwinan:
a) Bujang
b) Berkahwin

Bahagian 2

Arahan: Sila **ISIKAN** maklumat latar belakang tuan/puan diruangan yang disediakan.

1. Umur: ..... tahun. (*Contoh: **50** tahun*).

2. Pengalaman kerja: ..... tahun. (*Contoh: **10** tahun*).

3. Sila nyatakan sektor, jabatan atau kementerian di mana tuan/puan bertugas sekarang di bawah:

   .....
   *(Contoh: **Kementerian Kewangan**).*

Bahagian 3

Arahan: Sila berikan penilaian tuan/puan terhadap prestasi pekerja A dalam mengaplikasikan pengetahuan dan kemahiran yang dipelajari dari kursus latihan, anjuran Institut Tadbiran Awam Negara (INTAN). Bagi setiap pernyataan, sila **BULATKAN HANYA SATU NOMBOR** (1, 2, 3, 4, 5, 6 atau 7)berdasarkan penilaian tuan/puan.

		Sangat tidak setuju 1	Tidak setuju 2	Agak tidak setuju 3	Neutral 4	Agak setuju 5	Setuju 6	Sangat setuju 7
1.	Dengan menggunakan pengetahuan dan kemahiran baru yang diperoleh daripada latihan, telah membantu beliau meningkatkan prestasi kerjanya.	1	2	3	4	5	6	7
2.	Beliau mampu menyempurnakan kerja lebih cepat berbanding sebelum mengikuti latihan.	1	2	3	4	5	6	7
3.	Beliau telah menyempurnakan kerja lebih cepat berbanding sebelum mengikuti latihan.	1	2	3	4	5	6	7
4.	Beliau mampu menyempurnakan tugas dengan lebih baik menggunakan pengetahuan dan kemahiran baru yang diperolehi daripada kursus latihan.	1	2	3	4	5	6	7
5.	Kualiti kerja beliau telah meningkat selepas menggunakan pengetahuan dan kemahiran baru yang dipelajari dalam latihan.	1	2	3	4	5	6	7
6.	Beliau kurang melakukan kesilapan dalam tugas setelah menggunakan pengetahuan dan kemahiran baru yang dipelajari dalam latihan.	1	2	3	4	5	6	7

Kerjasama tuan/puan amat diperlukan untuk memastikan agar kesemua soalan di dalam soal selidik ini telah dijawab. Jasa baik tuan/puan di atas perkara ini amat dihargai dan diucapkan jutaan terima kasih.

Terima kasih.

APPENDIX F:
QUESTIONNAIRE TO THE EMPLOYEES' COLLEAGUES (ENGLISH AND BAHASA MALAYSIA VERSIONS)

UNIVERSITY OF SOUTH AUSTRALIA
City West Campus, North Terrace, Adelaide, SA, 5000



Questionnaire C

INFORMATION TO THE RESPONDENT

Dear participant,

My name is ABDUL RAHIM ZUMRAH, a PhD candidate at the School of Management, University of South Australia, Australia. My research examines the factors that influence transfer of training and the impacts of transfer of training on employee in the Malaysian public sector. I would appreciate it if you would complete this survey. Your participation is the key to the success of this research.

The time to complete this survey is about 10 minutes. Please answer all the questions.

There is no right or wrong answer. You are expected to answer all the questions based on your experiences and perceptions.

All that information you provide will be treated confidentially, so please do not write down your name on this questionnaire.

Please put the complete questionnaire in the envelope provided, seal it and directly return it to the researcher.

If you have any question, please contact me at zumay001@mymail.unisa.edu.au for verification.

Thank you in advance.

Yours sincerely,

(ABDUL RAHIM ZUMRAH)

Part 1

Instruction: Please **CIRCLE** the following demographical information about yourself.

1. Gender:
a) Male
b) Female

2. Education:
a) Secondary school and below
b) Diploma / Certificate
c) Undergraduate
d) Master
e) Ph.D

3. Marital status:
a) Single
b) Married

Part 2

Instruction: Please **FILL IN** the following demographical information about yourself.

1. Please write your age in years here: ..... years old. (*For example: **50** years old*).

2. Please write your work experience in years here: ..... years. (*For example: **10** years*).

3. Please write the sector/department/ministry you are working below:

.....

*(For example: **Ministry of High Education**).*

Part 3

Instruction: Please provide your comments about Employee A in the workplace. For each statement, please **CIRCLE ONLY ONE NUMBER** (1, 2, 3, 4, 5, 6 or 7) that corresponds to your opinion.

