THE DEVELOPMENT OF TEACHERS' KNOWLEDGE AND BEHAVIOURS IN PROMOTING PRESCHOOLERS' SELF-DISCIPLINE

PHORNCHULEE LUNGKA

A thesis submitted in partial fulfilment of the
requirements of Liverpool John Moores University
for the degree of Doctor of Philosophy

October 2014

Abstract

This research study examines the problematic issues associated with developing a programme of in-service training for teachers on the topic of self-discipline in preschool children in Thailand. The study is predicated on the notion that a lack of understanding of ways to enhance self-discipline amongst young children can lead to difficult and challenging behaviour issues in schools, which may also contribute to poor academic achievement and poor social skills later on in the education system. It is noted that training on the topic of promoting self-discipline for preschool children has rarely been provided for Thai teachers and that the in-service programmes that do exist tend to be focused on short courses that emphasise the acquisition of knowledge through direct instruction in the form of lectures and presentations. This study thus focuses on the development and subsequent analysis of the effectiveness of a teacher education programme using the Socialisation, Externalisation, Combination and Internalisation (SECI) Model of training and development, which was originally developed in Japan, in order to develop teacher knowledge and skills in relation to the promotion of preschoolers' self-discipline in one school in Thailand.

A mixed-methods approach was employed to collect both qualitative and quantitative data on the head teacher, deputy head teachers, preschool teachers and preschoolers. Three methods including semi-structured interviews, semi-structured observations and classroom observations were used to collect the quantitative data, while the quantitative data was collected by questionnaires and behaviour checklists. The study was conducted in one nursery school in Bangkok, as a case study. The sample consisted of one head teacher, three deputy head teachers, 24 preschool teachers and 527 preschoolers. A total of 24 preschool teachers participated in all sessions of the programme for 9 weeks, excluding pre- and post-test. The data gathering in the study was divided into three phases: (1) before the programme, (2) the programme implementation, and (3) after the programme. The programme was conducted on preschool teachers and then evaluated on both teachers' and preschoolers' outcomes.

The research findings revealed that the programme was effective in enhancing both teachers' knowledge and behaviour in promoting preschoolers' self-discipline, which resulted in improved self-discipline amongst the preschoolers involved in the study. Moreover, the findings also indicated that the adapted SECI model used in the programme could be considered a successful mechanism for preschool teachers' professional learning and practice.

There are several recommendations for further research. Firstly, further research should be conducted in other phases and types of school to confirm whether the SECI model is suitable for the training and development of teachers in all phases of education in relation to developing children's self-discipline. Secondly, it is recommended that studies are carried out to examine whether similar programmes can be applied to other school issues and challenges in all phases of education. In addition, it is suggested that the provision of teacher education programmes in Thailand in general should be expanded and that those programmes should make greater use of social learning approaches. Finally, it is recommended that follow-up studies should be implemented in order to examine further the crucial issues of the maintenance and enhancement teachers' knowledge and skills in Thailand.

Table of contents

Acknowledgements

I would like to express my profound gratitude to several key persons who have been involved continuously throughout my PhD study. First and foremost, I am deeply thankful to my supervisor Professor Mark Brundrett for all of his guidance, help and support throughout my PhD. I am grateful for his patience and encouragement and for keeping me focused when the end seemed unreachable. His hard work is very much appreciated. Indeed, I could not have completed this thesis without the patience and continuous comments and suggestions from all of my supervisors

I would like to acknowledge the Ratjabhat Suan Dusit University, which has generously funded the full scholarship for my PhD study. This is one of the greatest and most valuable opportunities in my life, one that has strengthened my potential, not only in my academic career, but also in many other aspects of life.

Additionally, without the support of the nursery school head teacher and the teachers in the school where this study took place, this project would not have been possible. I would also like to thank all my friends in Liverpool for always being there for me and for 'putting up' with me when I have found life challenging. Equal thanks are offered to all my friends in Thailand for their encouragement and support.

Last but not least, I would like to express my special thanks to my family for all their love and support and also for believing in me even when I did not believe in myself. This thesis is dedicated to my dad, mom and sister because I could never have come this far without them.

List of abbreviations

ITT	Initial Teacher Training
LAO	The Local Administrative Organisation
MOE	The Ministry of Education
ONEC	The Office of National Education Committee
OEC	The Office of the Education Council
OBEC	The Office of Basic Education Commission
OHEC	The Office of Higher Education Commission
RAPCAN	The Resources Aimed at the Prevention of Child Abuse and Neglect
UNESCO	The United Nations Educational, Scientific and Cultural Organisation

List of tables

List of figures

Chapter 1
Introduction

Introduction

This research study examines the problematic issues associated with developing a programme of in-service training for teachers on the topic of self-discipline in preschool children in Thailand. A lack of understanding of proper approaches to promoting self-discipline amongst young children is a major concern for educators in Thailand because inadequacies in this area can result in challenging behaviour by children in schools, which may lead to further problems throughout life. It is to be noted that teacher training on the topic of how to promote preschool children' self-discipline has been very limited for Thai teachers and, more generally, that in-service training programmes in Thailand have tended to focus on knowledge acquisition in the form of direct instruction by lectures and presentations as part of short courses. Indeed, although a variety of approaches have been used in teacher training in Thailand, most have been based on traditional approaches of direct instruction by tutors. By contrast, this study focuses on the use of the SECI model, which was firstly proposed in Japan and is considered as practical approach to adult training.

As will be discussed in more detail later in this chapter and then explored more fully later in the text, the SECI model emphasises the conversion of two types of human knowledge, explicit knowledge and tacit knowledge, and knowledge conversion in the SECI model can be described as a four-stage spiral model: Socialisation, Externalisation, Combination and Internalisation (SECI) (Nonaka and Takeuchi, 1995). As will be explained later, this has become one of the most influential models in the knowledge management field (Krogh, Ichijo and Nonaka, 2000). However, the SECI model is a new approach to teacher training in Thailand, it is able to integrate knowledge acquisition with social learning approaches by sharing, discussing, combining and applying knowledge throughout the group activities. Therefore, this study focuses on the development and subsequent analysis of the effectiveness of a teacher education programme using the SECI model in order to train and develop teacher knowledge and skills in relation to the promotion of preschoolers' self-discipline.

The study was conducted in one nursery school in Bangkok and a mixed-method approach was employed to collect both qualitative and quantitative data. Semi-structured interviews, semi-structured observations and classroom observations were all used to collect the qualitative data, whereas the quantitative data were collected through the use of questionnaire and behaviour checklists. As will be outlined later in this chapter and then in greater detail later in the text, the study was divided into three phases; pre-test, intervention, and post-test. All preschool teachers accepted to participate in all sessions of the programme for 9 weeks. The programme was conducted with preschool teachers and then evaluated through an examination of both teachers' and preschoolers' outcomes. Moreover, this study also explored the views of a head teacher, deputy head teachers and preschool teachers with regard to the wider issues connected with the promotion of preschoolers' self-discipline.

The introduction chapter will introduce the background to a research study, which sought to develop a programme to train preschool teachers about promoting preschooler's self-discipline in Thailand. The chapter will place this study into context and provide justification for the research. The chapter is in ten parts: the first part will introduce the background of the current and this is then followed by a discussion of self-discipline in part two; part three and four will explain Early Childhood Education and in-service teacher training in Thailand; part five will introduce the SECI model and then explain reasons for choosing the SECI model in the programme; part six will identify the research objectives and then part seven will focus on methodology; part eight will present originality of the study; part nine will identify the structure of the thesis; and finally, a summary of the chapter will be provided.

1.1 Background to the study

Self-discipline is regarded as one of the most desired characteristics for all students, whatever their age, since both learning and personal growth are enhanced when behaviour is appropriate. Equally, many societies consider that children should be trained to conform to social norms from early childhood. According to Bronson (2000: 32-37), preschool is the most appropriate phase to develop self-discipline and it is at this stage that children should be made aware of what is considered to be right and wrong since their cognitive development will have reached a stage where such

learning is possible. Indeed, a number of research documents show that self-discipline promotion in children should be treated as the primary goal of the child development process (Gordon and Browne, 1996; Hendrick, 1996; Marshall, 2001) since disciplined people can engage in disciplined thoughts and then take disciplined actions.

A holistic child development study discovered that one of the most important child development issues in Thailand was child self-discipline (Mohsuwan, 2004). Similarly, a study conducted by the Office of the Education Council (OEC) at Suan Dusit Rajabhat University revealed that Thai youth discipline creation is rated as a top priority for development (Chaloeysap, 2007). This appeared to prove that many children lack self-discipline and that this problem had led to difficult behaviour issues in many schools. Such studies feed into a general consensus that Thailand is facing a major social crisis and many commentators suggest that it is crucial that children should be educated from an early age to be disciplined adults in the future (Trangkasombat, 2005).

Many educators have believed that preschool teachers play an important role in helping their students build up their self-discipline (Frazee and Rudnitski, 1995) because children in this age group spend most of their time (approximately eight to ten hours a day) with their teachers. Moreover, the OEC (2013: 1) stated that several studies indicate that effective human development must begin right from conception, and that the first 5 years of life are critical for brain development. It is central to the researcher's argument that teachers who have the right knowledge and understanding about children's self-discipline development can initiate and implement the most appropriate teaching methods to support their self-discipline development.

Unfortunately, many Thai teachers are not trained in classroom management, conflict resolution or child development. As a result, they often rely on their own early school experiences, or local ideas of good teaching, to guide them. In some cases, those experiences and ideas are positive and inspiring ones but many times these experiences may have been negative or even distressing. If our training is inadequate, our experiences are harsh or local ideas are limited, educators may thus come to believe that classroom discipline is no more than scolding and hitting (Durrant, 2010).

The researcher's background

The genesis of this research lies with the background of the researcher; she gained a Bachelor's and a Master's degree in Early Childhood Education and she was a preschool teacher in Thailand for several years before starting her PhD in the year 2011. She wished to carry out the research for a number of reasons:

- First, the researcher herself had experience with self-discipline problems in nursery classrooms because she was a preschool teacher. Thus she is personally interested in the issue of encouraging social skills in young children, particularly in self-discipline.
- Second, she realised that teachers play an important role in teaching self-discipline to preschool children and that there should be a focus on training teachers about how to teach self-discipline to their children.
- Third, she had never attended any programmes about self-discipline during her time as a preschool teacher and it was notable that few, if any, such programmes have been available in Thailand. Whenever she was faced with difficult problems in the classroom, discussing and consulting with other senior teachers was considered as the best way to help her to sort out those problems. Thus, she felt that she would like to develop a new model of teacher training based on building social learning community of teachers rather than the more traditional approaches of direct instruction, which have tended to be prevalent in Thailand and in many other nations.

For these reasons, the researcher wished to develop a practical programme to train teachers about promoting self-discipline for preschool children. Finally, the researcher believed that this research was needed in order to address the needs of many nursery schools in Thailand and it was hoped that the Ministry of Education (MOE) might adopt the programme for teacher training in other contexts.

1.2 Self-discipline

In many countries, cultures and languages, the word 'discipline' has come to be equated with control and punishment. But this is not the true meaning of discipline. According to Durrant (2010), *'effective discipline is positive and constructive, which involves setting goals for learning and finding constructive solutions to challenging*

situations' (p.11). Positive discipline is seen as a part of an ongoing educative and corrective process that promotes the development of self-discipline and mutual respect within a non-violent and caring environment (Lake, 2008). Effective discipline can help teachers and students to reduce stress since self-discipline helps students to develop self-control in a way that allows both teachers and students to feel good about themselves (Goodman, 2001).

Self-discipline is seen as socially and morally responsible behaviour that is motivated primarily by intrinsic factors, not solely by anticipation of external rewards or fear of punishment (Bear, 2010). By fostering self-discipline, educators develop students who understand and appreciate the difference between right and wrong, assume responsibility for their actions, recognise the importance of cooperative relationships and show genuine care and interest in others (Bear and Duquette, 2008). Moreover, it also builds students' self-confidence and self-control and instills a love of learning that can last a lifetime (Durrant, 2010).

Promoting self-discipline aims to build on a student's strengths instead of criticising their weaknesses and uses positive reinforcement to motivate appropriate behaviour (Lake, 2008). It also can help students regulate their behaviours and gives them the power to make good decisions and choices (Taylor, 2011). Thus, it is an approach to teaching that helps students succeed in life, gives them the information they need to learn, and supports their development (Durrant, 2010: 13). In 1998, The National Parent Teacher Association (National PTA) stated that discipline should be a positive way of helping and guiding students to achieve self-control (Marshall, 1998: 38). Thus, promoting students' self-discipline would use positive approaches, including negotiation and systems of rewards, rather than punishment through verbal, physical, or emotional abuse.

Every parent wants the best for their child. They expect nursery school to be safe and of good quality, because high quality school promotes preschooler's development in the early years and is crucial to the development of preschoolers as the foundation for their future success at school and in life. Moreover, most parents expect nursery school to encourage good characteristics in their child. Thus, one of the primary tasks of early childhood education is to develop self-discipline (Turansky and Miller, 2011). Indeed, all children need to learn the skill of self-discipline to become independent, responsible,

happy, well-adjusted members of society and no child becomes well-disciplined without having been taught what is expected and how to do it (Goodman, 2001).

1.3 Early Childhood Education in Thailand

Professional organisations concerned with early childhood, such as the Consultative Group on Early Childhood Care and Development, the World Organisation for Early Childhood Education and the US-based National Association for the Education of Young Children, typically consider the early childhood period as covering the time from birth to 8 years. However, in Thailand we consider the early childhood period as lasting from birth to primary school entry, which is from 0 to 5 years old (UNESCO, 2006a).

Early childhood, the first five years of life, is a time of rapid cognitive, linguistic, social, emotional, moral and motor development, and the most important period of development in a child's life. Children who are nurtured and well cared for are more likely to fully develop cognitive, language, emotional and social skills, to grow up healthier and happier, and to have higher self-discipline. Each of these areas is crucial to our well-being as adults (Thomas, 2013).

Nursery schools provide early education services for children aged 3-5. Most nursery schools divide preschoolers into three groups: one for about 3 years old, a second for about 4 years old, and a third for about 5 years old. All public and private nursery schools in Thailand operate under the authority of the MOE and implement the Curriculum for Pre-primary Education for 3 to 5 years old developed by the MOE. The latest curriculum (2003) for early childhood education organised for children aged 3-5 focus on preparing them in terms of physical, intellectual, emotional/mental and social development domains (UNESCO, 2006a).

According to the National Education Act (1999), early childhood education, which refers to the period of 3 years of preschooler, is provided through all the 3 types of education i.e. formal, non-formal and informal education. Although the National Education Act stipulated that the state shall provide at least 12 years of basic education, which is of quality and free of charge, the government's policy intends to provide 15-years of free education which has as one element early childhood education (OEC, 2013).

Compulsory schooling begins at primary school (age 6), thus children aged 3-5 do not need to attend school and is optional for parents to send their child to nursery school.

Nowadays, early childhood education provided in the school system or childcare centres, is a crucial part of family life. This is due to the change in the working habits of parents and the form of the family, which is increasingly changing from the traditional nuclear family where the mother is the primary caregiver, to the extended family where both parents may be working. Thus, there is need to send children to nursery school instead of having them in family care. According to a survey on the situation of children in Thailand conducted by the National Statistical Office in 2012 with support from UNICEF, about 84 per cent of children aged 3-5 attended some form of organised early childhood education prorgramme (UNICEF, 2012). This has meant that most children aged 3-5 attend nursery school from 8.30 until 16.30 on Monday to Friday (UNESCO, 2006c). Therefore, nursery schools have to be ready to provide preschoolers with knowledge, skills and moral understanding, and they must also be able to prepare them to be ready to live in the world outside (Pinyoanuntapong, 2013).

1.4 In-service teacher in Thailand

The MOE in Thailand has determined that all Thai teachers must have completed at least a Bachelor's degree in Education, (B.Ed.). In 2003, all universities in Thailand were officially approved, and it is agreed that a remarkable change has occurred because of Thailand's education reforms. The Faculties of Education of all universities answered the call for change by renovating their teacher education curricula and by offering 5-year Bachelor's degrees in Education programmes instead of a 4-year Bachelor' degree. Student teachers have to enrol for modules in a variety of subjects which are required programmes of study at the university, and these subjects must be relevant to the major subject that the student is studying. However, crucially for the purposes of this study, it is notable that there are currently no courses that relate to promoting self-discipline for students.

After becoming a teacher, there is general agreement internationally that teachers should continue to learn and to do research in order to continuously gain more knowledge. This can either be through studying on their own by reading books or from the internet or by participating in training programmes and undertaking learning at a higher level

(Scheerens, 2010). However, both studying on one's own and learning at a higher level is dependent on the needs of each person, institutional support, personal satisfaction, and available budget. The researcher argues that teachers should be trained regularly in order to gain new knowledge and skills in teaching and that effective training programmes should, therefore, be managed and supported by the MOE or other relevant local and national organisations. Sadly, in Thailand, there are no organisations responsible for teacher training, so that most training programmes are dependent on the perceived needs and budget in each school or school department or more particularly on the resources of individuals.

In addition, there are no laws stating that all teachers are required to attend training to develop their potential on a regular basis in Thailand (OEC, 2012). The researcher notes that in England, The National College for Teaching and Leadership (formerly the National College for School Leadership) is responsible for providing a ladder of training opportunities for teachers and thus the teachers in England are subjected to a continuous development plan (Bubb and Earley, 2006). Furthermore, in Thailand, most of the content used in the training that does exist focuses on the development of cognitive skills more than social skills, for instance developing in scientific and mathematical skills, and there are no other agencies providing training for teachers in developing children's social skills, despite their key importance, as outlined earlier.

1.5 The SECI model

The SECI model is a knowledge creation process that was first proposed in 1995 by Ikujurio Nonaka and his colleagues, all of whom are professors in Japanese higher education institutions (Nonaka and Takeuchi, 1995). According to Nonaka and Takeuchi (1995), who proposed the basis of the SECI model, human knowledge is created and disseminated through social interactions between explicit and tacit knowledge. *Explicit knowledge* is codified whilst object knowledge can be transmitted in formal systematic language. In contrast, *tacit knowledge*, which is deeply rooted in individuals' actions, ideas, skills and experience, is not easily codified, difficult to express and subjective (Lee and Kelkar, 2011: 229). Specifically, the SECI model consists of four modes of knowledge conversion: *Socialisation* (tacit to tacit), *Externalisation* (tacit to explicit), *Combination* (explicit to explicit), and *Internalisation* (explicit to tacit) (Nonaka and

Takeuchi, 1995). Through the conversion process, tacit and explicit knowledge expands in both quality and quantity, making a spiral, rather than a circle. The spiral starts at the individual level and becomes larger and larger in scale, expanding as it moves through communities of interactions, which transcend sectional, departmental, divisional and even organisational boundaries (Nonaka and Konno, 1998). After internalisation, the process continues at a new level, hence the metaphor of a spiral of knowledge creation often referred to as the SECI model (Nonaka and Takeuchi, 1995). Moreover, Nonaka, Toyama and Nagata (2000: 2) identified that knowledge is created through the interactions amongst individuals or between individuals and their environments, rather than by an individual operating alone.

It is widely accepted that many teachers have their own experience and develop individual knowledge from teaching. According to the SECI model, it would be very useful if these sets of knowledge or experiences in promoting preschoolers' self-discipline could and would be shared with other teachers, since sharing experience and basic knowledge can help others to see the ways of promoting self-discipline among preschoolers in various ways. After that, these knowledge sets could be codified in formal systematic language for publishing in each group. Teachers could apply this with their student and themselves and, in addition, they could also evaluate their previous model or models in order to produce a new conceptualisation that could be used more effectively in promoting preschoolers' self-discipline.

In choosing the SECI model, the researcher is aware that there are various methods of teacher training including approaches such as group discussion, brainstorming, workshops, demonstration and case study. Each one has its own character so that each training programme should be chosen to suit the participants and the contents in the programme. Moreover, the training teachers who are adults, who tend to have previous knowledge ingrained as a habit and have their own ideas, require a proper and well-thought-out method. By using the SECI model, each person will learn and share her experience, previous knowledge, and new received knowledge in order to apply this knowledge more usefully. Therefore, when teachers share their knowledge with each other, they will be incited to learn new things that can create new knowledge easily and rapidly. Although the SECI model is widely used by many organisations and business

communities, currently, it is rarely used in the educational research community, thus affording an element of originality to the study.

For the reasons mentioned above, both in terms of the need to enhance self-discipline to preschoolers and the relationship between knowledge and behaviour of teachers and preschoolers' self-discipline, the lack of opportunities for teachers' development in Thailand is notable. Therefore, the researcher was interested in developing a programme for the enhancement of teachers' knowledge and behaviour in promoting preschoolers' self-discipline using the SECI model in order to refine the programme for use in the development of teachers to enhance self-discipline.

1.6 Objectives of the study

The main objectives of the study were as follows:

- To create a programme for the enhancement of teachers' knowledge and behaviour in promoting preschoolers' self-discipline using SECI model.
- To examine the effects of using the programme to change the level of teachers' knowledge in promoting preschoolers' self-discipline.
- To examine the effects of using the programme to change teachers' behaviours in promoting preschoolers' self-discipline.
- To investigate and analyse the effects of using the programme to change preschoolers' self-discipline.
- To explore the views of preschool teachers and a head teacher with regard to the wider issues connected with the promotion of preschoolers' self-discipline.

1.7 Methodology

The intended methodological approaches designed for this study were selected to generate data from differing perspectives. A mixed-method, which combined both qualitative and quantitative approaches, was employed in this study. Teddlie and Tashakkori (2010) stated that the study's mixed-methods research design utilised quantitative and qualitative means to arrive at an in-depth understanding of the research predicament.

To collect qualitative data semi-structured interviews, semi-structured observations and classroom observations were used. Semi-structured interviews were used to explore the view of teachers about self-discipline and self-discipline in their school and classrooms. Semi-structured observations were used to observe behaviour of teachers and preschoolers. Classroom observations were used to observe the relationship between teachers and preschoolers in terms of dealing with the self-discipline problems that occurred in the classes. Questionnaires and the behaviour checklists were used to collect quantitative data. The questionnaire was used to collect information on teachers' knowledge and understanding in choosing methods to deal with self-discipline problems of preschoolers. There were two sets of the behaviour checklists, one for teachers and another for preschoolers. The behaviour checklists were used to collect the overall behaviour of teachers and preschoolers.

The research is a case study, which was conducted in a nursery school in Bangkok, Thailand, where the sample consisted of the head teacher of the school, three deputy head teachers, 24 preschool teachers and 527 preschoolers. This study was divided into three phases.

Phase 1 was collecting data before the programme, during which, the head teacher of the school, three deputy head teachers and 24 preschool teachers were interviewed. All preschool teachers completed the questionnaire and then rated their behaviour and their preschoolers' behaviour using the behaviour checklists. Six preschool teachers and twenty preschoolers had their behaviour observed by the researcher.

Phase 2 was the implementation the programme, a total of 24 preschool teachers attended the programme for nine weeks, once a week after lunchtime, lasting for 60 minutes.

Phase 3 was the collection of data after the programme, where the head teacher of the school, three deputy head teachers, 24 preschool teachers were interviewed again. All preschool teachers completed the same questionnaire and then rated their behaviour and their preschoolers' behaviour using the same behaviour checklists. The same six preschool teachers and twenty preschoolers who were observed before the programme were observed again.

The full outline of the approaches, the pilot study, the sample, procedure and methods of analysis will be presented in the methodology and research design chapter.

1.8 Originality

As noted earlier, many schools in Thailand are facing self-discipline problems with students even in nursery schools and it is felt that many parts of society should take action to solve these problems. Schools are considered to be the first organisations that can address such issues, so it seems reasonable to suggest that teachers should be trained in the issue of self-discipline. Although, there have been a considerable number of in-service teacher training programmes on in a variety of topics, there have been limited teacher training opportunities for promoting self-discipline in Thailand. Moreover, most programmes for training teachers have generally been planned, implemented and managed by the MOE or other organisations and focused on delivering new knowledge and skills to teachers. Thus, most programmes are based on lecture-based training for short periods. Sadly, most teachers often find that these programmes are not useful in improving their knowledge and practice (Seo, 2013).

These circumstances prompted the researcher to seek a new approach to training teachers and it was found that the SECI model was appropriate approach to train teachers who have their own experience and knowledge from everyday teaching. Although the SECI model has been widely used to train workers in many companies or organisations, it is rarely used in educational research and these approaches have never been applied to in-service teacher training in Thailand. The researcher, therefore, designed the programme based on the SECI model, which focuses on knowledge-creating processes and group activities. Thus, this study is original in nature since it applied a recently developed training model to a new subject area and in a new context.

1.9 Structure of the thesis

This thesis is divided into six chapters. Chapter 1, the introduction, has identified the background to the study and the specific objectives. Chapter 2, the literature review, will discuss the literature appropriate to this study and will include literature which relates to self-discipline, the education system, as well as in-service teacher training in Thailand and the concepts that underpin the SECI model. Chapter 3, the methodology and research design chapter, identifies the methods of data collection, pilot study, the sample of the study, the procedures used as well as the ethical issues which needed to be considered, and data analysis. Chapter 4, presentation of data and findings, shows the findings on both

qualitative and quantitative data in four emerging themes. Chapter 5, the data analysis, discusses and unpacks the issues in these themes and compares and contrasts the work of this study with previous research in the field. Chapter 6, the conclusion, summarises the findings and identifies an adapted SECI model for use in in-service education and also identifies recommendations for professional practice and for further research.

1.10 Summary of the chapter

This chapter has presented the background to this study and has provided some details about the self-discipline problems in education and in the wider society that are being faced in Thailand. In addition, the complexities of Early Childhood Education and in-service teacher training in Thailand were explained, including an explanation about the scarcity of training opportunities for Thai teachers. The SECI model, on which this study is based, was introduced with an explanation of the reasons for choosing this model to develop the training programme which was at the centre of this study. The research objectives of the study were then identified and brief outline of the methodology was presented which then followed by an explanation of the claim for originality, which is a required element of study at doctoral level. Finally, the organisation of the thesis was provided with brief description of each forthcoming chapter.

The next chapter of this document provides the literature review element of the study and addresses themes including self-discipline, an overview of the education system, together with in-service teacher training in Thailand, and an exploration of the material on the SECI model of knowledge management.

Chapter 2
Literature review

Introduction

This chapter presents the literature review relating to current study. The chapter is in six sections. The first section will introduce the overall of the chapter. The second section is the concept of self-discipline, which presents definitions of discipline and self-discipline, the importance of self-discipline, promoting children's self-discipline, self-discipline skills for children, and teachers' roles in promoting children's self-discipline. The third section outlines the background to the education system in Thailand and early childhood education in Thailand as well as teacher education. The fourth section will illustrate in-service training in Thailand, which includes the review of preschool teachers training, the standards and qualifications of preschool teachers, together with summary of key issues relating to teacher education. The fifth is the concept of the SECI model of knowledge creation, which contains the main elements of the SECI model, types of knowledge, the SECI model: the development of the model and the four modes of knowledge conversion, together with limitations of the SECI model in different cultural contexts. The final section will summarise the chapter.

2.1 Definitions of discipline and self-discipline

The word *"discipline"* comes from the Latin term *"disciplina"* which means teaching or instructing (Howard, 1996). However, for many years it has been associated with notions of control and punishment (Samuel, 2009). Durrant (2010: 11) argues cogently that control and punishment are not the true meaning of discipline because effective discipline is positive and constructive. Perhaps a more accurate contemporary definition of discipline would relate to the guidance of children's moral, emotional and physical development and as a process of teaching children the values and normative behaviours of their society (Holden, 2002; Office of the Ministry for Children and Youth Affairs, 2010; Wissow, 2002). Moreover, discipline should involve making children aware of the boundaries, enabling children to take responsibility and teaches them the values and actions accepted in their family, school and society (Holden, 2002).

According to the Canadian paediatric society (2004: 37), discipline is the structure which helps children fit into the real world happily and effectively and it is also the foundation for the development of the child's own self-discipline. Similarly, Rogus (2001: 271) argues that 'self-discipline is the first target of discipline approach'. The term *"self-discipline",* which is central to this research, is defined by educators and scholars as the ability to control thoughts, emotions and actions and the ability to delay gratification; all of which are important elements of this concept (Bear 2010; Sasson, 2013). It is important to note that it is this positive, holistic usage that is employed by the writer of this study.

2.1.1 The importance of self-discipline

Self-discipline is considered not only to be useful but also to be a vital component of a person's sense of responsibility for their own behaviour (Brooks and Goldstein, 2007: 3). Moreover, self-discipline can help people regulate their behaviour and make good decisions and healthy choices (Taylor, 2011). According to the study by Heckman and Rubinstein (2001) on the importance of non-cognitive skills lessons in General Educational Development (GED) programmes, self-discipline is an important skill leading to success in life. They state that:

> 'Numerous instances can be cited of people with high IQs who fail to achieve success in life because they lacked self-discipline and of people with low IQs who succeeded by virtue of persistence, reliability and self-discipline' (p: 145).

We may thus note that self-discipline is an essential characteristic that can help people succeed in their life (Taylor, 2011). Furthermore, self-discipline is a key to academic success for many students. The study of Duckworth and Seligman (2005: 939-944) reveals that a major reason for students falling short of their intellectual potential is their failure to self-discipline and thus promoting self-discipline may be the most effective way to building academic achievement (Duckworth and Seligman, 2005). Equally, it seems clear that self-discipline not only seems to be related to academic success, but also makes children less likely to have problem behaviours that can interfere with school performance (Masten et al., 2005).

As noted at the start of this section of the text, self-discipline does not mean severe and limiting behaviour, restrictive lifestyle and punishment, and is considered as a very important ingredient for any form of success (Sasson, 2013). Therefore, it can be concluded that self-discipline is the most important factor for development in an individual child's characteristics in order to ensure that they behave well, that they learn to be reasonable, and that they are able to control themselves well and act with confidence in a reasonable and socially acceptable way in order to live happily within the family, school and society (Durrant, 2010).

2.1.2 Promoting children's self-discipline

Children need to learn and develop self-discipline from an early age in order to become independent, responsible, happy, well-adjusted people because no child becomes well-disciplined without having been taught what is expected of them (Goodman, 2001). Many children without adequate self-discipline are at risk of difficulties including peer rejection, challenging behaviour, and poor academic achievement (Tominey and McClelland, 2011). Moreover, parents and teachers should promote self-discipline in the process of a child's growing through proper routines and activities (Combs, 2001).

As we shall see later in this study, promoting children's self-discipline aims to enhance children's strengths instead of criticising their weaknesses through the use of positive reinforcement to motivate good behaviour rather than negative reinforcement which may entrench bad or negative attitudes (RAPCAN, 2008: 4). Similarly, Durrant (2010: 13) believes that promoting self-discipline should be non-violent, positive and respectful. In addition, children's self-discipline behaviour should not be motivated by the fear of punishment, but they should be able to delay gratification, and forgo immediate rewards in order to achieve a more important long-term outcome (Bear, 2010: 37-38).

In the context of schools, the promotion of self-discipline is an important goal for all educators internationally (Rogus, 2001: 271). This is equally true of Thailand where, according to the Early Childhood Curriculum, Section 11 states that 'self-discipline should be corrective and nurturing for all children'. To promote children' self-discipline in schools, teachers have to enhance self-discipline for children by using positive discipline (Mokhele, 2006: 150). Positive discipline can help children develop self-discipline in a way that allows both teachers and children to have a good relationship and reduces stress

of children (Goodman, 2001). For preschool-age children (three to five years), most children are able to develop their self-discipline because they are able to accept limitations, follow the rules, act in appropriate ways, and be self-reliant for their immediate needs as their age appropriates (The Canadian Paediatric Society, 2004). Thus, teachers must start promoting self-discipline for their children from the first day of school by considering age-appropriate strategies for each individual child (American Academy of Pediatrics, 1998: 723).

2.1.3 self-discipline skills for children

The Canadian Paediatric Society (2004) believe that a disciplined person is able to postpone pleasure, is considerate of the needs of others, is assertive without being aggressive or hostile, and can tolerate discomfort when necessary. Similarly, Howard (1996) identifies that discipline refers to the system of teaching and nurturing that prepares children to achieve competence, self-control, self-direction, and caring for others and cooperating with others.

According to Vasiloff (2003: 2), fifteen separate but connected skills are required for successful self-discipline and these can be used to measure growth in self-discipline behaviour. These skills include: (1) listening, (2) following instructions, (3) asking questions, (4) sharing time, space, people and things, (5) using social skills, (6) working cooperatively, (7) understanding and explaining the reason for rules, (8) accomplishing work related tasks on time, (9) demonstrating leadership, (10) communicating effectively (11) organising time, space, people and things, (12) resolving problems, (13) initiating solutions, (14) distinguishing fact from feeling, (15) making sacrifices and/or serving others.

If we subject the above skills to analysis, self-discipline skills can be grouped into six categories: self-control, self-responsibility, self-reliance, cooperation, empathy, and problem solving, all of which are necessary for preschool children to be self-disciplined. Although it is undoubtedly difficult for children in the preschool level to develop these skills there seems not doubt that they can start learning these attributes from the preschool-age if they receive guidance, support and help form their teacher (Vasiloff, 2003: 3).

2.1.4 Teachers' roles in promoting children's self-discipline

We have noted previously, that one of the primary tasks of teachers is to develop self-discipline in those in their care and scholars identify that there are a number of roles teachers can play to promote children's self-discipline in their classrooms (Turansky and Miller, 2011). As Canter and Canter (2001: xviii) identify that the process starts with the role of the giver of reward and punishment, the second role is that of working toward positive interactions with children, and the final role is creating an optimal and safe classroom environment for children. Likewise, Bear (2010) identifies three key components of comprehensive classroom discipline for teachers: developing self-discipline, preventing behaviour problems, and correcting behaviour problems. These components need to apply primarily at the preschool classroom levels (Bear, 2010: 3). Similarly, the American Academy of Pediatrics (1998: 723) posits that promoting children's self-discipline requires three essential components from teachers: building a positive and supportive relationship between the teacher and children, using positive reinforcement to increase desired behaviours, and applying negative reinforcement or punishment to eliminate undesired behaviours.

It can thus be concluded that teachers' roles in promoting preschoolers' self-discipline are divided into three main components, comprising of:

1. modelling an appropriate manner to children,
2. creating appropriate classroom environment, and
3. responding to children.

These three components are unpacked further below.

(1) Modelling an appropriate manner to children

Bandura (1986) investigated learning theory by studying children's reactions to observing a 'model' behaving aggressively towards an inflatable doll. After observation, it was noted that all the children were frustrated to the point of increasing their own aggression in their play with toys. Bandura's (1997) social learning theory stipulates that people learn from one another via observation, imitation and modelling (Bandura, 1997) and this finding was seen as a clear demonstration that children learn from those around them who they see as role models.

Since a teacher is considered as the children's role model, children are likely to copy teachers' behaviour. Therefore, it could be identified that modelling an appropriate manner for children is one of the most important of roles for teachers to help children in developing their self-discipline (Albrecht, 2006). However, it is important to note that the role model can be both negative and positive (Tomlin, 2008). Thus, teachers should model the values and behaviour that they would like to see from children and if teachers are well organised and in control, this means they provide sound examples for children by their behaviour (Reider, 2005: 105). Sometimes modelling should be used more directly when social, emotional, and behavioural skills are lacking or when need to be reviewed (Bear, 2010: 67)

(2) Creating the appropriate classroom environment

The classroom environment has an impact on shaping and developing children's self-discipline (Bear, 2010). Thus, creating a good classroom environment is regarded as one of the teacher's roles in helping children to develop self-discipline. Gartrell (2001: 14) states that teachers work together in teams to create an environment that includes making the schedule responsive to the rhythms of the group; providing an environment for individuals, small group, and large group engagement; and adjusting the curriculum to children's attention spans, learning styles, and family backgrounds. This means that creating the classroom environment includes the physical environment and organising the day to be responsive to children's needs and to make the best use of time. The structure of the classroom environment has a powerful impact on developing children's self-discipline (Gullo, 2008: 61).

