

Second Language Training Transfer for Providing Bilingual Service by the Public Officials in Sri Lanka

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ABSTRACT

This study was conducted to explore the predictions by training inputs (training characteristics, training design, and work environment) to training outcomes (retention, learning, and training transfer) in the context of second language training in Sri Lanka while considering the moderation effect of Public Service Motivation (PSM). The sample size of the study was 294 government officials who have followed the “Basic Tamil Language” course, which was conducted by the Department of Official Languages in Sri Lanka. Data was collected from two batches by using Five- Point Likert scale self-reported questionnaires in different time series. For the analysis purpose, two batches were integrated (PLS-SEM) run by SMART PLS version 3.2.7 for hypothesis testing.

The main findings of the study were all the training inputs positively predicted the training transfer only but not for the other training outcomes such as learning and retention. Moreover, it could not observe any significant results on the moderation effect of PSM on the relation between training inputs and training outcomes. However, this study confirmed the results of literature in the field of training transfer especially Baldwin and Ford model (1988), bridging it with the concept of transfer of training to the motivational behavior in the public sector. The study of Baldwin and Ford (1988) suggested that to conduct an integrated study examining the effect of all three training inputs on training transfer. So, this study attempted to fill that gap by conducting an integrated study. The findings of this study will be helpful for government organizations to enhance the training transfer process in terms of providing bilingual service to the public. Furthermore, the current results highlight useful recommendations for policies of human resources development of the government organizations.

Keywords: Self –Efficacy, Training Transfer, Work Environment, Learning, Retention, Public service Motivation, Training Design, Peer support, Supervisory Support, Opportunity to use.

Introduction to Training Transfer

Training is defined as a planned and systematic effort to provide and enhance employees’ knowledge, skills, and attitudes related to their job through learning experiences to work more efficiently (Blanchard & Thacker, 2010). In other words, effective training certainly has the potential to increase knowledge, skills, and abilities (KSAs) and to enable employees to leverage their KSAs for the organizational benefit (Combs et al., 2006). Also, training is defined as a planned and systematic effort to provide and enhance employees’ knowledge, skills, and Attitudes related to their job through learning experiences to work more efficiently (Blanchard & Thacker, 2010).

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Introduction to Training Transfer

Furthermore, the objectives of training should not be stopped at just gaining knowledge and skills, it is important to look forward to the transfer of training to the workplace. Transfer of training is defined as the consistent application of knowledge, skills, and attitudes that have been gained during training, to the workplace (Baldwin & Ford, 1988). Also, it is the application of what we have learned from the training to the workplace to achieve individual and organizational performance (Gold & Smith, 2003).

Although organizations spend billions of dollars on employee training, only a few percent of training are transferred to the work environment (Georgenson, 1982; Saks, 2002). Georgenson (1982) estimated that transfer of training from the training program to the workplace is only about 10% and empirical study of Wexley & Latham (2002) showed that approximately 40% of the content is transferred immediately following the training, the amount transferred falls to 25% after six months and 15% after one year. This suggests that as time passes, trainees may be unable or less motivated to retain and use the information gained in the training program. Furthermore, it shows that although much money and time is invested for the training, those investments are not effective since a few percent of training effectively transferred to the workplace.

It can be observed that several scholars investigated the antecedents of transfer of training over decades (Baldwin & Ford, 1988; Holton, 1996; Noe & Schmitt, 1986). Baldwin and Ford (1988) proposed that transfer of the training process has three factors such as training inputs, training outputs, and conditions of transfer. According to the training transfer model of Baldwin and Ford (1988), training inputs are three types such as trainee characteristics (personality, ability, motivation effect), training design (principles of learning, sequencing training content), and work environment (support, opportunity to use) which influence training transfer. Moreover, in that model, learning and retention have been considered as training outputs and generalization and maintenance have been recognized as conditions of transfer. Training design is also considered to be a predictor of training transfer (Holton et al., 2000). As an example, trainees are more likely to transfer when they perceived training contents that match with their work context. In addition to that, the work environment includes peer and supervisory support and the opportunity to influence training transfer (Rouiller & Goldstein, 1993). Moreover, Kirkpatrick (1994) emphasized that learning and retention lead to the transfer of training. Based on the above discussion it can be generally understood that several variables including training inputs (trainee

characteristics, work environment, training design), learning, and retention have an impact on training transfer. Not only that, some other scholars have pointed out that motivation to transfer is another factor that takes place for the effectiveness of the transfer of training (Rouiller & Goldstein, 1993).

Transfer of training in the public sector, to be analyzed in the present study, is very important as the public sector is the governing and functioning mechanism of the country. When it considers the public sector, public service motivation (PSM) can be taken apart for effective behavioral changes including transfer for training. In general terms, PSM is thought of as “an individual’s orientation to delivering better services to people with a purpose to do good for others and society” (Perry & Hondgehem, 2008). Perry (1996) identified a multi-dimensional scale to measure PSM, which has four components: attraction to policy service, commitment to the public interest, compassion, and self-sacrifice. Although many governments allocate an immense amount of time and money to training, very little attention has been paid to the field of transfer of training related to their human resources in empirical studies. Especially, it cannot be found that any research regarding training transfer process with the effect of PSM.

Therefore, this study tries to fill the gap in the transfer of training research by focusing on all training aspects particularly on training inputs, training outputs, and in addition to the basic, framework developed by Baldwin and Ford (1988), the aspect of moderation effect of PSM is incorporated into the framework of the present study.

Therefore, this study aims to investigate the predictions by training inputs to training outcomes with the moderation effect of PSM on the relation between training inputs and training outcomes in the context of second language training by public officials in Sri Lanka.

Introduction to Second Language Training

Language training is the process by which humans acquire the capacity to perceive and comprehend language as well as to produce and use words and sentences to communicate. Second language training is a conscious process where the teaching and learning of another language other than the first language take place (Richards, et al., 1985). Rod Ellis (1986) explains that language transfer exists in language acquisition and second language acquisition is a complex process, that acquirement of another language or language after first language acquisition. Khasinah (2014) has found that motivation, attitude, age, intelligence, aptitude, cognitive style, and personality are considered as factors that greatly influence someone in the process of his or her second language acquisition. Moreover, Robert Lado (1957) claimed that individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture both productively when attempting to speak the language and to act in the culture, and receptively when attempting to grasp and understand the language and the culture as practiced by natives. second language training in Sri Lanka plays a vital role in the implementation of the Official Languages Policy. According to the Official Languages Policy, every government institution and every government official is responsible for providing the public service in the language choice of citizens. Although there are legitimate provisions in the Constitution of Sri Lanka for the implementation of official language policy, one of the major issues is the low representation of the Tamil speaking public servants compared to the Tamil population in the country (Recommendations of the OLC, 2005). Therefore, to increase the number of Tamil-speaking officials, the government of Sri Lanka has issued Public Administration circular 7/2007. According to that circular every government official who has been recruited after 2007, it is compulsory to obtain second language proficiency within five years after the recruitment. Therefore, government officials in Sri Lanka attend second language training programs to obtain second language proficiency to provide bilingual service to the general public.

Research Problem

Sri Lanka has one of the largest public sectors in the world in comparison to its population. Among the total workforce of 8.5 million, there are approximately 1.12 million people employed in the public sector in Sri Lanka (Report of Department

Census in Sri Lanka, 2016). According to the statistics of the Department of Official Languages, each year, around 0.2 million government officials participate in second language training programs during their working hours to obtain second language proficiency. Such programs are paid by the Sri Lankan government. The aim of conducting a second language training program is to obtain second language proficiency to provide public services in the language of the choice to the general public. However, unfortunately, Ranjith (2013) found that public service was not in the language of choice of the general public in Sri Lanka.

Therefore, in 2013, even though public officials participated in the second language program, their second training transfer process did not reach the expected level, and their intellectual ability and knowledge of the second language obtained during the training remained underutilized. Hence, by employing Baldwin and Ford's (1988) training transfer model, this research attempted to identify the current situation of the training transfer process regarding the second language training of public officials to provide a bilingual service with the moderation effect of PSM in Sri Lanka.

Moreover, Saks (2002) has found that only a small percentage of the training is transferred to the workplace upon completion of the training program. Thus, Saks found that although a considerable amount of time and money is invested in the training, those investments are not effective since a small percentage of the training is effectively transferred to the workplace. Therefore, it can be identified that giving priority to the improvement of the training transfer process is the main responsibility of the researchers in the field of human resources development, though many studies have been conducted over the past few decades. Further, the process of training transfer has been recognized for a long time as an unfinished and unsolved problem in the organizational context, though it has been investigated over decades (Baldwin & Ford, 1988; Grossman & Sales, 2011). Consequently, researchers in the field of human resource development have a vital responsibility to find out the factors behind the failure and success of the training transfer. Moreover, it is also clear that several studies have examined the predictions of the training inputs on training outcomes separately.

It is worth noting that this study will be one of the first integrated studies to examine the predictions by training inputs on training outcomes. To conduct such an examination, to fill the research gap, this study has considered that all the factors together in one specific program with the moderation effect of PSM.

Research Objectives

The main objective of this study was to explore the predictions by training inputs (training characteristics, training design, and work environment) to training outcomes (retention, learning, and training transfer) in the context of second language training in Sri Lanka while considering the moderation effect of PSM on the training inputs and training outcomes.

Moreover, though this area has been well researched, limited studies have been carried out in Sri Lanka. Therefore, this study will primarily be important for the government institutions to identify the relationships between training inputs and the transfer of training with the moderation effect of PSM.

Literature Review

In this literature review, the first part of the chapter explains the widely used models of training transfer. Then, I provided a description of the factors affecting the training transfer process and the developed hypotheses. Finally, it has been explained the conceptual framework of the study.