		Strongly disagree 1	Disagree 2	Slightly disagree 3	Neutral 4	Slightly agree 5	Agree 6	Strongly agree 7
1.	When he/she promise to do something by a certain time, he/she does so.	1	2	3	4	5	6	7
2.	When I have problems, he/she is sympathetic and reassuring.	1	2	3	4	5	6	7
3.	He/she is dependable.	1	2	3	4	5	6	7
4.	He/she provide services at the time he/she promise to do so.	1	2	3	4	5	6	7
5.	He/she keep their work accurately.	1	2	3	4	5	6	7
6.	He/she does not tell others exactly when services will be performed.	1	2	3	4	5	6	7
7.	I do not receive prompt service from him/her.	1	2	3	4	5	6	7
8.	He/she is not always willing to help others.	1	2	3	4	5	6	7
9.	He/she is too busy to respond to other requests promptly.	1	2	3	4	5	6	7
10.	I can trust him/her.	1	2	3	4	5	6	7
11.	I feel safe in my transactions with him/her.	1	2	3	4	5	6	7
12.	He/she is polite.	1	2	3	4	5	6	7
13.	I get adequate support from him/her to do my jobs well.	1	2	3	4	5	6	7
14.	He/she does not give me individual attention.	1	2	3	4	5	6	7

		Strongly disagree 1	Disagree 2	Slightly disagree 3	Neutral 4	Slightly agree 5	Agree 6	Strongly agree 7
15.	He/she does not give me personal attention	1	2	3	4	5	6	7
16.	He/she does not know my needs.	1	2	3	4	5	6	7
17.	He/she does not has my best interests at heart.	1	2	3	4	5	6	7
18.	He/she does not has operating hours convenient to all their customers.	1	2	3	4	5	6	7

Your cooperation is needed to ensure all the above statements have been answered in each page. Your cooperation is highly appreciated.
Thank You.

UNIVERSITY OF SOUTH AUSTRALIA
City West Campus, North Terrace, Adelaide, SA, 5000



Soal selidik C

MAKLUMAT KEPADA PESERTA KAJIAN

Tuan/puan,

Saya ABDUL RAHIM ZUMRAH, pelajar PhD di Fakulti Pengurusan, University of South Australia, Australia. Kajian saya adalah untuk mengenalpasti factor-faktor yang mempengaruhi pemindahan latihan dan kesan pemindahan latihan ke atas para pekerja sektor awam di Malaysia. Jasa baik tuan/puan adalah diperlukan untuk melengkapkan soal selidik ini kerana penglibatan tuan/puan adalah kunci kepada kejayaan kajian ini.

Anggaran masa untuk menjawab semua soalan di dalam soal selidik ini adalah lebih kurang 10 minit. Sila jawab semua soalan di dalam soal selidik ini.

Tiada jawapan yang benar atau salah. Tuan/puan diminta untuk menjawab soalan-soalan di dalam soal selidik ini berdasarkan pengalaman dan persepsi tuan/puan.

Segala maklumat yang diberikan adalah dianggap sulit. Tuan/puan diminta untuk tidak menulis nama tuan/puan pada soal selidik ini.

Sila masukkan soal selidik yang telah sempurna dijawab ke dalam sampul surat yang disediakan, lekatkan pembuka sampul surat tersebut dan kembalikan semula terus kepada saya.

Sekiranya tuan/puan mempunyai persoalan berkaitan soal selidik ini, sila hubungi saya di ..... atau email: zumay001@mymail.unisa.edu.au

Terima kasih.

Yang benar,

(ABDUL RAHIM ZUMRAH)

Bahagian 1

Arahan: Sila **BULATKAN** maklumat berkaitan latar belakang tuan/puan bagi setiap pernyataan di bawah.

1. Jantina:
a) Lelaki
b) Perempuan

2. Pendidikan:
a) SPM
b) Diploma / Sijil
c) Ijazah Sarjana Muda
d) Sarjana/ Master
e) PhD

3. Status perkahwinan:
a) Bujang
b) Berkahwin

Bahagian 2

Arahan: Sila **ISIKAN** maklumat latar belakang tuan/puan diruangan yang disediakan.

1. Umur: ..... tahun. (*Contoh: **50** tahun*).

2. Pengalaman kerja: ..... tahun. (*Contoh: **10** tahun*).

3. Sila nyatakan sektor, jabatan atau kementerian di mana tuan/puan bertugas sekarang di bawah:

   .....
   *(Contoh: **Kementerian Kewangan**).*

Bahagian 3

Arahan: Sila berikan penilaian tuan/puan terhadap pekerja A di tempat kerja. Bagi setiap pernyataan, sila **BULATKAN HANYA SATU NOMBOR** (1, 2, 3, 4, 5, 6 atau 7)berdasarkan penilaian tuan/puan.