In creating this positive environment, setting appropriate spaces in the classroom may reduce the behaviour problems of children because crowded, uncomfortable, and physically unattractive environments can contribute to aggression and violence in classrooms (Berkowitz, 1989) and behaviour problems will occur more frequency when children are in close physical proximity to one another (Astor, Guerra and Van Acker, 2006; Bear, 2010). According to Gullo (2008: 62) the elements of an effective physical environment in the preschool classroom include:

- A space for children to store their work and personal belongings, this space should be provided for individual child.

- A place for group meetings; this space should be large enough so children can sit comfortably, and can see others during conversations.
- A variety of spaces for working, this space should be provided for group working and individual working. Moveable furnishings allow teachers to create big spaces for larger projects and small spaces for a few children to work, as needed.
- Quiet places should be provide when children need nooks and seating areas where they can get away or work quietly together with a friend or in a small group.
- Places to store materials, equipment and toys should be provided for organising those logically. It should enable children to find them when needed and return them to their proper place afterward (Gullo, 2008: 62).

In addition, the organisation of materials, supplies, equipment, and the general attractiveness of the classroom are recognised as important components in classroom management (Weinstein and Mignano, 2007). For this reason, teachers should arrange equipment and materials in a well-organised and effective manner in order to enable children to access and to return materials and equipment to their proper place (Scarlett, Ponte and Singh, 2009: 165). It is important to note that teachers should establish the use of those supplies, equipment, and materials to children since this can help teachers to manage their classrooms well and reduce inappropriate behaviour during activities (Bear, 2010: 88).

- ***Establishing predictable daily schedules***

In Yinger's (1980) study, classrooms with clear and consistent schedules were less likely to have disruptions than classroom in which schedules were not clear and consistent. This study is an example of what can happen when the classroom schedule is not clear to very young children (Scarlett, Ponte and Singh, 2009). A consistently followed schedule helps make settings predictable for both young children and adults (Ostrosky et al., 2007). Therefore, a consistent daily schedule enables young children to feel secure and prepared when they know what happens next (Gullo, 2008). Moreover, a predictable daily schedule helps children develop independence, responsibility, and a sense of order (Scarlett, Ponte and Singh, 2009).

Some of the predictable events likely to be a part of daily schedule include whole-group times, small-group times, learning centre time, and outdoor play (Gullo, 2008: 63-

64). However, when developing a schedule, teachers must work around factors outside of their control such as special events, field trips, visiting experts, school-wide events, and unexpected happenings (Ostrosky et al., 2007). It is helpful to think of a daily schedule as a guide, which is responsive to children and teachers and schedules should be flexible in moments that arise when children discover something that interests them (Gullo, 2008: 64). In addition, the classroom schedule should be posted in the proper place for all to see (Scarlett, Ponte and Singh, 2009: 157).

Creating a social classroom environment requires establishing classroom rules to make everyone feel safe. Teachers are advised to establish fair rules on the first day or first week of school to ensure that all expectations are clearly explained to all children (Scarlett, Ponte and Singh, 2009: 168). As preschool children, the rules become internalised and are accompanied by an increasing sense of responsibility and self-control of the children (American Academy of Pediatrics, 1998: 723). Many textbooks on classroom management state that school discipline and self-discipline general concur effective classroom rules (Canter and Canter, 2001; Duke, 2002; Jones and Jones, 2010; Weinstein, 2006).

Several effective classroom rules have been suggested as summarised by Lewis Bear (2010: 92-93) as follows: (1) effective rules are clear to all children, (2) effective rules are fair and reasonable, (3) effective rules are taught and behaviours consist with the rules that are reinforced, (4) effective rules are backed up by fair, reasonable, and judicious consequences and (5) effective rules are limited to no more than four or five rules in the classroom. However, it is difficult for children to understand and remember all classroom rules, thus all classroom rules should be presented by both orally and in writing or pictures to all children and then classroom rules should be properly posted in the right position of the classroom that everyone can see (Bear, 2010: 92-93).

Positive relationships between teachers and children can make children feel secure by feeling attached to a teacher (Scarlett, Ponte and Singh, 2009: 54) and it has been shown that positive relationships have a tremendous effect on the achievement of children academically and in other domains (Middleton and Midgley, 2002; Pianta and Stuhlman, 2004). Similarly, the study of Downer and Pianta (2006) affirms that children who have positive relationships with their teacher and peers are more likely to be successful at school. This is also in line with the study of Ostrosky and Jung (2008) which focused on

teacher and child relationships in preschools, the results of which found that children who had positive relationships with their teachers demonstrated good peer interactions and positive relationships with teachers and peers in elementary school, and lower levels of challenging behaviour and higher levels of competence in school (Ostrosky and Jung, 2008). This same study notes there are variety of strategies for teachers to build positive relationships with children such as listening to children, making eye contact, and engaging in many one-to-one exchanges, talking to children using pleasant, calm voices and simple language, and greeting children warmly when they arrive in the classroom with their parents (Ostrosky and Jung, 2008).

Thus, positive relationships between teachers and children in classrooms are an important factor for developing self-discipline skills and gaining social-emotional competence (Williford et al., 2013). Moreover, the American Academy of Pediatrics (1998: 732) affirms that applying discipline techniques to be most effective, it must occur in the context of positive relationships between teacher-child in which they feel loved, trusting and secure.

(3) Responding to children

Developing self-discipline is the process of teaching children the values and normative behaviours of their society (Wissow, 2002). Responding to children properly is one of a teacher' roles to help children develop their self-discipline effectively and there are several discipline techniques in response to misbehaviour proposed by various theorists. However, the types of discipline techniques used by teachers may depend on their personality, years of experience in the classroom, or the grade level they teach (Wolfgang, 2005). In addition, teachers have to be prepared to modify the discipline techniques used in promoting children's self-discipline over time, using different techniques as the child develops greater independence and capacity for self-discipline (The American Academy of Pediatrics, 1998: 723). We must also note that effectiveness in promoting children's self-discipline is not only the need for collecting misbehaviour, but also the need to use methods of preventing behaviour problems, together with providing reinforcements for desirable behaviours (Bear, 2010: 14). The following discipline techniques are consistent with discipline aimed at developing self-discipline in children.

- ***Rewards and Praise***

Many desirable behavioural patterns emerge as part of children's normal development, and one of the roles of the teacher is to notice these behaviours and provide positive attention to strengthen and refine them by rewards (The American Academy of Pediatrics, 1998). Rewards are typically used to strengthen appropriate behaviour of children as a form of positive reinforcement. Admittedly, rewards can be very effective in developing self-discipline for children, only when used strategically wisely (Bear, 2010) and, when trying to foster a new behaviour, it is important to reward children consistently each time when they show the desired characteristic. Once the behaviour has become an established habit, rewards can be reduced and then other techniques can be employed to encourage the child to maintain the preferred behaviour (Jacobson, 2004).

Praise is the most common approach that can be identified as social reward (Bear, 2010: 101). Praise may inspire some children to improve their behaviour, as Docking (1996: 42) states that praising good behaviour in the classroom maintains appropriate behaviour and reduces behaviour problems. He warns against criticising inappropriate behaviour while ignoring good behaviour. Similarly, Wragg (2001: 18) supports the idea of praising good behaviour by suggesting that a teacher needs to promote good behaviour by praising. However, there is a danger that praise will create dependence and over use (Wragg, 2001).

Thus, effective praise should always specifically describe which behaviours are being recognised and reinforced. Simple direct statements enhance children's understanding of what is being praised (Reider, 2005). Moreover, teachers should praise the actions rather than character traits (Bear, 2010). Thus, the teacher should praise more specific behaviour and it is significant to note that when reward and praise are not used in this manner, they may actually have the potential of causing more harm than good (Bear, 2010: 63).

- ***Natural and logical consequences***

The use of consequences is one of the most important discipline techniques for improving the appropriate behaviours of young children because they need to see the relationship between their own acts and the result of their actions (Pepper and Henry,

2001: 267). Consequences are divided into two types: natural consequences and logical consequences (Brooks and Goldstein, 2007; Pepper and Henry, 2001)

Firstly, natural consequences represent the natural result of children's actions without interference from teachers because they follow naturally from the children's behaviour. These are usually the most effective form of negative consequence for stopping unwanted behaviour (Martealla et al., 2012: 11). This type of consequence can teach children that their actions are within their control and lead to specific consequences (Brooks and Goldstein, 2007: 39). Even though natural consequences often help children learn responsibility for their behaviour, there are times when natural consequences are not practical such: (1) when in danger, (2) when natural consequences interfere with the rights of others, and (3) when natural consequences adversely affect children's health and well-being (Nelsen, 2014). However, if teachers cannot rely on the natural consequences under all circumstances, they can use logical consequences instead (Martealla et al., 2012: 11).

Secondly, logical consequences typically involve some actions taken by teachers in response to children's behaviour and they require the intervention of the teacher (Brooks and Goldstein, 2007: 39; Nelsen, 2014). Although logical consequences should be related to children's behaviour, they also require active planning and conscious application. It is important to decide what kind of consequences would create a helpful learning experience that might encourage children to be responsible and more self-disciplined (Malmgren, Trezek and Pual, 2005: 37). However, logical consequences are not always easy to tailor to all inappropriate behaviours. It is the teacher's task to arrange the consequence for children's action in a way that the children can see a relationship between consequence and their behaviour (Wolfgang, 2005: 116). Moreover, logical consequences must be served up with compassion, empathy, or understanding, and without anger (Wolfgang, 2005: 150).

- ***Ignoring misbehaviour***

Most inappropriate behaviours are motivated by unconscious needs such as to gain attention, exercise power, exact revenge, or display inadequacy (Martealla et al., 2012: 6-7). If the motive is unsatisfied, inappropriate behaviour associated with other attentions will not be manifested. This discipline technique is suitable for children's mild-inappropriate behaviour because whenever children receive attention, either positive or

negative, for their misbehaviour, those behaviours are likely to occur again (NHS Fife, 2013: 2). According to NHS Fife (2013: 2), teachers should avoid discussion, eye contact, and making angry comments when ignoring misbehaviour and as soon as the misbehaviour stops, teachers should praise this more appropriate behaviour immediately. Moreover, as soon as children start behaving more appropriately the teacher should use distraction techniques and praise this behaviour (Wilson, 1998). Therefore, teachers should stay in the same room with children in order to reinforce appropriate behaviour as soon as they stop misbehaving. However, teachers should make sure that those behaviours are not dangerous to children and other people or it is incumbent on them to intervene (NHS Fife, 2013: 2).

- ***Time-out***

A time-out is one of the disciplinary techniques that involve placing children in a very unstimulating or boring place for several minutes following inappropriate behaviours (Zolten and Long, 2006: 1). For young children, time-out usually involves removing the teacher's attention by placing children in a specified place without adult interaction for a particular length of time (The American Academy of Pediatrics, 1998: 725). The main purpose of time-out is to remove attention from children to allow them to get away from the causes of their misbehaviour and so that they can think through their misbehaviour and calm down. It is argued that time-out should last for the same number of minutes as the child's age (Morrisey, 2010) and thus, for example, four year olds should stay for four minutes in time-out.

Although, time-out is considered as a popular disciplinary technique for young children, it may not be effective for all children because each child is unique and may require alternative disciplinary techniques to deal with misbehaviours (Alberta Learning, 2012). To be successful, time-out requires effort and practice, when time out is first implemented, it will usually result in increased negative behaviour by the children, who will test the new limit with a display of emotional behaviour or temper tantrum. However, when time-out is used appropriately and consistently, the children's feelings are neither persistent nor damaging to self-esteem, despite the intensity of the reaction (The American Academy of Pediatrics, 1998: 725).

Wolfgang (2005: 156) suggests five questions in order to help older children think when they are in time out: (1) what happened?; (2) how did you feel?; (3) what did you do?; (4) how did it work out?; and, (5) what are you going to do next time? However, these questions might not be suitable for the youngest of children.

According to Alberta Learning (2012: 2) four levels of time out can be used in schools, as follows:

1. Non-exclusion time-out: the student is removed from the reinforcing activity, but is still allowed to observe the activity. The teacher directs the student to a timeout area in the classroom where the student is able to listen to the discussion, but not allowed to participate for a period of time.
2. Exclusion time-out: the student is excluded from the reinforcing activity and is not allowed to participate or observe the activity. The teacher asks the student to leave the time out area and go to another supervised area until the student demonstrates appropriate behaviour and is ready to return to class.
3. Seclusion time-out: the student is removed from the reinforcing activity area, placed in a separate room and is supervised during the entire seclusion timeout. The student is moved to a timeout room that is safe, where he or she is constantly supervised.
4. Suspension and expulsion: these interventions are recognised as forms of time out (Alberta Learning, 2012: 2).

- ***Loss of privileges***

Loss of privileges is an approach that removes positive reinforcement or involves losing something desirable or of value to the child in order to modify unacceptable behaviour (The American Academy of Pediatrics, 1998; Office of the Minister for Children and Youth Affairs, 2010). This technique is considered as an effective way of deterring children from repeating misbehaviour. Smith and Laslett (1995: 109) see the withdrawal of some privileges or the stopping of pleasant activities as comparatively easy to apply or impose but they also argue that some activities considered valuable by teachers may be viewed as less valued by children. For this reason, it may be possible that children may actually enjoy the loss of privileges rather than having the experience of being disciplined. It is, of course, significant to note that the privilege should be restored when

an appropriate behaviour has been displayed again (Evertson, Emmer and Worsham, 2003: 179-180).

- ***Punishment***

Punishment is the use of physical or psychological force or action that causes pain in an attempt to prevent undesirable behaviour from recurring. Thus, punishment is defined as negative reinforcement to reduce or eliminate inappropriate behaviour in children. There are two types typically used with children in schools: verbal reprimands and corporal punishment (The American Academy of Pediatrics, 1998).

The first type of punishment is verbal reprimands, some teachers use verbal reprimands to alter inappropriate behaviour. However, if used frequently, verbal reprimands may lose their effectiveness and become reinforcers of undesired behaviour because they provide attention for the child (The American Academy of Pediatrics, 1998: 725). Henderson and Ronald (2010) confirm that a verbal reprimand can be used when necessary but the positive way to use verbal reprimands is to speak to the child one to one, explain why the behaviour is inappropriate, and offer an appropriate alternative behaviour. The focus of a verbal reprimand must thus be on the specific inappropriate behaviour that the child exhibited (Henderson and Ronald, 2010). The second type of punishment is corporal punishment, which refers to the application of some forms of physical pain in response to inappropriate behaviour such as corporal punishment which includes spanking, slapping, grabbing, shoving, and hitting a child with an object (Straus, 1996). It is now agreed in most developed countries that this approach should never be used in schools (The American Academy of Pediatrics, 1998: 725-726). Even were it to be legal to apply physical punishment, this approach is now considered less effective as a form of discipline because the consequences of being slapped are relatively short-term compared with the consequences of losing privileges, time-out, and the use of logical consequences for reducing inappropriate behaviour in children (Office of the Minister for Children and Youth Affairs; 2010). Although punishment may immediately stop or reduce inappropriate behaviour, its effectiveness decreases with subsequent use and it does not result in long-term outcomes. Indeed, spanking and all types of corporal punishment are opposed or banned in all circumstances in many nations such as the United States and the United Kingdom (The American Academy of Pediatrics, 1998: 725-726).

Summary

The origins of the word 'discipline' are clear and refer to teaching, not punishing or controlling children. As students grow older and interact with a wider more complex social environment in society, they need to be encouraged and enabled to use self-discipline to become emotionally and socially mature adults. Six skills of self-discipline should be promoted children including: self-control, self-responsibility, self-reliance, cooperation, empathy, and problem solving. One of the most important tasks of teachers is to develop their children's self-discipline in schools and this includes three main roles for teachers including: modeling appropriate a manner to children, creating an appropriate classroom environment, and responding to children in an appropriate manner. All of these three elements play a crucial role in developing self-discipline and have been outlined and analysed in some detail in this section of the thesis. Perhaps most notably, a range of strategies for responding to children has been outlined. These strategies have particular significance for this study since the more effective and appropriate of these approaches are the ones that formed the basis for the training and development that was offered to Thai teachers in the case study that is at the heart of this study.

2.2 The education system in Thailand

The modern educational system in Thailand was a consequence of the revised constitution for the nation that was promulgated in October 1997, which forced the state to enact new national education legislation. The National Education Act of 1999 was enacted two years later and then was amended by the Second National Education Act in 2002. The new administrative structure of Thai education was established under the National Education Act 2002. According to Section 15 of the National Education Act, there are three types of education: formal education, non-formal education, and informal education (Office of National Education Committee (ONEC), 2002a: 7-8). However, most Thai children currently attend the formal education element of this system, which is the equivalent of the maintained sector in the UK or the public school system in the US. This formal education system is further stratified into classes or grades, each with an appropriate curriculum designed to enable learners to gain knowledge in accordance with the objectives of the curriculum (Pongpaibool, 2000). However, the non-formal and informal education systems are provided for those missing the opportunity to enrol

informal education such as adult students who have to work in a full time job. In this way learners can obtain knowledge from a variety of sources and there is no age restraint for learners. Thus, Thai nationals can study at any time in their life (Pongpaibool, 2000).

According to the National Education Act, formal education is divided into two levels: basic and higher education (MOE, 2008). Firstly, the basic education system is classified into four levels: pre-primary or preschool; primary school; lower secondary school; and upper secondary school (ONEC, 2008: 23). Compulsory education consists of nine years of schooling for all children starting from primary school to lower secondary school (ages 6-15) and thus, in total, offers 15 years of free basic education for all Thai children nationwide, starting from preschool and proceeding to upper secondary school. Secondly, the higher education system aims to fulfill the development of the individual intellectuality, and to enable the advancement of knowledge and technology. Higher education is provided in the form of colleges, universities, technical institutes, vocational colleges, and specialised training institutions (UNESCO, 2011b).

Since the main focus of this study is concerned with children in the early years of their education this review of the literature will now proceed to focus in more detail on early childhood education and teacher education, which are related to the participants in this study.

2.2.1 Early childhood education in Thailand

Early childhood refers to the period between newborn children until 5 to 8 years old, depending on the country under scrutiny. In Thailand, early childhood refers to the period between 0 to 5 years old, including those disadvantaged and disabled as well as children of foreign origin living in Thailand (OEC, 2012). The Office of Basic Education Commission (OBEC), (2008) identifies that:

> 'Early childhood education focuses on the development of children on the basis of modes of rearing, training and promoting learning processes that are in accordance with the nature and development of each child in the contexts of cultures and civilisations, and social ways of life that particularities and differences' (OBEC, 2008 : 3).

Early childhood education in Thailand is provided through formal, informal and non-formal education such as childcare centres, nurseries, preschools, home-based education and communities (UNESCO, 2013: 41). The MOE designed the Early Childhood Curriculum, which provides the basis for improving, promoting, supporting, monitoring, and supervising education quality at educational institutions (MOE, 2008). By this announcement, all Thai children aged 0-5 years should be provided with education in the form of nursery schools, kindergartens, childcare centres or child development centres, as indicated in the Early Childhood Curriculum (OEC, 2004). It should be noted that early childhood education in Thailand can be divided into main 2 segments: children under age three and children from three to five years of age (MOE, 2008) and these two periods of the child's life will now come under further examination.

(1) Children under age three

Although most children under three years are cared for by their parents, there are public and private childcare or nursery services available that are used mostly by employed parents (UNESCO, 2006c). All childcare centres and nurseries aim to provide children with a safe place to be during the day, nutritious meals, a sanitary environment and to develop good hygiene practices, as well as offer stimulation, interaction, and affection. Various childcare providers are operated by the private sector. The MOE promulgated the 2003 Early Childhood Curriculum for children under age three and this curriculum is provided for parents or other caregivers responsible for bringing up and developing children under three years of age (MOE, 2003).

(2) Children from three to five years of age

For children in the 3-5 years age group, there are child development centres, and preschools. Preschools in both public and private sectors are overseen by the MOE, while child development centres are supervised by the Sub-district Administration Organisations (SAOs) throughout the country (UNESCO, 2006c). Thai children who are aged 3-5 years may or may not be enrolled in preschool programmes since preschool education is not compulsory and is not a requirement before entering primary schools (MOE, 2008).

Preschool education is the provision of education for children age three to five and aims to encourage harmonious social, physical, emotional and intellectual development in young children prior to entering primary education. Although, preschool education is not compulsory, the Thai government has recognised the importance of preschool education and therefore launched 15-year free education policy in 2009, making preschool education free of charge (UNESCO, 2011a).

Preschools are expected to provide children the following services: food and nutrition; health; physical care and attention to personal hygiene; and support for holistic child development. The holistic child development includes love and care; space, toys and opportunities for physical movement; the development of the senses through exploration of their environment; a variety of learning experiences that allow for individual choices driven by children's own interests; opportunities to observe, investigate, problem solve, invent, explore different media, express themselves, interact fully with peers and adults and learn social skills and acquire self-discipline (UNESCO, 2004).

In the past, the first early childhood curriculum consisted of mathematics, science, Thai language, civics and ethics, social studies, and physical activities. However, the early childhood curriculum changed frequently until in 2003, the MOE promulgated the 2003 Early Childhood Curriculum for Children from birth until five years old (MOE, 2003). This curriculum is divided into two sections, the first of which is for children under age three and second for children from three to five years of age. Both stages are based on general principles on suitable approaches and strategies to education and outline educational goals, objectives, and characteristics by age and recommend the scope and coverage of curriculum content for children. This curriculum encouraged innovation, creativity and diversity and was designed to promote learning experiences that support the physical, social, emotional, and cognitive development of Thai children (MOE, 2003). However, as outlined earlier, the Early Childhood Curriculum is unable to be implemented directly by schools. Consequently, all public and private nursery schools have to develop their own early childhood curricula in accordance with the principles and guidelines of the 2003 Early Childhood Curriculum (UNESCO, 2004: 22).

According to the survey on the current situation of children in Thailand conducted by the National Statistical Office in 2012 with support from UNICEF, about 84 per cent of children aged 3-5 attended some form of organised preschool education programmes. In

respect to their development, 94 per cent of children aged 3-5 years who attend preschool programmes are developmentally on track, while only 77 per cent of the same age group who are not attending preschool programmes are on track (UNICEF, 2012). Similarly, the study by the OEC (2013: 1) confirmed that children aged 3-6 years who have participated in preschool education programmes are less likely to suffer personality disorders and will on average be healthier and perform better than those without preschool experience, especially during the first few years in primary school. It is notable and perhaps not surprising that most parents tend to send their children to nursery schools or childcare centres.

2.2.2 Teacher education

In the 1960's a larger number of teacher training institutions were established to meet an urgent demand for more teachers. This expansion was precipitated by three major factors: the extension of compulsory education, population growth, and the availability of secondary education to a larger population (The Office of Prime Minister, 1995). Since then many more training institutions were established and developed under the MOE. There are currently 118 institutions available to conduct both pre-service, in-service teacher training and professional development in Thailand (Chanbanchong, 2010).

Teacher education aims to train and develop student teachers to acquire knowledge, skills and abilities in teaching, motivating and encouraging students to learn. Student teachers must complete coursework in the subject areas they plan to teach, as well as pedagogy, classroom management, psychology, child development, and other related topics. Another part of a teacher's education is to undertake a real teaching experience or teaching practice in schools (ONEC, 2002b). Teacher education is centred on faculties of education within universities, which provide training services to deliver training to student teachers, serving teachers and administrators (Thailand Education Reform Project, 2002).

As noted at the start of the section, in the last decade of the 20th century, overall reform of education in Thailand took place and brought about the promulgation of the National Education Act. The teacher education system in Thailand was reformed by the introduction of a teacher certification system which, from 2003, required that student teachers and teachers had to practice in two consecutive academic terms or one year in order to receive a teacher license (Chanbanchong, 2010). Consequently, teacher education

programmes have been changed from a four-year programme to a five-year programme that includes one year practicing as full-time teacher in schools.

Kantawong, Nethanomsak and Luang-ungkool, (2012: 1047) identify that after the 1999 National Education Act, institutions have focused on five-year programmes instead of the four-year programme for a Bachelor's degree in education. According to the five-year programme, student teachers spend four years doing course work and one year of practical training in schools (The Bureau of International Cooperation, 2005). The research study by Tannirat (2010: 41-42) compares the input processes and outcomes of the four-year and five-year programmes of teacher education and the results show that five-year programmes seems to provide a more comprehensive body of academic knowledge and develop better teacher professional practices when compared to the four-year programme. It can thus be concluded that the five-year programme of teacher education tends to provide student teachers with the knowledge, skills, experience and attitudes corresponding to the National Education Act and to the needs of society (Kantawong, Nethanomsak and Luang-ungkool, 2012: 1047).

It is important to note that the minimum academic qualification required to be a teacher in Thailand is to complete the five-year programme of a Bachelor's degree in education. There are two ways to meet this requirement: (1) completing the five-year programme in specialised teacher training institutions or in a faculty of education in universities, leading to a B.Ed. degree, and, (2) completing a four-year education qualification in universities, leading to a bachelor's degree in the area of specialisation, and then followed by one year of teacher training (UNESCO, 2008: 17).

In order to be a preschool teacher, candidates generally need at least a Bachelor's degree in early childhood education in order to qualify to teach in public or private preschools and the majority of faculties of education in most universities around the country offer programmes in early childhood education. These are designed to provide student teachers in the field of early childhood education with an understanding of how to develop a child's ability to learn as well as methods for delivering education plans. Throughout the five-year programme, student teachers have to complete in total a minimum of 170 credits, including a minimum of 30 credits of general educational, a minimum of 122 credits of an early childhood course, plus 12 credits of internship, which

is one year of practical training during the last year of the programme, and a minimum of 6 credits of free elective (Faculty of Education, Chulalongkorn University, 2012).

2.3 In-service training in Thailand

It is critical for teachers to have ongoing and regular opportunities to be trained because they need to develop professionally to keep up-to-date on new research, new curriculum resources, and general changes (UNESCO, 2011b). Tantranont (2009: 29) reports the quality of Thai teachers has actually declined in recent years. If this is correct this may be caused by the fact that many teachers working in schools have qualifications ranging from the Bachelor's to the Master's degree in their discipline areas, but have no teacher training qualifications (Tantranont, 2009). It is also notable that the Thailand Education Reform Project (2002) pointed out that most Thai teachers had little or no teacher training since they graduated or, even if they had attended training programmes, seminars or workshops, these were considered ineffective and unsuitable for their teaching responsibilities. From these two studies, it seems likely that Thai teachers need additional training opportunities to improve their knowledge, skills, and experiences related to their discipline areas through in-service teacher training, since in-service training is regarded as an essential tool for teachers to develop and achieve success in the teaching profession (Bureau of International Cooperation, 2005).

There have also been concerns that the quality of Thai teachers should be enhanced as an urgent task of the MOE in Thailand. Indeed, the MOE has a statutory duty to develop the quality of Thai teachers through teacher education and the provision of in-service training. These efforts are essential to make sure that all teachers have a good foundation to improve the knowledge and skills that they need to carry out their tasks effectively (Thailand Education Reform Project, 2002). Thus, the MOE has committed itself to the development of teachers in Thailand (ONEC, 2002b) whilst, at the same time, the National Education Act has outlined the policy for the improvement of teachers, faculty staff, and educational personnel. Notably, it was stipulated in the National Education Act (ONEC, 2003a: 24) that:

> 'The pre-service and in-service education and training of teachers, staff members, and educational personnel must be developed urgently and changed comprehensively both in public and private schools'.

Thus, the MOE has recognised the importance of in-service training since pre-service teacher training is no longer sufficient to provide teachers all the knowledge and skills that they need throughout their careers (UNESCO, 2008). Consequently, in-service training has been promoted to upgrade all in-service programmes for teachers to raise professional standards and practices, and educational administrators and personnel have been encouraged to provide training and skills development to teachers and staff members (Bureau of International Cooperation, 2005). Although in-service teacher training is not new in Thailand, the content, processes and approaches are unsuitable for trainee teachers and commonly considered to be out of date and lacking in focus on new teaching and learning methods. Such new programmes as are being introduced are basically following old content in a new format with few interactive processes (Thailand Education Reform Project, 2002). It can be concluded that in-service training in Thailand usually consists of workshops: short-term courses to acquire knowledge, that offer teachers new information or new knowledge on a particular aspect of their work. Thus, in-service training needs to be re-organised as a long-term process that includes regular opportunities and experiences planned systematically to promote growth and development in the profession (Villegas-Reimers, 2003: 12)

Happily, the National Education Act has stipulated that the training of teachers will be improved so that teaching will be further developed and become a highly respected profession (OEC, 2004: 108). Meanwhile, the OEC (2004) recommends school-based training for in-service teacher development because the previous in-service training programmes for developing teachers in Thailand, usually organised by the central agencies in a city, involved high expenditure and teachers' absence from teaching, and took place in a very short time without continuity in terms of monitoring and evaluation (OEC, 2004: 108-109). These facts form the key background to this study.

2.3.1 Preschool teacher training in Thailand

In the past there was no need for preschool teachers in Thailand to hold a teaching license or to spend more time undertaking a teacher training programme after completing a Bachelor's degree (Tantranont, 2009: 16). Moreover, it has also been observed that the standard qualification for preschool teachers was that they should be high school

graduates, or that aspirant teachers should have completed a first degree in any subject, whether it is relevant to early years or not (UNESCO International Bureau of Education, 2006). This has begun to be addressed in recent years and Thailand is currently in the process of instituting new qualifications for preschool teachers that require all preschool teachers to have a Bachelor's degree in early childhood education and those with a Bachelor's degree in other discipline areas are now required to take a one year teacher training course in order to become a preschool teacher (Bureau of International Cooperation, 2005). Nonetheless, it is important to note that UNESCO (2006a) identifies two types of staff in child development centres and preschools. In the case of child development centres, the staffs directly responsible for taking care of children are called caregivers, while those working in preschools tend to be known as preschool teachers. Since the notion of teacher licensing has been found to be ineffective, both caregivers and preschool teachers now need to enter for professional examinations, as follows:

(1) Caregivers: the minimum requirement is that they are over 18 years old and have completed the nine years of compulsory education. National standards for childcare centres now require all caregivers to undergo a six-week training course, which is based on a standard core curriculum, either before staffs are hired or within three months of their employment, provided by any institution approved by the MOE. The quality controls of staffing and performance assessment are provided only in government service providers where limited-term contracts have been adopted in order to preserve high standards (UNESCO International Bureau of Education, 2006).

(2) Preschool teachers: the minimum requirement is a five-year undergraduate course leading to a Bachelor's degree in early childhood education or a related course (UNESCO International Bureau of Education, 2006). Regular participation in in-service training is not required of preschool teachers after gaining a Bachelor's degree (UNESCO, 2006a).

2.3.2 The standards and qualifications of preschool teachers in Thailand

The professional standards of preschool teachers in Thailand were addressed in the regulations of the Teachers' Council of Thailand, which stated that:

> '…the teacher professional standards comprise details of professional knowledge and experience, performance, and conduct' (Office of the Teachers' Council of Thailand, 2005).

This regulation is applied to all teachers in basic education but excluded lecturers in higher education and there is no government agency that has direct responsibility to develop the professional standard specifically for preschool teachers. Thus, the professional standard of preschool teachers has been applied from the Teachers and Educational Personnel Act which can be summarised as follows: (1) standard of knowledge and experience of the profession, (2) standard of working performance, and (3) standard of self-performance (Office of the Teachers' Council of Thailand, 2005). This follows best practice as outlined in the study by Tonchareon (2010), who synthesised the qualifications needed by preschool teachers from documents such as research publications, the National Education Act 1999, and the Council of Teacher and Educational Personnel Act 2003. The synthesis categorised the qualifications of the preschool teachers into three areas: qualification of knowledge, qualification of skills and techniques, and qualification of characteristics, which are explored further below.

(1) Qualification of Knowledge

There are two types of knowledge required for preschool teachers, consisting of: (1) knowledge of early childhood educational process such as the development stages of young children, early childhood learning, curriculum development, the arrangement of the environment, and activity to encourage early childhood learning, and (2) general knowledge and information such as knowledge of society, educational law, ICT, and language development (Tonchareon, 2010).

(2) Qualification of Skills and Techniques

The skills and techniques that preschool teachers need to be qualified in consist of: (1) skills and techniques such as communication with young children, designing or planning activities, operating activities, using media, learning evaluation, and arranging the environment to encourage learning, and (2) skills and techniques in general work, for

example, being able to use technology and choose appropriate information, studying and self-developing, using new research, and change management (Tonchareon, 2010).

(3) Qualification of Characteristics

Qualifications for preschool teachers consist of: (1) moral characteristics, such as kindness and compassion for others, tolerance, industriousness, honesty, responsibility, fairness, and good attitudes toward early childhood, (2) personal characteristics such as good manners, appropriate attire, calmness, good mental and physical health, and emotional maturity, and (3) human relationship characteristics, such as being co-operative, accepting others' opinions, caring for and helping students in need, and maintaining good relationships with parents and communities (Tonchareon, 2010).

2.3.3 Summary of key issues relating to teacher education in Thailand

The foregoing sections of this study have shown the many challenges that Thailand has faced in recent years in terms of initial teacher education and in-service education. It has been noted that great strides have been made in recent years through national legislation that has sought to improve the development of teachers throughout their professional lives. It has been shown that being a preschool teacher in Thailand does not require to gain several kinds of knowledge, skills and characteristics depending on the age-phase of specialisation. It has also been revealed that teachers in formal education are now required to undertake a 5-year programme of training at the level of a Bachelor's degree alongside appropriate school experience. Nonetheless, it has been argued that many inadequacies remain in the system, perhaps especially in relation to in-service education where programmes of training, where available, tend to be outdated and inappropriate for current needs. Crucially, it has been argued that there is a need for the development of high-quality, relevant and up-to-date in-service training for preschool teachers. This argument is central to the issue of this study, which focused on one key perceived need in Thai schools, which is for additional cutting edge training in relation to the development of self-discipline in young children.

2.4 Adult learning

As has been revealed in the introduction to this thesis, one of the central aims of the study was to develop the knowledge and understanding of teachers in Thailand. For this reason the researcher considers that a brief discussion of key theories in adult learning may be apposite prior to a more detailed discussion of the SECI model, which itself provides one theoretical perspective on how knowledge and skills may be developed by groups of professionals.

Transformational learning draws on sociology, philosophy, developmental and cognitive psychology, and psychotherapy (Percy, 2005: 130). The work of Mezirow (1991) focuses on adult learning, particularly on how the ways in which adults see things; their frames of reference can become more differentiated, open, inclusive, and integrated, and thus, transformed (Mezirow, 1991). Transformational learning thus describes the conditions and processes necessary for learners to make the most significant kind of knowledge transformation (Mezirow, 1991: 167), it takes place when learners simply acquire new information and/or knowledge that can easily fit into their pre-existing knowledge structure (McGonigal, 2005).

According to the transformative learning theory of Mezirow (1991), teachers' transformative learning requires a form of education different from that commonly associated with children. To become meaningful, learning requires that new information and/or knowledge be incorporated by the teacher into an already well-developed symbolic frame of reference, which is an active process involving thought, feelings, and disposition. The teacher may also have to be helped to transform his or her frame of reference to fully understand the experience (Mezirow, 1991: 10). In this study, we believe that Knowles's theory of adult learning and Bandura's social cognitive theory should be acknowledged as viable theoretical frameworks for a better understanding of how teachers learn, and that these approaches may provide more understanding for teachers' transformational learning in the programme.

Knowles is widely considered to be the first person to theorise cogently about adult education and the associated andragogy and in the late 1960's, he developed a set of six assumptions about adult learners (Knowles, 1980). Knowles posited that key differences in adult learners when compared to school-age children lies in the degree of motivation, the amount of previous experience, the level of engagement in the learning process, and

how the learning is applied (Sally, 2006). Similarly, the Adult Education Centre (2005) states that the reasons most adults enter any learning experience is to create change. This could encompass a change in their skills, behaviour, knowledge level, or even their attitudes about things.