Models of Training Transfer

The history of transfer research goes back more than 100 years, with researchers debating the nature, contexts, and prevalence of transfer (Barnett & Ceci, 2002). The transfer was originally defined as the extent to which the learning of a response in one task or situation influences the response in another task or situation (Adams, 1987). Baldwin and Ford (1988) define the transfer of training as “the degree to which trainees effectively apply the knowledge, skills, and attitudes gained in the training context to the job.” In other words, training transfer is described as the grade of trainees who apply the knowledge, skills, behaviors, and attitudes they obtained from the training program into their work context, which may improve their job performance (Velada & Caetano, 2007). In this section, three models of training transfer have been used to provide a greater understanding of training transfer; namely, Kirkpatrick’s four-level model, Baldwin and Ford’s transfer model, and Holton’s transfer of training model.

Kirkpatrick's four-level evaluation model

Kirkpatrick's Four-Level Training Evaluation Model was designed to objectively measure the effectiveness of training. The model was created by Donald Kirkpatrick in 1959, with several revisions made in 1975 and again in 1993. It is now accepted as the most influential model in the evaluation of the effectiveness of training (Reio, Tonette, Smith, & Chang, 2017). The four levels model consists of reaction, learning, behavior, and results. Figure 2.1 describes each level of the Kirkpatrick model.

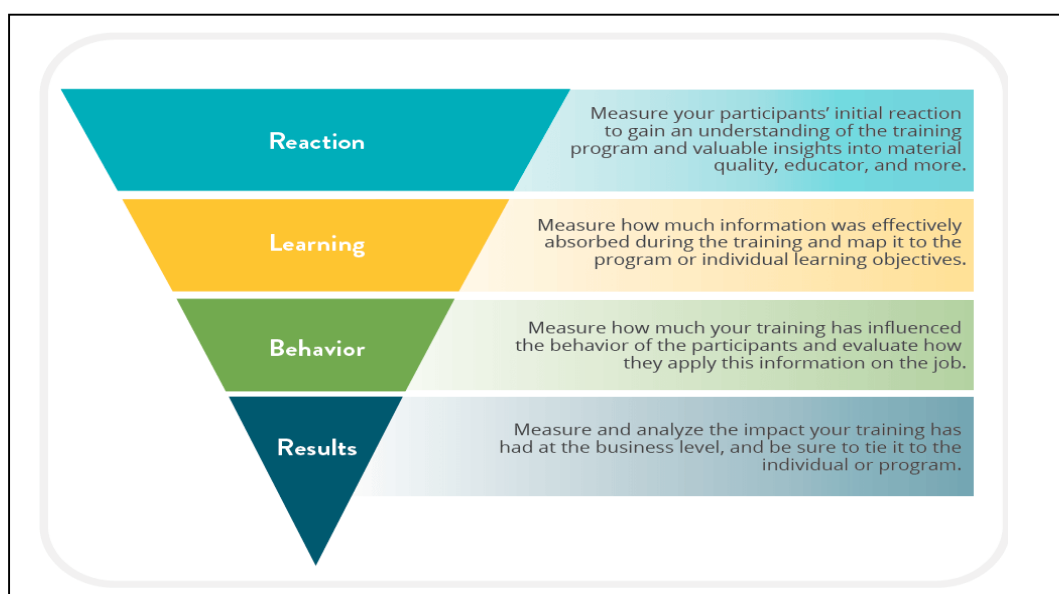


Figure 1.1: Kirkpatrick's four-level evaluation model (Source: Kirkpatrick, 1959)

According to figure 1.1, Kirkpatrick found that four levels in the model namely reaction (level 1), learning (level 2), behavior (level 3), and results (level 4). These four levels have been identified as training outcomes by Kirkpatrick. Reaction (level 1) measures the initial reactions of the participants to gain an understanding of the training program and valuable insights into material quality, educator, and more. Learning (level 2) measures how much information was effectively absorbed during the training. Moreover, according to Kirkpatrick's model, level three, behavior measures how much the training has influenced the behavior of the participants and evaluates how they apply information on the job. A result (level 4) measures the final results that occur at the business level after the training. Moreover, Kirkpatrick assumed that there is an interconnection between each level such that reaction could

lead to learning; learning could lead to behavioral change; behavioral change could lead to organizational results. And also, Kirkpatrick assumes that from these four levels, the distinctions between learning and behavior have drawn increased attention to the importance of the training transfer process in making training truly effective. Although this model has been accepted as the most influential on training evaluation, it can be seen, some researchers (Bates, 2004; Holton, 1996) had criticized the limitations of this model. Most fundamentally, there have been criticisms of the assumptions that the levels are associated with the previous and next levels. This implied causal relationship has not always been established by research. Other researchers pointed out that there was no significant relationship between learner reaction and learning (Mathieu, Tannenbaum, & Salas, 1992; Noe & Schmitt, 1986). Holton (1996) criticized that the model is too simple and fails to take account of the various intervening variables affecting learning and transfer. Moreover, Noe and Schmitt (1986) emphasized that motivation factors were not explicitly mentioned in these four stages.

Baldwin and Ford Model

The basic model of transfer of training was developed by Baldwin and Ford (1988) to use as a framework to measure the influencing factors on the training transfer process. According to figure 1.2, this model consists of three categories, namely training inputs, training outputs, and conditions of transfer. Trainee characteristics, training design, and work environment were introduced as the training inputs that have both direct and indirect (through training output) effects on conditions of transfer. Subsequently, trainee characteristics are described in terms of ability or skills and personality factors such as performance self-efficacy and learner readiness (Baldwin & Ford, 1988). Training design was portrayed as the principles of learning, sequencing, and training content. The work environment has been recognized as the support and opportunity in the workplace. Training output is expressed as learning and retention. Moreover, conditions of transfer are described in terms of generalization and maintenance.

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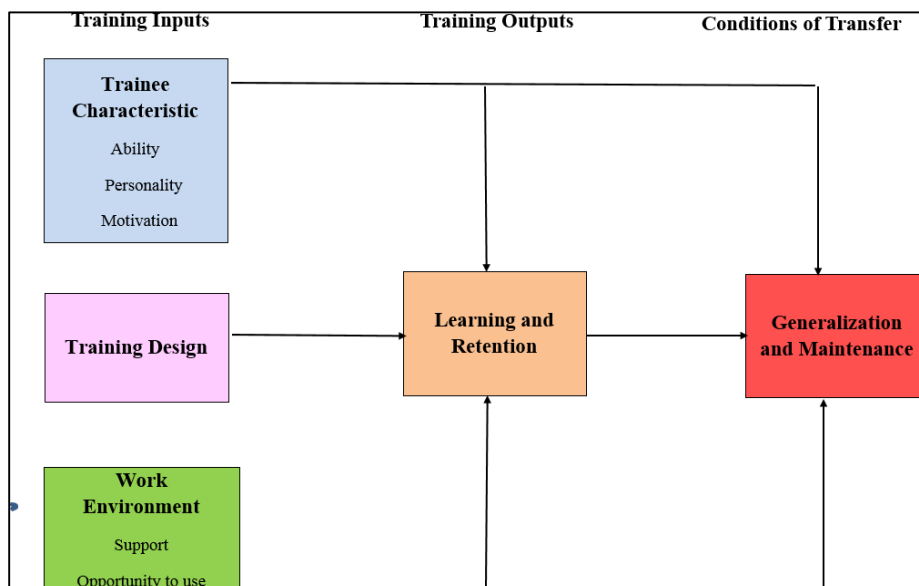


Figure 1.2: Baldwin and Ford Model (Source: Baldwin & Ford, 1998)

Holton's HRD Evaluation and Research Model

As mentioned above, Holton sharply criticized Kirkpatrick's (1959) four-level evaluation model and proposed the HRD Evaluation and Research Model as a more comprehensive framework for diagnosing and understanding the causal influences of HRD intervention outcomes in 1996. The instruments that resulted from this model are known as the Learning Transfer Systems Inventory (LTSI).

Based on figure 1.3, there are five categories; secondary influences, motivation elements, environment elements, outcomes, and ability or enabling elements. Three outcome levels are hypothesized in the model: learning, individual performance, and organizational performance. Moreover, in this model motivation factors such as motivation to learn and motivation to transfer have been included.

Furthermore, motivation, environment, and ability, are those three elements that affect the three outcome levels. Three intervening variables are included such as motivation to learn, motivation to transfer, and expected utility/return on

Investment. And also perception of training, transfer climate, and external events are categorized under the environmental elements. Learning design ability, transfer design, and linkage to organizational goals are under the ability to enable an element. It can be seen several differences between the Kirkpatrick model and Holton's model such as the exclusion of reaction as a primary outcome in Holton's model, learning refers to internal behavior and individual performances in Holton's model, including primary and secondary influences on three outcomes in Holton's model. However, this model is very important for the situational and demographic influences on the system characteristic in organizations. Based on the findings,

Situational variables have a significant contribution to transfer systems based on training program and organizational culture.