		Sangat tidak setuju	Tidak setuju	Agak tidak setuju	Neutral	Agak setuju	Setuju	Sangat setuju
		1	2	3	4	5	6	7
1.	Apabila beliau berjanji untuk melaksanakan sesuatu pada waktu tertentu, beliau akan melakukannya.	1	2	3	4	5	6	7
2.	Apabila saya mempunyai masalah, beliau akan bersimpati dan menenangkan saya.	1	2	3	4	5	6	7
3.	Beliau adalah individu yang boleh diharap.	1	2	3	4	5	6	7
4.	Beliau akan memberikan perkhidmatan pada masa yang dijanjikan.	1	2	3	4	5	6	7
5.	Beliau akan memastikan kerjanya sentiasa tepat.	1	2	3	4	5	6	7
6.	Apabila saya memerlukan perkhidmatannya, beliau tidak memaklumkan tentang waktu sebenar perkhidmatan tersebut akan diberikan.	1	2	3	4	5	6	7
7.	Apabila saya memerlukan perkhidmatannya, saya tidak mendapat perkhidmatan segera daripada beliau.	1	2	3	4	5	6	7
8.	Beliau tidak selalunya rela membantu orang lain.	1	2	3	4	5	6	7
9.	Beliau terlalu sibuk untuk memberi maklum balas serta merta kepada permintaan orang lain.	1	2	3	4	5	6	7
10.	Saya percayakan beliau.	1	2	3	4	5	6	7
11.	Saya merasa yakin dan selesa apabila berurusan dengan beliau.	1	2	3	4	5	6	7
12.	Beliau seorang yang sopan.	1	2	3	4	5	6	7
13.	Saya mendapat cukup sokongan daripada beliau untuk melakukan kerja dengan baik.	1	2	3	4	5	6	7

		Sangat tidak setuju	Tidak setuju	Agak tidak setuju	Neutral	Agak setuju	Setuju	Sangat setuju
		1	2	3	4	5	6	7
14.	Beliau tidak memberikan sepenuh perhatian ketika berurusan dengan saya.	1	2	3	4	5	6	7
15.	Beliau tidak memberi perhatian peribadi (contoh: tidak serius) ketika berurusan dengan saya.	1	2	3	4	5	6	7
16.	Apabila berurusan dengannya, beliau tidak memahami keperluan saya.	1	2	3	4	5	6	7
17.	Beliau tidak ikhlas menjaga kebajikan saya (contoh: dalam membantu menyelesaikan masalah berkaitan kerja).	1	2	3	4	5	6	7
18.	Beliau tidak mempunyai masa yang memudahkan pekerja lain berurusan dengannya.	1	2	3	4	5	6	7

Kerjasama tuan/puan amat diperlukan untuk memastikan agar kesemua soalan di dalam soal selidik ini telah dijawab. Jasa baik tuan/puan di atas perkara ini amat dihargai dan diucapkan jutaan terima kasih.

Terima kasih.

APPENDIX G:
LIST OF THE EMPLOYEES ORGANIZATIONS

No.	Public Sector Agencies	Frequency	Percent	Cumulative Percent
1	Ministry of Health (*Kementerian kesihatan Malaysia*)	23	10.4	10.4
2	Ministry of Higher Education (*Kementerian pengajian tinggi*)	4	1.8	12.2
3	Election Commission of Malaysia (*Suruhanjaya pilihanraya Malaysia*)	1	0.5	12.6
4	Ministry of Information Communication and Culture (*Kementerian penerangan komunikasi dan kebudayaan*)	7	3.2	15.8
5	Medical Laboratory Technology College (*Kolej teknologi makmal perubatan*)	2	0.9	16.7
6	Kuala Lumpur Hospital (*Hospital kuala lumpur*)	3	1.4	18
7	Ministry of International Trade and Industry (*Kementerian perdagangan, antarabangsa & industry*)	2	0.9	18.9
8	Ministry of Education (*Kementerian pelajaran*)	9	4.1	23
9	Ministry of Housing and Local Government (*Kementerian perumahan & kerajaan tempatan)*	5	2.3	25.2
10	Ministry of Science Technology and Innovation (*Kementerian sains, teknologi & Inovasi*)	4	1.8	27
11	Ministry of Works (*Kementerian kerja raya*)	1	0.5	27.5
12	Kuala Lumpur District Parole (*Pejabat parol wilayah persekutuan kuala lumpur*)	1	0.5	27.9
13	Prime Minister Department (*Jabatan perdana menteri*)	5	2.3	30.2
14	Ministry of Human Resource (*Kementerian sumber manusia*)	4	1.8	32
15	Malaysian Accountancy Department (*Jabatan akauntan negara Malaysia*)	2	0.9	32.9
16	Ministry of Finance (*Kementerian kewangan*)	5	2.3	35.1
17	National Institute of Public Administration (*Institut tadbiran awam Negara*)	10	4.5	39.6
18	Immigration Department (*Jabatan Imigresen*)	4	1.8	41.4
19	Farmers' Organization Authority (*Lembaga pertubuhan peladang*)	2	0.9	42.3
20	Ministry of Youth and Sports (*Kementerian belia dan sukan*)	3	1.4	43.7
21	Royal Police Malaysia (*Polis Diraja Malaysia)*	6	2.7	46.4
22	Malaysia External Trade Development Corporation (Matrade)	2	0.9	47.3
23	Ministry of Domestic Trade Co-Operatives and Consumerism (*Kementerian perdagangan dalam negeri, koperasi dan kepenggunaan*)	4	1.8	49.1