According to Knowles (1984), andragogy is the art and science of helping adults learn, whereas pedagogy is the art and science of helping children learn (p: 43). Andragogy is essentially a model of assumptions about the characteristics of adult learners that are different from the traditional pedagogical assumptions about child learners rather than an actual theory of adult learning (Knowles, 1984: 43). Therefore, andragogy is the theory of adult learning that sets out the scientific fundamentals of the activities of learners and teachers in planning, realizing and evaluating for adult learning (Zmeyov, 1998: 106; Knowles, 1984: 43). Knowles summarised six key assumptions about adult learners, which are the foundation of adult learning (Knowles, Holton and Swanson, 2005), as follows:

1) The need to know: adult learners need to know the reason for learning something before undertaking to learn it (Knowles, Holton, and Swanson, 2005). In adult learning, the first task of facilitators is to help the learner become aware of the need to know. When adults undertake learning something they deem valuable, they will invest a considerable amount of resources (Taylor and Kroth, 2009: 7).

2) Learner's self-concept: adult learners need to be responsible for their own decisions and to be treated as capable of self-direction. The teacher's concept of the learners is that of a dependent personality; thus, the learners should be offered choice and be encouraged to set their own learning goals (Knowles, Holton, and Swanson, 2005). As adult learner, his/her self-concept moves from one of being a dependent personality towards one of being self-directed. Adult learners tend to resist situations in which they feel that others are imposing their wills on them (Taylor and Kroth, 2009: 6).

3) Role of the learner's experience: adult learners have a variety of experiences of life, which represent the richest resource for learning. Therefore, they should be given the opportunity to use their existing knowledge and experience, which they can apply to new learning experiences (Knowles, Holton, and Swanson, 2005). Moreover, Adult learners tend to come into adult education with a vast amount of prior experiences compared to

that of children. If those prior experiences can be used, they become the richest resource available (Taylor and Kroth, 2009: 6).

4) Readiness to learn: adult learners are ready to learn those things they need to know in order to cope effectively with life situations. Adults are ready to learn when they identify something they want to know or become proficient at, or when they experience something that connects with their life situations. Readiness to learn is dependent on an appreciation of the relevancy of the topic to the learners (Knowles, Holton, and Swanson, 2005).

5) Orientation to learning: adults are motivated to learn to the extent that they perceive that it will help them perform tasks they confront in their life situations or to solve a problem that they may be facing in real life. The learners have a subject-centred orientation to learning, they would like to be engaged in life-centred or problem-centred learning experiences (Knowles, Holton, and Swanson, 2005; Taylor and Kroth, 2009: 6).

6) Motivation: Adult learners are motivated to learn by both internal and external motivators. However, the best motivators are internal such as increased job satisfaction, personal growth and development (Knowles, Holton, and Swanson, 2005). Knowles (1984) believes that the best motivation to learn for adults is primarily internal factors, such as increased self-esteem, self-actualisation, or recognition.

In brief, Knowles (1984) proposed the six assumptions with the understanding that adults have more experiences than children and have created pre-established beliefs. Experience is the most important as adults are focusing more on the process rather than the content being taught (Taylor and Kroth, 2009). Therefore, andragogy is sustained effort to assist adults to learn in a way that enhances their capacity to function as self-directed learners (Mezirow, 1991: 21).

Another highly influential theory relevant to this study and related to adult education is social cognitive theory, which was first proposed by Albert Bandura in 1977 and has become perhaps the most widely influential theory of learning and development (Bandura, 1977; 1986). Initially developed with an emphasis on the acquisition of social behaviours, social cognitive theory continues to emphasise that learning occurs in a social context and that much of what is learned is gained through observation (Denler, Wolters and Benzon, 2014). Bandura (1999) highlights that human learning occurs in a social environment by observing others in order to acquire knowledge, skills, beliefs, and

attitudes. Individuals also learn about the usefulness and appropriateness of behaviours by observing models and the consequences of modelled behaviours and they act in accordance with their beliefs concerning the expected outcomes of actions (Bandura, 1999).

According to social cognitive theory, Bandura (1986) defines learning as an internal mental process that may or may not be reflected in immediate behavioural change and people learn by observing others. Thus, people may learn through observing others' behaviour, attitudes, and the outcomes of those behaviours (Bandura, 1999). Social cognitive theory explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural, an environmental influences. Bandura (2001) proposes four component processes underlying observational learning are:

1) Attentional processes determine what is selectively observed in the profusion of modelling influences and what information is extracted from ongoing modelled events. These determinants concern the cognitive skills, preconceptions, and value preferences of the observers. Others factors are the structural arrangements of human interactions and associational networks, which largely determine the types of models to which people have ready access (Bandura, 2001).

2) Retention processes refers to the processes necessary for reducing and transforming what is observed into a symbolic form that can be stored for later use (Denler, Wolters and Benzon, 2014). Retention is greatly aided by symbolic transformations of modelled information into memory codes and cognitive rehearsal of the coded information. Preconceptions and affective states exert biasing influences on these representational activities (Bandura, 2001).

3) Reproduction processes are necessary when learners draw on their stored codes and make an effort to perform what they have observed (Denler, Wolters and Benzon, 2014) and then symbolic conceptions are translated into appropriate courses of action. This is achieved through a conception-matching process in which conceptions guide the construction and execution of behaviour patterns that are then compared against the conceptual model for adequateness. The behaviour is modified on the basis of the comparative information to achieve close correspondence between conception and action (Bandura, 2001).

4) Motivational processes are key for understanding why learners engage in the prior sub-processes, including whether they ever attempt to use or recreate the new skills they have observed (Denler, Wolters and Benzon, 2014). The learners are motivated by the successes of others who are similar to themselves, but are discouraged from pursuing courses of behaviour that they have seen often result in adverse consequences (Bandura 2001).

Furthermore, Bandura (1986) suggests that people not only respond to external stimuli with a learned behaviour, but can also control that behaviour through self-regulation. Self-regulated behaviour is considered as essential for the learning process because it is the process of one using one's own thoughts and actions to achieve a goal. Therefore, self-regulated learners identify goals and adopt and maintain their own strategies for reaching the goals and also help to maintain behaviour (Bandura, 1986).

2.5 The SECI model

Knowledge is viewed as one of key sources for creating organisational value, especially in an unpredictable environment (Nonaka, 1994). Thus, the issues of creating and managing knowledge in organisations are now the subject of a substantial literature, which includes a number of different models that purport to increase the efficiency of knowledge acquisition and transfer in organisations (Andreeva and Ikhichik, 2011). One of the most influential of such knowledge management models in recent years is the SECI model proposed by Nonaka and Takeuchi (1995) which has already been alluded to in the introduction to this thesis and which forms the basis for this study. This section of the thesis will explain the conceptual underpinnings of this important model and will outline the key elements from which it is constructed.

2.5.1 The main elements of the SECI model

The SECI model comprises four modes of knowledge creation including socialisation, externalisation, combination and internalisation and builds on the philosopher Polanyi's (1983) influential ideas about personal knowledge being related closely to organisational knowledge (Polanyi, 1983). Nonaka and Takeuchi (1995) believe that through the SECI model, organisational knowledge can be created by amplifying individual knowledge to be a part of the knowledge network of the organisation. Further,

they argue that this takes place by converting tacit knowledge into explicit knowledge and moving knowledge from the individual to the group, both within organisational and inter-organisational levels (Nonaka and Takeuchi, 1995). The power of this model has been accepted widely and has gained increasing significance in the knowledge management community (Krogh, Ichijo and Nonaka, 2000).

2.5.2 Types of knowledge

Before discussing the wider issues related to types of knowledge, it is important to distinguish between data, information and knowledge. The generally accepted view refers to data as facts or a row of numbers, to information as data in context that are endowed with purpose, and to knowledge as information that is accumulated and organised in a purposive way so that knowledge makes both data and information manageable (Grant and Grant, 2008; Nonaka, Toyama and Nagata, 2000; Wallace, 2007; Zack, 1999).

Liew (2007) suggests that the relationship between data, information and knowledge, can be summarised by the proposition that data is about facts, basic and unfiltered information, and personal experience. When data are organised in a logical way and appropriate context for a specific purpose, they become information and when information is analysed, processed, and placed in context, it becomes knowledge. Knowledge also involves making inferences and recognising unusual patterns, hidden trends, and exceptions in the data and information (Liew, 2007). As Tian, Nakamori and Wierzbicki (2009) and Tuomi (1999) note, the hierarchy from data to information to knowledge could also be conceived of in the form of a spiral or cyclic mode of knowledge transfer and acquisition as members of a community gain increasing understanding of knowledge and skills built on interaction with others and on past experiences. Thus, information is converted to knowledge once it is processed in the minds of individuals, and knowledge becomes information once it is articulated, verbalised and presented in the form of texts, graphics, or other symbolic forms as data (Alavi and Leidner, 2001). Thus, knowledge, information, and data are fundamental concepts in knowledge management and organisational learning (Liew, 2007) and it is important to note that there are two main types of human knowledge which are critical to the SECI model which include:

- tacit knowledge, and
- explicit knowledge.

Both of these components are fundamental, essential, and inseparable within the overall process of knowledge creation (Brown and Duguid, 2001; Choi and Lee, 2003; Nonaka and Takeuchi, 1995). Tacit knowledge is defined as knowledge that is 'personal, context-specific, and therefore hard to formalise and communicate', while explicit knowledge is defined as 'knowledge that is transmittable in formal, systematic language' (Nonaka and Takeuchi, 1995: 59).

In practice, tacit knowledge is highly personal and deeply rooted in an individual's action, experience, ideals, values, expertise or emotions (Nonaka and Takeuchi, 1995; Nonaka and Konno, 1998). Therefore, tacit knowledge may be difficult to articulate, formalise, communicate and share with others (Jones, Lori and Leonard 2009: 29). It may best be transferred through individual process such as direct experience, reflection and interpersonal means such as highly interactive conversation and storytelling and non-structured processes (Pham, 2008; Tua, 2000). In contrast, explicit knowledge is made up of tangible concepts that can be expressed to others in the form of systematic language such as guidelines, reports, procedures, strategies and databases (Nonaka and Takeuchi, 1995; Nonaka and Konno, 1998). Explicit knowledge is articulated and stored in certain media (Greiner, Bohmann and Krcmar, 2007), which suggests that it can be transferred through more technology-driven and structured processes such as information systems (Martensson, 2000). In brief, Laudon and Laudon (2004: 316) conclude that the difference between tacit and explicit knowledge is that:

> '…informal internal knowledge, often called tacit knowledge, resides in the minds of individuals but has not been documented in structured form, whereas structured internal knowledge is often called explicit knowledge such as product manuals or research reports'.

However, such an assertion has been subject to a sustained critique and not all scholars agree that the characteristics of tacit and explicit knowledge can be separated and distinguished. For instance, Brown and Duguid (2001) argue that there is hardly any distinction between tacit and explicit knowledge because they reflect dimensions of knowledge, rather than distinguishable types of knowledge. Equally, Polanyi himself (1966 cited in Hislop, 2002: 169), argues that 'explicit knowledge as all knowledge is rooted in tacit knowledge' and Tsoukas (2003) agrees that explicit knowledge is grounded

in a tacit component. This suggests that both tacit and explicit knowledge are complementary, and both forms of knowledge are essential to knowledge creation since knowledge is created through social interactions between tacit and explicit knowledge, rather than from tacit or explicit knowledge alone (Nonaka, Toyama and Nagata, 2000: 8). Moreover, Nonaka and his colleagues believed that tacit knowledge can be converted to explicit knowledge, and that explicit knowledge can be converted to tacit knowledge. Thus, one of the most important features of tacit and explicit knowledge comes from their dynamic relationship (Nonaka, 1994; Nonaka and Takeuchi, 1995; Nonaka, Toyama, and Konno, 2001).

2.5.3 The SECI model: the development of the model and the four modes of knowledge conversion

Since the 1990s, knowledge creation has been the subject of theorisation by a number of scholars who base their approach on the work of Nonaka and his colleagues (Nonaka, 1994; Nonaka and Takeuchi, 1995; Nonaka, Toyama and Konno, 2001). The SECI model first emerged in 1993, when Nonaka distributed 105 questionnaires to middle managers in different Japanese manufacturing companies in order to explore how knowledge is created and can be converted between tacit and explicit knowledge (Nonaka, 1994). The factor analysis of the data suggested four modes of knowledge conversion based on the transformation of tacit and explicit knowledge. It was from this original work that, in 1995, Nonaka and Takeuchi proposed the SECI (socialisation, externalisation, combination, and internalisation) model of knowledge conversion to describe the process of interactions between explicit and tacit knowledge (Nonaka and Takeuchi, 1995).

According to the four modes of knowledge conversion, the model is comprised of:

(1) socialisation process (converting from tacit knowledge to tacit knowledge);

(2) externalisation process (converting from tacit knowledge to explicit knowledge);

(3) combination process (converting from explicit knowledge to explicit knowledge); and

(4) internalisation process (converting from explicit knowledge to tacit knowledge) (Nonaka and Takeuchi, 1995: 61-62).

There are two dimensions considered in the SECI model, which relate to the epistemological and ontological dimensions (Nonaka, 1994; Nonaka and Takeuchi, 1995). The first dimension, the epistemological, describes the transformation of tacit knowledge into explicit knowledge, and the reverse actions, while the ontological describes the transformation of individual knowledge into group knowledge, and group knowledge into organisational knowledge, with possible reverse actions (Bratianu and Orzea, 2010: 15). Nonaka and Takeuchi (1995) combine these two dimensions, the epistemological dimension (tacit vs. explicit knowledge) and the ontological dimension (individual vs. group knowledge), to explain the spiral process of converting between tacit and explicit knowledge, and moving from individuals to organisation through the SECI model (Nonaka and Takeuchi, 1995).

Nonaka (1994) identifies that new knowledge is essentially created in the transformation between tacit knowledge and explicit knowledge. Moreover, Nonaka and Takeuchi, (1995: 62) consider the SECI model as 'the engine of knowledge creation' and they affirm that many Japanese companies have used this model successfully to create new organisational knowledge. The following describes the four processes of the SECI model.

(1) Socialisation

The first stage of the model is the socialisation process, which converts tacit knowledge into new tacit knowledge through shared experiences, ideas or technical skills between individuals, which takes place through everyday social interaction and cultural processes linked to ongoing organisational activities (Nonaka and Konno, 1998; Nonaka and Takeuchi, 1995; Nonaka and Toyama 2003; Nonak, Toyama and Nagata, 2000). Since tacit knowledge is difficult to articulate, formalise, and communicate, the socialisation process typically occurs in apprenticeship type learning such as joint or shared activities, spending time together and working in the same environment rather than through the use of written manuals or textbooks. Equally, it is suggested that it often takes place in informal social meetings both inside and outside the workplace, where tacit knowledge can be created and shared during interaction (Nonak, Toyama and Nagata, 2000). For these reasons, Bratianu and Orzea (2010: 48) believe that 'the socialisation process is an

opportunity for participating individuals to share their experiences and to learn through a direct exchange of tacit knowledge'.

(2) Externalisation

The next stage in the model is the externalisation process, which converts tacit knowledge into explicit knowledge (Nonaka and Konno, 1998; Nonaka and Takeuchi, 1995; Nonak, Toyama and Nagata, 2000). This process occurs when an individual's tacit knowledge is translated into comprehensible forms that can be understood and expressed by others (Finley and Sathe, 2013: 60). When tacit knowledge is shared amongst others through exchange mechanisms such as two-way dialogue, active listening and the visual depiction of ideas and concepts, it becomes new explicit knowledge, which means such knowledge has been successfully transferred (Little, Quintas and Ray, 2002; Nonaka and Konno, 1998).

It is important to note that Nonaka and Takeuchi (1995: 66) assume that 'among the four modes of knowledge conversion, externalisation is the key to knowledge creation, because it creates new explicit concepts from tacit knowledge'. When tacit knowledge is made explicit, knowledge is crystallised, allowing it to be shared with others through verbal and nonverbal communication to become the basis of new knowledge such as concepts, images, written documents and manual reports, so that the knowledge can be spread more easily through the organisation (Bratianu and Orzea, 2012; Nonaka and Takeuchi, 1995; Nonak, Toyama and Nagata, 2000). Thus, externalisation is a process of reducing the entropy of the total knowledge, by structuring and integrating new created knowledge into the existing explicit knowledge structures (Bratianu and Orzea, 2012: 17).

(3) Combination

The third stage in the model is the combination process, which converts explicit knowledge into more systematic sets of knowledge (Nonaka and Konno, 1998; Nonaka and Takeuchi, 1995; Nonak, Toyama and Nagata, 2000). Through the combination process, explicit knowledge is collected from inside or outside the organisation and then combined, edited or processed to appear as new knowledge and it is then disseminated among the members of organisations. This crucial element of the model has been revolutionised in recent years since creative use of computerised communication networks

and databases can facilitate this mode of knowledge conversion (Little, Quintas and Ray, 2002; Nonaka, Toyama and Nagata, 2000).

The combination process relies on three further processes which include collecting explicit knowledge from inside and outside and combining externalised knowledge, and then sharing this with the members of the organisation (Nonaka and Konno, 1998: 44-45). In brief, the SECI model asserts that the reconfiguration of existing information through the sorting, adding, combining and categorising of explicit knowledge can lead to new knowledge (Nonaka and Takeuchi, 1995: 67).

(4) Internalisation

The last stage of the SECI model is the internalisation process, which recycles explicit knowledge back into tacit knowledge through direct experience (Nonaka and Konno, 1998; Nonaka and Takeuchi, 1995). Through the internalisation process, explicit knowledge is shared throughout the organisation and converted into individual tacit knowledge through practice and practical activity (Easa and Fincham, 2012; Nonaka and Konno, 1998). For this reason, Nonaka and Takeuchi (1995: 69) identify that internalisation is closely related to 'learning by doing' and/or organisational learning. Examples of internalisation include practical activities based on previous knowledge in real situations such as training, mimetic activities and experiments (Nonaka and Takeuchi, 1995).

The last stage of the model assumes that individuals can broaden, extend and reframe their own tacit knowledge as they internalise from the explicit knowledge (Nonaka and Takeuchi, 1995: 69). An individual's tacit knowledge in the last stage of the model can thus set off a new spiral of knowledge creation when an individual's tacit knowledge is shared through socialisation with other colleagues, thus creating a spiral of knowledge transfer (Nonak, Toyama and Nagata, 2000).

2.5.4 Limitations of the SECI model in different cultural contexts

The SECI model has been accepted internationally by a number of academic institutions and companies as universally valid in conception and in application (Andreeva and Ikhilchik, 2011; Glisby and Holden, 2003). However, the application of the SECI

model in different cultural contexts is subject to debate and there are some suspicions about whether the SECI model can be equally efficient across cultural contexts (Glisby and Holden, 2003; Weir and Hutchings, 2005) since the use of the SECI model is based on the Japanese cultural traditions (Easa and Fincham, 2012: 103). For this reason, some research has been carried out to test the applicability of the SECI model in different cultural settings. For example, Weir and Hutchings's (2005) study tested the applicability of the SECI model in the Arab and Chinese contexts, whilst Andreeva and Ikhilchik's (2011) study also tested the applicability of the model in the Russian context. Moreover, Glisby and Holden (2003) highlight that each mode of the SECI model is strongly embedded in traditional Japanese values and management practices, and thus that the applicability of the model is not universal. In addition, they also stressed that this model is more relevant to Japanese culture in comparison to the Western culture. In addition, the study by Bratianu (2010: 195) shows that the SECI model can be useful in the context of Japanese culture, but it is unlikely to produce successful results in other cultures. The studies of Weir and Hutchings (2005) and Andreeva and Ikhilchik (2011), concur with Glisby and Holden's study by suggesting that not all processes of the SECI model are applicable across different cultures. However, Weir and Hutchings suggested that there are elements of the SECI model that do have application in the Arab world and China (Weir and Hutchings, 2005). For this reason, the succeeding section will discuss each process of the SECI model in light of the research findings about its applicability and utility in different cultural contexts.

(1) Socialisation: the key factor in this process is that individuals must be willing to share and exchange their tacit knowledge internally and externally to make socialisation process happen effectively (Nonaka and Takeuchi, 1995). Glisby and Holden (2003: 32) argue that sharing tactic knowledge is itself a Japanese trait that might not be easily introduced in a non-Japanese context. They also insist that the process of sharing tacit knowledge between individuals in the same organisation rests on a foundation of specific phenomena such as greater personal commitment, loyalty and stronger corporate affiliation (Glisby and Holden, 2003). These are typically found in Japanese culture as highly distinctive Japanese phenomena in comparison to Western organisations (Nonaka, 1994). Thus, the socialisation process depends on personal commitments to the organisation, the use of strong internal and external networks for the sharing of

knowledge, and organisational communication style which are features that are not necessarily so strong in Western organisations (Glisby and Holden, 2003).

In contrast, the results of Weir and Hutchings's (2005) study illustrate that the socialisation process works quite effectively in China and Arab countries. The process of sharing tacit knowledge in the Chinese context is found in the use of trusted networks in which an insider relationship exists within and between organisations. This is similar to the Arab world, where this process occurs primarily in the family context, which typically constitutes the most fundamental matrix of social organisation (Weir and Hutchings, 2005). However, the results of Andreeva and Ikhilchik's (2011) study show that in Russia the socialisation process is limited because willingness to share knowledge seems not to be a common societal feature (Andreeva and Ikhilchik, 2011).

(2) Externalisation: Nonaka and Takeuchi (1995) stress that the externalisation process is the most difficult and time-consuming amongst the four processes of the SECI model. Thus, it takes a long time to move into a situation of knowledge sharing from tacit to explicit knowledge because this function depends upon individual tacit knowledge already being in existence (Hutchings and Michailova, 2003). Indeed, some research studies claim that tacit knowledge cannot be made explicit (Ambrosini and Bowman, 2001; Collins, 2001; Tsoukas, 2003).

It is important to note that emphasis is placed on the centrality of group commitment for the realisation of the externalisation process (Nonaka and Takeuchi, 1995). Glisby and Holden (2003) state that the externalisation process is possible in collectivist cultures like the Japanese because Japanese organisations experience less pressure from shareholders, and they can spend their resources and time more freely to externalise their knowledge. Thus, the process of externalisation is strongly influenced by the Japanese communitarianism group orientation and relative weak external pressures for corporate performance (Glisby and Holden, 2003: 35). Additionally, Hofstede and Hofstede (2005) believe that group orientation is a specific feature of the Japanese culture.

After testing the applicability of the externalisation process of the SECI model in other cultural contexts, Weir and Hutchings, 2005 state that it is not clear that the concept of externalisation as used in the SECI model framework work effectively in the other cultures. For instance, Chinese organisations operate the externalisation process in almost the same way as Japanese companies do, whereas the externalisation process is not widely

used in the Arab context. This might be related to the fact that Arab people tend to prefer to retain knowledge until there is an absolute need for disclosure (Weir and Hutchings, 2005). Equally, in Russia, there is a limitation on the externalisation process, which is mainly related to group orientation since Russians tend to be more individualistic (Andreeva and Ikhilchik, 2011).

(3) Combination: this process is that of combining knowledge from all employees throughout the organisation. The practice of combination is predicated on free access to company information, which may be stored in a single integrated database, open to any employee regardless of position (Nonaka, 1994). This process has powerful roots in distinctive Japanese practices and it seems to be less easily accomplishable in non-Japanese contexts (Glisby and Holden, 2003: 33).

Thus, the combination process may play a rather different role in different countries and contexts and may not apply universally. Martin-de-Castro, Lopez-Saez and Navas-Lopez (2007) argue that the cultural context in the USA and Spain focus more on explicit knowledge than tacit knowledge, and they believe in 'the processes of knowledge creation as a set of activities that allows firms to obtain and apply explicit knowledge' (p: 225). Therefore, they conclude that the combination process of the SECI model is the main source of knowledge creation. Additionally, Haag, Duan, and Mathews (2010) agree with Martin-de-Castro, Lopez-Saez and Navas-Lopez (2007) by arguing that Japanese companies focus more on tacit knowledge, which is related to the socialisation process; whereas the western companies focus more on explicit knowledge, which is related to the combination process.

When applying the combination process in other cultures, the study of Weir and Hutchings (2005) suggests that the combination process does not work well in either the Chinese or the Arab world contexts. This might be because of the complex routines in the Arab world limit the effective sorting and translating of knowledge in this process; while in Chinese contexts, this may be explained by the fact that explicit knowledge is not distributed throughout organisations and people only share knowledge with members of their trusted networks. Similarly, in the Russian context, the combination process is also limited because there is a lack of free access to corporate information by employees in Russian companies (Andreeva and Ikhilchik, 2011).

(4) Internalisation: this process is that of turning explicit into individual tacit knowledge. Learning by doing, training, experiencing, and practicing, allow the individual to access the knowledge of the group and the entire organisation and then this knowledge converts to individual tacit knowledge (Nonaka and Konno, 1998: 45). Nonaka (1994) identifies that the practice of employees in most large Japanese corporations substantially enhances the internalisation of knowledge. Moreover, Glisby and Holden (2003: 35) suggest that the Japanese typically focus on developing generalists rather than specialists in one narrow domain and that there is wider acceptance of learning by doing. Altogether, these factors create a context for efficient internalisation.

In terms of examining the applicability of the internalisation process of the SECI model in other cultural contexts, the studies of Weir and Hutchings (2005) and Andreeva and Ikhilchik (2011), posit that the internalisation process of the SECI model is not widely applicable in China, Arab and Russia. This might be because of the fear of mistakes that inhibits learning-by-doing and the fear of taking actions that have a significant risk of failure (Andreeva and Ikhilchik, 2011; Weir and Hutchings, 2005).

Despite the concerns noted above about the difficulties of applying the SECI model across cultures, a number of researchers have investigated the model and found that it can have wide applicability in business organisations in nations other than Japan. For example, Halley and Beaulieu (2005) studied the relationship between supply chain and knowledge management practices in Canadian manufacturing companies. Their findings indicated that the SECI model could be used successfully in cross-organisational settings in order to support efficient knowledge management. It is also apposite to point out that Roy and Gupta (2007) attempted to re-examine the SECI model in the context of a small manufacturing organisation in India where the results revealed that the approach was beneficial but that the processes of tacit-explicit transformation varied from the description in the SECI model. Another example we may examine is the study of Tan et al. (2010) who investigated the motivational factors that encourage the widespread sharing of knowledge among bank employees. They found that motivational factors and knowledge sharing processes developed by applying the SECI model had an influence in determining success in the sharing of knowledge among bank employees about achieving organisational competitiveness.

We must note, however, that the SECI model was originally developed for company organisations and there are some limitations in applying this to other contexts. Nonetheless, and crucially, the findings of many educational researchers have confirmed that the process of the SECI model could be applicable in educational system (Halley and Beaulieu, 2005; Hosseini, 2011; Yeh, Huang and Yeh (2011). For example, Yeh, Huang and Yeh (2011) conducted the research about the SECI model in teacher training context with the blended learning approach, they indicated that the SECI model was suitable for teacher training and especially for improving teachers' professional knowledge, and it might be integrated to create a new paradigm for teacher training. They also confirmed that 'the SECI model should be a good model for teacher training' (p: 147). Moreover, the study by Hosseini (2011) proposed the SECI model as suitable for the development of educators and as one possible method for knowledge creation processes in formal courses.

Summary

From all of the above, it can be concluded that there are two closely interrelated forms of knowledge: tacit and explicit knowledge. These forms of knowledge can be converted in the interaction between individuals, groups, and organisations. The SECI model has two distinct dimensions of knowledge creation, the epistemological dimension and the ontological dimension. The epistemological dimension illustrates tacit and explicit knowledge. The ontological dimension is concerned with the architecture in which knowledge conversion takes place: individuals, groups, organisations and inter-organisations.

In 1995, Nonaka and Takeuchi originally proposed a four-stage spiral model of knowledge conversion: socialisation, externalisation, combination and internalisation (SECI model). The spiral starts with a socialisation process, in which the tacit knowledge of individuals is exchanged. This is followed by an externalisation process, in which new tacit knowledge is translated into explicit knowledge. This explicit knowledge is combined with existing explicit knowledge in the combination process. The last process is internalisation, in which this new explicit knowledge is absorbed by individuals and enriches their tacit knowledge base. Finally, the tacit knowledge is then exchanged in a new socialisation process, and the knowledge creation process continues along the spiral (Nonaka and Takeuchi, 1995). The SECI model was first proposed in Japan and is

grounded in the Japanese culture. Thus, there are some limitations in terms of the utility and applicability of the SECI model in different cultural contexts. However, many researchers have confirmed that the SECI model can be applied efficiently in other cultures and other contexts by adaptation.

2.6 Summary of the chapter

The chapter reviewed a substantive literature relating to self-discipline, education systems, teacher training through a focus on Thailand, together with the SECI model of knowledge conversion. The first section described the concept of self-discipline, which presents definitions of discipline and self-discipline, the importance of self-discipline, promoting children's self-discipline, self-discipline skills for children, and teachers' roles in promoting children's self-discipline. The next section outlined the background to the education system in Thailand. It focused on early childhood education and teacher education. It then illustrated in-service training in Thailand, including the review of preschool teacher training, the standards and qualifications of preschool teachers, together with summary of key issues relating to teacher education. The next section was about adult learning. The final section was the concept of the SECI model of knowledge creation, which contained the main elements of the SECI model, types of knowledge, the SECI model: the development of the model and the four modes of knowledge conversion, together with limitations of the SECI model in different cultural contexts.

The next chapter focuses on the methodology and research design and will employ this literature in order to gather appropriate data to develop the teacher training programme in the topic of promoting preschoolers' self-discipline.

Chapter 3
Methodology and research design

Introduction

This chapter will explain the methodology and the research design for the study. The introduction identifies briefly what each section is going to cover. The chapter begins with a discussion of research paradigms, and is followed by mixed-method research. It will then explain case study approach. There will then be an explanation of research methodology with details about methods used to collect data and research tools. It will then include an explanation of ethics to conduct the study. The pilot study and an explanation of trustworthiness, validity and reliability of the tools will be presented. The next section will provide the details of sample, main study and data analysis. Finally, there will be a consideration of insider researcher. The last section will summarise this chapter and briefly identify how the next chapter will present.

3.1 Discussion of paradigm approaches to research

According to Taylor, Kermode and Roberts (2007: 5), a paradigm is a broad view or perspective of something. Similarly, Teddlie and Tashakkori (2009: 84) defined a paradigm as a worldview, together with the various philosophical assumptions associated with that point of view. Likewise, Lincoln (1990 cited in Morgan, 2007) described paradigms as alternative worldviews with such pervasive effects that adopting a paradigm permeates every aspect of a research inquiry. Denzin and Lincoln (2005) summarised the meaning of paradigm as a set of beliefs that guide action; and specifically in the research context, reflect the researcher's worldview that is composed of four sets of philosophical beliefs: axiology (ethics), epistemology (knowledge), ontology (reality), and methodology (inquiry). It is thus good to think of paradigms as worldviews that include virtually everything someone thinks or believes; and therefore it is important to clarify what is contained in a worldview, which in this case would primarily focus on a person's thoughts about the nature of research (Morgan, 2007: 52).

There are currently three major research paradigms in education: (1) a positivist or post-positivist paradigm (quantitative research), (2) a constructivist paradigm (qualitative

research), and (3) a pragmatist paradigm (mixed-methods research). Positivist and constructivist paradigms predate the pragmatist paradigm (Teddlie and Tashakkori, 2009). According to Creswell and Plano Clark (2011), it was not until the 1980s that several researchers first described their use of mixed methods. Thus, mixed-methods research is referred to as the third wave or third research movement (Johnson and Onwuegbuzie, 2004) and the third research community (Teddlie and Tashakkori, 2009: 4). Thus, mixed-methods research can help bridge the schism between quantitative and qualitative researches (Onwuegbuzie and Leech, 2004).

Due to the complex nature of the research study, there is no single paradigm that could satisfactorily deal with all of the required methodological aspects. Therefore, the researcher found it necessary to combine the qualitative paradigm with the quantitative paradigm as mixed-methods in this study.

3.2 Mixed-methods research

To generate a basic definition of mixed-methods research, Johnson, Onwuegbuzie, and Turner (2007: 123) asked numerous leaders in mixed-methods research for their definitions of the approach and compiled their responses. They concluded that mixed-methods research is a combination of elements of qualitative and quantitative research approaches (the use of qualitative and quantitative view points, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration.

According to John and Onwuegbuzie (2004: 17), mixed-methods research is a class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study. Creswell and Plano Clark (2011) also provided a comprehensive definition of mixed-method as follows:

> ‘Mixed-method research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative data in a single study or series of studies. Its central premise is that the use of

quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone' (p: 5).

Similar to Teddlie and Tashakkori (2010) who defined the methodology of mixed-methods as:

'The broad inquiry logic that guides the selection of specific methods and that is informed by conceptual positions common to mixed methods practitioners. This definition of methodology distinguishes the mixed method research approach to conducting research from that practiced in either the quantitative or qualitative approach' (p: 5).

As noted by Sechrest and Sidana (1995), growth in the mixed-methods has the potential to reduce some of the drawbacks associated with singular methods. It also can incorporate the strengths of both quantitative and qualitative methods. The goal of mixed-methods research is to draw from strengths and also to minimise the weakness of both approaches in single research studies (Johnson and Onwuegbuzie, 2004: 15). By narrowing the divide between quantitative and qualitative researchers, mixed-methods research has a great potential to promote a shared responsibility in the quest for attaining accountability for educational quality (Johnson and Onwuegbuzie, 2004: 23-24). Moreover, combining quantitative and qualitative methods in a mixed-methods approach provides comprehensiveness (O'Cathain, Murphy and Nicholl, 2007), greater knowledge, which yields a whole greater than the sum of the parts (Barbour, 1999) and more in-depth understanding (Greene, 2007).

For the benefits of mixed-methods, it has usually been compared with mono method research (Molina-Azorin, 2011: 15). Teddlie and Tashakkori (2009) pointed out two main areas in which mixed-method studies may be superior to mono method approaches. Firstly, mixed-methods research can answer research questions that the other methodologies cannot and it also enables the researcher to simultaneously generate and verify theory in the same study. Secondly, it provides stronger inferences. Moreover, there are potential benefits of mixed-methods research: comprehensive findings, increased confidence in results, increased conclusion validity, and more insightful understanding of the underlying phenomenon (Johnson and Christensen, 2004). In fact, mixed-methods

approaches have several purposes that can be considered as advantages of this approach Bryman and Bell, 2003; Creswell and Plano Clark, 2011). Thus, the combination of multiple methodological practices in a single study is best understood as a strategy that contributes rigour, breadth, validity, richness and depth to any inquiry (Denzin and Lincolun, 2005). Mixed-method approach is also of interest in this study because this kind of study cannot depend on a single data collection method and is likely to use several sources of evidence.

Thus, a decision to employ mixed-methods approach was undertaken in this study. The reason for using both quantitative and qualitative approaches for the methodology was because of the nature of the research objectives. Moreover, the aim of this study was not only quantitative; it provided an overall picture of the data collection followed by qualitative data: a narrative and detailed account of the data. The research seeks to understand the teacher training programme relating to promoting preschoolers' self-discipline in one nursery school from the views of participants, behaviour of both teachers and preschoolers, and also teacher's knowledge. In order to gain the best understanding of the whole picture, quantitative and qualitative approaches needed to be integrated (Creswell, 2009: 121). Using mixed-methods can enhance the credibility of the research findings by triangulating information from both quantitative and qualitative methods (Hesse-Biber, 2010: 3-4).