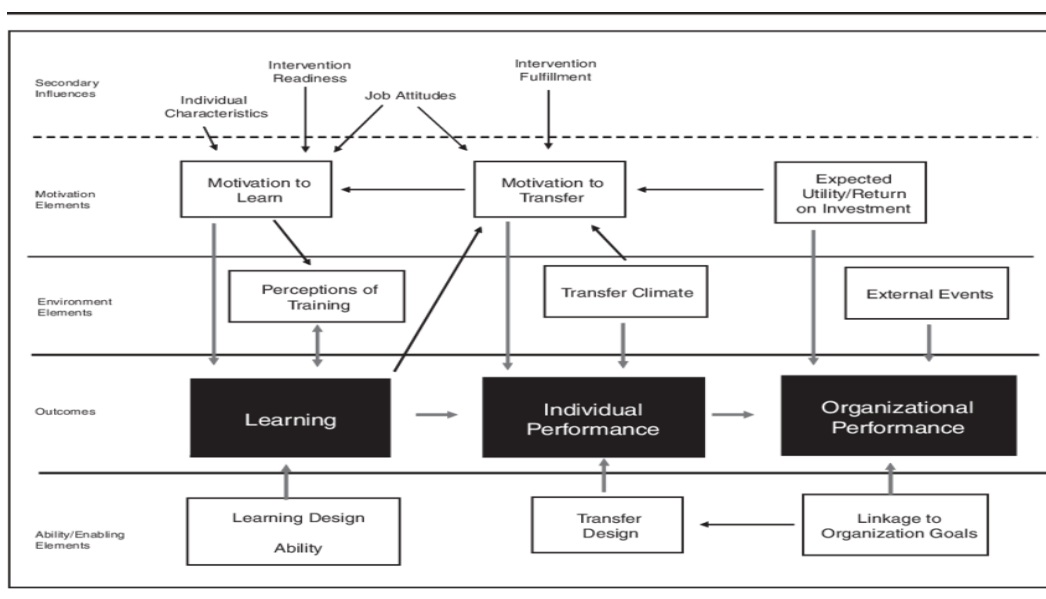


Figure 1.3: Holton's HRD Evaluation and Research Model (Source: Holton, 1996)

Factors influencing for Transfer of Training

According to the previous literature, mainly the Baldwin and Ford model, it can be seen several factors especially training inputs affect the process of training transfer

as discussed in the above section. The first part of this section elaborates on the effect of training inputs on the training transfer process. There are three kinds of training inputs namely training characteristics, training design, and work environment. The second part of this section describes the effects of training outcomes such as learning and retention on training transfer. The last part of the section explains the effects of PSM on the training transfer process. Based on each discussion, each related hypothesis of the study was developed.

Trainee Characteristics

Although basic trainee's characteristics are categorized in terms of ability, personality, and motivation in the Baldwin and Ford model, cognitive ability, locus of control, conscientiousness, achievement motivation, motivation to learn and to transfer, anxiety, training self-efficacy, and Valence are other characteristics which affecting for the training transfer (Colquitt et al, 2000; Mathieu et al, 1992; Noe, 1986). Others include job involvement, organizational commitment, organizational cynicism, and job satisfaction (Mathieu et al, 1992; Tannenbaum, 1992; Tesluk, 1995; Velada & Caetano, 2007). Among those variables, this study mainly considers the training self-efficacy under the training characteristics since that variable is recognized as one of the strong affecting factors on the process of training transfer (Baldwin & Ford, 1988; Burke & Hutchins, 2007; Velada et al., 2007; Chiaburu, 2008). Furthermore, both studies of Elangovan and Karkowsky (1999) and Velada et al. (2007) show that higher perceived self-efficacy is more likely to lead to the positive transfer of training to the job than other trainee characteristics. They believed that trainees with confidence in their ability will likely transfer their knowledge and skill to the job. Therefore, efficacy has been selected as the main trainee characteristic for this study.

Training Self-Efficacy

Training participants' cognitions especially training self-efficacy can be the most powerful motivational force and influence factor for the training transfer process and it has a strong relationship with training (Chiaburu, 2008).

Generally, training self-efficacy can be defined as an individual's "beliefs in one's capabilities to organize and execute the course of action required to produce given

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attainments (Bandura, 1993). Holton (2000) defined performance self-efficacy as an individual's self-Belief that can change their performance and results when desired. Hence, when a trainee feels confident in his or her ability to perform, the more likely he or she will learn and retain the knowledge and skills and transfer such knowledge and/or skill to the job. Moreover, many studies indicate that trainees who lack sufficient self-efficacy will put less effort into learning (Tziner, 2007). Moreover, it has been found that self-efficacy also has a vital impact on learning (Gist, 1990; Mathieu et al, 1992) Based on that, the first hypothesis was developed. Moreover, Baldwin and Ford (1988) found that trainee characteristics' including self-efficacy have a direct relationship with retention. And also the study of Gist & Steven (2006) confirmed the effect of self-efficacy on training retention.

Based on the above empirical studies and findings the second hypothesis was developed. Furthermore, Baldwin and Ford (1998) have indicated that trainees with higher self-efficacy are more likely to transfer the training to the job. And also Noe (1986) found that self-efficacy has an impact on trainees' motivation to training transfer. Besides that, the study of Chaiburu and Lindsay (2008) emphasized that self-efficacy has a potential connection with the transfer of training. Based on those empirical studies, the third hypothesis was developed.

H₁: Self Efficacy positively predicts Learning

H₂: Self Efficacy positively predicts Retention

H₃: Self Efficacy positively predicts Training Transfer

Training Design

Based on the training transfer literature training design also has a vital impact on the training transfer process. Training design was explained by perceived content validity and transfer design.

Perceived content validity is the extent to which trainees' judge training content to reflect job requirements accurately and transfer design is the degree to which training has been designed and delivered to give trainees the ability to transfer learning on the job (Holton et al., 2000). According to the training design literature, several training design factors influence the transfer of training: instructional techniques and learning principles (Alvarez, 2004), self-management and relapse prevention strategies, and goal setting (Tziner, 1991; Wexley & Nemeroff, 1975).

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Furthermore, the major training design factors are the incorporation of learning principles (Bass and Vaughan, 1966), the sequencing of learning material, and the job relevance of the training content (Tracy, 1984). Should design their training programs to include such factors that increase the likelihood of transfer.

Trainees are more likely to transfer the training content to the work context when they perceive that the training program was designed and delivered in such a way that maximizes the trainee's ability. Moreover, according to the study of Baldwin and Ford (1988) training design directly influenced learning and retention. According to the Baldwin and Ford model, there is no direct relationship between training design and training transfer, but he explained that training design also can affect the transfer of training. Furthermore, Burke and Hutchins (2007) also explained that training design also can affect the transfer of training as well as retention as training output. So, the following hypotheses were developed.

H₄: Training Design positively predicts Learning

H₅: Training Design positively predicts Retention

H₆: Training Design positively predicts Training Transfer

Work Environment

Several studies have shown that environmental factors are important for understanding the transfer of the training process (Baldwin & Ford, 1988; Rouiller & Goldstein, 1993; Tracey, 1995). Baldwin & Ford (1988) stated that the work environment has three factors as peer and supervisory support and opportunity to use. Support refers to the one provided by peers or supervisors.

Supervisor support was defined as the 'extent to which supervisors/managers support and reinforce the use of training on the job' (Holton, 2000). The empirical study of Xiao (1996) has found that supervision is the most influential factor in training transfer. It means if supervisor support is very strong, the trainee can transfer more of what they learned in the training program to the workplace. Not only that empirical research has indeed confirmed the effectiveness of supervisors taking on a supportive role for the learning and retention of their employees (Ellinger et al.

1999). When it considers peer support, peer support can be defined as the extent to which peers support and reinforce the use of training on the job' (Holton, 2000). Several studies confirmed that peer support also positively affects training transfer, learning, and retention (Blume, Ford, Baldwin & Huang, 2010; Martin, 2010). Opportunity to use is the extent to which trainees are provided with or obtain resources and tasks on the job enabling them to use training on the job (Holton et al., 2000). The empirical study of Lim and Morris (2006) confirmed that transfer opportunities have a significant impact on perceived learning and retention and training transfer.

Opportunity to use, supervisor support and, peer support has been studied as characteristics of the work environment that affect not only the transfer of training but also learning and retention (Baldwin & Ford, 1988; Burke & Hutchins, 2007; Blume, Ford, Baldwin & Huang, 2010). Based on the above arguments, the following hypotheses were developed.

H₇: Work environment positively predict learning

H₈: Work Environment positively predicts retention

H₉: Work Environment positively predicts training Transfer

Learning and Retention

Learning and retention are essential factors to achieve the transfer of training. Learning involves both memorization and incorporation. Training retention is a construct that directly aims to capture the degree to which trainees retain the training content and what they have learned after training is completed (Velda et al. 2007). The empirical study of Mandler and Heinemann (1956) found that learning has an impact on retention. Based on that argument we developed hypothesis 10. Furthermore, Kirkpatrick (1976) emphasized that for trained skills to transfer; training materials must be learned and retained. Trainees must have the ability to retain the knowledge instilled during the training program to facilitate the transfer process. Furthermore, Baldwin and Ford (1988) argue that learning and retention outcomes are directly associated with the generalization and maintenance of training effects on the job. The empirical study of Velada et al (2007). confirmed that learning and retention were significantly related to the transfer of training.

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Besides that, the findings of Mathieu et al. (1992) also found the relationship between learning, retention, and performance. Based on the above findings, other two hypotheses were also developed follows.

H₁₀: Learning positively predicts Retention

H₁₁: Retention positively predict training Transfer

H₁₂: Learning positively predicts Training Transfer

Public Service Motivation (PSM)

PSM is a major research topic that explains the attitudes of the employees and behavior in the public sector. Since this study is based on public sector employee training transfer, we investigate the effect of PSM on the training transfer process. PSM is an important individual predisposition that explains the work attitudes of public employees (Castaing, 2006; Kim, 2011).

PSM is “an individual’s orientation to delivering services to people with a purpose to do good for others and society” (Perry & Hondeghem, 2008). Brewer and Selden (1998) described it as “the motivational force that induces individuals to perform meaningful public service. “Perry and Wise (1990) proposed that PSM is associated with three types of motives: affective, norm-based, and rational. Kim and Vandenaabeele (2010) reviewed research to assess commonalities in the content of PSM internationally and then made modest changes to the concept of PSM. They proposed that PSM is defined as a four-dimensional construct, with self-sacrifice as the foundational concept and three categories of motives: instrumental, value-based, and identification. Value-based motives are related to values and ethics, identification motives are related to attitude, and instrumental motives are related to behavior. PSM constructs have subsequently been refined along the lines of attraction to public participation, commitment to public values, compassion, and self-sacrifice (Kim & Vandenaabeele, 2010). Public service motives are at the root of the behaviors and actions taken to achieve outcomes that serve the public interest.