24	Nilai Municipal Council (*Majlis perbandaran nilai*)	2	0.9	50
25	Ministry of Defense (*Kementerian pertahanan*)	8	3.6	53.6
26	Department of Occupational Safety and Health Kuala Lumpur (*Jabatan keselamatan & kesihatan pekerjaan wilayah persekutuan*)	2	0.9	54.5
27	Department of Labour Kuala Lumpur (*Jabatan tenaga kerja wilayah persekutuan*)	1	0.5	55
28	Royal Malaysian Customs Department (*Jabatan kastam diraja Malaysia*)	3	1.4	56.3
29	Department of Chemistry Malaysia (*Jabatan kimia Malaysia*)	4	1.8	58.1
30	Yayasan Selangor	1	0.5	58.6
31	Ministry of Agriculture and Agro-Based Industry (*Kementerian pertanian & industri asas tani*)	6	2.7	61.3
32	Public Service Department (*Jabatan perkhidmatan awam*)	2	0.9	62.2
33	Malaysian Maritime Enforcement Agency (*Agensi penguatkuasaan maritim Malaysia*)	2	0.9	63.1
34	Ministry of Transport (*Kementerian pengangkutan*)	1	0.5	63.5
35	College of Allied Health Sciences (*Kolej sains kesihatan bersekutu*)	2	0.9	64.4
36	Judicial and Legal Training Institute (*Institut latihan kehakiman & perundangan Malaysia*)	2	0.9	65.3
37	Department of National Unity (*Jabatan perpaduan negara & integrasi nasional*)	1	0.5	65.8
38	National Security Council (*Majlis keselamatan Negara*)	3	1.4	67.1
39	Road Transport Department (*Jabatan pengangkutan jalan*)	2	0.9	68
40	Department of Skills Development (*Jabatan pembangunan kemahiran*)	1	0.5	68.5
41	Department of Industrial Relations (*Jabatan perhubungan perusahaan*)	2	0.9	69.4
42	Department of Occupational Safety and Health Malaysia (*Jabatan keselamatan dan kesihatan pekerjaan Malaysia*)	1	0.5	69.8
43	Sultan Salehuddin Polytechnic (*Politeknik sultan salehuddin*)	2	0.9	70.7
44	Selangor Agricultural Development Corporation (*Perbadanan kemajuan pertanian Selangor*)	1	0.5	71.2
45	Malaysia Department of Insolvency (*Jabatan insolvensi Malaysia*)	2	0.9	72.1
46	Information Technology Unit SUK Selangor (*Bahagian teknologi maklumat SUK Selangor)*	1	0.5	72.5