Both quantitative and qualitative approaches were conducted at the same time. In the quantitative approach, the survey method was used to gather the teachers and preschoolers' behaviour on a larger scale, which was not possible to obtain from qualitative approaches. In the qualitative approach, semi-structured interviews, semi-structured observations and classroom observations were employed to investigate deeper and richer information, whilst questionnaires and behaviour checklists were employed in the quantitative approach. Multiple data can help the researcher gain an in depth understanding of teacher training programmes. The use of both qualitative and quantitative approaches was necessary to explore the development and evaluation of the teacher training programme in promoting preschoolers' self-discipline using the SECI model and then it was also essential to compare teachers' knowledge and behaviours in promoting preschoolers' self-discipline and preschoolers' self-discipline behaviour before and after the programme in order to test the effectiveness of the programme.

3.3 Case study approach

Yin (1994: 13) defined a case study 'as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used'. Case study design enables a researcher to closely examine specific data because it may select a small geographical area or a limited number of participants as the subjects of study. Case studies investigate contemporary real-life phenomenon through specific detailed context of a limited number of subjects (Zainal, 2007: 2-3).

Case study typically combines data collection techniques such as interviews, observations, questionnaires and document and text analysis. Both qualitative and quantitative data collection and analysis methods may be used (Yin, 1994: 14). They can be used to achieve various research aims: to provide description of phenomena, develop theory and test theory (Darke, Shanks and Broadbent, 1998: 275)

Case study research may adopt a single-case design or a multiple-case design. A single-case study indicates a critical case, where it is an extreme case, unique case or a revelatory case (Yin, 1994: 38-40). It allows researchers to investigate phenomena in depth to provide rich description and better understanding (Walsham, 1995). Turning to multiple-case design, this design provides cross-case analysis, comparison and the investigation of a particular phenomenon in diverse settings. Multiple- case studies may be chosen to predict similar results or to produce contrasting results for predictable reasons (Yin, 1994: 46). Moreover, selecting the case is crucial; case selection must be determined by the research purpose, questions, propositions and theoretical context, but there will also be other constraints that impact on case selection, including accessibility, resources, and time available (Rowley, 2002: 19).

For the purpose of this study, a case study was chosen because of its advantages in profound insights and its focus on evaluating the teacher-training programme in promoting preschoolers' self-discipline. Thus, a single nursery school was selected to conduct the main study.

3.4 Research Methodology

The research method is a strategy of enquiry, moving from underlying assumptions to research design and data collection (Myers and Avison, 2002). The most common

classification of research methods is into qualitative and quantitative approaches. Qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena whilst quantitative research methods were originally developed in the natural sciences to study natural phenomena. Both qualitative and quantitative research approaches are employed in educational research. Indeed, many researchers prefer to use mixed methods approaches by combining these two methods for use in a single research project depending on the kind of study and its methodological foundation (Bryman and Burgess, 1999: 45).

An obvious basic distinction between qualitative and quantitative research is the form of data collection, analysis and presentation. While quantitative research presents statistical results represented by numerical or statistical data, qualitative research present data as descriptive narration with words and attempts to understand phenomena in natural settings (Denzin and Lincoln, 2005: 3).

As mentioned earlier, this study used a mix-methods approach and a case study; therefore, it provided an opportunity for the researcher to use multiple methods within a case. Using a single method to explore a complex topic is not feasible and beneficial for a full understanding. Therefore, the multi methods were employed in order to incorporate the strengths of each method or minimise any bias, which might potentially be inherent in any single method. A concurrent mixed-methods approach in which both quantitative and qualitative methods were conducted at the same time was employed in the study reported in this thesis. It is clear that both quantitative and qualitative research methods have advantages to achieve valid and reliable research outcomes. These methods provide specific techniques and strategies. In line with this, several experts have pointed out that quantitative and qualitative methods are valuable depending on the purpose of the study and have relevance and characteristics for the improvement of education (Creswell, 2009; Wiersma and Jurs, 2005).

This descriptive research study employed a mixed-methodology design in order to develop and evaluate the effectiveness of the teacher-training programme in promoting preschoolers' self-discipline. Theoretical guidance was sought from the Nonaka and Takeuchi (1995) SECI model of Knowledge creation, and from Bandura's (1977) Social Cognitive Theory and Malcolm Knowles (1980) Adult Learning Principles. Qualitative and quantitative data were collected using five methods including: semi-structured

interviews, semi-structured observation, classroom observation, questionnaires and behaviour checklists. Semi-structured interviews, semi-structured observations and classroom observations were employed to gather qualitative data in order to gain a greater scope and breadth of educators' views and a greater understanding of teachers and preschoolers' behaviour. Meanwhile, questionnaire and behaviour checklists were used to obtain a wider picture of teachers' and children's behaviours (see Table 3.1). The details of each method are as follows.

Table 3.1 Methods for data collection

Qualitative methods	Quantitative methods
- Semi-structured interviews - Semi-structured observations - Classroom observations	- Questionnaire - Behaviour checklists

3.4.1 Qualitative methods

Qualitative methods were designed to gather interview and observation data. Three qualitative methods used to collect data were employed in the study: semi-structured interviews, semi-structured observations and classroom observations.

(1) Semi-structured interviews

The first method used to obtain data was semi-structured interviews. Interview is perhaps the most important of all qualitative methods as it can provide more comprehensive insight into the participants thinking than surveys (Henning, 2004). It can be defined as a flexible tool for data collection, enabling multi-sensory channels to be used and it is also a powerful tool for researchers (Cohen, Manion and Morrision, 2007). According to Atkins and Wallace (2012: 86), interviews are a frequently used method for collecting qualitative data in education research. Interviews are commonly used methods for researchers favouring qualitative approaches in the disciplines of both psychology and sociology (Potter and Hepburn, 2005) Moreover, the conducting of interviews with participants, either alone or in small groups, enables the researcher to establish personal contact with the participants. It can provide a crucial opportunity to ask follow-up questions when information provided is not always clear (Henning, 2004).

There are three general categories of interviews: fully structured interview, semi-structured interview and unstructured interview (Robson, 2011). Firstly, unstructured interviews are a conversation with specific purpose. In this way, the researcher can gain access to, and subsequently understand, the private interpretation of social reality that individuals hold (Minichiello et al., 1995). Secondly, structured interviews apply close-ended questions that force the respondents to select their answer from a limited set of responses. During the interview, a conversational approach cannot be maintained as specific questions receive specific answer (Minichiello et al., 1995). Thirdly, the last category of interviews is semi-structured interview. Taylor and Bogdan (1984, cited in Burns, 1994) defined semi-structured interviews as 'repeated face-to-face encounters between the researcher and informants directed towards understanding informants' perspectives on their lives, experiences or situations as expressed in their own words' (p: 279).

In this research study, semi-structured interviews were designed to interview two groups of participants: the head teacher and the deputy head teachers; and the preschool teachers. Each group was interviewed according to the different interview schedules. The researcher conducted two formal interviews before and after the programme. Therefore, there were four interview schedules: two of them were to interview the head teacher and the deputy head teachers before and after the programme, while another two interview schedules were used to interview the preschool teachers before and after the programme (see Table 3.2).

The purpose of the initial interview was to obtain the views of educators regarding the topic of self-discipline, self-discipline issues in the school and in the classes, teacher's knowledge, and behaviours and roles in promoting self-discipline. The interview schedule for the head teacher and deputy head teachers was divided into 3 main topics (see Appendix 1.1). Moreover, the interview schedule for preschool teachers was divided into 4 main topics (see Appendix 1.3).

The purpose of the second interview was to obtain the views of the head teacher, deputy head teachers, and preschool teachers who participated in the programme, on the effectiveness of the programme and how teachers had improved their knowledge and behaviour and also how preschoolers had changed self-discipline behaviour. The interview schedule for the head teacher and deputy head teachers was divided into 2 main topics (see

Appendix 1.2), whereas the interview schedule for preschool teachers was divided into 4 main topics (see Appendix 1.4). The participants were interviewed twice before and after the programme.

Table 3.2 The main topics in four interview schedules

	Head teacher and deputy head teacher	Preschool teacher
Before the intervention	1. The importance of self-discipline; 2. Behaviours of teacher in promoting preschoolers' self-discipline in their school before the intervention 3. Self-discipline problems in their school before the intervention	1. The importance of self-discipline; 2. Teachers' knowledge in promoting preschoolers' self-discipline before the intervention 3. Behaviour of teacher in promoting preschoolers' self-discipline before the intervention 4. The self-discipline problems in their classroom before the intervention
After the intervention	1. Behaviours of teacher in promoting preschoolers' self-discipline in their school after the intervention 2. Self-discipline problems in school after the intervention	1. The effectiveness of programme. 2. Teachers' knowledge in promoting preschoolers' self-discipline after the intervention 3. Behaviour of teacher in promoting preschoolers' self-discipline after the intervention 4. The self-discipline problems in their classroom after the intervention

Developing semi-structured interviews

All interview schedules were developed over the period January until May 2012. There were four sets of interview schedules. As noted earlier, two of these were used to interview the head teacher and deputy head teachers before and after the programme and another two sets were used to interview preschool teachers before and after the programme.

The draft of the head teacher interview schedule originally contained three main questions before the programme and two main questions after the programme. The draft of the preschool teacher interview schedules contained four main questions both before and after the programme. All drafts were sent to the supervisory team and two native English-speaking volunteers; they were asked to check and comment on questions which were ambiguous, had potential for misunderstanding or showed other weaknesses. Preliminary feedback indicated that some questions were not clear and some words were inappropriate. The interview schedules were revised following these comments. The second draft of the interview schedules were approved by the LJMU Research Ethics Committee before conducting the pilot study. After the pilot study, there were no negative comments from the participants in the pilot study.

(2) Semi-structured observations

Observation method is a basic technique used in most qualitative research. Even if other methods are used, most researchers retain observation as the most essential instrument (McCracken, 1988: 18-20). According to Marshall and Rossman (2006), observation is 'the systematic description of events or behaviours in the social setting chosen for study' (p.79). This method is a way of collecting data by watching behaviour, events, or characteristics in the natural setting. Moreover, observation is considered as an effective way to see what people do and to hear what they say (Robson, 2011). It can offer an investigator the opportunity to gather live data from occurring daily situation and can focus on human behaviour (Cohen, Manion and Morrision, 2007). Similarly, Morrison (1993: 80) noted that 'observations enable researchers to gather data on the human setting, the interactional setting and the programme setting'.

There are two types of observations, which are qualitative, including unstructured and semi-structured observations, and structured observation. Unstructured and semi-structured observations are widely used in flexible designs, whereas structured observation is almost exclusively linked to fixed designs, of both experimental and non-experimental researches (Robson, 2011: 316-317).

The purpose of observation in this study was to obtain more detail on both teachers and preschoolers' behaviour in order to support data gained from behaviour checklists. Therefore, semi-structured observations were employed to observe teachers and

preschoolers' behaviour regarding self-discipline behaviour issues inside and outside classrooms. The data obtained from semi-structured observations were used to support the data gained from the behaviour checklists. There were two sets of the semi-structured observations, one for observing teachers' behaviour and another for observing preschoolers behaviour.

Observation guides were developed from the behaviour checklists to observe general behaviour of each domain in order to gain more detail of those behaviours. Firstly, the observation guide on teacher behaviours for promoting preschoolers' self-discipline was created to observe preschool teachers in three domains; (1) modelling good manners, (2) creating classroom environment, and (3) responding to children (see Appendix 3.2). Secondly, the observation guide on preschoolers' self-discipline behaviours was developed to observe preschoolers' behaviour in six domains: (1) self-control, (2) self-responsibility, (3) self-confidence, (4) self-reliance, (5) empathy, and (6) problem solving (see Appendix 4.2). The semi-structured observations were conducted by the researcher to observe both teacher and preschooler individually in K1, K2 and K3 classes twice before and after the programme, lasting one day in each class.

Developing semi-structured observation

Observation guides were developed in parallel with behaviour checklists over the period January until May 2012. The draft of the teacher observation guide originally comprised three domains: (1) modelling appropriate behaviour, (2) creating an appropriate classroom environment, and (3) responding to children properly. The draft of the child observation guide comprised six domains: (1) self-control, (2) self –responsibility, (3) self-reliance, (4) cooperation, (5) empathy, and (6) problem solving.

Two drafts of classroom observation guides were sent to the supervisory team and two native English-speaking volunteers; they were asked to check and comment on questions that were ambiguous, had potential for misunderstanding or showed other weaknesses. The feedback suggested that the format of the semi-structured observation form should be changed to make it clearer, and so it was revised following these comments. The second draft was approved by the LJMU Research Ethics Committee before the pilot study was conducted.

(3) Classroom observations

Classroom observation is a qualitative method of measuring classroom situation from direct observations that specify behaviours that are to be observed. This method provides valuable insight data on both teachers and students such as performance, characteristics, knowledge, and beliefs of teachers and students. Such observation also provides researchers with data, covering areas such as the impact of classroom interaction and the application of different techniques, teaching and tasks (Yurekli, 2013: 302).

The purpose of the classroom observations in this study was to obtain data of the reaction between teachers and preschoolers when challenging behaviours of preschoolers arise. A classroom observation form was developed containing topics to observe how teachers responded to the challenging behaviour of preschoolers and the consequences after the programme during school time, both inside and outside the classroom. There were four categories on the classroom observation form:

(1) Challenging behaviour of the children,

(2) The techniques being used by teachers in order to respond to these behavioural patterns of the children,

(3) Whether the children reacted to the intervention of their teacher, and

(4) Whether the children changed their behaviour after intervention.

The classroom observations were conducted by the researcher on K1, K2 and K3 classes twice, both before and after the programme at the times when the researcher observed teacher and preschoolers individually.

Developing classroom observation

Classroom observation forms were formulated over the period January until May 2012. The draft of the classroom observation form originally consisted of three categories: (1) child behaviour problems, (2) how the teacher responded to the child, (3) how the child reacted to the teacher's response.

The draft of the classroom observation form was sent to the supervisory team and two native English-speaking volunteers, who were asked to check and comment on questions that were ambiguous, had potential for misunderstanding or showed other weaknesses. Preliminary feedback indicated that the classroom observation guides should add one more question about how the preschoolers change their behaviour after the

programme. Moreover, some words were inappropriate in some situations. The classroom observation schedule was revised following these comments. The second draft of the questionnaire was approved by the LJMU Research Ethics Committee before conducting the pilot study. After the pilot study, there was no further comment.

4.3.2 Quantitative methods

Quantitative methods were created to gather survey data. Two qualitative methods used to collect data were employed in the study: questionnaire and behaviour checklists.

(1) Questionnaire

Questionnaires are very widely used in social research. They are defined as a method for collecting information from people, such as people's knowledge, beliefs, attitude and behaviours (Robson, 2011). Additionally, questionnaires can be applied in various ways in order to identify different responses (Boynton and Greenhalgh, 2004). A questionnaire is based around asking questions of respondents, they are suitable for large populations, which are being asked to respond in short and simplified ways (Burton, Brundrett and Jones, 2009). Similarly, Oppenheim (1992: 174) affirmed that the questionnaire approach is one way of obtaining a measure of attitude and knowledge. According to Burns (1994: 349), there are three kinds of items which are generally used in the construction of questionnaires: closed items, open-ended items, and scale items. To explain further, the closed items allow the respondents to choose from two or more fixed alternatives. The open-ended items simply supply a frame of reference for a respondents' answer, coupled with a minimum of restraint of command on their expression. The scale items are a set of items to which the respondents respond by indicating degrees of agreement or disagreement (Burns, 1994).

In this study, the aim of the questionnaire was to collect data about teacher knowledge regarding how teachers respond to challenging behaviour in each situation. Responses to the questionnaire items were what teachers would do to deal with challenging behaviour in their classes, which were taken as indicators of their knowledge. The questions were designed in relation to scenarios of challenging behaviour of preschoolers in six domains. There were four choices of solutions provided for each question and the teachers were asked to choose only one choice that they thought was the

best solution in each scenario. However, there was a space for teachers to leave some comments when they had other techniques to solve those problems.

The questionnaire was divided into 6 domains of self-discipline problems of preschoolers in the classroom: (1) lack of self-control, (2) lack of self-responsibility, (3) lack of self-reliance, (4) lack of cooperation, (5) lack of empathy, and (6) lack of problem solving. Each domain contained five questions and the total number of questions was 30. The teachers were asked to complete the questionnaire twice before and after the programme.

Developing the questionnaire

The first draft questionnaire was developed by information gathered from a review of the existing literature over the period January until May 2012. It was initially drafted to cover specific issues regarding preschoolers' self-discipline problems in classrooms in six domains: (1) lack of self-control, (2) lack of self –responsibility, (3) lack of self-reliance, (4) lack of cooperation, (5) lack of empathy, and (6) lack of problem solving. Multiple-choice questions were used and applied appropriately to each question**.** There were three choices in answer to each question and teachers were to choose the answer which was most representative as to how they would react to each scenario. Extra space was also provided for teachers to answer in their own words. An introductory sheet was included on the first page, which introduced the objectives of the study and provided brief instruction on how to complete the questionnaire.

The draft of the questionnaire was sent to the research team and two native English-speaking volunteers; they were asked to check and comment on questions. Preliminary feedback indicated that questions were simple and clear. However, some words were inappropriate in some situations. The questionnaire was revised following these comments. The second draft of the questionnaire was then approved by the LJMU Research Ethics Committee. After the pilot study, the questionnaire was revised again following comments from the teachers in the pilot study. The comments of the teachers can be seen in section 3.6.

(2) Behaviour checklists

A behaviour checklist allows a standardised method of collecting information about a person's behaviour (Myers, 2013: 1). Behaviour checklists offer many advantages such as low cost and an efficient method of collecting information (Merrell, 2008; Nordess, Epstein and Synhorst, 2009). It is particularly important because few other methods of efficiently assessing social and emotional characteristics exist. Direct observations can be time-consuming and difficult to complete in a natural setting without the subject reacting to the presence of the observer (Myers, 2013: 1). Moreover, behaviour checklists allow teachers or parents to rate a preschool child's behaviours across numerous areas (Merrell, 2008).

There were two sets of behaviour checklists in this study, one for teachers and another one for preschoolers. The aims of the behaviour checklists were to collect data of preschool teachers' behaviour in promoting preschoolers' self-discipline into three domains and preschoolers' self-discipline behaviour into six domains.

The purpose of the behaviour checklist was to obtain the frequency of both teachers' and preschoolers' behaviour related to self-discipline behaviour inside and outside the classroom during school time. There were two sets of behaviour checklists: a teacher behaviour checklist and child behaviour checklist.

Rating on both behaviour checklists was based on a three-point scale: "never", "sometimes" and "often".

Never	means	that behaviour was never found
Sometimes	means	that behaviour was found once or twice
Often	mean	that behaviour was found three times or more

- **Teacher behaviour checklist**

The teacher behaviour checklist contained 30 questions in three domains: (1) modelling good manner, (2) creating an appropriate classroom environment, and (3) responding to children (see Table 3.3). The teachers were asked to rate their own behaviour using the teacher behaviour checklist twice before and after the programme.

Table 3.3 The framework for teacher behaviour regarding promoting preschoolers' self-discipline consisting of three domains

Domain	Subcategory
1. Modelling good manner	1.1 Putting things away neatly 1.2 Tidying up equipment in the right place when finish 1.3 Talking with children warmly and politely 1.4 Using the appropriate voice tone 1.5 Using 'Please' and 'Thank you' whenever getting or asking for help from children 1.6 Saying sorry whenever he/she upset to children 1.7 Paying attention when children speak 1.8 Keeping him/her temper 1.9 Keeping the similar routine every day 1.10 Respecting and following the rules in the classroom regularly
2. Creating appropriate classroom environment	2.1 Establishing the clear rules that children can understand 2.2 Allowing children to participate in creating the rules in their classroom 2.3 Providing adequate amount of equipment and toys 2.4 Making a clear daily schedule 2.5 Providing the quiet zone for children to use when necessary 2.6 Providing the personal locker in the classroom for children 2.7 Encouraging children to take good care of themselves as well as others 2.8 Allowing children to think and solve problems themselves 2.9 Treating each child without bias 2.10 Providing variety activities
3. Responding to children	3.1 Giving clear and simple directions 3.2 Rewarding a child's good behaviour 3.3 Praising a child's good behaviour 3.4 Using physical punishment of undesirable behaviours 3.5 Using social punishment of undesirable behaviours 3.6 Blaming a child in front of others 3.7 Giving short and clear explanation 3.8 Ignoring misbehaviour that is not harmful 3.9 Asking and paying attention to reasons from children 3.10 Setting aside a time each day to spend with each child individually

- **Child behaviour checklist**

The child behaviour checklist contained 30 questions in six domains: (1) self-control; (2) self –responsibility; (3) self-reliance; (4) cooperation; (5) empathy; and (6) problem solving (see Table 3.4). The teachers were asked to rate their preschoolers behaviour in their classes using child behaviour checklist twice before and after the programme.

Table 3.4 The framework for children self-discipline behaviour consisting of six domains

Domain	Subcategory
1. Self-control	1.1 Does he/she queue up? 1.2 Does he/she hit friends? 1.3 Does he/she take toys from friends? 1.4 Does he/she ask for permission before leaving the classroom? 1.5 Does he/she run around the classroom?
2. Self –responsibility	2.1 Can he/she finish activities on time? 2.2 Does he/she put a lot of effort into work? 2.3 Does he/she tidy up toys in the right place when finished playing? 2.4 Does he/she talk to others when teacher is teaching? 2.5 Does he/she listen to others when they speak?
3. Self-reliance	3.1 Does he/she make the bed himself? 3.2 Does he/she leave belongings out? 3.3 Does he/she flush the toilet after use? 3.4 Can he/she feed him/herself? 3.5 Does he/she make decisions by himself?
4. Cooperation	4.1 Does he/she follow the rules in the classroom? 4.2 Does he/she follow the regulations of each activity? 4.3 Does he/she make a high-pitched noise in the classroom? 4.4 Does he/she bring materials related to the lesson as assigned? 4.5 Does he/she help the teacher to do something?
5. Empathy	5.1 Does he/she use appropriate language with others? 5.2 Will he/she help others when asked? 5.3 Will he/she take turns? 5.4 Does he/she say ‘Sorry’ when he/she has done something wrong? 5.5 Does he/she use ‘Please’ and ‘Thank you’?
6. Problem-solving	6.1 Does he/she cry when he/she cannot deal with a problem? 6.2 Does he/she ask for help from others when problems arise? 6.3 Can he/she solve problems alone? 6.4 Does he/she choose appropriate ways to solve problems? 6.5 Can he/she explain why he/she chooses these ways to solve problems?

Developing behaviour checklists

Lists of key questions were identified and formulated into the draft behaviour checklists over the period January until May 2012. There were two sets of behaviour checklists: one for rating teacher behaviour in promoting preschooler's self-discipline and another one for rating preschooler's self-discipline behaviour.

The draft of the teacher behaviour checklist, covering 30 questions was originally constructed in three domains: (1) modelling good manners, (2) creating appropriate classroom environment, and (3) responding to children properly. The rating scale was constructed in four scales: never, rarely, most of time, always. In addition, the draft of the child behaviour checklist, containing 30 questions, was originally constructed into 6 domains: (1) self-control, (2) self –responsibility, (3) self-reliance, (4) cooperation, (5) empathy, and (6) problem solving. Meanwhile, the rating scale was in four grades: never, rarely, most of the time, always.

The draft of the behaviour checklists were sent to the supervisor team and two native English-speaking volunteers; they were asked to check and comment on questions which are ambiguous, had potential for misunderstanding or showed other weaknesses. Preliminary feedback indicated that questions were simple and clear. However, some words were inappropriate in some situations. The behaviour checklists were then revised following these comments. Ethical approval was sought for the behaviour checklists before undertaking a pilot study and the second draft of the behaviour checklists were approved by the LJMU Research Ethics Committee.

The draft behaviour checklists were tested in a pilot study among a sample of preschool teachers and preschoolers to assess the reliability and internal validity of the instrument. Full details regarding the pilot study have been described in section 3.6. After the pilot study, the behaviour checklists were revised again as comments from the teacher in pilot study. The comments of the teachers for developing the behaviour checklists can be seen in section 3.6, and the validity and reliability of both behaviour checklists can be found in section 3.7.

3.5 Ethical consideration

Research ethics refers to the moral principles guiding research (Economic and Social Research Council, 2010). Gray (2009: 69) stated that research ethic means

conducting research in a way that goes beyond merely adopting the most appropriate research methodology, but conducting research in a responsible and morally defensible way. Ethics, then, are sets of moral principles or norms that are used to guide moral choices of behaviour and relationships with others (Blumberg, Cooper and Schindler, 2005). The research tools were submitted to Liverpool John Moores University (LJMU) Research Degrees Committee and were granted approval on 1st June 2012 (Ref: 12/ECL/006).

The main participants in this study were the head teacher, deputy head teachers, preschool teachers and preschoolers in one nursery school in Bangkok, Thailand. The researcher asked for permission to conduct the study from the head teacher of the preschool where the study was to be conducted. The researcher also sought permission from the teachers and the parents of the preschoolers who were participants in the study. Invitation packs consisting of an invitation letter (see Appendix 6.1), a participant information sheet (see Appendix 6.2), and a consent form (see Appendix 6.3) were directly posted out to the head teacher. A telephone follow up was subsequently made a few weeks after the posting date to assess interest and ask for agreement to allow her school to participate in this study.

When the head teacher agreed to participate, she introduced and asked the deputy head teachers and the preschool teachers to participate in this study. After that invitation packs for teachers consisting of an invitation letter (see Appendix 7.1), a participant information sheet (see Appendix 7.2), and a consent form (see Appendix 7.3) were directly posted out to the deputy head teachers and the preschool teachers individually.

In case of preschoolers, invitation packs for parents consisting of an invitation letter (see Appendix 8.1), a participant information sheet (see Appendix 8.2), a consent form (see Appendix 8.3) were posted out the teachers and then were distributed to all parents during the summer. Written consent forms obtained from all participants, including the deputy head teachers, the preschool teachers and the parents were sent back to the head teacher and then all of them were sent to the researcher prior to any of the research being undertaken.

All participants understood and agreed to their participation, it was made clear how information gained would be used and how it would be reported. Moreover, participants were also given the opportunity to withdraw from the research at any time. In addition,

participants in this study were assured of confidentiality and anonymity in the reporting of findings. The storage and use of any personal information was securely retained by password protection system on the LJMU data system and on the personal computer of the researcher. Therefore, no one else could gain access to the data, except the supervisor. To further protect confidentiality and anonymity all participants in the research have been referred to as the head teacher, deputy head teacher, teacher and child. Any school which participated even in the pilot study and main study, has been referred to anonymously as school A and school B.

3.6 Pilot study

The pilot study not only provides an opportunity to identify confusing, ambiguous language and misunderstanding, but also to obtain information about possible patterns of results (Wiersma and Jurs, 2005). Pallant (2005: 5) confirmed that validity and reliability of an instrument can influence the quality of the data obtained. She clarifies that no matter how good the reports are concerning the validity and reliability of the scales, it is necessary to pilot-test them with the intended sample.

The pilot study was carried out on 6 - 20 July 2012 in two nursery schools in Bangkok, Thailand. Details of participants in the pilot study are shown in Table 3.5 below. Initial meetings were arranged with headteachers of preschools to discuss and distribute information on the pilot study and clarify any concerns. Invitations to preschool teachers to participate in the pilot study were subsequently made after agreement from the heads teachers. These meetings were provided for preschool teachers to explain the process of interviews, observations in the classroom and questionnaire and to ensure no disruption occurred to all activities

Table 3.5 The details of participants in the pilot study

Positions	School A	School B	Total
Head teacher	1	1	2
Preschool teacher	8	7	15
Preschooler	14	11	25
Total			**42**

Ethical approval for the study was given by the Liverpool John Moores University Research Ethics Committee. Written informed consent was obtained from head teachers and preschool teachers. Observations of children's behaviour involved both individual children and observation of the whole class; therefore, parental consent was obtained prior to the pilot study.

Conduct of the pilot study

There were five research tools to pilot validity, reliability and the understanding of questions. Details of conduct in the pilot study were explained, as follows (see Table 3.6),

- In total there were two head teacher and five preschool teacher interviews conducted. All of the seven semi-structured interviews took place during a two-week period at a location within the work place of the participants and lasted between 30 and 45 minutes. All of the interviews were tape recorded with the participant's approval.

- The questionnaire was given to 15 preschool teachers to complete all of whom returned the questionnaire. They completed every question with the average time taken being 25-30 minutes. The teachers were requested to complete and return their questionnaire within one week; nine returned their questionnaire the same day, six teachers required reminding once and then returned the questionnaire within one week.

- The classroom observation took place in three classrooms: one K1, one K2, and one K3, for a whole day per classroom.

- The child behaviour checklist was given to five teachers to rate their children's behaviour. In total there were 25 children who were observed and checked in the checklist form. The teachers were requested to complete and return the child behaviour checklists within two weeks; one teacher returned five child behaviour checklists forms the next day, and four teachers returned another 20 child behaviour checklists in two weeks.

- Fifteen teachers were asked to rate their behaviour using the teacher behaviour checklist. All teacher behaviour checklists were returned to the researcher within two week of being received.

- Three classrooms were observed using classroom observation. While the researcher was observing the whole class, she also observed the prominent behaviour of some teachers in promoting children's self-discipline and filled in the semi-structured observation form. Finally, the behaviour of three teachers could be completed in six

domains of the semi-structured observation form. In addition, five children in three classrooms were selected randomly by the researcher to observe individually in order to fill in the semi-structured observation form.

Table 3.6 Summary of Instrument used and the number of participants

Research Instruments	No	The participants in the pilot study	Approach
Head teacher interviews	2	Head teachers from school A and B	Qualitative
Preschool teacher interviews	5	3 preschool teacher from school A 2 preschool teacher from school B	Qualitative
Teacher questionnaire	15	8 preschool teacher from school A 7 preschool teacher from school B	Quantitative
Classroom observation	3	2 classrooms from school A 1 classrooms from school B	Qualitative
Teacher behaviour checklist	15	8 preschool teacher from school A 7 preschool teacher from school B	Quantitative
Semi-structured observation on teacher behavior	3	2 preschool teacher from school A 1 preschool teacher from school B	Qualitative
Child behaviour checklist	25	3 preschooler from school A 2 preschooler from school B	Quantitative
Semi-structured observation on children behavior	5	3 preschooler from school A 2 preschooler from school B	Qualitative

Feedback on pilot study

The comments from the pilot study for developing the research instruments; there were 10 teachers who made further comments on the questionnaire and the preschooler behaviour checklist. The most interesting of these were:

- Three teachers who commented on the questionnaire said that there should be more than three choices per question. Moreover, four teachers recommended that there should be a space for writing an open answer in case they felt there was no appropriate choice for a teacher‘s reaction in each scenario.

- Three teachers pointed out that some behaviours on the preschooler behaviour checklist do not appear in their preschoolers’ behaviour. For example, question 3.2 can

he/she use the toilet independently? In fact, all children can use the toilet independently, but they do not flush the toilet after use.

- Four teachers who commented on the preschooler behaviour checklist said that some questions were unclear and misunderstood, particularly in the issue of problem solving, such as question 6.1 does he/she make choices for solving problems? And question 6.2 can he/she choose appropriate ways to solve problems?

All amendments were made and the final version of all research tools before conducting the main study.

3.7 Trustworthiness, Validity and Reliability

3.7.1 Trustworthiness

Trustworthiness is employed to ensure the quality of the approach used qualitative methods, which reflects the honesty of the research process (Shenton, 2004). Four criteria that might address trustworthiness are 'credibility, confirmability, dependability and transferability' (Guba, 1981 cited in Shenton 2004: 73). In order to meet these requirements, the work tried to employ the appropriate research methods, along with an element of triangulation, to ensure authenticity: 'Triangulation refers to attempt to get a true fix on a situation by combining different ways of looking at it or different findings' (Silverman, 2010: 277).

In the semi-structured interviews and the semi-structured observations, the content of questions concentrated on the research aims; the sample was chosen purposively; and the length of interviews and observations were designed to be sufficient to gain in-depth data and to make the interviewees feel free to express their views. The researcher interviewed different educators at different positions in the same school and also observed teachers and preschooler's behaviour. The results provided a richness of detail which subsequent work could use then to explore and support other sources of data.

3.7.2 Validity

Validity is the extent of accuracy of an instrument to measure the construct it is supposed to measure in the context of the concept/variable being studied (Polit and Beck, 2006: 329). There are four basic ways in which to assess the validity of an instrument: criterion, face, content and construct validity. The criterion validity approach compares

the new tool to an existing well-accepted instrument that measures the same concept (DeVaus, 2002: 64). Since no other instruments could be found in the published literature, this approach could not be used to test for these instruments. The following discussion therefore will focus on the issues of face and content validity.

(1) Face validity

Face validity is a type of instrument validity usually assessed by small numbers of relevant colleagues at an early stage. This is used to assess whether the questions drafted have ability to generate the pertinent answers accurately (Smith, 2002). The first draft of all instruments was sent to two native English-speaking volunteers. They were asked to comment on questions, the feedback indicated that, in general, questions were simple, clear and concise.

(2) Content validity

Content validity refers to the ability of the instrument's items to represent the content of the given construct (DeVaus, 2002). When the researcher was developing the instruments, the concern was whether the measurement tools and the items it contained were representative of promoting children' self-discipline knowledge and the lists of self-discipline behaviour which were what the researcher intended to measure. To test the content validity of questionnaire and behaviour checklists, the researcher approached educators who are experts in social development in children in Thailand to examine the questionnaire's content and the behaviour checklists. The researcher wanted to ensure that these tools focused on fundamental and promoting preschoolers' self-discipline concepts.

3.7.3 Reliability

Reliability is the degree of consistency with which the data collection instrument produces the same results every time; it is implemented in the same situation or used by different investigators (Polit and Beck, 2006: 324). To ensure reliability, the researcher tested both behaviour checklists by preschool teachers and preschoolers who were not part of the sample.

The data collection should be accurate and stable to reflect true scores of the attributes under investigation and minimize error (Burns and Grove, 2003). The extent of this consistency is measured by a reliability coefficient using a scale from 0.00 (very

unreliable) to 1.00 (perfectly reliable). In practice, a score of 0.9 is generally deemed to be acceptable. There are several ways in which this coefficient can be calculated. One of the most common is Cronbach's alpha, which presents the average of all possible split-half correlations and so measures the consistency of all items, both globally and individually (Gray, 2009: 363).

In this study, Cronbach's alpha was used to analyse the reliability of behaviour checklists. According to Field (2009: 676-681) recommended that Cronbach's alpha coefficient can indicate consistency of each question set and can be simply analysed by SPSS programme. Key values in the reliability analysis output are Corrected Item-Total correlation, Cronbach's Alpha if Item Deleted and Cronbach's alpha. *Corrected Item-Total correlation* was used to identify internal consistency of each question sets. A value above 0.300 represents good correlation between each question item and the overall score of question set. *Cronbach's Alpha if Item Deleted* was used to identify an adjusted value of Cronbach's alpha if that question items was deleted. Finally, Cronbach's alpha was used to identity overall reliability of a question set. A value above 0.800 represents good reliability. Therefore, both behaviour checklists showed good reliability, with 0.970 and 0.966 respectively. The results are shown in Table 3.7 and 3.8.