Many studies related to PSM have investigated the direct effect of PSM as follows. PSM theory suggests that PSM is positively directly related to work attitudes and

behaviors (Perry & Hondeghem, 2008; Perry & Wise, 1990). Advocates of PSM theory argue that individuals with greater PSM are more satisfied with their public sector jobs and are committed to the organization that imposes the role on them (Pandey et al 2008; Perry and Wise 1990). Perry and Wise (1990) proposed that in public organizations, PSM is positively related to performance. Previous researchers also found that PSM is positively associated with both individual performance (Vandenabeele, 2009) and organizational performance (Brewer and Selden, 2000).

Moreover, Perry and Wise (1990) postulated that employees who were high in PSM would be more positive about working for the government than were employees who scored lower on the scale. In another word, Perry and Wise (1990) argued that individuals with greater PSM are likely to perform better in public sector work. They suggested that high PSM employees would show greater commitment to their jobs, a more positive attitude towards government employment, and less of a need for instrumental incentives such as pay.

High PSM employees would be better performers on the job, and more likely to join and remain with a public organization. Furthermore, Alonso and Lewis (2001) found a positive association between PSM and self-reported individual performance ratings. And also, a study by Vandenabeele (2009) on data from the Flemish civil service detected both a direct showed relationship between PS Mand self-reported performances and an indirect association mediated by job satisfaction and normative and affective commitment. Besides that, Moynihan and Pandey (2010) found that PSM was positively correlated with reported performance information use, “a form of behavior that is a logical contributor to both higher individual and organizational performance”. Moreover, Taylor (2008) showed a direct and significant association between PSM and organizational commitment in Australia. As well as

Brewer, Selden, and Facer (2000) note that, PSM is important not only just to motivate but also to improve productivity, improved management practices, accountability, and trust in government. And PSM is an it one of the major topics of investigation in public administration today.

In addition to that Naff and Crum (1999) found that PSM had a strong positive effect on job satisfaction and performance ratings and a weaker negative effect on plans to leave the government, holding constant education, age, seniority, grade level, job type, race, and gender. Therefore, according to the above literature, it can be seen as PSM has a direct relationship to organizational outcomes. In addition to that Thaler (2017) examined the PSM as a mediator of the relationship between satisfaction with employee training and the resulting competence. The findings indicate a positive direct effect of satisfaction with employee training on competence gains and a mediating effect of PSM. Further Tuna (2016) found that HR flexibility also demonstrated the mediation effect with public service motivation in predicting knowledge sharing among public employees in the Vietnam context

The moderation effect of PSM is very important to the research to investigate the employee attitudes and behavior of the public sector. Even though it can be observed many studies related to the direct effect and mediation of PSM, these can be seen limited studies related to the moderation effect of PSM. Therefore, we have only the following studies related to the moderation effect of PSM.

Alonso and Lewis (2001), tested the link between PSM and job performance in the public service and they introduced an interaction term between these PSM and Merit in the workplace. Then predicted that this interaction would have a negative coefficient because it is believed that the agency materially rewarded the performance which many have less impact on the performance of employees with high PSM (who cared more about intrinsic rewards) than on that of others. According to the findings of the instrumental-variables model, the coefficient on the PSM× Merit interaction was, as hypothesized, negative and significant, suggesting that monetary rewards affected the performance of high-PSM employees. From the perspective of the present study, their study can be interpreted to identify the moderation effect of PSM by considering the relationship between merit and employee performance with the moderation effect of PSM.

Another study, Taylor (2008) investigated the influence of organizational factors such as intrinsic rewards, extrinsic rewards, work relations with management, work relations with co-workers on PSM and two work outcomes such as job satisfaction

and organizational commitment. He found that, despite their significant and direct effects on the work outcomes, the organizational factors did not show any significant moderating effects on the relationships between PSM and the two work outcomes. This study is also can be used to identify the moderation effect of PSM. We can take the moderation effect of PSM on the relationship between organizational factors and work outcomes. So we can take this study to identify the moderation effect of PSM by taking the moderation effect of PSM on the relationship between organizational factors and work outcomes instead of the relationship between PSM and work outcomes with the moderation effect of organizational factors.

Since we could find several empirical studies on direct, mediation, and moderation relationship between PSM and public sector employee's performance it can be said that PSM has a potential relationship with employee's behavior.

Moreover, since we have limited studies on the moderation effect of PSM, we wanted to include the moderation effect of PSM in this study to fill the research gap. Therefore, we proposed the following hypothesis regarding the moderation effect of PSM on the relationships effect the training transfer process.

H₁₃: PSM has a positive moderation on the relation between each training inputs and training outcomes (learning, retention, and training transfer)

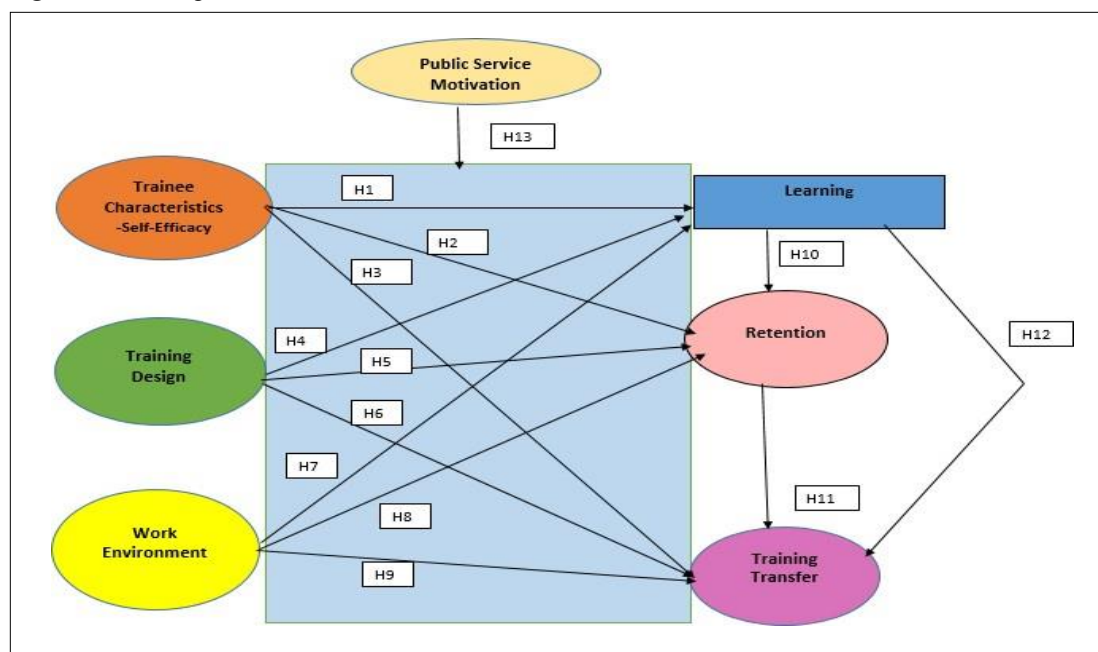
Under the moderation effect of PSM, there are nine hypotheses were developed as follows,

1. H_{13a} Positive moderation on self-efficacy to learning
2. H_{13b} Positive moderation on self-efficacy to retention
3. H_{13c} Positive moderation on self-efficacy to training transfer
4. H_{13d} Positive moderation on training design
5. H_{13e} Positive moderation on training design to retention
6. H_{13f} Positive moderation on training design to training transfer
7. H_{13g} Positive moderation on the work environment to learning
8. H_{13h} Positive moderation on the work environment to retention
9. H_{13i} Positive moderation on the work environment to training transfer

Conceptual Framework

Based on the Baldwin and Ford training transfer model, the conceptual framework of this study was developed as shown in Figure 1.4, the main theme is based on the transfer of training, analyzing its relationships with training inputs and training outcomes. In addition, the moderation effect of PSM is considered in this study.

Figure 1:4 Conceptual Framework



Methodology and Data Analysis

Research Design Overview

The main objective of this study was to analyze the predictions of training inputs (trainee characteristics, training design, and work environment) on training outcomes (retention and learning, and training transfer) in the context of second language training in Sri Lanka while considering the moderator effect of PSM on the relationship between training inputs and training outcomes. The selected second

language training program was the “Basic Tamil Language Program” which was conducted by the Department of Official Languages which is the government official body that has the authority to conduct the second languages training program. The Basic Tamil Course was conducted two times per year from January to June and July to December. Participants for the course were public officers, officers of the government-affiliated institutions, officers in the private sector, and those who are interested in language learning. At the end of the program, participants have to face oral and written examinations. Two samples have been taken for the study.

A five-point Likert scale, self-reported questionnaires were used for both case studies. For the analysis, Partial Least Squares Structural Equation Modeling (PLS-SEM) run by SMART PLS version 3.2.7 was used.

Sample and Data Collection Procedure

Sample 1

The first sample was taken as the participants of the Basic Tamil course which was implemented from January to June 2018. Although the total number of participants for the course was 725, it was considered only the government officers since this research was limited to the public sector. The total number of government officers was 216 and paper-based questionnaires were distributed to all of them and 171 fully filled questionnaires were received. Having screened 171 questionnaires, 167 questionnaires were retained. After three months, online data collection was conducted to measure the components of retention and training transfer, though 158 officers responded for that. Then for the final examination, six were absent out of the 158 officers. Finally, 152 officers were taken as the sample for the first batch. The response rate was 70.37%.