47	Town and Village Planning Department (*Jabatan perancangan bandar & desa negeri Selangor*)	2	0.9	73.4
48	Public Works Department Malaysia (*Jabatan kerja raya Malaysia*)	4	1.8	75.2
49	*Majlis agama islam Selangor*	1	0.5	75.7
50	Public Work Department Workshop Persekutuan (*Jabatan kerja raya workshop persekutuan*)	2	0.9	76.6
51	*Bahagian teknologi pendidikan negeri wilayah persekutuan*	1	0.5	77
52	Education Department Kuala Lumpur (*Jabatan pelajaran negeri wilayah persekutuan*)	3	1.4	78.4
53	Ministry of Natural Resources and Environment (*Kementerian sumber asli & alam sekitar)*	5	2.3	80.6
54	Malaysia Civil Defence Department (*Jabatan pertahanan awam Malaysia)*	1	0.5	81.1
55	*Majlis agama islam wilayah*	5	2.3	83.3
56	*Perbadanan stadium merdeka*	2	0.9	84.2
57	Selayang Hospital (*Hospital selayang)*	1	0.5	84.7
58	Ministry of Rural and Regional Development (*Kementerian kemajuan luar bandar & wilayah*)	2	0.9	85.6
59	Inland Revenue Board of Malaysia(*Lembaga hasil dalam neger Malaysiai)*	2	0.9	86.5
60	Council of Trust for the People (*Majlis amanah rakyat)*	2	0.9	87.4
61	Sungai Buloh Hospital (*Hospital sungai buloh)*	1	0.5	87.8
62	National Pharmaceutical Control Bureau (*Biro pengawalan farmaseutikal)*	1	0.5	88.3
63	Public Private Partnership Unit (*Unit kerjasama awam swasta)*	1	0.5	88.7
64	Ministry of Plantation Industries and Commodities (*Kementerian perusahaan perladangan & komoditi)*	1	0.5	89.2
65	Sepang Municipal Council (*Majlis perbandaran sepang)*	1	0.5	89.6
66	Selayang Destist Clinic (*Klinik pergigian selayang)*	2	0.9	90.5
67	*Pejabat daerah tanah Gombak*	2	0.9	91.4
68	Malaysian Rubber Board (*Lembaga getah Malaysia)*	1	0.5	91.9
69	Kuala Lumpur City Hall (*Dewan bandaraya kuala lumpur)*	1	0.5	92.3
70	Federal Territory Syariah Court (*Mahkamah syariah wilayah persekutuan)*	2	0.9	93.2
71	Ampang Jaya Municipal Council (*Majlis perbandaran ampang jaya)*	1	0.5	93.7

72	Ampang Law Court (*Mahkamah seksyen ampang)*	1	0.5	94.1
73	*Perbadanan putrajaya*	1	0.5	94.6
74	Fire and Rescue Department Malaysia (*Jabatan bomba & penyelamat Malaysia)*	1	0.5	95
75	Department of Survey and Mapping Malaysia (*Jabatan ukur & pemetaan Malaysia)*	1	0.5	95.5
76	Nilai Polytechnic (*Politeknik nilai)*	1	0.5	95.9
77	National Botanical Garden Shah Alam (*Taman botani negara shah alam)*	1	0.5	96.4
78	*Pejabat pembangunan negeri wilayah*	1	0.5	96.8
79	Ministry of Tourism (*Kementerian pelancongan)*	1	0.5	97.3
80	Meteorological Department (*Jabatan meteorology)*	1	0.5	97.7
81	Prisons Department (*Jabatan penjara)*	5	2.3	100
	Total Respondents	222	100	

APPENDIX H:
THE RESULT OF MODIFICATION INDICES OF THE STRUCTURAL MODEL

Regression Weights: (Group number 1 - Default model)

			M.I.	Par Change
JS	<---	POS	41.923	.550
JS	<---	PL	25.042	.431
POS8	<---	ASS	4.508	.136
POS8	<---	EMP	4.423	.130
RES	<---	JS	5.416	.137
RES	<---	JS1	6.145	.104
ASS	<---	PL3	7.349	.094
EMP	<---	JS	6.207	-.126
EMP	<---	JS1	5.919	-.087
EMP	<---	POS3	4.115	-.072
EMP	<---	PL1	4.722	-.102
JS1	<---	POS	4.350	.168
JS1	<---	PL	13.259	.297
JS1	<---	POS8	4.044	.102
JS1	<---	POS1	9.085	.168
JS1	<---	PL1	10.748	.234
JS1	<---	PL2	8.764	.206
JS1	<---	PL4	13.821	.228
JS3	<---	POS	20.850	.444
JS3	<---	POS8	11.731	.210
JS3	<---	POS1	12.345	.237
JS3	<---	POS2	21.010	.281
JS3	<---	POS3	20.641	.295
JS3	<---	POS4	10.272	.182
JS3	<---	POS5	5.841	.136
TOT1	<---	JS	4.335	.111
TOT1	<---	JS1	5.405	.088
TOT1	<---	POS2	4.580	.076
TOT3	<---	PL	5.693	-.137
TOT3	<---	PL2	5.873	-.119
TOT4	<---	PL3	8.150	-.122
POS1	<---	JS	10.661	.232
POS1	<---	JS1	10.594	.164
POS1	<---	JS3	6.205	.104
POS2	<---	POS5	4.732	-.096
PL1	<---	TOT4	4.152	.088
PL2	<---	SQ	4.576	-.119
PL2	<---	ASS	5.557	-.095
PL4	<---	JS	4.174	.117
PL4	<---	JS1	4.620	.087