Table 3.7 Reliability analysis of the pilot study of the teacher behaviour checklist

Question Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Standardised Cronbach's alpha
1. Modelling good behaviour			
1.1 Putting things away neatly	0.914	0.965	
1.2 Tidying up equipment in the right place when finished	0.778	0.969	
1.3 Talking with children warmly and politely	0.941	0.965	
1.4 Using the appropriate tone of voice	0.769	0.970	
1.5 Using 'Please' and 'Thank you' whenever receiving or asking for help from children	0.924	0.966	
1.6 Saying sorry whenever he/she upsets children	0.843	0.969	0.894
1.7 Paying attention when children speak	0.677	0.965	
1.8 Keeping his/her temper	0.764	0.970	
1.9 Keeping to a similar routine every day	0.855	0.965	
1.10 Respecting and regularly following the rules in the classroom	0.755	0.969	
2. Creating an appropriate classroom environment			
2.1 Establishing clear rules that children can understand	0.904	0.965	
2.2 Allowing children to participate in creating the rules in their classroom	0.881	0.966	
2.3 Providing adequate amount of equipment and toys	0.778	0.969	
2.4 Making a clear daily schedule	0.922	0.965	
2.5 Providing a quiet zone for children to use when necessary	0.865	0.965	
2.6 Providing a personal locker in the classroom for children	0.776	0.972	0.910
2.7 Encouraging children to take good care of themselves as well as others	0.783	0.970	
2.8 Allowing children to think for and solve problems themselves	0.892	0.965	
2.9 Treating each child without bias	0.911	0.966	
2.10 Providing a variety of activities	0.876	0.920	
3.1 Responding to preschoolers properly			
3.1 Giving clear and simple directions	0.778	0.969	
3.2 Rewarding a child's good behaviour	0.895	0.966	
3.3 Praising a child's good behaviour	0.624	0.972	
3.4 Using physical punishment of undesirable behaviours	0.923	0.965	
3.5 Using social punishment of undesirable behaviours	0.900	0.966	
3.6 Blaming a child in front of others	0.869	0.965	0.903
3.7 Giving short and clear explanations	0.723	0.920	
3.8 Ignoring misbehaviour that is not harmful	0.834	0.970	
3.9 Asking for and paying attention to reasoning from children	0.771	0.965	
3.10 Setting aside a time each day to spend with each child individually	0.738	0.966	

Data from table 3.7 represents that all questions that measured teacher behaviour in promoting preschoolers' self-discipline were reliable. Although the question item on 'Praising a child's good behaviour' was the lowest correlation among all of these questions (0.624) it still had good reliability. Thus, all questions on teacher behaviour were retained in the behaviour checklist.

Table 3.8 Reliability analysis of the pilot study of child behaviour checklist.

Question Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Standardised Cronbach's alpha
1. Self-control			
1.1 Does he/she queue up?	0.817	0.964	
1.2 Does he/she hit friends?	0.684	0.965	
1.3 Does he/she take toys from friends?	0.761	0.964	0.899
1.4 Does he/she leave the classroom without permission?	0.758	0.964	
1.5 Does he/she run around the classroom?	0.677	0.965	
2. Self –responsibility			
2.1 Can he/she finish activities on time?	0.742	0.964	
2.2 Does he/she tidy up toys when finished playing?	0.673	0.965	0.898
2.3 Does he/she pay attention during activities?	0.890	0.963	
2.4 Does he/she put a lot of effort into work?	0.829	0.964	
2.5 Does he/she listen to others when they speak?	0.746	0.964	
3. Self-reliance			
3.1 Is he/she an independent child?	0.718	0.965	
3.2 Can he/she use the toilet independently?	0.604	0.965	0.744
3.3 Does he/she make decisions independently?	0.423	0.966	
3.4 Will he/she eat on his/her own?	0.438	0.966	
3.5 Does he/she take care of personal belongings?	0.717	0.965	
4. Cooperation			
4.1 Does he/she help the teacher to prepare materials being used in activities?	0.701	0.965	
4.2 Does he/she bring materials related to the lesson as assigned?	0.716	0.965	0.838
4.3 Does he/she break rules in the classroom?	0.826	0.964	
4.4 Does he/she help others when asked?	0.527	0.966	
4.5 Does he/she help the teacher?	0.817	0.964	
5. Empathy			
5.1 Does he/she use appropriate language with others?	0.618	0.965	
5.2 Does he/she make noise to interrupt the class?	0.707	0.965	0.794
5.3 Will he/she take turns?			
5.4 Does he/she use 'Please' and 'Thank you'?	0.761	0.964	
5.5 Does he/she say 'Sorry' when he/she has done something wrong?	0.600 0.562	0.965 0.966	
6. Problem solving			
6.1 Does he/she make choices for solving problems?	0.594	0.965	
6.2 Can he/she choose appropriate ways to solve problems?	0.683	0.965	
6.3 Does he/she ask for help from others when problems arise?	0.467	0.966	0.809
6.4 Does he/she quarrel with friends?	0.729	0.965	
6.5 Does he/she cry when he/she cannot deal with a problem?	0.680	0.965	

Data from table 3.8 indicates that overall, all questions that measured preschoolers' self-discipline behaviour were reliable. Although, the question item on 'Does he/she make decisions by themselves?' was the lowest correlation among all of these questions (0.423), it still had good reliability. Thus, all questions on preschoolers' self-discipline behaviour were retained in the behaviour checklist.

3.8 Sample of the main study

Sampling refers to the method used to select a number of people from a population (Mertens, 1998: 253). According to Teddlie and Tashakkori (2009: 713) noted that purposive sampling techniques involve selecting certain units or cases based on a specific purpose rather than randomly. Researchers make a conscious decision about which group of participants and which school would be best to provide the desired information in the study (Burns and Grove, 2003). One strength of purposive sampling is that a small sample that has been systematically selected for typicality provides confidence that the conclusions adequately represent the average members of the population (Bickman and Rog, 1998).

This study purposively selected one preschool as the sample; it provided the researcher with rich and useful data towards which to develop and evaluate the teacher-training programme in the topic of promoting preschoolers' self-discipline. The preschool is a public school, which is located in a central part of the country. It has students who come from a wide range of different backgrounds and therefore provides a wider range of teacher experiences. The selection was done by means of a matrix, which was constructed around four dimensions:

(1) The preschool was the first preschool in Thailand, established in 1939. It is regarded as a preschool model in Thailand because it has a good quality of teaching, curriculums and environments.

(2) The preschool welcomes researchers to carry out their research about early childhood education. One of the aims of the school is to be the leading research institution for developing the early childhood curriculum in Thailand.

(3) The school is one of the largest preschools in Thailand; it has over 20 preschool teachers and over 500 preschoolers.

(4) All teachers and preschoolers in the school are used to participating in research by means such as interviewing, completing questionnaires, and observing.

Purposive sampling has several advantages for this study: (1) the researcher required specific preschool teachers who have at least a Bachelor's degree in early childhood education and also have experience on teaching preschoolers, (2) there were limited preschool sites which were willing to take part in the study, (3) it was not practicable or economical for the researcher to conduct the main study in one of the largest preschools in Thailand.

Participant selection

The total number of participants in this study was 555, consisting of one head teacher, three deputy head teachers, 24 preschool teachers and 527 preschoolers from the selected preschool in Bangkok, Thailand. The selection process for the participants in this study was as follows:

- A head teacher and three deputy head teachers were invited to be participants in this study.

- The teachers of the study were invited to participate in this study; participation in the study was voluntary. Twenty-four out of 27 preschool teachers agreed to participate in this study.

- The preschoolers in the class of those 24 preschool teachers were automatically selected to participate in this study. However, the details and process of the study were explained to parents or guardians of preschoolers who took part if permitted by their parents. If parents did wish to not allow their children to be participants, these children were not included in the study and alternates were sought. The total number of preschooler participants was 527.

3.9 Main study

The main was conducted from May until August 2013, which encompassed three phases. The first phase was to collect data before the programme. The second phase was for the preschool teacher who participated in the programme. The third phase was to collect data after the programme.

In the data collection, the quantitative and qualitative data collection was concurrent in the study. The qualitative approach was conducted concurrently with semi-structured interviews, semi-structured observations and classroom observations. The quantitative approach was conducted simultaneously with questionnaire and behaviour checklists to gather data in order to support the data obtained from the qualitative approach. This process is detailed in Table 3.9 below:

Table 3.9 Summary of methods in this study

	Purpose	Study design	Participants (N)
Phase I Before the programme	To obtain a general view of preschoolers' self-discipline behaviour in the classroom and the interaction between teachers and children before intervention.	**Quantitative** Questionnaire	Teachers (24)
		Teacher behaviour checklist	Teachers (24)
		Child behaviour checklist	Preschoolers (527)
	To qualitatively explore both views and teacher and children behaviour towards self-discipline issues in the school before the intervention.	**Qualitative** Semi- structured interview	Head teacher (1) Deputy head teacher (3) Teachers (24)
		Teacher observation	Teachers (6)
		Child observation	Preschoolers (20)
		Classroom observation	Classrooms (6)
Phase II Intervention	To create new knowledge of promoting preschooler' self-discipline behaviour between teachers.	Nine weeks for attending the programme	Teachers (24)
Phase III After the programme	To obtain a general view of children's self-discipline behaviour in the school and the interaction between teachers and children after intervention	**Quantitative** Questionnaire	Teachers (24)
		Teacher behaviour checklist	Teachers (24)
		Child behaviour checklist	Preschoolers (527)
	To qualitatively explore the views and teacher and children behaviour towards self-discipline issues in the school before	**Qualitative** Semi- structured interview	Head teacher (1) Deputy head teacher (3) Teachers (24)

	intervention.	Teacher observation	Teachers (6)
		Child observation	Preschoolers (20)
		Classroom observation	Classrooms (6)

Phase 1: Before the programme

- **Qualitative data**

To collect qualitative data, the head teacher, three deputy head teachers and 24 preschool teachers were interviewed to explore their general views of self-discipline and those that were specific to their school or their classrooms (see Appendix 1.1 and 1.3). The interviews, lasting approximately 30-45 minutes, were conducted according to the interview schedule by face-to-face interview. The head teacher, deputy head teachers and preschool teachers were given the opportunity to choose a place and time for the interview to be conducted. Therefore, interviews were arranged to suit the participants and conducted after work or lunchtime, at their office for the head teacher and in the classrooms for the teachers.

In addition, there were six of the teachers and twenty of the preschoolers, who were chosen for in-depth observation using semi-structured observations (see Appendix 3.2) and classroom observations (see Appendix 5). The teacher selection criteria were the length of experience in preschool teaching, the teaching qualifications and the recommendation of the head teachers and other staff members in the school. While, the preschooler selection criteria was the recommendation of the teachers. Thus, the researcher, using semi-structured observations (see Appendix 4.2) observed twenty preschoolers, spending one day per classroom. The researcher was aware that the observer could have been be seen as an intruder into the classroom and that the intrusion can affect the psychological and social rapport between teacher and preschool children. Accordingly, every step was taken to try and to reduce this disruption by explaining the purpose of the observation.

The researcher observed six classes out of 22 classes, which were purposely selected: comprising of two classes in K1, K2 and K3. These classes were observed twice: before and after the programme. The observation lasted one day per classroom in order to obtain in-depth information from a variety of situations**.**

- **Quantitative data**

To collect quantitative data, twenty-four preschool teachers were asked to complete the questionnaires (see Appendix 2). The questionnaire was given to all teachers to complete. The teachers were requested to complete and return the questionnaire one week before the start of the programme. All teachers returned the questionnaire to the researcher within the same week that they had received it.

In addition, they were asked to rate their behaviour using the teacher behaviour checklist (see Appendix 3.1) and then rate their preschoolers' self-discipline behaviour using the child behaviour checklist (see Appendix 4.1). To complete the child behaviour checklist, each preschooler was observed by their teachers and then the teachers rated the behaviour on the checklist form. The teachers were requested to complete and return both behaviour checklists within two weeks after they were received. All of the behaviour checklists of both teachers were returned to the researcher within two weeks.

Phase 2: The intervention

Twenty-four preschool teachers participated in the programme for nine weeks (see in Table 3.10).

Table 3.10 The details of topics and activities for nine weeks

Week	Topics	Activities
Week 1	Introduce the programme	- Lecture by the researcher
Week 2	How to promote or solve problems of self-control and self- responsibility for preschoolers	- Sharing experience (S*) and brainstorming (E*) in those topics - Applying discipline techniques to use in the class (I*)
Week 3		- Making the leaflet (C*) in those topics - Applying discipline techniques to use in the class (I*)
Week 4	How to promote or solve the problems of self- reliance and cooperation for preschoolers	- Sharing experience (S*) and brainstorming (E*) in those topics - Applying discipline techniques to use in the class (I*)
Week 5		- Making the leaflet (C*) in those topics - Applying discipline techniques to use in the class (I*)
Week 6	How to promote or solve the problems of empathy and problem solving for preschoolers	- Sharing experience (S*) and brainstorming (E*) in those topics - Applying discipline techniques to use in the class (I*)
Week 7		- Making the leaflet (C*) in those topics - Applying discipline techniques to use in the class (I*)
Week 8	How to solve other self-discipline problems and challenging behaviour in the class	- Sharing experience (S*) and brainstorming (E*) in those topics - Applying discipline techniques to use in the class (I*)
Week 9		- Making the leaflet (C*) in those topics - Applying discipline techniques to use in the class (I*)
	Conclusion	- Discussion

*S: Socialisation stage in the SECI model, *E: Externalisation stage in the SECI model

*C: Combination stage in the SECI model, *I: Internalisation stage in the SECI model

Phase 3: After the programme

- **Qualitative data**

The head teacher, deputy head teachers and preschool teachers were interviewed to explore any improvement in self-discipline in their school or their classrooms after the teachers had attended the programme (see Appendix 1.2 and 1.4). In addition, the researcher observed the same six teachers and twenty preschoolers, who were observed before the programme using the same semi-structured observations and classroom observations in order to see how teachers' and preschoolers' behaviour had improved after attending the programme.

- **Quantitative data**

The same tools collected quantitative data again; the preschool teachers were asked to complete the same questionnaires in order to see the change of techniques that they chose to solve each self-discipline problem. All questionnaires were returned to the researcher in the same week that they received it. In addition, they were asked to rate their behaviour using the teacher behaviour checklist and then rate their preschoolers' self-discipline behaviour using the child behaviour checklist again in order to see how teachers' and preschoolers' behaviour had improved. They took about two weeks to complete both behaviour checklists and then returned them to the researcher.

3.10 Data analysis

Polit and Hungler (1995: 699) referred to data analysis as the systematic organisation and synthesis of research data, and the testing of a research hypothesis using those data. According to Burn and Grove (2003: 479) defined that data analysis is a mechanism of organising data to produce findings that require interpretation by the researcher.

The main research was conducted from May 2013 to August 2013. In order to investigate the effectiveness of the programme into four themes, the researcher analysed both qualitative and quantitative data collections, as follows:

3.10.1 Qualitative data analysis

In the case of qualitative data analysis, the data were categorised and coded in four themes which link to the research objectives and then were analysed thematically. There were three methods for collecting qualitative data: the semi-structured interviews, the semi-structured observations and classroom observations. The data obtained from the interviews were analysed to explore views of the head teacher, deputy head teachers and preschool teachers with regard to promote preschoolers' self-discipline before and after the programme and the effectiveness of the programme. On the other hand, the data obtained from the semi-structured observations were analysed to support the information obtained from behaviour checklist. While the data gained from the classroom observations were analysed to explain the change of teachers' behaviour and preschoolers' behaviour before and after the intervention in some cases.

This study was undertaken in Thailand; therefore, qualitative data analysis concerned transcribing and analysing in two languages. This process began with transcribing all information from the tape-recorder of each semi-structured interview and from written notes of each semi-structured observation in Thai language. It was transcribed word-by-word in order to ensure that all the relevant data from the interviews were included. Then, the transcripts of the interviews were sent back to all respondents to check their thoughts. The Thai transcripts were read through by the researcher. Main themes were constructed from the research objectives. During the analysis process, emergent sub-themes from the interview data were added into the main themes. Quotations of each interview scripts were placed in the theme matrixes in Thai language. In this stage, each quotation in the matrix of themes still remained in the Thai language in order to not lose sense of the original meaning. They were then translated into English. Then, these matrixes of themes were checked by the research supervisor. The reason for transcribing and analysing in the Thai language at the first stage was to prevent errors that may occur as a result of the translation processes.

3.10.2 Quantitative data analysis

In the case of quantitative data analysis, there were two types of research instruments: the questionnaire and the behaviour checklists. These were used to collect

quantitative data before and after the programme. The data were then analysed with the Statistical Packages, Service and Solutions (SPSS) package, as follows:

(1) Percentage was used to analyse the questionnaire through each question. Results were presented in numbers and percentages for all choices in each question.

(2) T-test was provided to analyse the behaviour checklists. Dependent samples T-Test was used to compare the differences of mean scores between pre-test and post-test score in teachers' behaviour and preschoolers' behaviour. A rating scale for these behaviour checklists were scored as: never = 0.00, sometimes = 1.00 and often = 2.00. Moreover, some questions in the behaviour checklists were negative behaviour, those behaviours were converted a rating scale as: never = 2.00, sometimes = 1.00 and often = 0.00. In addition, percentage was used to analyse the behaviour checklists through each question. Results were presented in numbers and percentages for all choices of frequency in each question.

It is necessary to note that data analysis just means to help in interpreting and analysing the research findings. Oppenheim (1992: 285) stated that the statistical techniques are tools to help us in understanding precious findings, and composing the findings into meaningful structure. However, depending on the nature and characteristics of the data, different statistical tools have to be used for different purposes.

3.11 The insider researcher

It is pivotal for social researchers to clarify the researcher's role in order to make their research credible. Researchers who undertake a mixed-method approach often take on a variety of roles when they are in the research setting, and so if they choose to examine a context with which they have some connection they can be considered as both *"an insider"* who is a member of the group being studied and *"an outsider"* who is a stranger (Adler and Adler, 1994). The former of those terms, that of insider researcher, describes a situation where the researcher chooses to study a group or setting with which they have a direct involvement or connection (Robson 2011). Meanwhile, the latter term, that of outsider researcher indicates a situation where the researcher does not belong to the group under scrutiny (Breen, 2007). Thus in the research reported in this study the researcher was, in some senses, both and insider and an outsider, since she has strong previous connections with the school and knew most of the colleagues who acted as

respondents, but she was also an outsider in the sense that she was undertaking the role of researcher rather than colleague.

It is important to note that there are various advantages of being an insider researcher. Indeed, Bonner and Tolhurst (2002) have outlined three key advantages of being an insider researcher including: (1) having a superior understanding of the culture being studied, (2) having the ability to interact naturally with the members of group, and (3) having an established intimacy with the group. Generally, insider researchers have a great deal of knowledge, which takes an outsider a long time to acquire (Smyth and Holian, 2008). Hockey (1993) also noted that insider researchers often have credibility and rapport with those being researched. The role of insider researcher also provides methodological advantages in the research process, such as the advantage of greater access and cultural interpretation (Labaree, 2002).

Although there are many benefits of being an insider researcher, there are also some problems associated with such as status. Firstly, insider researchers are likely to make wrong assumptions unconsciously about the research process based on the researcher's prior knowledge and/or experience, which can be considered as a bias (DeLyser, 2001; Hewitt-Taylor, 2002). Secondly, they may not receive important information and may fail to gain access to sensitive information (Unluer, 2012: 2). Thirdly, they may also be confronted with role duality since they often struggle to balance their insider role and the researcher role (DeLyser, 2001). Thus, the insider researchers must develop an explicit awareness of the possible effects of perceived bias on data collection and analysis and respect the ethical issues related to the anonymity of the school and individual participants. They must also consider and address the issues relating to the influence of the researcher's insider role relation to the dangers of coercion, compliance and access to privileged information, at each and every stage of the research (Smyth and Holian, 2008).

It is thus clear that there are both advantages and disadvantages of being an insider researcher and it is important to address and overcome the disadvantages in order to ensure credible insider research. In the context of the study, the researcher had been working as a preschool teacher in the nursery school before commencing study for her PhD. Therefore, she was an insider researcher for the main data-gathering element of the study. This required the researcher to obtain the trust of the respondents in her new role

and to ensure that they understood the revised relationship, which her role as a researcher implied. Once this was accomplished she had the advantage of a greater access to data sources, which led to the richness of data and also gained a deeper understanding of the culture, which benefitted from cultural interpretation. Indeed, for those teacher participants who were former colleagues of the researcher there were distinct advantages in the nature of the role since she found it simpler and easier to encourage them to continue to participate throughout the programme since she was able to discuss the importance of her research openly and comparatively informally.

In terms of the power balance of interviewing and observing teachers, care was taken to ensure that the formal relationship with all teachers was the same since the nature of the work being undertaken was emphasised and anonymity and confidentiality were ensured from the outset. To minimise any disadvantages in the situation, the researcher followed the consent procedure of Liverpool John Moores University and sent a participant information sheet and the consent form to the nursery school in advance. Before gathering the data, all participants were informed about the aims and the procedure of the study and also the potential benefit of their participation. They were assured that all information from each participant was stored securely, and that only the researcher and the supervisor would have access to the information. Primary research data and results were kept only during the period of the research and degree process, and it was explained that all primary research data would be destroyed once the degree was completed. Moreover, all participants were assured of confidentiality and anonymity in the reporting of findings. Thus, the outcomes of the study would not affect their work or personal privacy.

It is also apposite to point out that the interviews were scheduled to take place at a convenient time and place and the observation dates were arranged in advance in order to avoid disrupting classes. Respondents were informed in detail about the nature of the research in an information sheet to ensure that participants were fully aware of the process of interview and observation. Participants also confirmed agreement for the audio recording of interviews by signing a consent form prior to the interviews. Moreover, the participants of the interviews were given the opportunity to review, edit, or erase information that they had previously contributed. By doing this, the researcher believed that she minimised the drawbacks and maximised the advantages of being an insider researcher.

3.12 Summary of the chapter

This chapter examined the research methodology and design focusing on mixed-method approaches to conduct in one site as a case study. Firstly, it began with the description of the research paradigms and then was followed by mixed-method research and a case study approach. Following these discussions, a detailed description of research methodology with details about methods used to collect data and research tools was presented. The ethics issue was provided and then followed by the pilot study and trustworthiness, validity and reliability of the research tools. Next, the details of sample, implementation and data analysis in the main study were presented. Lastly, insider researcher role was addressed in detail. The next chapter will present the main findings of the study.

Chapter 4
Presentation of data and findings

Introduction

This chapter will present the date derived from the interviews, questionnaires, semi-structured observations, classroom observations and the behaviour checklists undertaken with the team of teachers and preschoolers in the preschool. The chapter is in four parts, including: introduction, presentation of the demographic data, and the findings from five tools. This latter element is presented in relation to five themes, as follows:

Theme 1: The programme's effectiveness

Theme 2: Teachers' knowledge in promoting preschoolers' self-discipline behaviour

Theme 3: Teacher's behaviour in promoting preschoolers' self-discipline behaviour

Theme 4: Preschooler's self-discipline behaviour

Theme 5: The general view of self-discipline

The final part in the chapter will then summarise the main findings that have emerged from the data, which will then be discussed and analysed in the next chapter.

4.1 Introduction of the findings

In the main study, five specific objectives were distinguished, along with five instruments designed to gather information and provide an insight into those objectives. The first objective was to investigate the programme's effectiveness by interviewing teachers who participated in the programme. The data obtained from the interviews is presented in theme 1: The programme's effectiveness.

The second objective was to survey the understanding of teachers in order to check their basic knowledge in promoting preschoolers' self-discipline. It was decided to use the questionnaire (see Appendix 2) to obtain this information before the programme and then use the same questionnaire after the programme in order to compare their responses. The data collected and obtained from the questionnaire is presented in theme 2: Teachers' knowledge in promoting preschoolers' self-discipline behaviour.

The third objective was to obtain information about teachers' behaviours in promoting preschoolers' self-discipline. It was determined to use both qualitative and

quantitative methods in three instruments to obtain the information. The first tool employed was a teacher's behaviour checklist (see Appendix 3.1), all teachers had to consider and rate their behaviour in the checklist by themselves. The teacher's behaviour checklist contained 30 items that address three domains: modeling good manner, creating appropriate classroom environment, and responding to children properly. Further information about this objective was gathered through the use of the second and the third research tools, which were semi-structured observations (see Appendix 3.2) and classroom observations (see Appendix 5). These tools were designed to support the teachers' behaviour checklist findings and the in-depth detail of teachers' behaviour. Both tools were used by the researcher to observe teacher behaviour. All of these instruments were used twice to obtain this information before and after the programme in order to examine the ways in which teachers may have changed in their behaviour after they had attended the programme. The data collected and obtained from three instruments is presented in theme 3: Teacher's behaviour in promoting preschoolers' self-discipline behaviour.

The fourth objective was to obtain information about children's self-discipline behaviours. It was determined to use both qualitative and quantitative methods in three instruments to obtain information on this topic in the same way as carried out for the third objective. The first tool was a child's behaviour checklist (see Appendix 4.1). All teachers had to consider and rate their preschoolers' behaviour in the checklist using a research tool that contained 30 items that describe six domains. The second and the third tools were semi-structured observations (see Appendix 4.2) and the classroom observations (see Appendix 5). They were designed to gather further information to support the child's behaviour checklist findings used by teachers in order to gain in-depth detail of children's behaviour. Both of these were used by the researcher to observe children's behaviour. All of these instruments were used twice; again, as explained above in the third objective. The data collected obtained from these three instruments is presented in theme 4: Children's self-discipline behaviour.

The final objective was to explore the views of the head teacher, deputy head teachers and team of teachers in the preschool on self-discipline issues. As outlined in the chapter on methodology, it was decided to use the interview method and the participants were interviewed twice before and after the intervention by the different interview

schedules (see Appendix 1.1-1.4). The data collected and obtained from the interviews is presented in theme 5: The general views of self-discipline.

4.2 The demographic data of the sample

In this part, the biographic and background information of the participants is presented in order to show the distribution of teachers who participated in this study by their gender, age, experience, and qualifications. Then the researcher will show the information about child participants by their gender and kindergarten level.

This information is important to the study because it helps the reader to understand some pertinent issues that may have a bearing on the analysis; for instance, how the biographic information relates to the appraisal process. The data will be presented in both tabular and text form.

(1) Demographics of the team of teachers participating in this study

Table 4.1 Demographics of the team of teacher participants

	Frequency	Percentage
Gender		
Male	2	7.14
Female	26	92.86
Age		
22-30 years old	12	42.86
31-40 years old	10	35.72
41-50 years old	4	14.28
Over 51 years old	2	7.14
Qualification		
Bachelors' degree	21	75.00
Masters' degree	7	25.00
Years of teaching experience		
Less than 1 year	4	14.28
1-5 years	6	21.43
6-10 years	7	25.00
11-15 years	2	7.14
15-20 years	4	14.28
Over 21 years	5	17.87
Responsibility		
Head of school	1	3.58
Deputy Head	3	10.71
Preschool teacher	24	85.71
Total	**28**	**100.0**

Table 4.1 shows demographic details of the team of teacher participants. The vast majority of teacher participants were female 26 (92.86%), while 2 (7.14%) were male. The majority of teachers were young teachers (42.86%) (22-30 aged group). Similarly, 35.72% fell into the group aged 31-40 years old. Most of the teachers (75.00%) have a Bachelors' degree, while a quarter of the teachers have a Masters' degree. It is clear that there was a variety of number of years of teaching experience. 25.00% of the teachers fall within six to ten years teaching experience. However, 21.43% are quite experienced, with between one to five years in the field. Nonetheless, it should be pointed out that 14.28% represents a number of teachers who possess very little experience, less than one year. A significant number of the teachers are preschool teachers (85.71); followed by 10.71% as deputy head teachers.

(2) Demographics of children participants

Table 4.2 Demographics of children participants

	Frequency	**Percentage**
Gender		
Boy	285	54.08
Girl	242	45.92
Kindergarten		
Kindergarten 1 (aged 3-4 years old)	202	38.33
Kindergarten 2 (aged 4-5 years old)	168	31.87
Kindergarten 3 (aged 5-6 years old)	157	29.80
Total	**527**	**100.0**

Table 4.2 shows demographic details of child participants. The majority of children were boys: 285 (54.08%), while 242 (45.92%) were girls. They studied in K1 (aged 3-4 years old) 202 (38.33%): followed by 168 (31.87) in K2 (aged 4-5 years old) and 157 (29.80%) in K3 (aged 5-6 years old).

4.3 The results

This section focuses on the findings of the study. Data collected from all instruments were outlined according to five main themes, which relate closely to the research objectives:

- The programme's effectiveness,
- Teachers' knowledge in promoting preschoolers' self-discipline behaviour,
- Teachers' behaviour in promoting preschoolers' self-discipline behaviour,
- Preschoolers' self-discipline behaviour, and
- The general views of self-discipline.

Four themes were constructed from the research objectives. The fifth theme 'The general views of self-discipline' emerged from the interview data.

Theme 1: The programme's effectiveness

Three sub-themes emerged from the responses of interviewees when they were asked questions relating to the programme's effectiveness:

1. Advantages of attending the programme,
2. Satisfaction with the programme, and
3. Suggestions for improving the programme.

The interviews revealed that that most of those who took part felt that they had gained many benefits and expressed considerable satisfaction in the programme. However, they also made suggestions for the further development of the programme to fit better with Thai preschool teachers' needs. More detail of each of these topics will be discussed in sections 1.1, 1.2 and 1.3.

1.1 Advantages of attending this programme

According to the data collected from the semi-structured interviews, there were five main advantages of attending this programme. First, the teachers had a chance to be trained about preschoolers' self-discipline. Second, they acquired new knowledge and techniques to use for promoting their preschoolers' self-discipline. Third, their preschoolers' self-discipline was improved after they applied the knowledge and

techniques to their class. Fourth, they felt that their teamwork competence had improved. Finally, they felt more supported by their colleagues to deal with their preschoolers' misbehaviour and that they had greater support from colleagues with self-discipline issues.

1.1.1 Having a chance to be trained about preschoolers' self-discipline

Six teachers explained that normally there was no direct training course regarding ways in which to develop preschoolers' self-discipline in Thailand. Most training courses were considered to focus on how to improve either preschoolers' cognitive skills or academic excellence. Indeed, although the of lack of self-discipline was considered to be one of the main behavioral problems amongst preschool children, which teachers felt they encountered frequently in classrooms, the respondents indicated that they had never attended any training courses directed towards how to deal with this problem. One teacher said:

> *"I have been a preschool teacher for 10 years, but I have never seen any organisations provide training courses on this issue. Most training courses focus on how to improve either children's academic skills or teacher working skills, which is not relevant to children's progress. This is my first time to attend a training course focusing on self-discipline."* [Teacher 5]

Similarly, another teacher was very happy to attend the programme since she also felt that it was not easy to find a course of training on how to promote preschoolers' self-discipline. She said:

> *"Lack of self-discipline is a major problem of children that I found in class. When I knew that the training course regarding how to improve child's self-discipline would be set up, I was very happy and told myself I would not miss this course since it is not often that there is a training course relevant to the problems I am faced with."* [Teacher 21]

Overall, a quarter of all the teachers involved in the research noted that this was the first training course regarding preschoolers' self-discipline that they had been able to attend. Moreover, the large majority of respondents noted that the programme was very helpful since they felt that could apply the knowledge and techniques they gained in their classrooms.

1.1.2 Acquiring new knowledge and techniques

Eight teachers mentioned that they had acquired new knowledge to promote preschoolers' self-discipline by attending this programme. Although some topics in the programme, such as the theory of child development, had already been studied in undergraduate courses, teachers felt that they had never applied such knowledge to their work. In addition, four teachers agreed that knowing how to improve a child's self-discipline requires specific knowledge and skills, and that transferring techniques to their classrooms was complex and difficult since the use of the knowledge was contingent upon the individual circumstances that they found in their own classrooms including the specific needs of the group of preschoolers they had in their care. One teacher said that:

> *"Improving a child's self-discipline is not just following the guidelines from the first, second and third stages which some books mention, but it is how to apply knowledge to fit with each situation and individual child. Most importantly, I think experience will help a teacher learn how to deal with it."* [Teacher 5]

Most teachers explained that individual experience was identified as a major source of knowledge. Therefore, sharing experience with other teachers was an important tool for enhancing teacher's knowledge and creating new ideas. They also insisted that sharing experiences with colleagues provided them with new ideas or approaches, which they could apply with their preschoolers in class. One teacher said:

> *"Some teachers have taught for 10 years. They are a major source of knowledge. Unfortunately, those teachers have not had a chance to share their knowledge with other teachers. However, this programme provides*

them an opportunity to share their knowledge with other teachers. It is very useful." [Teacher 7]

Moreover, some teachers suggested that sharing experiences would help teachers to save time in starting learning, understanding, and applying new knowledge and putting it to use in class. One teacher said:

"I think applying other teachers' experiences to solve our problems can save time very well in finding solutions. Although this method cannot 100% solve our problems, it is better than having to find out how to solve it alone." [Teacher 15]

In addition, most teachers also mentioned the techniques that they had discovered to promote preschoolers' self-discipline. They explained that they had learned how to promote preschoolers' self-discipline in various ways. Some approaches they were instructed in were new to them. For example, 'time-out' was one of the techniques that was new to some of the teachers who took part in the programme. As one teacher said:

"I have never heard of time-out before, but now I use it well to solve inappropriate behaviour of children in my class and I use it quite often." [Teacher 6]

On the other hand, three teachers argued that they already knew how to promote preschoolers' self-discipline before attending the programme, but they had never consistently used the recommended techniques in classes. These respondents stated that they had used approaches such as ignoring mildly inappropriate behaviour, reward, or punishment but when such techniques did not work immediately they decided stop using them. Nevertheless, after attending the programme they stated that now they knew more about the techniques and limitations of each approach that teachers might use to promote preschoolers' self-discipline. One teacher said:

"I used to use an ignoring approach in reaction to the negative behaviour of my children; when they behaved inappropriately to get

attention from me such as crying or shouting. However, I could not stand to let this behaviour occur. Now I realise that I should be more patient and try not to pay attention to those inappropriate behaviours." [Teacher 19]

In brief, the majority of teachers agreed that attending the programme provided them with new knowledge regarding how to promote preschoolers' self-discipline. It also gave them a chance improve their knowledge by sharing experience with their colleagues who had greater experience in dealing with their preschoolers' problems of lacking self-discipline. Consequently, teachers could apply those well-used techniques or approaches to solve their problems in classes effectively, resulting, one hopes, in the progress of preschoolers' self-discipline behaviour.

1.1.3 Improving preschoolers' self-discipline

Twenty of the 25 teachers reported that after applying knowledge and techniques from the programme to use in their classes, most of their preschoolers exhibited more appropriate behaviour in the classroom than before the programme. Ten respondents who were teachers explained further that their preschoolers' behaviour was significantly improved. They further stated that this could help them to follow their teaching plan more effectively and that they felt that they could control their class more easily since most children displayed negative behaviours such as arguing or fighting less frequently. One teacher said:

"Most children in my class know their duty. They know what they have to do after finishing each activity. I do not have to complain or order them to do it. For example, after finishing their art class, they know they have to wash their hands and sit at their seat waiting for snack-time." [Teacher 1]

Similarly, another teacher mentioned that her class was quieter after she applied a new technique that she had gained from the programme. She said:

"Now, my students do not shout in class. So, my classroom is very quiet. If one child shouts or makes a loud noise, I will whisper to that child to speak softly as we aren't far away." [Teacher 8]

On the other hand, another five teachers claimed that although they applied techniques and approaches they gained from other teachers to use with their preschoolers who had self-discipline related behaviour problems, some children improved only slightly. One teacher said:

"Although I used the time-out technique or punishment approaches for example, Beam and Adam, still argue and fight each other. They have never feared any punishments. I try to explain why fighting is inappropriate but they seem not to listen to my explanation. I don't know what to do. I try all of the techniques other teachers recommend, but they do not work well at all." [Teacher 21]

Similarly, another teacher argued that some preschoolers still behave inappropriately, when they do not see teachers immediately in their vicinity. She said:

"Some children in my class do not queue up if their teacher doesn't stay with them. They may think that their teacher doesn't see what they are doing. If they knew that their teacher had stayed with them, they would queue up neatly." [Teacher 4]

One teacher assumed that the cause of this problem may arise from the way their parents look after and interacted with them and speculated that it might be that they had never been required to practice self-discipline at home. This led to the positive conclusion that, therefore, teachers should cooperate with parents by asking them to practice their children's self-discipline at home. She said:

"Overall, in this class students' behaviour is better; except for one child. She still has a problem in the classroom. It is because she is very slow

and she still needs assistance from me. I try to use various techniques to encourage her to do activities faster by herself, but it doesn't work at all. I think I need cooperation from her parents to make her practice self-discipline at home. From watching her behaviour, I think it may arise from her parents spoiling her, helping her with everything, and never allowing her to do activities alone. Practicing a child's self-discipline needs cooperation between school and home." [Teacher 25]

In conclusion, after attending the programme, all teachers reported that they applied knowledge to use in their classes. Eighty per cent of all teachers mentioned that their preschoolers' self-discipline had improved significantly. However, twenty per cent argued that some preschoolers still had self-discipline behaviour problems, although they had applied all techniques they gained from this programme. In addition, most teachers stated that this programme provided them with a chance to share ideas, practice brainstorming, and teamwork skills.