The data collection was implemented three times by paper-based questionnaires, an online survey, and an examination as follows. The first part of the paper-based questionnaire consisted demographic details of the respondents and the second part of the questionnaire consisted the items of each construct. Although data regarding the trainee characteristics, work environment, and PSM should be collected at the

beginning of the program, data of those were collected at the end of the program in June 2018 (Time 1) because our research design has not been completed at the beginning of the program. In August 2018 after two months of the course, it has been measured learning components by obtaining the final examination results only (Time 2) and there was no placement test for the first batch at the beginning of the program since the researcher was not ready to implement the data collection at that time. Then retention and training transfer data were collected through Google Form online questionnaire in September 2019 (Time 3) after three months of the program.

Sample 2

Participants of the basic Tamil course which was implemented from July to December, 2018 were taken as sample 2 for the study. Among the 616 participants, government officers were 183. So that 183 paper-based questionnaires were distributed to all government officers who followed the training program and 160 questionnaires were returned. Then after data screening of 160 questionnaires, 150 questionnaires were retained. After three months, online data collection was conducted to measure the components of retention and training transfer. However, 150 officers responded to that. Then for the final examination, eight people were absent among the 150 officers. So finally, 142 officers were taken as the sample for the second batch. The response rate was 77.59%. The data collection was implemented three times by paper-based questionnaires, an online survey, and an examination as follows.

At the beginning of the course in July 2018 (Time 1), the first paper-based questionnaires were distributed to measure the items of self-efficacy, work environment, and PSM (See Appendix 3). The learning components were measured in two ways. Beginning of the course in July 2018, the placement test was conducted and collected the marks of the participants (Time 2).

Paper-based Questionnaire was developed to measure the training design (See Appendix 04) and it was distributed in December 2018 at the end of the course (Time 3). Then after two months of the program in February 2019, it was collected the final examination results to measure the learning aspects of the program (Time 4). Then data regarding retention and training transfer was collected through Google Form online questionnaire in March 2019 (Time 5) after three months of the program.

The summary of the data collection periods of each sample was in Table 3.1 and 3.2.

Table 1.1: Data collection of Sample 1

Data collection Time	Components
Time 1- June 2018 (Paper-based questionnaire Survey)	training characteristics, training design, working environment, and PSM
Time 2 - August 2018	learning through the final examination results
Time 3 - September 2018 (Online Survey)	retention & training transfer

Table 1.2 Data collection of Sample 2

Data collection Time	Components
Time 1- July 2018 (Paper-based questionnaire Survey)	training characteristics, training design, working environment, and PSM
Time 2- July 2018	learning - placement test results
Time 3 -December 2018	training design
Time 4 - February 2019	learning - final exam results
Time 5 March 2019 (Online Survey)	retention & training transfer

Measures

The items for all the constructs used a 5-point Likert scale ranging from 1(= strongly is agree) to 5 (= strongly disagree). All measures were drawn from existing studies having high reliability and validity. Altogether 62 items were used in the study.

Table 1.3: Summary of all the measures

Factors	No of Items	Sample Items	Source
Self-Efficacy	4	I am confident to use newly learnt knowledge to provide bilingual service	Development of a generalized learning transfer inventory - Holton et al. (2000)
Training Design	8	The instructional aids (equipment, illustration...etc) used in the training program are very similar to real thing I use on the job	Development of a generalized learning transfer inventory - Holton et al. (2000) Velada et al. (2007)
Work Environment	16	My supervisor meets with me to discuss ways to apply the second language training on the job /My peers help and discuss with me to apply the knowledge on the job /I will get the opportunities to use second languages training on the job	Development of a generalized learning transfer inventory - Holton et al. (2000) Velada et al. (2007)
Learning		final exam results and placement test results	Results from DOL
Retention	3	I still remember the main topics that I have learnt in the second languages training program	Velada et al. (2007)
Training Transfer	11	I have been incorporating learnt knowledge and skills into daily job routine When I get a telephone call in Tamil language, I can reply in same language	Xiao (1996). Public Administration Circular 3/2010 ,1/2011 ,4/2012
Public service Motivation	20	I am interested in helping to improve public service	Testing the Measurement Scale of PSM in Korea Sangmook Kim (2012)

Data Analysis

Partial Least Squares Structural Equation Modeling (PLS-SEM) was used because of the small sample size in both samples and the complex model (Hair et al., 2016). It has been analyzed two models such as complete full model having all the constructs and without learning and retention. The reason for analyzing two models is learning data was not valid enough because we could measure the knowledge level

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of trainees only at the end of the program and so we could not observe the learning as their changed in terms of knowledge during the training. Furthermore, retention was neither reliable nor valid since only one item has remained in the analysis. So, we wanted to check the result without learning and retention as well. Conceptual frameworks of analyzed models are in Figures 1.5 and 1.6.

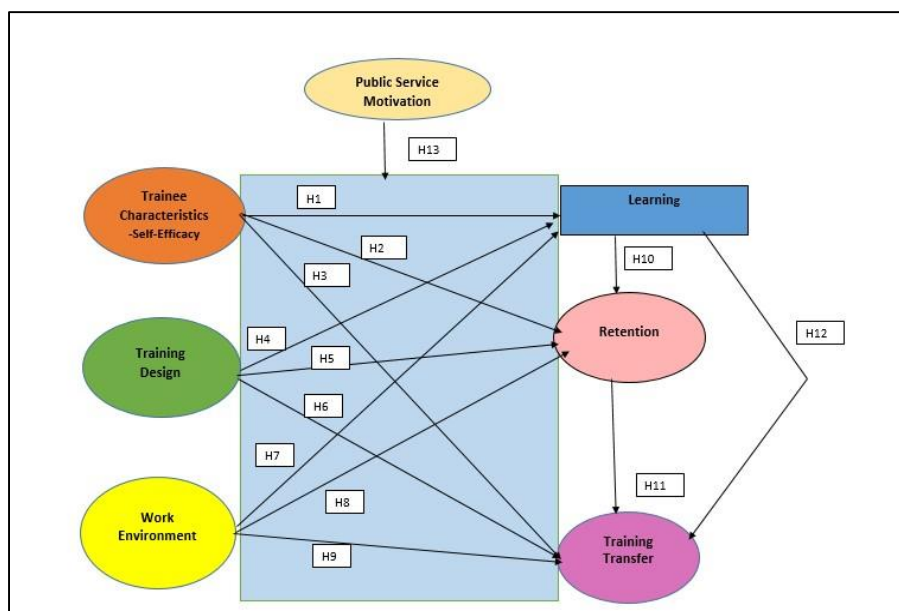


Figure 1.5: Full Model

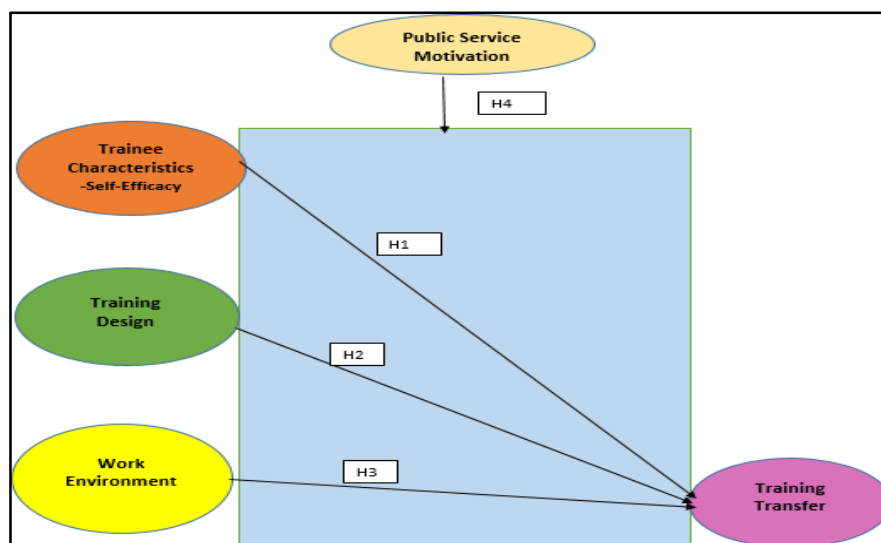


Figure 1.6: Model without Learning and Retention

PLS-SEM results are used to evaluate in two-stage approaches such as measurement model (outer model) and structural model (inner model).

RESULTS

Demographic Information

Sample 1 and Sample 2 were integrated for the data analysis. So, the number of total participants of the study is 294. Demographic information is common for two model.

Considering the gender distribution, the majority of the participants were female officials hence, 112 officers (38%) were male and, 182 (62%) officers were female. When comparing the age most of the officers were in the age category of 18-39 years (67%) and 33% of officers were in the age category of 40-65 years. Moreover, 64% of the sample were none executive officers (188) and 36% Executive Officers (106). Further, 70% of the sample represent officers who have been recruited after 2007 and, 30% of officers have been recruited for the government service before 2007. Furthermore, 152 (52%) participants are from sample 1 and 142 (48%) participants are from sample 2. Apart from the majority of the sample was Buddhist representing 95%, Islam and Hindu religions represented 4% and 1% respectively.

Moreover, the second language which should be acquired by all officers is Tamil since all the officers have been recruited in the medium of Sinhala language.

Descriptive Statistics

Table 1.3 shows the descriptive statistics of the variables. According to table 4.2, means, standard deviations, and correlations between variables are shown. The mean value of age is 36. It can be seen significant correlations between several variables at a significant level 1% and 5% level. Descriptive statistics detail is also common for all two models.