1.1.4 Improving teamwork competence

Ten teachers noted that sharing experiences and brainstorming activities encouraged teachers to present their ideas and listen to others opinions. Even though there were some arguments during discussion, finally they could reach a conclusion. One teacher said:

"It appeared at the beginning of this activity that there was a strong argument amongst the teachers. However, they found consensus. I think the programme provides teachers with not only knowledge but also a chance to learn how to present their ideas, negotiate, and listen to others ideas." [Teacher 4]

In addition, five teachers mentioned that the leaflet-making activity enhances teachers' teamwork skills. This activity assigned teachers to make leaflets presenting their group ideas and deliver their ideas to other teachers. One more experienced teacher explained the reason that that they had rarely taken part in group-work activity was

because previously, they did their individual jobs in their own classes with little interaction with others. However, they reported that attending the programme had provided teachers with a chance to work with others cooperatively and that they had found this useful. She said:

> *"I have never seen our teachers doing group work before. I think they can work as a team very well as they produced many beneficial leaflets."* [Teacher 8]

In summary, attending the programme was reported to have enhanced many teacher competencies including presenting ideas, listening to other opinions, negotiation, problem solving, and teamwork. In addition, attending the programme also provided them with a chance to develop teamwork competence. New teachers also stated that they got a lot of encouragement from senior teachers on dealing with self-discipline problems in their class during the activity.

1.1.5 Receiving support from colleagues

Four new teachers who graduated and started working as preschool teachers this year affirmed that facing problems of preschoolers lacking in self-discipline causes them get more stressed and worried because they lack experience in dealing with self-discipline problems. They also struggle with finding experienced teachers in their school to consult with, as they are not familiar with either their workplace or their colleagues. One teacher said:

> "*After attending the programme, I realised that I am faced with typical problems every teacher has to deal with. Students lacking self-discipline would not be a big problem, if teachers knew how to deal with it systemically."* [Teacher 20]

Moreover, another teacher noted that many of her colleagues ask her about problems arising in her class and then try to commiserate with her and offer advice on how to deal with such issues. She said:

"Other teachers always ask me what my children' behavioural problems in the classroom are and they try to cheer me up and tell me that I can solve those problems. I think I gain not only new knowledge, but also receive strong support and encouragement from my work colleagues." [Teacher 1]

It is, therefore, rewarding to note that it can be concluded that all new teachers mentioned that they gained a lot of support and recommendations on how to deal with self-discipline problems in their classes from experienced teachers who attended the programme.

Summary of advantages of attending the programme

The majority of teachers explained that the programme was very useful and provided them with several benefits. First of all, they had a chance to be trained in promoting preschoolers' self-discipline. Next, they had acquired new knowledge and techniques to use for promoting their preschoolers' self-discipline. After this they applied the knowledge and techniques to their classes. As a result, most preschoolers improved in their self-discipline behaviour. Moreover, as a result of the leaflet-making activity, the teachers had developed their teamwork competencies. Finally, all new teachers were supported by their senior colleagues in dealing with self-discipline problems both inside and outside the classroom.

1.2 Programme satisfaction

The data collected from interviews shows that most teachers were satisfied with the programme in four main parts, including contents, activities, schedule, and facilities.

1.2.1 Contents

Overall, most teachers expressed themselves to be satisfied with the contents of the programme. Twelve teachers mentioned that contents were very useful and that they could use them not only to promote their preschoolers' self-discipline but also apply them to manage their classroom and teaching more effectively. One teacher said:

"I have tried to change my physical classroom environment when I teach math with what was suggested in the leaflet I got from this programme. I found that it could decrease a lot of chaos in class dramatically." [Teacher 16]

In addition, five teachers noted that knowledge they have got from this programme could be immediately applied in practice. It was different from other courses, as most courses they had attended previously only provided ideas and theories; teachers would then have to think themselves about how to apply it in practice. One teacher said:

"I think the knowledge I got from this training course is knowledge gained from a real practitioner. It is very different from other training courses that only talk about theory and when it comes to how to use it I have to apply it by myself." [Teacher 2]

On the other hand, two teachers thought differently. They stated that the content of the programme was too great and that they had not had enough time to discuss each topic in sufficient depth. Moreover, they stated that they would like to gain specific knowledge directly relevant to the problems they were facing at that time and that they would like to know exactly how to solve the problems regarding inappropriate behaviour, such as not paying attention to teaching and not doing assignments. As one teacher said:

"It may be a waste of time to learn many things. I don't want to know any theories. I just want to know how to directly develop a child's self-discipline. For example, when children don't pay attention to my teaching, what should I do?" [Teacher 6]

In conclusion, the majority of teachers were satisfied with the contents of the programme and were able to apply it well to their classes. However, a minority of teachers argued that there was more content than they needed.

1.2.2 Activities

Fifteen teachers noted that every activity was fun and that they could take part in each activity as much as they wished. For example, one teacher said:

> "*I can see that all activities focused on the participation of all the teachers. It also provided ideas on how to apply knowledge to practice in the most effective way."* [Teacher 9]

The majority of teachers voted that their favourite activity was the 'sharing experience activity'. Nine teachers explained that this activity, which focused on sharing ideas on a topic provided each week, was always related to the children's behavioural challenges that teachers were typically faced with. Moreover, five teachers stated that this activity was the main motivation for them attending the programme because they had the chance to listen to techniques from other teachers. These techniques could then be used to solve the problems they themselves were encountering. One teacher said:

> *"I think the activity regarding sharing opinions was a very good activity. It provided me with a chance to share both my ideas and experiences with my colleagues. Their experiences also helped me to create new ideas to use in my class. For example, one teacher would turn off the light to signal her students that it was time to clean up and put their toys away. This technique was interesting as the teacher did not shout or sing a song to tell students to stop playing like most typical teachers do. When I applied this method in my class it worked well. My children knew what they had to do without me having to shout to stop them playing. My class was quiet and orderly."* [Teacher 11]

Six teachers appreciated the brainstorming activity. They thought that this activity encouraged them to express more of their opinions and listen to others more in order to reach a conclusion and provide a solution for each problem.

From observing this activity, the researcher found that in the first two weeks, not many teachers expressed their idea or opinions. Thus, the conclusions reached did not

come from unanimous agreement among group members but derived from the opinions of some teachers who were dominant in the group. However, after the second week, there were more teachers trying to express their opinion. This observation matched with the data collected from the semi-structured interviews. One teacher said:

> *"As a new teacher, I did not have any confidence to express my opinion at all because I was afraid that what I said would be wrong and other teachers would laugh at me. However, now I have more confidence to express my idea because I know it's my idea no matter if it's right or wrong."* [Teacher 23]

The last activity was a leaflet making activity. It is an activity where teachers brought their ideas and conclusions from brainstorming in the previous activity together make a leaflet. This leaflet was then delivered it to all the preschooler teachers in their school. Four teachers believed that this activity enhanced both their teamwork and responsibility skills. One teacher said:

> *"It's not very often that we have a chance to attend an activity like this. Making leaflets lets me know that our teachers can work well together as a team and that they also have good relationships."* [Teacher 12]

We may summarise here that most teachers were satisfied with all, or at the very least, the majority of the activities in the programme they participated in because those activities provided them with several benefits, including: (1) enhancing their ability to express their ideas and listen to others, (2) gaining more knowledge and techniques regarding how to develop preschoolers' self-discipline, and (3) developing their team-work skills.

1.2.3 Schedule

Ten teachers stated that when considering the schedule of this programme, they felt that it was suitable because the programme ran more than once. This meant they could choose to attend on a day they were free; whereas, by contrast, most training courses

run only once and so if they are not free on the day the course is held, they miss the event. As one teacher said:

> *"I was amazed when I found out that the programme would run three times a week: every Tuesday, Wednesday, and Thursday, and that I could choose to join on a day that I was free. I was also able to attend more than once if I wanted…wonderful."* [Teacher 15]

Three teachers pointed out that all the activities were held after lunchtime, which they considered as a perfect time for running activities; teachers are free from their routine work because all preschoolers normally take a nap at that time and are looked after by teaching assistants. Therefore, teachers could attend the activity without feeling worried about their preschoolers. One teacher said:

> *"The time that the researcher selected to run activity was perfect because if it was held either in the evening after school or on a weekend, I wouldn't be able to attend this activity. However, it was held while children were sleeping, which is normally a time teachers are free."* [Teacher 9]

Five teachers mentioned spending time in activities and noted that one hour for each activity is a perfect amount of time. They saw it as it is an appropriate amount of time for teachers to be able to pay attention to the activity. Moreover, two teachers appreciated the fact that all activities were set up to run for one hour. Some activities took approximately one and a half or two hours because the topic was related to wider issues, resulting in spending more time in discussion during the activity. Nonetheless, most respondents felt that spending one or two hours in each activity was acceptable. One teacher said:

> *"The length of time on each activity was quite perfect and not too long. I think if it took more time than this, teachers would get bored. Although some activities took up to two hours, it was fine."* [Teacher 14]

In conclusion, most teachers were satisfied with the schedule and activity length because it did not affect their teaching or routine work. In addition, teachers could select the day they were free to attend, making the training convenient and flexible.

1.2.4 Facilities

When considering the facilities, eleven teachers agreed that where the activity took place was large and comfortable. One teacher said:

> *"All activities were held in the school's meeting room, which was very big and has air conditioning, I really appreciated doing the activities in this room."* [Teacher 19]

Another teacher mentioned the impact of room temperature on the success of activities. She concluded that the perfect temperature of the school's meeting room supported her and her colleagues in doing activity very well. She said that:

> *"I liked the air-conditioned room that the activity took place in because it isn't hot. I wasn't frustrated during the activity because I wasn't feeling hot. It's very hot during this time of year (May-August). If this activity was held in a room without air conditioning, teachers may easily get angry during activities. Sometimes they argued in the brainstorming activity, as the hot weather makes them easily get angry."* [Teacher 21]

Furthermore, seven teachers mentioned that stationary, tools and electronic equipments were provided in sufficient quantities in each activity and that this facilitated the activities very much. One teacher said:

> *"I think having sufficient stationary and electronic equipment is one of the positive points of this programme. The teachers would get what they wanted to support their activity no matter if it was a highlighter pen, big pieces of paper, scissors, glue, a printer, or Internet access. These enabled the activities to run smoothly."* [Teacher 3]

Five teachers also mentioned that the atmosphere during activities was very friendly. Therefore, most activities were not considered to be excessively serious but were rather about sharing knowledge between friends. Thus, this atmosphere encouraged teachers to attend the activities continuously. One teacher said:

> *"I liked all of the activities in this programme because it was fun, not stressful, informal, and unpressured. To be honest, it didn't look like a training course, but was like talking and sharing ideas between friends."*
> [Teacher 10]

It can be concluded that 80 percent of all teachers involved in the programme were satisfied with the physical environment of the programme. Place, environment, and atmosphere were described as suitable. They also appreciated the availability of stationary and electronic equipment, which were provided during activities.

Summary of programme's satisfaction

The majority of teachers expressed themselves to be satisfied overall with the programme. There were four main points that the teachers mentioned. Firstly, the majority of teachers were satisfied with the contents of the programme, although some teachers argued that it was too much. Second, they were pleased to partake in all of the activities in the programme, particularly the experience sharing activity. Those activities enabled teachers to develop their ability to express their ideas and listen to others and also enhanced their teamwork competence. Third, the schedule of the activities in this programme was convenient and flexible for all teachers. Finally, they appreciated all facilities of the programme such as the venue, the working atmosphere, the materials provided, and the electronic equipment.

1.3 Suggestions

Most teachers greatly appreciated the programme. Therefore, it was very difficult to press them to provide suggestions on how to improve the programme. Only one teacher recommended improving the period of activity by extending the length of the programme from three months to a whole year. She said:

"I think a period of three months was too short for the teachers to continue sharing and gaining new knowledge. It is not often we get to attend a programme like this; most training courses usually take only one or two days. This might be useful for the teachers, if the period of programme will be expanded." [Teacher 12]

Summary of theme 1

In conclusion, data collected from interviews on three topics, including (1) advantages of attending the programme, (2) programme satisfaction, and (3) suggestions, indicated that the programme was very effective. First of all, most teachers reported that they had gained many benefits from the programme in terms of knowledge and techniques. They reported feeling that they could apply them in their classroom to promote their preschoolers' self -discipline and that these techniques worked very well since most of their preschooler's had improved in terms of self-discipline. The programme also benefitted them in terms of improving their work competencey since they felt that they had enhanced their teamwork skills from taking part in the leaflet activity. Furthermore, the new teachers developed their techniques to deal with preschoolers' misbehaviours from consulting with their senior colleagues. In addition, they were satisfied with the programme in relation to four criteria including: place, activities, schedule, and facilities. Finally, it is rewarding to note that there was only one suggestion on how the programme could be improved, which was extending the length of the programme.

Theme 2: Teachers' knowledge in promoting preschoolers' self-discipline behaviour

Teachers' knowledge in promoting preschoolers' self-discipline behaviour was investigated via the questionnaire (see Appendix 2). The questionnaire section and relevant questions, for each part, will be presented followed by a table comparing response pre- and post-intervention together with an explanation of the table.

The questionnaire itself was divided into 6 sections entitled: Self-control, Self-responsibility, Self-reliance, Cooperation, Empathy, and Problem solving. The aim of

questionnaire was to get teachers to think how they respond to children when they misbehave in each situation. Thus the questionnaire was focused on the knowledge and understanding of teachers in promoting preschoolers' self-discipline.

Number and percentage of respondents was recorded using the questionnaire. It was divided into six sections: self-control, self- responsibility, self-reliance, cooperation, empathy, and problem solving. Each section was composed of five scenarios. There were five answer choices for each question. All data were calculated and presented as the frequency and percentage of respondents to each question. As shown in Table 4.3- 4.33.

Section 1: Self-control

The data were obtained through question 1 to 5 of the questionnaire. Table 4.3 – 4.7 compares the frequency and percentage of respondents in promoting preschooler's self-control between pre- and post- intervention.

Question 1: If a child runs in the classroom, the teacher should…

Table 4.3 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24) 13

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Call out the name of the child and say "stop running."	7	29.2	5	20.8
B. Explain reasons why he cannot run around the classroom	7	29.2	3	12.5
C. Establish it as a classroom rule and remind him when he breaks the rules	8	33.3	8	33.3
D. Make him stand in the corner for time-out and then allow him to go back to the activity	0	0	9	37.5
E. Others	2	8.3	1	4.2

Table 4.3 reflects that before attending the programme, 8 teachers (33.3%) responded to the problem of running in the classroom by establishing it as a rule (choice C) to deal with the problem, while 8.3% of respondents proposed their own methods of dealing with the problem, by spanking and blaming a child runs in the class. There was

change in the teacher responses after attending the programme, 9 teachers (37.5%) selected time-out method (choice D) to deal with the problem, but no one chose at first. There was followed closely by establishing as a rule establishing as a rule (choice C), which was the same number of teachers as before (8 teachers, 33.3% of all teachers).

Question 2: If a child hurts another child e.g. hitting, punching, kicking. The teacher should…

Table 4.4 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)14

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Give her time-out in the defined place immediately	0	0	6	25.0
B. Stop her behaviour and tell her to say sorry to the child who gets hurt	13	54.2	7	29.2
C. Take her away from their friends and explain to her why cannot do like that	4	16.7	9	37.5
D. Give her punishment in order to prevent other children behaving in the same way	7	29.2	2	8.3
E. Others	0	0	0	0

Table 4.4 reveals that over a half of teacher (13 teachers, 54.2%) responded to the problem of children hurting others by stopping their behaviour and then making the child apologise (choice B), whereas using time-out (choice A) was not chosen before the intervention. There was change in the teachers' responses after the programme; 9 teachers (37.5%) selected taking the child away and explaining (choice C) to deal with the problem; followed by stopping the behaviour and making the child apologise (choice B); and time-out (choice A), 29.2% and 25.0% respectively.

Question 3: When two preschoolers fight over a toy, the teacher should...

Table 4.5 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Offer two limited choices and ask them to choose.	0	0	15	62.5
B. Take that toy away and give them other toys to play with instead.	8	33.3	0	0
C. Let them solve the problem by themselves without interfering.	3	12.5	0	0
D. Call the name of the child and say "don't grab the toy, your friend is playing with that."	10	41.7	3	12.5
E. Other.	3	12.5	4	16.7

Table 4.5 indicates that the majority of teaches (41.7%) responded to the problem of two children fighting over a toy by calling out their name and telling them to stop to their behaviour (choice D), while 3 teachers (12.5%) issued their own methods dealing with the problem by warning children to share the toys and giving the negative consequence. There was change in the teacher responses after the intervention; the vast majority of teaches (62.5%) responded by offering some choices and then letting children choose (choice A) in order to deal with the problem, while no one selected choice B and choice C. Moreover, 4 teachers (16.7%) issued their own techniques by telling the children that "I will be happy when I see you all sharing and playing together" and praising the children who had desirable behaviour.

Question 4: If a child leaves the classroom without permission, the teacher should…

Table 4.6 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Tell him off immediately when he leaves the classroom.	1	4.2	9	37.5
B. Teach him to ask for permission before leaving the classroom.	14	58.3	1	4.2
C. Not allow him to return to the classroom until the next activity.	0	0	0	0
D. Explain the reason why he should ask for permission before leaving the class.	9	37.5	14	58.3
E. Other.	0	0	0	0

Table 4.6 reveals that more than half of the teachers (14 teachers, 58.3%) responded to the problem of a child leaving the classroom without permission by teaching how to ask permission properly (choice B), whereas only one teacher (4.2%) responded to the problem by verbal consequence (choice A) before attending the programme. There was change in the teacher responses after attending the programme; the majority of teachers (58.3%) responded by explaining the reason why the child should ask permission to leave the classroom (choice D) to deal with the problem, while no teacher chose giving a negative consequence (choice C) before and after the programme.

Question 5: If a child does not queue up, the teacher should…

Table 4.7 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Remind her to queue up.	12	50.0	15	62.5
B. Praise a child who queues up nicely.	2	8.3	2	8.3
C. Let the other children warn her to queue up.	7	29.2	5	20.9
D. Punish her in order to prevent other children behaving in the same way.	3	12.5	2	8.3
E. Other.	0	0	0	0

Table 4.7 reflects that before the intervention, half of the teachers selected the reminding method (choice A) to respond to the problem of queuing up, whilst 2 teachers (8.3%) responded to the problem by praising another child who queues up nicely (choice B). There was a slight change in the teacher responses after attending the programme; 15 teachers (62.5%) still selected reminding the child (choice A) to deal with the problem, whereas praising another child who queues up (choice B) and punishing method (choice C) were chosen the least by the teachers (2 teachers, 8.3% of all teachers).

Section 2: Self-responsibility

The data were obtained through questions 6 to 10 of the questionnaire. Table 4.8 – 4.12 compares the frequency and percentage of respondents in promoting preschooler's self- responsibility between pre- and post- intervention.

Question 6: If a child cannot finish activities on time, the teacher should…

Table 4.8 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Move on to another activity as scheduled.	14	58.3	4	16.7
B. Allow more time to finish activity.	6	25.0	1	4.2
C. Give warnings to let children anticipate the end of the activity before time is up.	4	16.7	9	37.5
D. Use a clock in front of the classroom to show start and finish times of an activity.	0	0	10	41.7
E. Other.	0	0	0	0

Table 4.8 reveals that more than half of the teachers (14 teachers, 58.3%) responded to a child who finishes activities late by moving on to next activity (choice A), whereas using a clock to remind children (choice D) was not chosen at all before the intervention. There was a big change in the teacher responses after the programme; nearly half of the teachers (10 teachers, 41.7%) selected using a clock (choice D) to remind children of the time the activity would finish, followed closely by giving warnings to children before the activity ended (9 teachers, 37.5% of all teachers).

Question 7: A child always finishes his work quickly but without completing it. When the teacher encourages him to make more effort, he replies that he has finished and his work is good. The teacher should…

Table 4.9 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Give him more work to do.	2	8.3	8	33.3
B. Allow him to do other activities.	20	83.3	5	20.8
C. Motivate him to try harder.	0	0	6	25.0
D. Not allow him to do other activities until he completes his work properly.	2	8.3	5	20.8
E. Other.	0	0	0	0

Table 4.9 indicates that before attending the programme, the vast majority of teachers (83.3%) responded to the problem of children putting effort into their work by allowing children to do other activities (choice B), while no teacher selected the motivation technique (choice C) to deal with the problem. However, after attending the programme there were 5 teachers (20.8%) who selected the motivation technique (choice C), and giving more work to do (choice A) was chosen by one third of the teachers (33.3%).

Question 8: If a child does not tidy up toys when finished playing, the teacher should…

Table 4.10 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Not allow him to play with the toys again.	1	4.2	0	0
B. Explain reasons whyhe has to tidy up.	15	62.5	16	66.7
C. Tell him to always tidy up the toys when she has finished playing.	5	20.8	8	33.3
D. Praise other children who tidy up toys when they have finished playing.	3	12.5	0	0
E. Other.	0	0	0	0

Table 4.10 reflects that before the intervention, nearly two thirds of the teachers (62.5%) selected explaining the reason to children (choice B) to deal with the problem of tidying up the toys, whilst only one teacher (4.2%) responded to the problem by the negative consequence (choice A). There was a slight change in the teachers' responses after attending the programme; 16 teachers (66.5%) still selected explaining the reason in order to deal with the problem, whereas giving a negative consequence by not allowing children to play with the toys again (choice A) and praising another child who behaved well (choice D) were not chosen by the teachers.

Question 9: If a child talks to others when teacher is teaching, the teacher should…

Table 4.11 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Warn her to stop talking.	4	16.6	12	50.0
B. Ignore her and continue teaching.	2	8.3	5	20.8
C. Make child stand when everyone is sitting.	5	20.8	2	8.3
D. Immediately point out that this behaviour is inappropriate.	13	54.2	5	20.8
E. Other.	0	0	0	0

Table 4.11 reveals that more than half of the teachers (13 teachers, 54.2%) responded to the problem of talking when the teacher is teaching by pointing out to children that the behaviour is inappropriate (choice D), whereas ignoring (choice B) was chosen by the teachers the least (8.3%) before the programme. There was a big change in the teacher responses after the programme; exactly half of the teachers (12 teachers, 50.0%) selected warning children (choice A), while punishment method (choice C) was chosen the least by the teachers (2 teachers, 8.3% of all teachers).

Question 10: If a child does not listen to others when they speak, the teacher should…

Table 4.12 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Explain reasons why he has to be a good listener.	15	62.5	6	25.0
B. Be a good listener when child speaks as a good role model.	0	0	10	41.7
C. Praise him when he is listening to others when they speak.	6	25.0	1	4.2
D. Explain the logical consequences e.g. others will not listen when he is speaking.	3	12.5	7	29.2
E. Other.	0	0	0	0

Table 4.12 indicates that before attending the programme, the majority of teachers (62.5%) responded to the problem of not listening to others when they speak by explaining the reason to children (choice A), while no teacher selected demonstrating as a good listener (choice B) to deal with the problem. However, after attending the programme, there were 10 teachers (41.7%) who chose choice B, which was modelling as a good listener. Praising technique (choice C) was chosen by one teacher (4.2%).

Section 3: Self-reliance

The data were obtained through questions 11 to 15 of the questionnaire. Table 4.13 – 4.17 compares the frequency and percentage of respondents in promoting preschooler's self-reliance between pre- and post- intervention.

Question 11: If a child needs help all the time during routine activities such as changing clothes, making the bed and tidying up toys, the teacher should…

Table 4.13 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Ignore her when she asks for help.	1	4.2	1	4.2
B. Praise her when she does things by herself.	2	8.3	1	4.2
C. Take time to teach her step-by-step about how to be self-reliant.	5	20.8	0	0
D. Encourage her to be confident so that she can do these things by herself.	16	66.7	22	91.7
E. Other.	0	0	0	0

Table 4.13 reflects that before the intervention, two thirds of the teachers (66.7%) selected encouraging children to be confident (choice D) to deal with the problem of a dependent child, whilst only one teacher (4.2%) selected ignoring (choice A) to deal with the problem. There was a slight change in the teachers' responses after attending the programme; the overwhelming majority of teachers (91.7%) still selected encouraging children to be confident in order to deal with the problem, whereas teaching step-by-step (choice C) was chosen by none of the teachers.

Question 12: If a child does not take care of her personal belongings, the teacher should…

Table 4.14 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Explain to her the natural consequences.	2	8.3	7	29.2
B. Praise her whenever she takes care of her personal belongings.	5	20.8	0	0
C. Warn her about natural consequences e.g. losing her personal belongings.	15	62.5	9	37.5
D. Set an example of expected behaviour at all times and be a good role model.	2	8.3	8	33.3
E. Other.	0	0	0	0

Table 4.14 reflects that before the programme, nearly two thirds of the teachers (62.5%) selected warning children of the natural consequences (choice C) to deal with the problem of not taking care of personal belongings, followed by the praising technique, which 5 teachers (20.8%) selected. Although the number of teachers decreased in choosing to warn of natural consequences to deal with the problem after the programme; 37.5% of the teachers chose this option.

Question 13: If a child does not flush the toilet after use, the teacher should…

Table 4.15 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Remind her every time she is going to the toilet.	8	33.3	5	20.8
B. Give her one-to-one assistance every time she uses the toilet.	9	37.5	3	12.5
C. Put a sign on the door to remind children to flush the toilet after use.	0	0	16	66.7
D. Take time to teach her step-by-step how to flush the toilet after use.	7	29.2	0	0
E. Others	0	0	0	0

Table 4.15 indicates that before attending the programme, 9 teachers (37.5%) responded to the problem of not flushing the toilet after use by providing assistance to check (choice B), while no teacher selected putting the sign on the door (choice C) to deal with the problem. However, after attending the programme, the majority of teachers (66.7%) used a sign on the door to remind children, whereas one teacher chose teaching children step-by-step how to flush the toilet after use (choice D).

Question 14: If a child displays bad habits whilst eating such as talking to others and playing with the food on the plate, the teacher should…

Table 4.16 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Praise other children who are eating nicely.	4	16.7	1	4.2
B. Remind her what are good habits whilst eating and how to behave.	5	20.8	11	45.8
C. Take time to teach her step-by-step about good habits whilst eating.	15	62.5	2	8.3
D. Eat with the children as often as possible to set an example of good habits whilst eating.	0	0	10	41.7
E. Other.	0	0	0	0

Table 4.16 indicates that before the programme, the majority of teachers (62.5%) responded to the problem of bad habits whilst eating by teaching children step-by-step how to about good habits whilst eating (choice C), while no teacher selected demonstrating an example of good habits whilst eating (choice D). However, after the programme, there were 10 teachers (41.7%) who chose choice D, which was modelling good habits. Reminding children to show good habits whilst eating (choice B) was chosen by 11 teachers (45.8%).

Question 15: If a child does not make decisions by himself, the teacher should…

Table 4.17 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Tell him directly what he should do in some situations.	5	20.8	0	0
B. Give praise for his efforts when he tries to make decisions.	6	25.0	2	8.3
C. Give him the choice between two or three courses of action and let him choose only one.	5	20.8	0	0
D. Encourage him to make decision as often as possible and then encourage him to express his own ideas.	8	33.3	22	91.7
E. Others	0	0	0	0

Table 4.17 reflects that before the programme, 8 teachers (33.3%) selected encouraging children (choice D) to make decisions by themselves, and then followed by the praising technique to deal with the problem (choice B) (25.0%). There was a significant change in the teacher responses after the programme; the number of teachers increased in choosing choice D, which was encouraging children to make decisions by themselves (22 teachers, 91.7%); whereas making decisions for children (choice A) and giving children only a few choices (choice C) were chosen by no teachers.

Section 4: Cooperative

The data were obtained through questions 16 to 20 of the questionnaire. Table 4.18 – 4.22 compares the frequency and percentage of respondents in promoting preschooler's cooperation between pre- and post- intervention.

Question 16: If a child breaks the classroom rules, the teacher should…

Table 4.18 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Give him a brief reminder of the rules.	10	41.7	9	37.5
B. Punish him when he breaks the classroom rules.	0	0	0	0
C. Call the name of the child and tell him to stop that behaviour.	8	33.3	0	0
D. Give an outline of the consequences if he chooses to break the classroom rules.	6	25.0	15	62.5
E. Other.	0	0	0	0

Table 4.18 reveals that before the programme, 10 teachers (41.7%) responded to the problem of breaking the classroom rules by reminding children of the classroom rules (choice A), followed by calling their name and telling them to stop to behaviour (choice C) (33.3%). There was change in the teachers' responses after the programme; the majority of teachers (62.5%) responded to the problem by providing children with an outline of the logical consequences (choice D), while no teacher chose punishment (choice B) to deal with the problem neither before nor after the programme.

Question 17: If a child quarrels with friends, the teacher should…

Table 4.19 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Ignore the quarrelling and let them solve the problem by themselves.	8	33.3	3	12.5
B. Immediately give them time-out for a while in the defined place.	0	0	11	45.9
C. Punish them in order to prevent other children behaving in the same way.	4	16.7	1	4.2
D. Talk to them about negative results of quarrelling and how to find other ways that a problem can be resolved.	10	41.7	9	37.5
E. Other.	2	8.3	0	0

Table 4.19 indicates that 10 teachers (41.7%) responded to the problem of quarrelling between children by discussing with children the negative results of quarrelling and how to find other ways to resolve problems (choice D), whereas using time-out (choice B) was not chosen at all before the programme. Moreover, 2 teachers (8.3%) issued their own methods of dealing with the problem by giving the logical consequences, spanking and telling off. There was change in the teachers' responses after the programme; nearly a half of the teachers (45.9%) selected the time-out method (choice B) to deal with the problem, which no one chose before the programme, while there was only one teacher (4.2%) who chose punishment (choice C) to deal with the problem.

Question 18: A child interrupts the class by being noisy. The teacher should…

Table 4.20 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Warn him to stop being noisy.	5	20.8	21	87.5
B. Ignore him and continue teaching.	4	16.7	1	4.2
C. Send him out of class for 5 minutes.	2	8.3	0	0
D. Immediately point out that the behaviour is inappropriate.	12	50.0	2	8.3
E. Other.	1	4.2	0	0

Table 4.20 reflects that before the programme, exactly half of the teachers (50.0%) selected pointing out that behaviour is inappropriate (choice D) to deal with the problem of interrupting the class by being noisy, whilst one teachers (4.2%) issued their own methods of dealing with the problem by sending the child to another class. There was a significant change in the teachers' responses after the programme; a large majority of teachers (87.5%) selected warning children (choice C) to deal with the problem, while taking children out of class for 5 minutes was not chosen by any of the teachers.

Question 19: If a child does not bring materials related to the lesson as assigned, the teacher should…

Table 4.21 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Not allow her to participate in the activity.	0	0	0	0
B. Remind her often to bring the materials for the lesson.	9	37.5	20	83.3
C. Praise her when she does bring the materials for the lesson.	1	4.2	0	0
D. Tell her parents directly to bring the materials for the lesson.	14	58.3	4	16.7
E. Other.	0	0	0	0

Table 4.21 reveals that before the programme, more than half of the teachers (58.3%) responded to the problem of not bring materials related to the lesson as assigned by telling to parents directly (choice D), followed by reminding children as often as possible (choice B) (37.5%). There was a big change in the teachers' responses after the programme; the number of teachers who chose choice B increased, which was to remind children as often as possible (20 teachers, 83.3%), whereas the number of teachers choosing choice D decreased, which was telling parents directly (4 teachers, 16.7%). Moreover, there was no teacher who chose the logical consequences (choice A) to deal with the problem before and after the programme.

Question 20: If a child does not help the teacher to prepare materials being used in activities when asked, the teacher should…

Table 4.22 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Ask her for help politely whenever the teacher needs help.	14	58.3	2	8.3
B. Praise her when she does help to prepare materials being used in activities.	3	12.5	3	12.5
C. Praise another child who does help to prepare materials being used in activities.	5	20.8	0	0
D. Set age-appropriate volunteer work for children to help the teacher preparing materials being used in activities.	2	8.3	19	79.2
E. Other.	0	0	0	0

Table 4.22 reveals that before the programme, more than half of the teachers (58.3%) responded to the problem of not helping the teacher prepare activities by asking children for help when necessary (choice A), whilst 2 teachers (4.2%) responded to the problem by setting age-appropriate volunteer work for children (choice D). There was a high change in the teachers' responses after the programme; the number of teachers who chose choice D increased (19 teachers, 79.2%), whereas the number of teachers who chose choice A decreased (2 teachers, 8.3%). Moreover, the number of teachers choosing the

praising technique (choice B) stayed the same before and after the programme (3 teachers, 12.5%).

Section 5: Empathy

The data were obtained through questions 21 to 25 of the questionnaire. Table 4.23 – 4.27 compares the frequency and percentage of respondents in promoting preschooler's empathy between pre- and post- intervention.

Question 21: If a child uses inappropriate language, the teacher should...

Table 4.23 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Stop talking with him until he uses inappropriate language.	0	0	0	0
B. Ignore the inappropriate language and keep speaking politely with him.	2	8.3	8	33.3
C. Point out an example of a child who speaks politely and praise that child.	6	25.0	1	4.2
D. Say to him, "That's a word we don't use here" and explain in a simple way.	16	66.7	15	62.5
E. Other.	0	0	0	0

Table 4.23 reflects that before the programme, two thirds of the teachers (66.7%) selected telling children off firmly and explaining the reason (choice D) to respond to the problem of use of inappropriate language, whilst 2 teachers (8.3%) responded to the problem by ignoring the behaviour (choice B). There was a slight change in the teachers' responses after the programme; 15 teachers (62.5%) still selected telling children firmly and explaining the reasons (choice D) to deal with the problem, whereas the number of teachers who chose ignoring (choice B) increased to 8, 33.3%. However, there was no teacher who chose to stop talking with children (choice A) neither before nor after the programme.

Question 22: If a child does not help others when they ask for help from her, the teacher should…

Table 4.24 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Praise another child who always helps others.	2	8.3	0	0
B. Praise her in front of others whenever she helps others.	5	20.8	3	12.5
C. Direct her to help others when they ask for help.	4	16.7	1	4.2
D. Provide her with the logical consequences when she does not help others and then explain the positive consequences of helping others.	13	54.2	20	88.3
E. Other.	0	0	0	0

Table 4.24 reflects that before the programme, 13 teachers (54.2%) selected providing the logical consequences (choice D) to respond to the problem of not helping others, whereas 2 teachers (4.2%) responded to the problem by praising another child who always helps others (choice A). There was change in the teachers' responses after the program;, the number of teachers who chose choice D increased (20 teachers, 88.3%), whereas praising another child who always helps others (choice A) was not chosen by any of the teachers.

Question 23: If a child does not take turns when playing with friends, the teacher should…

Table 4.25 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Play with the children and show them how to take turns properly.	0	0	17	70.8
B. Warn him of the consequences of not taking turns e.g. not having anyone to play with.	3	12.5	2	8.3
C. Let him think and solve this problem himself because this is a good challenge for him	0	0	3	12.5
D. Explain to him why he must take turns and ask him to think of some things that would be fun for him and his peers to play with together.	21	87.5	2	8.3
E. Other.	0	0	0	0

Table 4.25 indicates that before attending the programme, the vast majority of teachers (87.5%) responded to the problem of not taking turns by explaining the reason to children (choice D), while no teacher selected playing with children to set a good example of sharing (choice A) or letting children solve problem themselves (choice C) in order to deal with the problem. However, after attending the programme, there were 17 teachers (70.8%) who chose choice A, whereas the number of teachers who chose choice D decreased dramatically (2 teachers, 8.3%).

Question 24: A child does not say 'Sorry' when he or she has done something wrong. The teacher should…

Table 4.26 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Stop talking with her.	0	0	0	0
B. Praise a child who says 'Sorry'.	1	4.2	0	0
C. Keep speaking politely with her as a good role model.	0	0	0	0
D. Remind her to say 'Sorry' whenever she has done something wrong.	23	95.8	24	100.0
E. Other.	0	0	0	0

Table 4.26 reflects that before the programme, the vast majority of teachers (95.8%) selected reminding children to say 'Sorry' (choice D) to respond to the problem of not saying 'Sorry' when has done something wrong, whilst only one teacher (4.2%) responded to the problem by speaking politely with children (choice C). However, after attending the programme, all teachers (100%) selected choice D to deal with the problem.

Question 25: If a child does not use 'Please' and 'Thank you', the teacher should…

Table 4.27 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Keep speaking politely with her as a good role model.	1	4.2	6	25.0
B. Praise another child who is uses 'Please' and 'Thank you'.	2	8.3	9	37.5
C. Stop talking with her until she says 'Please' or 'Thank you'.	2	8.3	1	4.2
D. Remind her to say 'Please' and 'Thank you' when appropriate.	19	79.2	8	33.3
E. Other.	0	0	0	0

Table 4.27 reflects that before the programme, more than three quarters of the teachers (79.2%) selected reminding children to say 'Please' and 'Thank you' when appropriate (choice D) to respond to the problem of not saying 'Please' and 'Thank you', whilst only one teacher (4.2%) responded to the problem by speaking politely with children (choice A). There was change in the teacher responses after attending the programme; 9 teachers (37.5%) selected praising another child who says 'Please' and 'Thank you' (choice B) to deal with the problem, whereas the number of teachers who chose ignoring (choice B) increased, 8 teachers, 33.3%, followed closely by choice D, which decreased from 79.2% to 33.3%. of the teachers. However, there was only one teacher who chose to stop talking with children (choice C).

Section 6: Problem solving

The data were obtained through questions 26 to 30 of the questionnaire. Table 4.28 – 4.32 compares the frequency and percentage of respondents in promoting preschooler's problem solving between pre- and post- intervention.

Question 26: If a child cries when he cannot deal with a problem, the teacher should…

Table 4.28 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Assist him in solving the problem.	12	50.0	7	29.2
B. Ignore him for a while until he stops crying.	1	4.2	5	20.8
C. Encourage him to think of a way to deal with the problem himself.	7	29.2	10	41.7
D. Offer two limited choices to solve the problem and ask him to choose.	2	8.3	2	8.3
E. Other.	2	8.3	0	0

Table 4.28 reflects that before the programme, half of the teachers (50%) selected helping children to solve the problem (choice A) to respond to children dealing with a problem, whilst only one teacher (4.2%) responded to the problem by ignoring the child (choice B). Moreover, 2 teachers (8.3%) issued their own techniques by letting other

children help to find a solution. There was change in the teachers' responses after attending the programme; 10 teachers (41.7%) chose encouraging children to think a solution to respond to the problem themselves (choice C). Moreover, teachers selecting to provide a choice of solutions (choice D) stayed the same before and after the programme (2 teachers, 8.3%).

Question 27: If a child always asks for help from others when problems arise, the teacher should...

Table 4.29 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Ignore her when she asks for help.	0	0	0	0
B. Assist her when a problem arises.	8	33.3	4	16.7
C. Offer her one or two options to choose from in order to deal with the problem.	10	41.7	0	0
D. Give her her more time to think and encourage her to express her own ideas to solve problems.	6	25.0	20	83.3
E. Other.	0	0	0	0

Table 4.29 reflects that before the programme, 10 teachers (41.7%) selected offering children one or two options (choice C) to respond to the problem of problem-solving skills, followed by assisting children (choice B) which 8 teachers (33.3%) selected to deal with the problem. There was a big change in the teachers' responses after attending the programme; the vast majority of teachers (83.3%) selected giving children more time think and encouraging children (choice D) to respond to the problem, which increased from 25.00% of the teachers choosing this option before the programme. However, no teacher chose ignoring (choice A) neither before nor after the programme.

Question 28: If a child does not make choices for solving problems, the teacher should…

Table 4.30 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Tell him step by step how to deal with the problem.	3	12.5	0	0
B. Encourage him to keep trying to solve a problem until it is resolved.	9	37.5	8	33.3
C. Offer him variety of solutions that range from bad to good and let him choose the best choice himself.	1	4.2	0	0
D. Allow him to make a choice and face the negative or positive consequences (provided he is still safe).	11	45.8	16	66.7
E. Other.	0	0	0	0

Table 4.30 indicates that 11 teachers (45.8%) responded to the problem of making choices for solving problems by allowing children to face the negative and positive consequences (choice D), whereas offering children only one or two options (choice C) was chosen the least by teachers (4.2%) before the programme. There was change in the teachers' responses after attending the programme; two thirds of the teachers (66.7%) selected choice D to deal with the problem, whereas telling children to solve problems step by step (choice A) and offering a variety of solutions (choice C) was not chosen by any teachers.

Question 29: If a child does not choose appropriate ways to solve problems, the teacher should…

Table 4.31 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Tell her the pros and cons of the solution that she has chosen.	6	25.0	5	20.8
B. Give her an example of an appropriate solution to deal with the problem.	5	20.8	5	20.8
C. Ask her some questions to make her reconsider her own solution until she can come up with a better one.	6	25.0	8	33.3
D. Allow her to the face negative or positive consequences (provided she is still safe) and encourage her to think of another better way.	7	29.2	6	25.0
E. Others	0	0	0	0

Table 4.31 reflects that before the programme, 7 teachers (29.2%) selected allowing children to face the negative and positive consequences (choice D) to respond to the problems of choosing appropriate way to solve problems, whereas giving some examples of appropriate solutions (choice B) was chosen the least (5 teachers, 20.8%). There was a slight change in the teachers' responses after the programme; guiding children in reconsidering their solutions (choice C) was selected by 8 teachers (33.3%).

Question 30: If a child cannot explain his choice of solutions to problems, the teacher should…

Table 4.32 Comparison of frequency and percentage of teachers who completed this question between pre- and post- intervention (n=24)

Choices	Pre-intervention		Post-intervention	
	Frequency	%	Frequency	%
A. Give him an example of an explanation.	9	37.5	5	20.8
B. Tell him the pros and cons of the solution that he has chosen.	1	4.2	6	25.0
C. Do nothing because he can solve problems himself, which is fine.	14	58.3	3	12.5
D. Ask him some questions in order to guide him in thinking over his ideas.	0	0	10	41.7
E. Other.	0	0	0	0

Table 4.32 indicates that before attending the programme, over half of the teachers (58.3%) responded to the problem of explaining choice of solutions by doing nothing (choice C), while no teachers selected asking questions to guide children in thinking over their ideas (choice D). However, after attending the programme, 10 teachers (41.7%) selected choice D and the number of teachers who selected choice C (12.5%) decreased dramatically.

Summary of theme 2

Before the intervention, the majority of respondents to the questionnaire indicated that the majority of teachers used both positive and negative reinforcements to deal with behaviour patterns. The reason-explanations were used the most for children of all ages and also in many situations. After the programme, most respondents indicated more positive responses were used to deal with the behaviour problems than negative responses. Moreover, the explanations were still used with any reinforcement.

Theme 3: Teachers' behaviour in promoting preschoolers' self-discipline behaviour

Frequency and percentage of teachers' behaviour in promoting preschoolers' self-discipline was collected using teacher's behaviour checklist (see Appendix 3.1). It was divided into three categories: modeling good manners, creating an appropriate classroom environment and responding to children properly. Each category was composed of ten subcategories. The frequency of teacher's behaviour was classified as never, sometimes (less than three times) and often (more than three times). The teacher's behaviour checklists were caluclated and presented as mean scores and standard deviations and paired t-test was performed in Table 4.33

In addition, all data from teachers' behaviours were calculated and presented as the frequency and percentage of teacher's behaviour in Table 4.34 – 4.36. Subsequently, some teachers were observed individually by using semi-structured observation (see Appendix 3.2) and classroom observation (see Appendix 5) in order to gather more details about teachers' behaviours, responding to children, and teacher-child relationships.

Table 4.33 Teacher's behaviour scores in each category collected using teacher's behaviour checklist (n=24). The values demonstrate mean, SD of pre- and post- intervention, and paired t-test was performed (* $P < .05$)

Category	Time of measurement	Mean	SD	*T*	*P*-value
1. Modelling good manners	Pre-intervention	0.85	0.31	-15.65	.00*
	Post-intervention	1.71	0.23		
2. Creating an appropriate classroom environment	Pre-intervention	1.32	0.19	-16.39	.00*
	Post-intervention	1.89	0.11		
3. Responding to children	Pre-intervention	1.28	0.18	-7.12	.00*
	Post-intervention	1.58	0.14		

*Significant at $P < .05$

Table 4.33 shows the paired t-test results of teachers' behaviour between pre- and post-intervention. The mean scores obtained on the post-intervention in three categories

(1.71, 1.89 and 1.58 respectively) were higher than the ones obtained on pre-intervention (0.85, 1.32 and 1.28). Moreover, there was a significant difference in scores obtained from pre- and post-intervention all categories ($P < .05$).

3.1 Modelling good manners

The data were obtained through subcategories 1 to 10 of the teacher's behaviour checklist. They were calculated and presented as the frequency and percentage of teachers' behaviour in Table 4.34.

Table 4.34 Comparison of frequency and percentage of teachers' behaviour in each subcategory of modelling good manner between pre- and post- intervention (n=24)

Modelling good manner	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
1. Putting things away neatly.	Never	5	20.80	0	0
	Sometimes	17	70.80	7	29.20
	Often	2	8.40	17	70.80
2. Tidying up equipment in the right place when finished.	Never	3	12.50	0	0
	Sometimes	16	66.70	3	12.50
	Often	5	20.80	21	87.50
3. Talking with children warmly and politely.	Never	1	4.20	0	0
	Sometimes	16	66.60	2	8.30
	Often	7	29.20	22	91.70
4. Using the appropriate tone of voice.	Never	7	29.20	0	0
	Sometimes	16	66.60	5	20.80
	Often	1	4.20	19	79.20
5. Using 'Please' and 'Thank you' whenever receiving or asking for help from children.	Never	14	58.30	0	0
	Sometimes	10	41.70	12	50.00
	Often	0	0	12	50.00
6. Saying sorry whenever he/she has upset children.	Never	14	58.30	0	0
	Sometimes	10	41.70	18	75.00
	Often	0	0	6	25.00
7. Paying attention when children speak.	Never	3	12.50	0	0
	Sometimes	20	83.30	5	20.80
	Often	1	4.20	19	79.20
8. Keeping his/her temper.	Never	3	12.50	0	0
	Sometimes	19	79.20	4	16.70
	Often	2	8.30	20	83.30
9. Keeping to a similar routine every day.	Never	9	37.50	0	0
	Sometimes	14	58.30	8	33.30
	Often	1	4.20	16	66.70
10. Respecting and following the rules in the classroom regularly.	Never	3	12.50	0	0
	Sometimes	15	62.50	5	20.80
	Often	6	25.00	19	79.20

Table 4.34 compares the frequency and percentage of teachers' behaviour between pre- and post-intervention. In general, the percentage of the teachers' behaviour in modelling good manners was significantly increased. For example, 79.20% of teachers were sometimes able to control their temper when children were fighting in class, and this behaviour was then observed more frequently after intervention (83.30%). Moreover, 66.70% of teachers sometimes tidied up equipment in the right place when finished and this behaviour was observed more frequently after intervention (87.50%). The other subcategories were demonstrated in Table 4.34.

The teacher's behaviour checklist findings, as shown in the table 4.34, were supported by data obtained from semi-structured observation and classroom observation in all subcategories.

Before the programme

Before attending the programme, most teachers understood that they are role models for their children and should show appropriate behaviour that they would like children to copy. However, the findings obtained from observation showed that some teachers did not act in a way that they would want their children to act. For example, teachers ordered their children to tidy up toys neatly while their stuff was left strewn around. Another example is that most teachers taught children to use appropriate language whenever speaking to others and they also spoke to all children politely with appropriate language. However, when they talked to their colleagues or other adults outside the classroom, they sometimes used swear words without concern that some children were able to overhear.

One of the common classroom rules is to listen when others are speaking. The reason for this being because most teachers stated that most preschoolers like telling their own stories or expressing their own feelings rather than listening to others. Therefore, the teachers encouraged them to listen when other children were speaking by setting it as a classroom rule. Surprisingly, some teachers did not listen to children when they were talking or did not pay attention to them. For example:

"A teacher was working at her desk; a child came in and started telling her about his new brother who was born yesterday. She continued with her work and responded to him with only 'Yes' and 'Right', without looking at him until he finished." [Classroom 3]

Another point, which can be found frequently, is that most teachers did not respect their own classroom rules. When they found that a child was breaking the rules, they did not give them any consequence, despite having discussed consequences for breaking rules previously. Some teachers sometimes ignored those misbehaviours, whiles others just gave them a warning without doing anything.

The next point that should be mentioned is that some teachers were unable to control their tempers when they were faced with a difficult situation; they lost their tempers and got angry when children misbehaved. As a result, they were unlikely to choose the best way to discipline their children. One example of a teacher losing her temper was as follows:

"A boy, who was 4 years old, whined when the teacher was telling a story. She gave him a warning, but he still continued whining and ignored the teacher's warning. The teacher came to him and tried to take him out of the class. He did not want to go out and so he hit his teacher three times. At that moment, the teacher lost her temper. She hit him back five times and said, 'You hit me; I need to hit you back! If you hit me again, I will get you back more than twice." [Classroom 1]

The significant point here is that the majority of teachers never said sorry to children even though they behaved wrongly, they just left the situation without apologising.

The last point that was found in this category is that some teachers did not follow the daily schedule as defined. They suddenly changed from one activity to the next without giving advance notice. As a result, children tended to have difficulty transitioning between activities when routines were changed and did not align to their previous expectations.

After the programme

After all teachers attended the programme, most of them improved their behaviours by being better role models and showing behaviour that they expected their children to copy. Moreover, they realised that modelling appropriate behaviour is an important part of promoting self-discipline for children. Thus, they intended to act in a way that they would like their preschoolers to behave. During the last workshop a teacher stated:

> *"Children watch and learn from their parents and teachers. They learn from what I do and what I say. So, I try to model the behaviour that I wish them to encourage rather than just talking about it."* [Teacher 5]

Most teachers paid attention and listened to children while they were speaking. When talking to children, they did not only use appropriate words, but also used a polite tone of voice and made eye contact.

The next point that should be mentioned is that many teachers were able to control their emotions and actions. In the worst cases of losing their temper, they removed themselves from the difficult situations and took some deep breaths for a few minutes. When they had calmed down, they came back into the classroom and dealt with children's misbehaviour in a positive way. A teacher stated that:

> *"Despite the same situation, I ended up being a good teacher that day. I responded as best as I could positively, dealt with the behaviours, kept my cool, and survived. I contrasted that to other days when I have had similar experiences with my students and I've lost my temper, yelled back, and just felt out of control and really angry."* [Teacher 15]

Most teachers felt that children had more respect for the classroom rules after they had instigated the actions recommended in the programme. When children broke the rules, they gave them a warning for the first time. If they did it a second time, they immediately received the consequence of breaking the rules as discussed previously. Therefore all

children clearly knew what would happen if they broke the rules. The most popular consequences for breaking the rules were temporary loss of privileges and time-out from the current activity. Eventually, it was found that children rarely broke the classroom rules.

The last point is that many teachers followed the daily schedule as determined, but flexible schedules were also provided. If there was any change, they provided advance notice of any changes in the classroom and explained short and clear reasons for the change. Thus, children could understand what activity was coming next.

3.2 Creating an appropriate classroom environment

The data were gained through items 11 to 20 of the teacher's behaviour checklist. They were calculated and presented as the frequency and percentage of teachers' behaviour in Table 4.35.

Table 4.35 Comparison of frequency and percentage of teachers' behaviour in each subcategory of creating an appropriate classroom environment between pre- and post- intervention (n=24)

Classroom environment	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
11. Establishing clear rules that children can understand.	Never	0	0	0	0
	Sometimes	4	16.70	0	0
	Often	20	83.30	24	100.00
12. Allowing children to participate in creating the rules in their classroom.	Never	0	0	0	0
	Sometimes	11	45.80	2	8.30
	Often	13	54.20	22	91.70
13. Providing an adequate amount of equipment and toys.	Never	0	0	0	0
	Sometimes	10	41.70	0	0
	Often	14	58.30	24	100.00
14. Making a clear daily schedule.	Never	2	8.30	0	0
	Sometimes	10	41.70	0	0
	Often	12	50.00	24	100.00
15. Providing a quiet zone for children to use when necessary.	Never	2	8.30	0	0
	Sometimes	16	66.70	4	16.70
	Often	6	25.00	20	83.30
16. Providing personal lockers in the classroom for children.	Never	0	0	0	0
	Sometimes	0	0	0	0
	Often	24	100.00	24	100.00
17. Encouraging children to take good care of themselves as well as others.	Never	3	12.50	0	0
	Sometimes	15	62.50	4	16.70
	Often	6	25.00	20	83.30
18. Allowing children to think and solve problems themselves.	Never	13	54.20	0	0
	Sometimes	10	41.70	10	41.70
	Often	1	4.20	14	58.30
19. Treating each child without bias.	Never	4	16.70	0	0
	Sometimes	18	75.00	6	25.00
	Often	2	8.30	18	75.00
20. Providing a variety of activities.	Never	1	4.20	0	0
	Sometimes	19	79.20	0	0
	Often	4	16.70	24	100.00

Table 4.35 compares the frequency and percentage of teachers' behaviour between pre- and post- intervention. In general, the percentage of the teachers' behaviour in creating an appropriate classroom environment was significantly increased. For instance, the percentage of teachers who often made a clear daily schedule before intervention was 50%, and this behaviour was shown more often after intervention (100%). A few subcategories slightly increased such as establishing clear rules that children could

understand. However, there was no difference in the percentages of teacher's behaviour between pre- and post intervention in terms of providing personal lockers in the classroom for children (100 % VS 100%). The other subcategories were demonstrated in Table 4.34.

The teacher's behaviour checklist findings, as shown in table 4.34, was supported by data obtained from semi-structured observation and classroom observation in all subcategories.

Before the programme

Classroom environment included the creating of the physical environment and organising of the day. Classroom environments in each class were different due to varying factors, such as number of children in the class, size of classroom space, age of children and the level of ability and responsibility of children in the class, although these factors were quite similar in the same kindergarten level.

The findings obtained from observation showed that many classrooms did not have quiet places for children to get away or work quietly together with a friend or in a small group. On the other hand, personal lockers were provided for all children. In many of the observed classes the daily schedule was presented in a written table and posted on the classroom door. This meant that the daily schedule was accessible only for teachers, parents or other adults, and not written in a format accessible for children. There were a variety of learning areas prepared by the teacher in each classroom. Areas usually included role-play, blocks, science, math, games, puzzles, books, and music. Although the teachers allowed each child to choose which activity he or she wants to participate in, they limited the time for playing to an average of twenty minutes per day. Children were allowed to participate in activities in learning areas after they finished their work sheets.

In the first week of school, all teachers set classroom rules and routines by consistently introducing them to children. Some teachers established unclear and unspecific classroom rules in a long list. For example, the teacher in K1 (aged 3-4 years) established 12 classroom rules for the first week of school as follows:

1. Follow directions

2. Raise your hand and wait for permission to talk

3. Do not leave seat while the teacher is teaching

4. Keep hands and feet to yourself

5. Respect yourself and others

6. Be responsible

7. Be safe

8. Have a positive attitude

9. Do your best

10. Behave Appropriately

11. Do not run in the class

12. Obey your teachers

[Classroom 4]

Although most teachers allowed children to participate in the creating of the classroom rules, most of the rules came from the teachers. Example of this situation:

Teacher: Today we are creating our classroom rules. I need all of you to create them together. What do you think are necessary rules for us?

A child: We should be good children, obey the teacher...

Teacher: Can we run in the classroom?

Children: Yes, we can… sometimes walk, sometimes run

Teacher: You should walk, don't run in the classroom. So, the first rule of our classroom is 'Do not run in the classroom'.

[Classroom 1]

An important point that should be mentioned is that some teachers always helped children to solve problems immediately when they arose. They did not give children a chance to think about the problem and solve it for themselves, whilst a few teachers never taught problem-solving skills to the children. It might seem easier and faster for teachers

to jump in and solve problems for children or to show them the right way to reach a solution. A teacher said:

> *"I have to look after 27 children in my class, so I don't have enough time to teach them individually. I will teach this skill to the whole group."* [Teacher 4]

As a result, children always asked for help from their teachers to solve problems. The most common problem seen in classrooms was children grabbing things from others. Teachers solved this problem by taking away the thing that had been taken or offering another one in addition.

After the programme

After teachers had attended the programme, physical classroom environments were improved significantly. All classrooms had a quiet zone for children doing activities individually or in small groups. A variety of activities were provided for children to choose from. Moreover, some teachers discussed with their children before starting class work about ideas for what they would like do if they finish work early, and then listed these ideas on the board, adding others if necessary. For students who did not want to do any of the things listed, a compulsory worksheet, puzzle or game was made available.

All teachers provided a healthy balance for children, between group times and more solitary moments, quiet and noisy activities, indoor and outdoor play. Most teachers allowed children to participate in creating classroom rules and then illustrate the rules in their own language or pictures. Afterwards, all classroom rules were posted in a manner that was easy for children to see. Similarly, many classes posted the daily schedule by presenting times and pictures along with the activity, e.g. wash hands, music class, lunch etc. Thus, children were able to anticipate what was coming next. For example:

> *"When a child asked her teacher 'what are we going to do next?' the teacher told her firmly that she could go and see the daily routine in front of the classroom. The child did not ask her teacher anymore throughout the day."* [Classroom 4]

The teachers also helped children to make transitions between activities by allowing enough time so children could make the transition gradually. The teachers gave their children notice about 5 minutes in advance before changing to another activity. This gave the children a chance to finish what they were doing, which made cooperation more likely. During the transition the teachers sang songs, played word or guessing games, recited or did finger play with children so that the time passed more quickly whilst waiting long periods of time for new activities to begin.

A significant point should be noticed that a quarter of all toys were taken away in K3 classes. This was because children were taught about self-sharing. One teacher said:

> *"Well, I think five years old is mature enough to be taught about sharing. If there are lots of toys in our class, they won't learn to share with their peers."* [Teacher 21]

Two thirds of teachers tried to teach children problem solving skills. When problems arose, most teachers allowed children an opportunity to try and reach a solution themselves first, even if children were struggling. If they were not able to reach a solution themselves, the teachers tried to help them find a solution by giving them a few choices and then letting them choose. Afterwards, some teachers took the problems that occurred during the day and discussed them with all the children before home time and encouraged them to think of ways to solve these problems themselves.

3.3 Responding to children properly

The data were gained through items 21 to 30 of the teacher's behaviour checklist. They were calculated and presented as the frequency and percentage of teachers' behaviour in Table 4.36.

Table 4.36 Comparison of frequency and percentage of teachers' behaviour in each subcategory of responding to children properly between pre- and post-intervention (n=24)

Responding to children	Respond	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
21. Giving clear and simple directions.	Never	7	29.20	0	0
	Sometimes	15	62.50	6	25.00
	Often	2	8.30	18	75.00
22. Rewarding a child's good behaviour.	Never	0	0	2	8.30
	Sometimes	16	66.70	17	70.80
	Often	8	33.30	5	20.80
23. Praising a child's good behaviour.	Never	0	0	0	0
	Sometimes	5	20.80	0	0
	Often	19	79.20	24	100.00
*24. Using physical punishment of undesirable behaviours.	Never	17	70.80	22	91.70
	Sometimes	7	29.20	2	8.30
	Often	0	0	0	0
*25. Using social punishment of undesirable behaviours.	Never	1	4.20	0	0
	Sometimes	23	95.80	24	100.00
	Often	0	0	0	0
*26. Telling off a child in front of others.	Never	0	0	18	75.00
	Sometimes	24	100.00	6	25.00
	Often	0	0	0	0
27. Giving short and clear explanations.	Never	0	0	0	0
	Sometimes	20	83.30	8	33.30
	Often	4	16.70	16	66.70
28. Ignoring misbehaviour that is not harmful.	Never	0	0	0	0
	Sometimes	12	50.00	12	50.00
	Often	12	50.00	12	50.00
29. Asking for and paying attention to reasons from children.	Never	0	0	0	0
	Sometimes	7	29.20	4	16.70
	Often	17	70.80	20	83.30
30. Setting aside time each day to spend with each child individually.	Never	10	41.70	0	0
	Sometimes	12	50.00	18	75.00
	Often	2	8.30	6	25.00

*Negative responses

Table 4.36 compares the frequency and percentage of teacher's behaviour between pre- and post- intervention. The percentage of the teachers' behaviour in responding to children properly was increased in some subcategories. For example, the percentage of teachers who never spent time with each child individually was 41.7%, however, after intervention the percentage of teachers who spent time with individual children increased to 75.0%. There was a slight increase in the percentage of the teacher's behaviour such as praising a child's good behaviour. On the other hand, the percentage of the teacher's

behaviour was decreased in subcategory 24, 25 and 26. This is because these were negative responses. For example, the percentage of teachers who sometimes told a child off in front of others had been 100% and this behaviour dropped to sometimes (25%) and never (75%) after intervention. However, there was no difference in the percentages of teacher's behaviour between pre- and post-intervention in terms of ignoring misbehaviour that is not harmful. The other subcategories were demonstrated in Table 4.36.

The teacher's behaviour checklist findings as shown in the table 4.36 were supported by data obtained from semi-structured observation and classroom observation in all subcategories.

Before the programme

Overall, teachers used limited discipline strategies to promote children's self-discipline. There was more use of negative reinforcements than positive reinforcements, such as verbal, social and occasionally corporal punishment.

There weas much appropriate behaviour of children that could be recognised with rewards or praise, but most teachers rarely gave positive reinforcement to children who behaved well. This is because they were afraid that it would spoil children or they might only show good behaviour because they want to receive praise or rewards. Moreover, they sometimes overlooked positive behaviour. Thus, well-behaved children were ignored by the teacher. One teacher said at the first workshop that:

> *"I never give my children any reward and seldom give them praise when they have such good behaviour. I think if they receive more rewards, they may do it next time for the same reward. I want them to behave appropriately by themselves."* [Teacher 8]

On the other hand, they had paid more attention to children who misbehaved than children who displayed good behaviour. They sometimes accidentally rewarded inappropriate behaviour by paying more attention, even if the attention was to yell at or tell children off. As a result, other children imitated those inappropriate behaviours because they would be more likely to get more attention from their teacher as well. For example;

"During circle time, a child was whining and interrupting the class. The teacher called out his name and told him to stop whining. He stopped for a while and then started whining again. The teacher called out his name again. He stopped whining, but another child started whining instead. The teacher then called out her name and said to the whole class, ''a good child will not whine to interrupt others." [Classroom 6]

Some teachers inadvertently encouraged their children's negative behaviours. Sometimes, children received attention from negative behaviours, which encouraged them to continue misbehaving, even though the attention was negative, such as yelling, arguing, and pleading. Moreover, some teachers warned children many times throughout activities in order to prevent trouble. For example:

"During play time, the teacher warned the children that ''you should play together well, share the toys with your friends, don't grab toys from your playmate.'' The teacher repeated this again and again.
[Classroom 3]

Surprisingly, almost none of the teachers knew about the 'Time-out' approach. One senior teacher said:

"I have never heard about this technique before and don't know how to use it." [Teacher 8]

However, some teachers had applied the time-out technique to their children, without recognising it as a discipline technique. For example, there was a special chair in the corner for misbehaviour, and when a child hurt another classmate; he was made to sit there briefly until he was prepared to behave.

After the programme

The majority of teachers applied many discipline strategies to promote children's self-discipline depending on the circumstance, such as ignoring, time-out, rewarding,

praising, and privileges. They used more positive reinforcement than negative reinforcement to encourage children's appropriate behaviour. The punishments were used when necessary such as taking away privileges and implementing negative consequences. Moreover, they overlooked disruptive behaviour and either focused on a child who was behaving well, or waited for the misbehaving child to exhibit desirable behaviour. They paid more attention to desirable behaviour and less attention to misbehaviour. One teacher said:

> *"During story time, the teacher ignored a child calling out an answer and called on the child who raised her hand before answering. Next time, the child raised his hand before answering and the teacher called on him and said, ''I'm allowing you to answer because you are following our rules by raising your hand."* [Teacher 7]

Most teachers responded quickly, firmly, and respectfully when children misbehaved. The first step was to give them a warning. If they continued, it was followed up by giving the child a consequence as pre-determined such as time-out or the taking away of privileges. Sometimes they ignored children's misbehaviour because they knew children misbehaved in order to get attention from their teacher, even when the attention was negative. One teacher said:

> *"When the teacher heard a child using potty words, she told her that we don't use those words here. She ignored the child when they used the potty words and did not respond to any questions. After that, the child started using appropriate words and so she talked to the child as usual."* [Teacher12]

The teachers more positively reinforced children's good behaviours. Although some teachers disagreed about the use of a reward system, such as sticker chart or reward chart, they provided social rewards, including smiles, a thumbs-up, words or praise. They also used activity rewards such as spending more time in the playground or on their favourite activities. The teachers rewarded children immediately following the good

behaviour. It can be easily concluded that most teachers tended to use positive reinforcement and guidance instead of negative judgment and reprimand.

Summary of theme 3

Overall, the findings from three tools showed that there were important changes in teacher's behaviours in order to promote preschoolers' self-discipline after the intervention. Before joining the programme, the findings from observations illustrated that some teachers did not show the appropriate behaviour in order to set a good example of behaviour for children. Some teachers responded to the children by negative reinforcement, although they rarely used corporal punishment. Moreover, sometimes some teachers ignored the desirable behaviour of children and paid attention to the misbehaviour instead. However, overall most classroom environments could be deemed appropriate for the age group. After joining the programme, the findings from observations indicated that many teachers had improved their behaviours, particularly in modelling good behaviours. Responding to children has been changed appropriately. Most teachers used more positive reinforcement and also more natural and logical consequences. As for classroom environment, some materials and furniture were moved in order to allow children to be more independent. The spaces for each activity were changed to be more suitable.

Theme 4: Preschoolers' self-discipline behaviour

Frequency and percentage of children's self-discipline behaviour was collected using the child's behaviour checklist (Appendix 4.1). It was divided into six categories: self-control, self- responsibility, self-reliance, cooperation, empathy and problem solving. Each category was composed of five subcategories. The teachers were asked to rate the children's behaviours in their classroom using the three-point scale (0=never, 1=sometimes and 2=often). The frequency of children's behaviour was classified as never; sometimes (less than three times); and often (more than three times). The child behaviour checklists were performed and presented as mean scores and standard deviations and the paired t-test was performed in Table 4.37

In addition, all data were calculated and presented as the frequency and percentage of children's behaviour in Table 4.38 – 4.43. Subsequently, some children were observed

individually and in small groups using semi-structured observation (Appendix 4.2) and classroom observation (Appendix 5) in order to gather more details about children's behaviours.

Table 4.37 Children's behaviour scores in each category collected using the child's behaviour checklist (n=527). The values demonstrate mean, SD of pre- and post- intervention, and paired t-test was performed (* $P < .05$)

Category	Time of measurement	Mean	SD	*t*	*P*-value
Self-control	Pre- intervention	1.50	0.33	-21.46	.00*
	Post- intervention	1.85	0.19		
Self –responsibility	Pre- intervention	1.37	0.36	-21.39	.00*
	Post- intervention	1.78	0.23		
Self-reliance	Pre- intervention	1.57	0.31	-18.52	.00*
	Post- intervention	1.85	0.19		
Cooperation	Pre- intervention	1.38	0.31	-25.77	.00*
	Post- intervention	1.79	0.21		
Empathy	Pre- intervention	1.19	0.39	-26.35	.00*
	Post- intervention	1.74	0.25		
Problem solving	Pre- intervention	1.33	0.48	-14.96	.00*
	Post- intervention	1.71	0.37		

*Significant at $P < .05$

Table 4.37 shows the paired t-test result of children's behaviour between pre- and post-intervention. The mean scores obtained on the post-intervention in six categories (1.85, 1.78, 1.85, 1.79, 1.74 and 1.71 respectively) were higher than the ones obtained on pre-intervention (1.50, 1.37, 1.87, 1.38, 1.19 and 1.33 respectively). Moreover, there was a significant difference in scores obtained from pre- and post-intervention all categories ($P < .05$).

4.1 Self-control

The data were obtained through subcategory 1 to 5 of the child's behaviour checklist. They were calculated and presented as the frequency and percentage of teachers' behaviour in Table 4.38

Table 4.38 Comparison of frequency and percentage of children's behaviour in each subcategory of self-control between pre- and post- intervention (n=527)

Self-control	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
1. Does he/she queue up?	Never	35	6.60	0	0
	Sometimes	238	45.20	97	18.40
	Often	254	48.20	430	81.60
*2. Does he/she hit friends?	Never	290	55.00	449	85.20
	Sometimes	194	36.80	75	14.20
	Often	43	8.20	3	0.60
*3. Does he/she take toys from friends?	Never	287	54.5	426	80.80
	Sometimes	193	36.6	100	19.00
	Often	47	8.9	1	0.20
4. Does he/she ask for permission before leaving the classroom?	Never	0	0	0	0
	Sometimes	35	6.60	3	0.60
	Often	492	93.40	524	99.40
*5. Does he/she run around the classroom?	Never	211	40.00	422	80.00
	Sometimes	227	43.10	102	19.40
	Often	89	16.90	3	0.60

*Negative behaviour

Table 4.38 compares the frequency and percentage of children's self-control behaviour between pre- and post- intervention. Slightly increased percentage was shown of children's behaviour in asking for permission before leaving the classroom. Moreover, the percentage of children's behaviour in queuing up was significantly increased. Children who were often in the queue were 48.2%, and this behaviour was then observed more frequently after intervention (81.6%). However, the other subcategories were decreased because they were negative behaviours. For example, children who often ran around the classroom was recorded at 16.9% before the intervention whereas this behaviour was then observed less often after intervention (0.60%). The other subcategories were showed in Table 4.38.

The child's behaviour checklist findings, shown in table 4.38, were supported by data obtained from semi-structured observation and classroom observation in some subcategories.