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Table 1.3 Descriptive Statistics

	Mean	Standard Deviation	Self- Efficiency	Training Design	Work Enviro nment	Learning	Retenti on	Training Transfer	Public Sector Motiva tion
Age	36.60	10.113	-.062	-.107	-.010	- 0.108	- .162**	-.174**	0.042
Gender	0.615	0.487	0.002	0.062	0.050	0.187 **	0.127 *	0.105	0.037
Position	0.649	0.477	-0.330	0.031	-0.900	0.025	0.134 *	0.046	0.059
Batch	0.482	0.500	0.332**	0.196 **	0.157**	0.258 **	0.170* *	0.084	-0.800
Self-Efficacy	2.160	0.861	1.000						
Training Design	2.213	0.869	0.468**	1.000					
Work Environment	2.413	0.950	0.373**	0.399**	1.000				
Learning	74.37 4	13.749	0.076	0.011	0.009	1.000			
Retention	2.666	0.807	0.091	0.163**	0.046	-0.022	1.00 0		
Training Transfer	2.580	0.882	0.187**	0.327**	0.265**	- 0.660	0.328* *	1.000	
Public Service Motivation	1.711	0.785	0.127*	0.037	0.243**	0.037	- 0.069	0.085	1.000

Results of Full Model

The evaluation was done according to two models i.e: measurement model and evaluation of the structural model

Construct Reliability and Validly

To have valid indicator's reliability, all items of each (Rho_A) value should be greater than or equal to 0.7, composite reliability should be greater than or equal to 0.7 and the average variant extracted should be greater than or equal to 0.5. Moreover, loadings of the outer model are the bivariate correlations between the indicator and the construct. and also, the outer loading of the indicators should be equal to or greater than 0.5. Hence outer loadings less than 0.5 should be removed always from the model since those are weaker loadings. So, in this study, some indicators which have outer loadings value less than 0.5 have been removed. All the results relevant to construct reliability and validity are shown in Table 1.4 as follows.

Table 1:4 Construct Reliability and Validity

Construct	Indicator	Outer Loadings > 0.5	> 0.7	Composite Reliability > 0.7	Average Variance Extracted > 0.5
Self-Efficacy	TC_SE2	0.789	0.849	0.843	0.729
	TC_SE4	0.906			
Training Design	TD_PCV1	0.717	0.806	0.801	0.575
	TD_PCV2	0.828			
	TD_TRD2	0.724			
Work Environment	WE_OU4	0.668	0.912	0.896	0.526
	WE_PS3	0.649			
	WE_SP1	0.859			
	WE_SP2	0.962			
	WE_SP3	0.634			
	WE_SP4	0.720			
	WE_SP5	0.603			
Learning	WE_SP6	0.634			
	L_FT	1.000	1.000	1.000	1.000
Retention	R3	1.000	1.000	1.000	1.000
Training Transfer	TT2	0.790	0.773	0.773	0.630
	TT3	0.798			
Public Service Motivation	PSM_AP1	0.727	0.932	0.917	0.653
	PSM_AP2	1.027			
	PSM_AP3	0.693			
	PSM_AP4	0.924			
	PSM_AP5	0.755			
	PSM_CPV4	0.800			

Discriminant Validity

The discriminant validity can be captured through Cross Loadings, Fornell and Larcker criterion, and Heterotrait –Monotrait Ratio (HTML).

Cross Loadings

Table 1.5 shows that the results of cross-loadings of each indicator. It can be seen that all the cross-loadings were lower than the respective indicator's outer loadings. Thus discriminant validity was established in the full model.

Table 1.5: Cross Loadings

Construct	Indicator	Learning	Public Service Motivation	Retention	Self-Efficacy	Training Design	Training Transfer	Work Environment
Learning	L_FT	1.000	0.069	0.035	-0.067	0.003	-0.017	0.001
Public Service Motivation	PSM_AP1	0.03	0.708	0.105	0.115	0.03	0.008	0.136
	PSM_AP2	0.077	1.014	0.14	0.107	0.005	-0.033	0.139
	PSM_AP3	0.045	0.671	0.082	0.068	0.047	0.041	0.074
	PSM_AP4	0.065	0.903	0.116	0.084	-0.001	0.017	0.066
	PSM_AP5	0.057	0.730	0.081	0.153	0.03	0.059	0.1
	PSM_CPV4	0.08	0.769	0.063	0.151	0.134	0.108	0.14
Retention	R3	0.035	0.121	1.000	-0.005	0.081	-0.014	0.008
Self-Efficacy	TC_SE2	-0.060	0.136	0.014	0.798	0.33	0.264	0.323
	TC_SE4	-0.055	0.106	-0.021	0.906	0.279	0.303	0.325
Training Design	TD_PCV1	0.000	0.007	0.067	0.204	0.717	0.273	0.179
	TD_PCV2	-0.045	0.006	0.027	0.347	0.828	0.329	0.310
	TD_TRD2	0.060	0.102	0.096	0.244	0.724	0.267	0.221
Training Transfer	TT2	-0.024	0.006	-0.018	0.263	0.296	0.790	0.307
	TT3	-0.002	0.058	-0.004	0.265	0.313	0.798	0.282
Work Environment	WE_OU4	-0.053	0.164	-0.019	0.432	0.281	0.249	0.668
	WE_PS3	0.077	0.106	-0.006	0.182	0.131	0.240	0.649
	WE_SP1	-0.010	0.073	-0.015	0.286	0.279	0.318	0.856
	WE_SP2	-0.005	0.155	-0.001	0.307	0.202	0.357	0.962
	WE_SP3	0.031	0.087	0.03	0.243	0.192	0.234	0.634

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Fornell and Larcker Criterion

The cross-diagonal values should be higher than the values inside the diagonal to establish the discriminant validity. According to table 4.5, that condition was satisfied.

Table 1.6: Fornell- Larcker Criterion

	Learnin g	Public Service Motivatio n	Retenti on	Self- Efficacy	Training Transfer	Traini ng Design	Work Environm ent
Learning							
Public Service Motivatio n	0.073						
Retention	0.035	0.121					
Self- Efficacy	0.068	0.142	0.02				
Training Design	0.046	0.075	0.083	0.353			
Training Transfer	0.017	0.057	0.014	0.333	0.381		
Work Environ ment	0.047	0.141	0.025	0.382	0.313	0.365	

Heterotrait –Monotrait Ratio (HTML)

HTML should not be more than 0.9. HTML ratio was shown in below table in 1.7.

Table 1:7 Heterotrait –Monotrait Ratio (HTML)

Construct	Learnin g	Public Service Motivati on	Retenti on	Self- Efficacy	Trainin g Design	Trainin g Transfe r	Work Environ ment
Learning	1.000						
Public Service Motivation	0.074	0.808					
Retention	0.035	0.121	1.000				
Self-Efficacy	-0.067	0.14	-0.005	0.854			
Training Design	0.003	0.049	0.081	0.354	0.758		
Training Transfer	-0.017	0.04	-0.014	0.333	0.384	0.794	
Work Environment	0.001	0.141	0.008	0.379	0.316	0.371	0.726

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Collinearity Assessment

Variance Inflation Factor (VIF) measures the collinearity between each variable. If the VIF is below 5, it can be considered that there is no serious collinearity among the variables since all the values of VIF is less than 5 in table 1.7, there is no collinearity issue in the full model.

Construct	Learning	Retention	Training_ Transfer
Learning		1.142	1.142
Public Service Motivation	1.225	1.232	1.255
Retention			1.040
Self-Efficacy	1.359	1.394	1.396
Training Design	1.248	1.249	1.260
Work Environment	1.328	1.328	1.330

Table 1:8 Collinearity Assessment

Construct	Learning	Retention	Training_ Transfer
Learning		1.142	1.142
Public Service Motivation	1.225	1.232	1.255
Retention			1.040
Self-Efficacy	1.359	1.394	1.396
Training Design	1.248	1.249	1.260
Work Environment	1.328	1.328	1.330

Model Fitness

Standardized Root Mean Square Residual (SRMR) should be less than 0.08 to establish the model fitness. Consequently, the Normed Fit Index (NFI)

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results in values between 0 and 1. Moreover and Chi-square value over the degree of freedom should be less than 3.84. According to Table 1.9, this model's SRMR value is less than 0.08, NFI value is within the relevant range and Chi-square value over the degree of freedom is less than 3.84, this model has satisfied the conditions of the model fitness.

Table 1.9: Model Fitness Values

	Estimate Model
SRMR	0.07
Chi- Square	2.38
NFI	0.430

Evaluating Structural Model

Hypotheses were tested with the structural model. The structural model represents the conceptual elements of the path model since it shows the path relationships among the latent variables (Hair et al, 2016). Figure 4.2 shows the results of the path model. Values from outside the circles of figure 4.2 are outer loading. Paths between variables are the path coefficients. The small circles are the interaction term that is used in PLS-SEM to indicate moderating effect. Moreover, it has been highlighted the significant paths are located between the constructs.

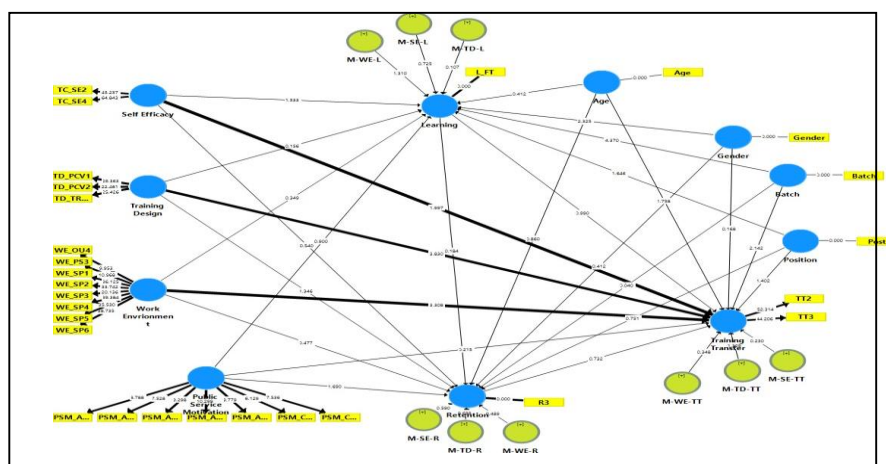


Figure 1:8 Path Evaluation Model

Path Coefficients

The results of path coefficients have been taken by running 5,000 samples bootstrapping and using the value for the two-tailed test 1.96 (5% significant level). The bootstrapping results for the path coefficient of each hypothesis are presented in 1.10

Table 1.10 Path Coefficient of Hypothesis

Paths		Path coefficients	T statistics	P Values	Decision
H1	Self-Efficacy -> Learning	-0.098	1.534	0.125	Not Supported
H2	Self-Efficacy -> Retention	-0.033	0.528	0.598	Not Supported
H3	Self-Efficacy->Training Transfer	0.114	1.990	0.047	Supported
H4	Training Design-> Learning	0.010	0.155	0.877	Not Supported
H5	Training Design-> Retention	0.086	1.327	0.185	Not Supported
H6	Training Design->Training Transfer	0.213	3.758	0.000	Supported
H7	Work Environment -> Learning	-0.021	0.347	0.729	Not Supported
H8	Work Environment ->Retention	-0.031	0.478	0.633	Not Supported
H9	Work Environment -> Training Transfer	0.191	3.278	0.000	Supported
H10	Learning ->Retention	0.012	0.184	0.854	Not Supported
H11	Retention->Training Transfer	-0.038	0.727	0.467	Not Supported
H12	Learning ->Training Transfer	-0.053	0.999	0.318	Not Supported

According to Table 1.10, it can be seen, the path between self-efficacy to training transfer was positive and statically significant at a 5% level. So hypothesis 3, self-efficacy positively predicts training transfer was accepted in the study. And also it was

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found that the path between training designs to training transfer was positive and statically significant at the 1% level. Thus hypothesis 6 was also accepted in the study. Furthermore, the path coefficient from work environment to training transfer was also positive and statically significant at the 1% level. Therefore, hypothesis 9, work environment positively predicts training transfer was also accepted and supported for the study. Therefore, Hypotheses 3, 6, and 9 were supported by the study. However other hypotheses were not significant and they didn't support. Hypothesis 13 was PSM has appositve moderation on the relationship between each training input and training outcomes. There are nine moderation effects between each training input to training outcome. According to Table 1.10 could not observe any positive statistically significant value in any moderation effect. Therefore, hypothesis 13 was rejected.

Table 1.10 Path coefficient of hypothesis 13

	Path	Path coefficients	T statistics	P Value	Decision
H 13- Moderation Effect of PSM					
H13(a)	Self-Efficacy>Learning	0.057	0.723	0.470	Not Supported
H13(b)	Self-Efficacy>Retention	0.046	0.596	0.551	Not Supported
H13(c)	Self-Efficacy>Training Transfer	-0.016	0.235	0.814	Not Supported
H13(d)	Training Design>Learning	0.007	0.107	0.915	Not Supported
H13(e)	Training Design>Retention	0.048	0.707	0.480	Not Supported
H13(f)	Training Design>Training Transfer	0.081	1.351	0.177	Not Supported
H13 (g)	Work Environment-Learning	0.089	1.347	0.178	Not Supported
H13 (h)	Work Environment--Retention	-0.039	0.491	0.623	Not Supported
H13(i)	Work Environment—Training Transfer	0.023	0.349	0.727	Not Supported

So finally, to sum up, among the 13 hypotheses, three hypotheses (hypotheses 3, 6, and 9) were fully accepted, and other hypotheses were rejected.

Results of Model without Learning and Retention

Learning and retention constructs cannot be seen in this model since those two constructs were removed as those are not trustworthy. The evaluation was done according to the measurement model and structural model. All the results have been shown below.

4.4.1 Evaluating Measurement Model

Figure 4.3 shows the result of the inner and outer models.

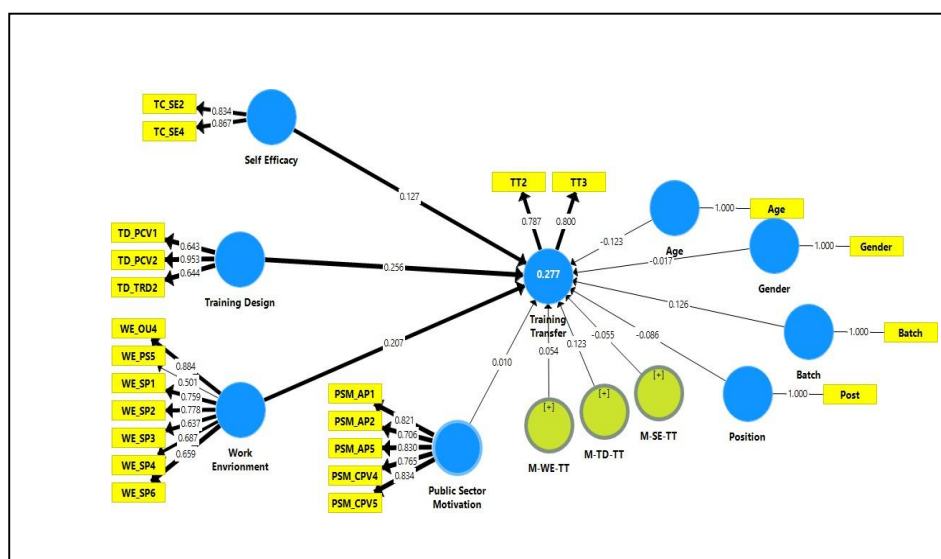


Figure 1.9: Inner and Outer Model Evaluation for without learning and retention model

Construct Reliability and Validly

All the results relevant to establish valid construct reliability and validity are shown in Table

4.11 As follows.

Table 1: 11 Construct Reliability and Validity

Construct	Indicator	Outer Loadings > 0.5	RH0_A > 0.7	Composite Reliability > 0.7	Average Variance Extracted > 0.5
Self-Efficacy	TC_SE2	0.834	0.8	0.84	0.724
	TC SE4	0.867	41		
Training Design	TD_PCV1	0.643	0.8	0.799	0.579
	TD_PCV2	0.953	40		
	TD_TRD2	0.644			
Work Environment	WE_OU4WE	0.884	0.8 87	0.874	0.504
	_PS5	0.501			
	WE_SP1	0.759			
	WE_SP2	0.778			
	WE_SP3	0.637			
	WE_SP4	0.687			
	WE_SP6	0.659			
Training Transfer	TT2	0.787	0.7	0.773	0.630
	TT3	0.800	73		
Public Service Motivation	PSM_	0.821	0.899	0.894	0.629
	AP1	0.706			
	PSM_	0.830			
	AP2	0.765			
	PSM_	0.834			
	AP3				
	PSM_				
	CPV4				
	PSM_				
	CPV5				

Discriminant Validly

Cross Loadings, Fornell and Larcker criterion, and Heterotrait –Monotrait Ratio (HTML) are the measurements to measure the valid discriminant validity.

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Cross Loadings

Table 1.12 shows that the results of cross-loadings of each indicator. All the cross-loadings were lower than the respective indicator's outer loadings. Thus, discriminant validity was established in this model also.

Table 1.12 Fornell and Larker Criterion

Construct	Indicator	Public Service Motivation	Self-Efficacy	Training Design	Training Transfer	Work Environment
Public Service Motivation	PSM_AP1	0.821	0.117	0.025	0.008	0.144
	PSM_AP2	0.706	0.11	0.004	-0.033	0.155
	PSM_AP5	0.830	0.154	0.029	0.059	0.11
	PSM_CPV4	0.765	0.151	0.125	0.108	0.157
	PSM_CPV5	0.834	0.121	0.045	0.053	0.158
Self-Efficacy	TC_SE2	0.141	0.834	0.331	0.264	0.364
	TC_SE4	0.139	0.867	0.283	0.303	0.352
Training Design	TD_PCV1	0.021	0.206	0.643	0.273	0.186
	TD_PCV2	0.014	0.35	0.953	0.329	0.318
	TD_TRD2	0.114	0.247	0.644	0.267	0.233
Training Transfer	TT2	0.017	0.264	0.299	0.787	0.314
	TT3	0.064	0.266	0.306	0.800	0.276
Work Environment	WE_OU4	0.183	0.434	0.282	0.248	0.884
	WE_PS5	0.164	0.246	0.085	0.172	0.501
	WE_SP1	0.099	0.288	0.281	0.318	0.759
	WE_SP2	0.177	0.309	0.206	0.357	0.778
	WE_SP3	0.116	0.244	0.194	0.234	0.637
	WE_SP4	0.097	0.252	0.288	0.267	0.687
	WE_SP6	0.064	0.288	0.267	0.233	0.659

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Fornell and Larker Criterion was established in this model too since cross diagonal values are the highest in the shown in Table 1.13.

Table 1.13: Fornell- Larker Criterion

Construct	Public Service Motivation	Self-Efficacy	Training Design	Training Transfer	Work Environment
Public Service Motivation	0.793				
Self-Efficacy	0.165	0.851			
Training Design	0.058	0.36	0.761		
Training Transfer	0.051	0.334	0.381	0.794	
Work Environment	0.181	0.421	0.33	0.372	0.710

Heterotrait –Monotrait Ratio (HTML)

HTML should not be more than 0.9. HTML result was shown in Table 4.14.

Table 1.14: Heterotrait –Monotrait Ratio (HTML)

	Public Service Motivation	Self-Efficacy	Training Transfer	Training Design	Work Environment
Public Service Motivation					
Self-Efficacy	0.165				
Training Design	0.079	0.353			
Training Transfer	0.067	0.333	0.381		
Work Environment	0.181	0.41	0.312	0.364	

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Collinearity Assessment

Since all the values of VIF is less than 5 in table 4.15, there is no collinearity issue in this model too.

Table 1.15: Collinearity Assessment

Construct	Training Transfer
Public Service Motivation	1.352
Self-Efficacy	1.386
Training Design	1.247
Work Environment	1.385

Model Fitness

Since SRMR is less than 0.08 and NFI is within the 0 to 1 model fitness is also established in this model too and all the results are shown in Table4.16.

Table 1.16: Model Fitness Values

	Estimated Model
SRMR	0.069
Chi-Square	1.004
NFI	0.698

Evaluating Structural Model

Figure 1.10 shows the results of the path model.

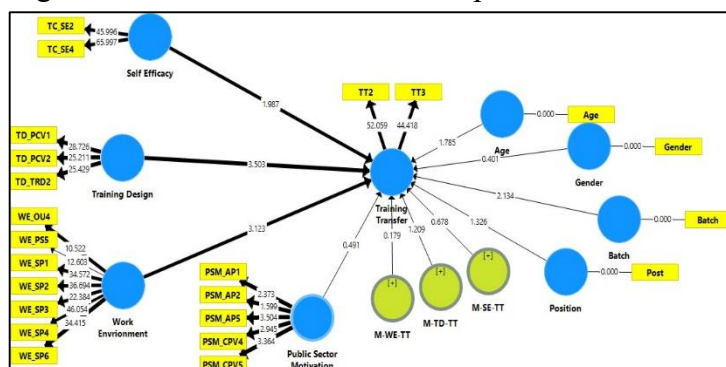


Figure 1.10 Result of Path Analysis

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Path Coefficients

The bootstrapping results for the path coefficient of each hypothesis are presented in Table 4.17. All the results related to the moderation effect are also shown in Table 4.17.

Table 1.17: Path Coefficient of Hypothesis

Paths		Path coefficients	T statistics	P Values	Decision
H1	Self-Efficacy -> Training Transfer	0.121	1.987	0.047	Supported
H2	Training Design-> Training Transfer	0.213	3.683	0.000	Supported
H3	Work Environment -> Training Transfer	0.197	3.296	0.001	Supported

According to Table 4.17, it can be seen, the path between self-efficacy to training transfer was positive and statically significant at a 5% level. So hypothesis 1, self-efficacy positively predicts training transfer was accepted in this study. And also it was found that the paths between training design to training transfer and work environment to training transfer were positive and statically significant at 1% level. Thus hypotheses 2 and 3 were also accepted in the study.

Hypothesis 4 was PSM has a positive moderation on the relation between each training input and training outcome. But according to Table 4.18, it could not observe any statistically significant value

Table 1.18: Path coefficient of hypothesis 4 and control variables

Hypothesis	Path	Path coefficients	T statistics	P Value	Decision
H 4- Moderation Effect of PSM					
H4(a)	Self-Efficacy>Training Transfer	-0.016	0.235	0.814	Not Supported
H4(b)	Training Design>Training Transfer	0.081	1.351	0.177	Not Supported
H4(c)	Work Environment-Training Transfer	0.023	0.349	0.727	Not Supported

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So finally to sum up, among the 4 hypotheses, hypotheses 1, 2, and 3 were fully accepted, and hypothesis 4 were rejected.

By looking at the results of the two models, it can be seen that both two models have the same results. In another word, all two models emphasized the training inputs has a positive significant prediction on training transfer but not for retention and learning. Moreover, it could not see any moderation effect of PSM on the training transfer process in both models.

Discussions

For the full model, 13 hypotheses were developed and three hypotheses (hypotheses 3, 6, and 9) were fully accepted and other hypotheses were rejected due to insufficient data quality because it could not be observed the learning as their change in terms of knowledge during the training. Therefore, learning and retention data was neither reliable nor valid. These matters may be the reason for having insignificant results. Moreover, the majority of the participant's objective was to get a certificate at the end of the course rather than providing bilingual service, and most of the time, it can be seen the majority of the officials do not use a second language after getting the second language proficiency. Those factors may be one the reasons for getting insignificant results in some paths.

Hypothesis 3, self-efficacy positively predicts training transfer was supported. This finding is consistent with the results of previous empirical studies (Baldwin and Ford (1998); Noe (1986)). Hypothesis 6 is that training design positively predicts training transfer. This finding also confirmed the previous literature such as Furthermore Burke and Hutchins (2007); Baldwin and Ford (1988)). Hypothesis 9 is that the work environment positively predicts training transfer. These results also validated the results of previous empirical studies (Baldwin & Ford, 1988; Burke & Hutchins, 2007).

Hypothesis 1 and 2 respectively, self-efficacy positively predicts learning and self-efficacy positively predicts retention were not significant in this study. This study

could conduct only one examination after the training program to measure the learning level before the training program and it was unable to conduct the examination before *Second Language Training Transfer for Providing Bilingual Service by the Public Officials in Sri Lanka*

the program to measure the learning level program. Therefore, this study was unable to measure the gap between learning levels of the participants before and after the training program and unable to measure the additional learning between before and after the training program. Therefore, learning could not capture properly and self-efficacy to learning path was insignificant. As mentioned above, retention was both neither reliable nor valid, which may be a reason for the path between self-efficacy and retention was not significant. Moreover, this study used subjective measurements to measure the retention criteria. It may also affect getting an insignificant result.

Hypothesis 4, training design positively predicts learning and hypothesis 5, training design positively predicts retention. Both hypotheses were insignificant. Although all the participants have the same training program and same training design, they are from different educational backgrounds, and they have different jobs to perform are different. Hence, their learning abilities and retention level of memory are different. So that the paths from training design to learning and paths from training design to retention were not significant. Hypothesis 7, that the work environment positively predicts learning and hypothesis 8, that the work environment positively predicts retention were not significant in this Study. The reasons behind the insignificant results are, it can be observed 294 participants belong to different organizations in the government sector and they have to deal with different types of tasks and workloads in the different locations.

Therefore, some may not have opportunities and enough peer and supervisory support from the work environment for learning and retention of the second language. That may lead to insignificant results. The selected training program was conducted only one day per week. Therefore, there is an interval for learning every week. Those intervals may affect the final learning levels. Moreover, after the training program, trainees do not have any opportunity for having second language training again. Those intervals also may affect the retention level too. So those factors may be the reasons behind the insignificant results of hypotheses 7 and 8.

Hypothesis 10, learning positively predicts retention was also insignificant. As discussed above due to learning and retention data being neither trustworthy nor valid, this path from learning to retention was insignificant. Moreover, the participant's main

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objective was to get the certificate at the end of the course. Therefore, learning does not have any effect on retention since after the final examination for getting the certificate they may forget gradually what they have learned. So that may be the cause of getting an insignificant result for the path between learning and retention. Hypothesis 11, was that retention positively predicts training transfer was also insignificant. One of the reasons for this the insignificant result is trainees are not motivated after the training program even though they may successfully be retained what they have learned. Moreover, insufficient data quality of retention data may affect getting insignificant results. Hypothesis 12, learning positively predicts training transfer was not also significant. Rather than transferring what they have learned getting a certificate is the main priority and the uncaptured learning gap may be the reason for getting the insignificant result for the path between learning and training transfer.

The last hypothesis was that, moderation effect of PSM between training inputs and training outcomes. There were nine moderation effects and neither of them are significant. Some studies found that PSM does not have any moderation effect on the relationship between organizational factors and work outcomes such as the study of Taylor (2008). The present study also confirm the above empirical study as having found the interaction of PSM and work-related variables has no significant impact on work outcomes. In addition to that, bases of PSM are generally a commitment to public values, altruism, etc. Self-efficacy is an individual's self-belief that can change their performance and results when desired. Bandura (1977) states that self-efficacy is not a person's logical trait; it refers to beliefs regarding specific abilities concerning specific situations and it varies according to task and context. This may be a reason for why PSM did not moderate the relationships.

Training has two kinds of impacts such as motivational and development. By looking at the result of the study it seems to be public officials in Sri Lanka have the motivational aspect rather than development aspects since we got significant results

only for the training transfer but not for the learning and retention. However, we should be cautious since development aspects may be also

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Captured by the direct paths in our analysis. The insufficient data quality of learning and retention may also be the reason for getting the insignificant results.

Conclusion

It was found that all the training inputs namely training characteristics, training design, and work environment have a positive prediction on the training transfer process in second language training in Sri Lanka. However, this study confirmed the results of literature in the field of training transfer especially Baldwin and Ford model (1988), bridging it with the concept of transfer of training to the motivational behavior in the public sector. Their study suggested conducting an integrated study to examine the effect of all three training inputs on training transfer. Hence, this study attempted to fill that gap by conducting an integrated study to examine all three training inputs on the training transfer process. However, it has been emphasized in this study that training inputs positively predict only training transfer, but not for learning and retention. Furthermore, the PSM of the government officers doesn't have any predictions on the training transfer process.

According to the results of the study, trainees' perceptions of training inputs seem to be effective to predict the transfer of training. Therefore government institutions should pay attention to the training inputs in terms of training transfer for providing bilingual service. Thus, the findings of this study will be helpful for government organizations to enhance the training transfer process in terms of providing bilingual service to the general public. Moreover, this study will also help the Department of Official Languages to improve their second language training programs since they didn't evaluate training programs in terms of training transfer.

Future Directions

Future researchers can use the experimental type of research design to identify the causal effects of training inputs on training outcomes. Since this study is limited to a single training program, it is better to select different types of second language training programs for future research, and then the results can be more generalized. It is better to research and find out the conditions that distinguish with and without

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moderation effect of PSM on training transfer since this study could not find any significant moderation effect on PSM.

Since this study was unable to find out the most influencing factor of the work environment, it would be interesting if future studies would identify the most influencing factor among the three factors of the work environment. To minimize the bias due to the respondent's perception, it would be better to use objective measurements rather than using subjective measurements. For example, it would be better if there were tests for measuring retention so that measures would be more objective than subjective, as perception differs between individuals.

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