Before the programme

The majority of children ran in the classroom or ran everywhere instead of walking. In addition, most children wanted to be the first person for each activity. For example, the children needed to make a line before going from one classroom to another. They always ran quickly in order to be the first person in the line. These situations sometimes led to accidents such as falling down and bumping into each other. Data supporting the child behaviour checklist shows that 43% of the children *sometimes* ran around the class, and 16.90% *always* ran around the classroom. An example of this behaviour:

> *"A boy who was 5 years old was running around the classroom during playtime. Although the teacher reminded him to stop running, he stopped running for just less than 5 minutes before starting running again. After that some other children started running around with him."* [Child 6]

One third of the children took toys or other things from their peers. It could be commonly seen that the children were grabbing toys from another child or wanting something that another child had. This led to problems such arguing and fighting among children. These behaviours occurred most commonly in children of K1 (aged 3-4 years). However, the same problems rarely appeared in older children because they could deal with the problems themselves. Example of this behaviour:

> *"A girl, who is 4 years old, grabs toys she wants off other children. Although the teacher asks her to give the toys back or share, she doesn't respond to the teacher and still plays with the toys."* [Child 2]

A minority of the children did not ask for permission before leaving the classroom. It was observed on the first day of school and occurred especially in K1. For example:

> *"On the first day of school during activity time, two children started crying and ran out of the classroom when they saw their parents were outside."* [Classroom 1]

After the programme

The most significant improvements after the intervention in self-control of the children were found in terms of attempts to walk instead of running and sharing more effectively with classmates. The majority of the children throughout all levels of kindergarten were quiet walking into the classroom and also kept hands and feet to themselves. In addition, they were able to be careful more about not hurting themselves and others by crashing, bumping, hitting and falling down when they were doing activities both inside and outside the classroom. One example of this behaviour:

> *"A boy, who is 5 years old, said when he was going to the playground with his classmates, 'I don't hurry to be there, I don't want to run because I'm afraid I will fall down."* [Child 11]

Furthermore, over two thirds of the children observed did not take toys or things from their peers and they also shared with others or played with toys together. There were more generous and cooperative children who got along with their peers well. However, a few children did not share with others. It appeared particularly in the youngest children (aged 3 years old). Some children not only reminded themselves to behave well, but also warned their classmates who misbehaved, to behave well. For instance, one respondent stated:

> *"A girl, who is 5 years old, warned another child who was running in the classroom during playtime that this is the classroom, it is not the playground. So, you should stop running and walk instead."* [Child 12]

4.2 Self- responsibility

The data were gained through subcategories 6 to 10 of the child's behaviour checklist. They were calculated and presented as the frequency and percentage of teachers' behaviour in Table 4.39.

Table 4.39 Comparison of frequency and percentage of children's behaviour in each subcategory of self-responsibility between pre- and post- intervention (n=527)

Self-responsibility	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
6. Can he/she finish activities on time?	Never	32	6.10	1	0.20
	Sometimes	201	38.10	95	18.00
	Often	294	55.80	431	81.80
7. Does he/she put a lot of effort into work?	Never	40	7.60	1	0.20
	Sometimes	240	45.50	110	20.90
	Often	247	46.90	416	78.90
8. Does he/she tidy up toys in the right place when finished playing?	Never	17	3.20	0	0
	Sometimes	226	42.90	98	18.60
	Often	284	53.90	429	81.40
*9. Does he/she talk to others when teacher is teaching?	Never	224	42.50	394	74.80
	Sometimes	210	39.80	128	24.30
	Often	93	17.60	5	0.90
10. Does he/she listen to others when they speak?	Never	75	14.20	2	0.40
	Sometimes	265	50.30	140	26.60
	Often	187	35.50	385	73.10

*Negative behaviour

Table 4.39 compares the frequency and percentage of children's self-responsibility behaviour between pre- and post- intervention. In general, the percentage of the children's behaviour in self-responsibility was highly increased. For example, children who often put away toys in the right place when they had finished playing was recorded at 53.9%, and this behaviour was then observed more frequently after intervention (81.40%). However, the percentage of the children's behaviour in talking to others when the teacher was teaching was highly decreased. This is because it was negative behaviour. The other subcategories were presented in Table 4.39.

The child's behaviour checklist findings, as shown in table 4.39, were supported by data obtained from semi-structured observation and classroom observation in some subcategories.

Before the programme

The findings obtained from the observations found that most children finished activities on time because teachers gave them a warning in advance in order to give them a

chance to finish their work. They had their own sign to tell children that it was time to clean up such as singing a song or turning off some lights in the room.

Most children tidied up toys when they had finished playing, but not in the right place and not neatly. They just threw toys onto the shelf. Some children did not stop playing when the teacher announced that it was time to clean up, because they needed a few more minutes to finish their playing. An example of this behaviour:

> *"A girl, who was 3 ½ years old, enjoyed playing in the block centre and interacting with friends. When the teacher announced that it was time to clean up and move on to another activity, she got very upset and threw toys. When the teacher came near her, she started screaming and saying that she was not finished playing."* [Child 1]

As the teachers stated previously, most children would like to talk about their own stories rather than listening to others. For example:

> *"A child who was 4 years' old interrupted conversations between the teacher and another child repeatedly by telling them, 'I can't wait for my turn to speak, I want to speak now.'"* [Child 9]

After the programme

The most significant improvements after the programme in self-responsibility of the children were found in terms of attempts to clean up toys after playing. All children tidied toys up neatly and put them in the right place after they finished playing or when the teacher announced that it was time to clean up. They also helped others to clean up, despite having not played with those toys. It was noticed that all teachers gave a few minutes warning to help children make the mental transition from play time to clean up.

Data gained during observation showed that there was no improvement of children behaviour on paying attention to instructions. This data appeared to be in opposition or contradiction to the score of children's behaviour rated by teachers using the child behaviour checklist. Surprisingly, observation findings in both pre and post-intervention showed the same results: that most children did not seem to be listening or paying

attention when the teacher was teaching. For example, they were looking out of the window or talking to their classmates and they sometimes focused on irrelevant noises or other stimuli. Some children could not sit still during circle time.

4.3 Self- reliance

The data were obtained from subcategory 11 to 15 of the child's behaviour checklist. They were calculated and presented as the frequency and percentage of teacher's behaviour in Table 4.40.

Table 4.40 Comparison of frequency and percentage of children's behaviour in each subcategory of self-reliance between pre- and post- intervention (n=527)

Self-reliance	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
11. Does he/she make the bed him/herself?	Never	20	3.80	4	0.80
	Sometimes	136	25.80	54	10.20
	Often	371	70.40	469	89.00
*12. Does he/she leave his/her belongings lying around?	Never	299	56.70	475	90.10
	Sometimes	177	33.60	52	9.90
	Often	51	9.70	0	0
13. Does he/she flush the toilet after use?	Never	23	4.40	0	0
	Sometimes	203	38.50	98	18.60
	Often	301	57.10	429	81.40
14. Can he/she eat and complete a meal by him/herself?	Never	6	1.1	0	0
	Sometimes	229	43.5	111	21.10
	Often	292	55.4	416	78.90
15. Does he/she make decisions by himself?	Never	0	0	0	0
	Sometimes	181	34.30	74	14.00
	Often	346	65.70	453	86.00

*Negative behaviour

Table 4.40 compares the frequency and percentage of children's self-reliance behaviour between pre- and post- intervention. In general, the percentage of the children's behaviour in self-reliance was highly increased, apart from leaving their belongings lying around. For example, the percentage of children who made decisions by themselves was 65.7% before intervention and this behaviour was then observed more often after intervention (86.0%). However, the percentage of children's behaviour in queuing up was slightly decreased because it is a negative behaviour. To explain further, children who

often leave their belongings lying around were recorded at 9.7%, and this behaviour did not present again after intervention. The other subcategories were presented in Table 4.40.

The child's behaviour checklist findings, as shown in table 4.40, were supported by data obtained from semi-structured observations and classroom observations in some subcategories.

Before the programme

Data obtained from observation before the programme showed that there were three major problems in children's self-reliance. First of all, all children take a nap after lunchtime for 2 hours. Thus, all children had to put away mats themselves after their nap. Most children in K1 could not store the mat themselves and needed some help from the teacher or caregiver. However, this situation was rarely found in children in K2 and K3.

Another problem commonly found in before the intervention observation was that over half of the children in K1 started school without being toilet trained. Details emerged by asking teachers of 8 classes in K1, which found that 25 children did not know how to use the toilet and still wore nappies. Whilst most children in K2 and K3 were able to use the toilet independently with occasions when they forgot to flush the toilet after use.

Finally, over one third of children had some trouble eating. For example, some children refused to eat the food provided by the school, while others needed someone to feed them as they are fed by a care-giver at home. Some children were not hungry at mealtimes, thus they tried to end the meal after a few bites. Another problem of eating behaviour was that children ate slowly; they took more than an hour to finish a meal, especially if it was not their favourite kind of food. They got easily distracted, singing to themselves and sometimes even falling asleep.

After the programme

After the programme, there were major improvements in children behaviour, showing that most children were moving from dependence to independence, thus becoming less dependent on their teacher. They were able to do daily routine activities themselves. Moreover, most children were able to make decisions themselves about what they wanted or did not want to do.

By improving children's self-reliance, the teachers helped young children become independent by allowing and encouraging them to take responsibility for themselves whenever possible such as feeding, making beds and using the toilet themselves. They were able to adjust to the routines quite nicely during the first few weeks of school. For example:

> *"During lunch time, children quickly got into the routine of serving themselves and pouring their own milk from a pitcher."* [Classroom 5]

> *"Most children aged 3 years fell into their own toileting routine, although they had to let their teacher know when they were going to the bathroom."* [Classroom 1]

4.4 Cooperation

The data were obtained from subcategories 15 to 20 of the child's behaviour checklists. They were calculated and presented as the frequency and percentage of teachers' behaviour in Table 4.41.

Table 4.41 Comparison of frequency and percentage of children's behaviour in each subcategory of cooperation between pre- and post- intervention (n=527)

Cooperation	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
16. Does he/she follow the rules in the classroom?	Never	28	5.30	1	0.20
	Sometimes	230	43.60	105	19.90
	Often	269	51.00	421	79.90
17. Does he/she follow the regulations in each activity?	Never	28	5.30	0	0
	Sometimes	234	44.40	109	20.70
	Often	265	50.30	418	79.30
*18. Does he/she make a high-pitched noise in the classroom?	Never	282	53.50	438	83.10
	Sometimes	203	38.50	87	16.50
	Often	42	8.00	2	0.40
19. Does he/she bring materials related to the lesson as assigned?	Never	0	0	0	0
	Sometimes	105	19.90	18	3.40
	Often	422	80.10	509	96.60
20. Does he/she help the teacher? E.g. to tidy up after finishing activities.	Never	224	42.50	22	4.20
	Sometimes	230	43.60	179	34.00
	Often	73	13.90	326	61.90

*Negative behaviour

Table 4.41 compares the frequency and percentage of children's cooperative behaviour between pre- and post- intervention. In general, the percentage of the children's cooperative behaviour was highly increased, except for making high-pitched noise in the classroom. For example, children who often followed the rules in the classroom were recorded at 51.0% before the programme, and this behaviour was observed more frequently after the programme (79.9%). Likewise, children who often helped the teacher were recorded at 13.9%, and this behaviour was also presented more frequently after the programme (61.9%). However, the percentage recorded of children's behaviour in making high-pitched noise in the classroom was slightly decreased due to it being negative behaviour. The other subcategories were presented in Table 4.41.

The child's behaviour checklist findings as shown in the table 4.41 was supported by data obtained from semi-structured observation and classroom observation in some subcategories, whilst some behaviours obtained from semi-structured observation were in contrast to behaviour from the child's checklist findings.

Before the programme

Data obtained from observation before the programme showed that there was only one major problem in children's cooperation. Breaking classroom rules was one of the most important self-discipline problems in many classes. Many children did not follow the classroom rules and regulations of each activity the first time the rules were presented. Sometimes children forgot the rules and sometimes they tested the rules to see how teachers would react. The data in Table 4.39 was supported by the qualitative data.

It can be notice that, most preschoolers often imitated their peers' behaviours, either appropriate behaviours or misbehaviours, in order to get attention or a reaction from their teacher or peers. As a result, other children might imitate these behaviours to get attention. For example of this behaviour:

> *"During the art lesson, a 5 year old boy disrupted the class by making high- pitched noise. The teacher and caregivers gave him warnings by calling out his name and telling him to stop. Afterwards, another boy started making high- pitched noise like the first boy did. The teacher said*

to him, 'This is not good behaviour. You should not copy his behaviour. You should stop doing this and go back to your work." [Classroom 5]

Data obtained from observation in the issue of helping teachers to do something was in contrast to data gained from the checklists. The teachers rated in the checklists that 42.50% of the children never helped them with tasks. On the other hand, it could be observed that most children, particularly in K3, asked their teacher if they could help whenever they saw the teacher doing a task. When other children saw someone helping the teacher they often tried to come and help their teacher as well. After that, they still looked to their teachers for approval or assistance if needed. An example of this behaviour:

"When the teacher was preparing the paint colours for art lesson, a boy came and asked his teacher, 'What are you doing? Can I help you to do this?'. The teacher gave him the job to put all the paints on the desk. Another girl came and told the teacher, 'I want to help you as well'. The teacher said thank you to the two children and told them, 'I have done everything to prepare for the art lesson and thank you for your offer, that is kind of you. I will let you know when I need help." [Classroom 3]

After the programme

The most improvement in children's behaviour in this category after the programme was that the majority of children respected and followed classroom rules and regulations of activities. This might be because most teachers decreased their list of classroom rules; no more than five rules, which were clear and specific, were then displayed on a poster that everyone could see and were reviewed regularly. A whole group of children were asked to make the posters together. Furthermore, the teacher allowed students to participate whilst setting the consequences for breaking classroom rules to ensure that all children knew and understood what to expect when rules were broken.

4.5 Empathy

The data were obtained from subcategories 20 to 25 of the child's behaviour checklist. They were calculated and presented as the frequency and percentage of teachers' behaviour in Table 4.42.

Table 4.42 Comparison of frequency and percentage of children's behaviour in each subcategory of empathy between pre- and post- intervention (n=527)

Empathy	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
21. Does he/she use appropriate language with others?	Never	8	1.50	0	0
	Sometimes	230	43.60	79	15.00
	Often	289	54.80	448	85.00
22. Can he/she help others when they ask for help?	Never	116	22.00	7	1.30
	Sometimes	243	46.10	145	27.50
	Often	168	31.90	375	71.20
23. Will he/she take turns?	Never	101	19.20	3	0.60
	Sometimes	238	45.20	139	26.40
	Often	188	35.70	385	73.00
24. Does he/she say 'Sorry' when he/she has done something wrong?	Never	174	33.00	2	0.40
	Sometimes	273	51.80	168	31.90
	Often	80	15.20	357	67.70
25. Does he/she use 'Please' and 'Thank you'?	Never	51	9.70	0	0
	Sometimes	253	48.00	119	22.60
	Often	223	42.30	408	77.40

Table 4.42 compares the frequency and percentage of children's empathy behaviour between pre- and post- intervention. In general, the percentage of the children's empathetic behaviour was highly increased. For instance, children who never said 'Sorry' when they had done something wrong were recorded at 33% before the programme but they were recorded as more often saying 'Sorry' after the programme (67.7%). Moreover, children who often helped others were 31.9%, and this behaviour was then often presented after the programme (71.2%). The other subcategories were demonstrated in Table 4.42.

The child's behaviour checklist findings, as shown in table 4.42, were supported by data obtained from semi-structured observation and classroom observation in some subcategories.

Before the programme

The difficult behaviours in the category of empathy were found in all subcategories, but particularly in K1. Over a half of children rarely used the words

'please', 'thank you' or 'sorry'. They only used these words when the teacher reminded them.

> *"When a teacher gave the children a cup of milk at snack time, most children took it without saying, 'Thank you'. She had to remind them to say thank you every time."* [Classroom 4]

One third of children sometimes used inappropriate language when they talked to others. It can be noticed that sometimes children used bad words by accident; they used swear words because they were imitating friends or family without knowledge of what the words meant. Sometimes they used potty talk to get attention or a reaction from teacher or peers, whereas they used hurtful language when upset. Most children in K1 did not take turns and share with their playmates, even though the teacher taught them about sharing and also created activities for children to play together.

After the programme

It could be seen that most children used more words like 'please', 'thank you' and 'sorry' than before the programme, without being reminded by their teacher. They used them automatically according to the situation. For example, they always said thank you when they received things or help from others. They also used 'please' when asking for someone's help. They said 'sorry' when they had hurt someone or someone's feeling or done something wrong. This was a big change in improvement of children's behaviours. By helping children improve these behaviours, teachers were displaying good modelling, and praised them when hearing the children use words such as 'please', 'thank you' and 'sorry'.

Moreover, the majority of children used appropriate language when they were talking to others. By improving this, teachers reduced giving attention to children who used inappropriate words. If they repeated the inappropriate words, teacher told them firmly, "That's a word we don't use here." and helped them move on to another activity.

There was only a small change in children's behaviour in taking turns; only two thirds of children took turns and shared with their playmates themselves without needing a

reminder. Thus, teachers had to remind them often about sharing or taking turns. The findings after the intervention were similar to findings before the programme.

4.6 Problem solving

The data were obtained through subcategory 1 to 5 of the child's behaviour checklist. They were calculated and presented as the frequency and percentage of teacher's behaviour in Table 4.43.

Table 4.43 Comparison of frequency and percentage of children's behaviour in each subcategory of problem solving between pre- and post- intervention (n=527)

Problem solving	Response	Pre-intervention		Post-intervention	
		Frequency	%	Frequency	%
*26. Does he/she cry when unable to deal with a problem?	Never	400	75.90	486	92.20
	Sometimes	112	21.30	40	7.60
	Often	15	2.80	1	0.20
*27. Does he/she ask for help from others when problems arise?	Never	219	14.60	392	74.40
	Sometimes	228	43.30	123	23.30
	Often	80	15.20	12	2.30
28. Can he/she solve problems independently?	Never	72	13.70	12	2.30
	Sometimes	251	47.60	164	31.10
	Often	204	38.70	351	66.60
29. Does he/she choose appropriate ways to solve problems?	Never	72	13.70	10	1.90
	Sometimes	295	56.00	178	33.80
	Often	160	30.30	339	64.30
30. Can he/she explain why he chooses these ways to solve problems?	Never	73	13.90	10	1.90
	Sometimes	246	46.70	160	30.40
	Often	208	39.50	339	67.70

*Negative behaviour

Table 4.43 compares the frequency and percentage of children's problem solving behaviour between pre- and post- intervention. In general, the percentage of children's behaviour in problem solving was moderately increased. For example, children who were often able to solve problems themselves were recorded at 38.7%, and this behaviour was then observed more frequently after the programme (66.6%). A slight difference of the percentage of children's behaviour was shown in crying when they cannot deal with a problem. However, the percentage of children's behaviour in asking for help from others was decreased. The other subcategories were showed in Table 4.43.

The child's behaviour checklist findings, as shown in table 4.43, were supported by data obtained from semi-structured observation and classroom observation in some subcategories.

Before the programme

The findings from the observation supported the figures in Table 4.41. Observing children's self-discipline behaviour in problem solving skills showed that half of the children could not always solve problems themselves. Although they could come up with solutions to problems on their own, they would sometimes choose inappropriate ways to solve problems. Most children avoided doing anything to try and resolve the issue. Some children relied on help from their teacher, caregiver or peers when problems arose without trying to resolve the problem on their own. If no help was offered, they would sometimes start crying. An example of this behaviour:

> *"A girl, 4 years old, lashed out by hitting her playmates whenever they took toys in order to get the toy back. The teacher, who had seen this situation happening for a while, came and said "She had it first, give it back to her. If both of you are going to fight over that toy, you can't play with it."* [Classroom 4]

After the programme

Children clearly improved in their problem solving skills. Two-thirds of children could solve the problem themselves in the appropriate way. One third of children could deal with the problem but not in the appropriate way, such as being silent or ignoring the problem. A minority of children asked for help from others instead of crying and doing nothing. An example of this behaviour was as follows:

> *"Teachers helped children to develop their ability of problem-solving skills during circle time as a whole group or in small groups by using five steps: (1) Identify the problem, (2) brainstorm at least three ways to handle it, (3) choose one way to try first, and decide on a back-up plan,*

(4) try out the strategy, (5) evaluate how well the strategy works." [Classroom 5]

Summary of theme 4

Overall, the findings from three tools showed that most children have significantly improved their self-discipline behaviours after the programme. Before the programme, all teachers rated the behaviours of all their children. It could be summarised that most children had behaviour issues in empathy. Also, children had behaviour problems in self-reliance. However, after the programme the majority of teachers reported that they had taken some techniques gained from attending the programme and used them with their children. Most children's behaviour problems had been decreased and some behaviour issues had not been found anymore.

Theme 5: The general views of self-discipline.

Seven sub-themes emerged from the responses of interviewees when they were asked questions relating to self-discipline for children.

5.1 Importance of self-discipline skills

All the respondents agreed that self-discipline is one of major keys to success in life and that the development of positive self-discipline is extremely important to the happiness and success of children and adults. Over two thirds of the respondents stated that self-discipline should be taught to children as soon as possible. Thus, teaching self-discipline has become a big focus for early childhood education since it can help them to achieve goals throughout their life. They also believed that children who have the greatest self-discipline in preschool ages are the most likely to have fewer problems later in life, particularly socially, and will also be more likely to be successful throughout their lives.

Additionally, the majority of the respondents noted that self-discipline is crucial because it is likely to promote children's self-control, teach them to take responsibility for their actions, help them make thoughtful choices, encourage them to respect others, teach them how to live cooperatively with others and also get along well with others.

"...When talking about self-discipline, many people consider it to be about lining up, walking in the line and obeying teachers and parents.

That's not exactly true. It means children know what their duties are, what they should and should not do, etc..." [Deputy head teacher 2]

A well-managed classroom can also be an advantage of self-discipline and some teacher respondents mentioned that it could help teachers manage and organise their classrooms well. Disciplined children paid more attention when teachers were teaching and would not interrupt other children. This enabled teachers to follow the lesson as planned without wasting time to handle children's misbehaviour. The teacher respondents suggested that enhancing self-discipline is one of the best ways to try to prevent disruptive behaviour in the classroom.

"The existence of self-discipline will lead to greatness; the lack of self-discipline will lead to disaster…" [Teacher 12]

Half of the teacher interviewees indicated that they were willing to spend more time teaching children self-discipline at the beginning of the term. One suggestion here was that although this is a very hard task to accomplish, ,if carried out there are fewer problematic behaviour patterns in the class later on:

"…I was very tired from teaching children self-discipline during the first three weeks of term, but I was willing to devote my time to do it because when my children have self-discipline skills, everything in the class goes well throughout the whole year. It's worth it…" [Teacher 3]

5.2 The disadvantages of lack of self-discipline in childhood

The head teacher stated that there are several problems that presently occur in society. Some of these might result from a lack of self-discipline.

"…Several problems occur in our society, which are small problems until they become serious problems, such as cheating and corruption. Those result from the lack of self-discipline skills of people…" [The head teacher]

The majority of the respondents were concerned that a lack of self-discipline in childhood might cause several problems in their life, others lives and society. Without self-discipline skills, children might show inappropriate behaviours in the classroom, which can make it difficult for them to learn and also cause harm to them and other children. Moreover, they may be struggling with social skills development because they do not care about others' feelings and always think about themselves. They may lack the ability to cooperate with peers and not respect others. As a result, they could not make good relationships with others and some children's behavioural issues are likely to interfere with their daily lives, studies and also relationships.

Additionally, a lack of self-discipline skills might result in a loss of academic purpose, which was a concern of some teacher respondents. To explain further, it was felt that children with lack of self-discipline are likely to pay less attention when the teacher is teaching or explaining, and they might not put much effort into work sheets or learning activities. Therefore, it is highly likely that opportunities to learn new knowledge or new skills will be lost. As one respondent noted:

> *"…Most preschoolers who are disciplined children will have academic success when they grow up; I have seen this for many generations of my children..."* [Teacher 16]

Additionally, the majority of teacher respondents were also concerned that a lack of self-discipline in children might cause several problems in the classroom. This then leads to disruptive behaviour such as breaking rules, running in the classroom, talking when the teacher is teaching and creating excessive noise. Most teachers felt that such inappropriate behaviour resulted from a lack of self-discipline of children. Most teachers stated that sometimes they took more time to deal with disruptive behaviours instead of teaching or doing activities with children. For instance, one teacher stated:

> *"…I think we can prevent disruptive classroom behaviour by teaching self-discipline in the first place…"* [Teacher 23]

5.3 When is the best time to teach self-discipline skills?

Most interviewees acknowledged the purpose of teaching self-discipline is to teach and guide children in identifying the difference between right and wrong, but it was felt that teaching self-discipline is one of the most challenging tasks for both teachers and parents. This may be because self-discipline skills are not innate, and need to be taught. A minority of teacher respondents mentioned that this crucial set of skills and attitudes cannot be taught overnight, and that it takes many years for most children to be able to achieve self-discipline skills.

> *"...Though self-discipline can be improved throughout life, the earlier children can learn these skills of self-discipline the better.* [Deputy head teacher 1]

The majority of interviewees mentioned that children should be taught self-discipline skills at an early age or as soon as possible since they are not mature enough to decide on their own what is right or wrong, what they should or should not do. Thus, they need help from their parents and teachers to guide them in which behaviours are appropriate and acceptable.

> *"…Many parents may think that their child is too young for enhancing self-discipline skills. I think their thoughts are wrong…"* [Teacher 4]

Furthermore, some interviewees posited that these skills could only be promoted if parents addressed these issues when the children were babies rather than waiting until school age. Thus, many respondents felt that promoting self-discipline skills should start at home, not at school. This complex issue is explained further by a teacher interviewee who stated that most parents waited until school age before they started teaching their child self-discipline skills.

> *"… I think self-discipline skills should be enforced by parents from when children are infants, such as setting a schedule for feeding, sleeping or*

interaction with others. This can provide them with a sense of predictability and then they will feel safe…" [Teacher 11]

"...Unfortunately, parents think that their child is not old enough to discipline. So they wait until their child goes to school..." [Teacher 17]

5.4 Obstacles of promoting preschooler's self-discipline skills at school

Over 80 percent of teacher interviewees identified there were two main obstacles to promoting children's self-discipline at the school. The first one was parents and another was children with special needs in classrooms.

(1) Parents

The majority of teacher interviewees noted that one of the major obstacles to promoting self-discipline skills for children is parents, and several respondents notes that they felt that parents were not cooperating with school to enhance these skills. Indeed, some teachers felt that many if not most of the children were spoiled by their parents since they did everything for them, such as feeding, dressing, carrying their belongings to class and so on. However, it was noted that some parents thought that it was the duty of teacher to promote children's self-discipline and this the issue of promoting children's self-discipline was often overlooked by their parents:

"… Presently, many parents look after their children as if they are babies all the time. …" [Teacher 12]

Many respondent teachers stated that at the first meeting with parents, all teachers asked for collaboration from parents to work together in promoting children self-discipline at home. Some parents did as teachers suggested, while others ignored it:

"…When school reopened from taking a break, many children in my class were lacking in self-discipline. I can see what parents did at home. I have to start establishing the same rules because they totally forgot all of the classroom rules and some children could not help themselves in

daily routine despite the fact that they could do it well before the holidays…" [Teacher 9]

(2) Children with special needs

Additionally, teacher interviewees considered that children with special needs is one of the main barriers to promoting self-discipline. This may be because there are several children with special need in some regular classes. The head teacher indicated that children with special needs should take part in regular classes and activities, and by doing this it might be beneficial in helping them to develop better social skills and other skills. On the other hand, many teachers stated that children with special needs may have challenging behaviour including restlessness and moodiness. They may also exhibit problems like a short attention span, an inability to understand what is being taught, and being disruptive in the classroom. There was concern that many children learn by example and they might begin to imitate behaviours of special needs children that were not beneficial, and that this might cause behavioural issues in the classroom:

"…I'm really happy when Abby (a child with special needs) is absent, I can control my class and everything in my class is goes well..." [Teacher 6]

5.5 Children's misbehaviours and improvement

Before attending the programme, all preschool teachers reported that they were facing some behaviour patterns in their classes, particularly in a lack of self-discipline. The common behaviour problems in children included temper tantrums, not following directions, whining, grabbing toys, hitting or fighting with other children, breaking rules, not paying attention when studying, and so on. However, children in different age groups had different types of behaviour problems. Those behaviour problems can be grouped into three kindergarten levels, as follows:

There were five common problems of self-discipline in K1 (aged 3-4 years):

1. Most children paid less attention when teacher was teaching.
2. Most children broke the classroom rules and did not follow the instructions.

3. Most children could not help themselves well in their daily routine.
4. Some children hit other children and grabbed toys when they were playing together.
5. Some children needed help from their teacher or other adults all the time.

There were five common problems of self-discipline in K2 (aged 4-5 years):

1. Most children did not listen when others were speaking.
2. Most children paid less attention when the teacher was teaching.
3. Some children could not wait until it was their turn.
4. Some children could not solve problems themselves.
5. Some children broke the classroom rules.

There were five common problems of self-discipline in K3 (aged 5-6 years):

1. Most children did not pay attention when the teacher was teaching by talking to other peers.
2. Most children did not listen when others were speaking.
3. Some children could not cooperate with peers when working as a group.
4. Some children could not solve problems themselves.
5. Some children did not put effort into their work.

After attending the programme, most preschool teachers reported that self-discipline issues of their children before the intervention improved significantly. All preschool teachers in K1 said that the self-discipline problems which had been reported since the beginning of the programme have been improving continuously, particularly in self-reliance and self-control. Also in other areas, the children were noted to be improving. For example, they paid more attention when the teacher was teaching or demonstrating the procedure of activities by talking and playing less. There was a minority of children in the class breaking the classroom rules, and this might have been because they forgot, became unsure or were testing limits. For instance, one respondent noted:

"…All children in my class can do everything in the daily routine by themselves, such as feeding, changing clothes, toileting and so on, and

they also help other friends to tidy up toys when finished. They don't ask me for help all the time as they did during the first month of school, but there are still two children who still need some help from me because they have delayed development…" [Teacher 2]

Significant improvement in children's behaviour has been shown in K2; the preschool teachers in this level said that the majority of children have changed from displaying inappropriate behaviour patterns to appropriate behaviour. For example, most children took turns, waiting until their turn when playing together and sharing with their peers. Over half of the teachers in this level pointed out significant improvement in that most children attempted to solve problems on their own, even when they could not deal with the problems properly. This could be a good start for developing problem-solving skills.

In K3, the teachers stated that children's behaviour problems as reported at the first interview had improved in all points, particularly in cooperation skills. Children revealed more ability to cooperate with peers when working as a group. The teachers comments that this may because they provided children more opportunities to work in pairs, small groups, and large groups in a variety of activities at least twice a week. Working in groups could also help children to develop emotional and social skills, problem solving skills, self-confidence and empathy. The teachers noted that working with others enables children to develop a greater sense of social competency because they learn to open their minds and respect others' opinions, to respond to their peers' needs and to resolve little conflicts in their group. The important thing was that they were learning to actively listen and respond in a way that made the group effort more effective.

5.6 The teacher's knowledge in promoting preschoolers' self-discipline

All teacher interviewees acknowledged that there was on-course teaching about children's self-discipline skills when they trained to be a preschool teacher. There were only some courses related to self-discipline skills, such as child social development and classroom management. After becoming a preschool teacher, they had never attended any teacher training programmes which were related to promoting self-discipline skills. All training programmes on offer were about developing child cognitive development, despite

that fact that teaching self-discipline should be the first thing to teach children at the beginning of term.

> *"…On the first day and during the first week of school, we need to teach our children about self-discipline such as the limits in our classroom, the classroom rules, and what they can and cannot do…"* [Teacher 8]

Without a course of training on self-discipline skills, the teacher interviewees noted that they had to gain knowledge about self-discipline from several other resources, such as watching TV programmes, reading books, browsing websites, sharing experiences with colleagues, and learning from their experience. The teacher interviewees also stated that there were numerous methods and techniques to help teachers in promoting self-discipline. Indeed, with so many methods and techniques, the teachers had to select which one to use and when to use them. Sometimes they combined the various methods into an effective self-discipline enhancing approach.

> *"…There are so many techniques for teaching children self-discipline skills that I have got from various other resources. But I cannot use all of them; some techniques don't work with my children this year despite having worked very well with my class last year. So I have to find better ones for my class, which provide the logic consequence and praise them…"* [Teacher 9]

Additionally, before the programme the teachers mentioned that they would like to know about the most effective techniques to deal with misbehaviours in the class and also examples of how to use those techniques in each situation. The teacher interviewees commented that by showing some examples of problems and techniques to solve these problems, it would help them gain better understanding in promoting children self-discipline.

> *"…Although, I know many techniques to teach children self-discipline, it is quite hard to apply them to the problems arising in my class properly.*

It would be useful if I have some example of using these techniques…" [Teacher 6]

Additionally, the head teacher and deputy head teachers mentioned that another kind of knowledge that teachers should gain was related to child development stages. This was considered to be because children are developing continually, meaning that their behaviours and their needs change consistently over time. Thus, the teachers needed to understand each stage of child development precisely in order to be prepared to modify new discipline approaches over time, using different strategies or techniques as children develop greater independence and capacity for self-control and responsibility:

"…Knowing and understanding child development accurately is the heart of promoting children's self-discipline…" [The head teacher]

"...Sometimes teacher's expectations exceed children's capability. Thus, the more they know about children's development, the better they will be able to guide their children successfully..." [Deputy head teacher 2]

5.7 The teacher's roles in promoting preschoolers' self-discipline

Respondents identified several teachers' roles in promoting children's self-discipline skills.

(1) Reinforcement

The majority of the interviewees acknowledged the most important role of the teacher was to reinforce both appropriate and inappropriate behaviour of children. Over half of the teachers mentioned behaviours that are followed by positive reinforcement, including reward, praise and privilege, are likely to be strengthened and repeated. Indeed, a total of 38% of teacher interviewees believed that positive reinforcement could help children to behave appropriately; praise and attention are particularly highly rewarding for young children.

"…It is a very important thing to reward children when they are good. They needed to get a complement or attention from the teacher to confirm that their behaviour has been accepted…" [Teacher 11]

"…I just give my children thumbs up when they do something right, it is meaningful for them…" [Teacher 14]

On the other hand, others believed that rewards work well for getting children to do something that they do not want to do, or something they will just do short-term. Rewards are like to be temporary encouragement for children because when there is no reward, some children might return to behaving inappropriately. They might become addicted to rewards by being well behaved only in order to get rewards.

"…I don't want to reward my students because I'm afraid that they will behave well only when I'm watching them, in order to get a reward from me …" [Teacher 8]

Additionally, all teacher interviewees suggested that negative consequences should be provided to discourage negative behaviour. It includes anything that would discourage children from displaying the misbehaviour again. Children were likely to stop misbehaviours to avoid these consequences. Some interviewees considered that negative consequences provided should be age appropriate and should be specific to a child's personality.

Moreover, some teacher interviewees agreed that allowing for natural consequences or logical consequences could be another technique to help children learn from the result of their behaviours and mistakes. They also allow for an opportunity to take responsibility for their own behaviour. The deputy head teacher mentioned that natural consequences could be provided when the consequences are safe for children. She said:

"…We do not allow children to touch a lighted candle and receive the natural consequence of a serious burn. Besides, it might work better for

older children, rather than younger children, because they are able to understand the link between their behaviours and the consequences…" [Deputy head teacher 1]

Furthermore, one of the keys to making reinforcement effective is that consequences should be consistent and immediate. The head subject 2 noted that if teachers are inconsistent with giving children consequences, the children might continue to misbehave in hopes they will not get a consequence that time. Subsequently, children can do best when they receive immediate feedback for their positive and negative behaviours.

(2) Modelling

All interviewees agreed that the teacher has an influence on children's behaviours. Modelling appropriate behaviour is an important part of teaching self-discipline. 92% of respondent teachers mentioned that modelling disciplined behaviour, teaching by example, and demonstrating all have a part in helping children become more self-disciplined. It was considered that teacher modelling would be one of the most effective methods to encourage children self-discipline.

"…the best way to teach children self-discipline is to show them good behaviour and habits because they learn the most by watching what you do, not what you say. So we should behave in a way that we expect children to behave…" [Teacher 9]

"…When I see the group of children outside the classroom, I can guess who is their teacher. Don't imagine I can remember all of the preschoolers here, but the clue is in the children's behaviours. They are similar to their teacher's behaviours…" [Deputy head teacher 3]

Furthermore, some subject teachers mentioned that when it comes to being a role model, teachers must be aware that everything they do impacts their children, who regard the teacher as their superhero. Therefore, teachers have to be a good role model in all

aspects, such as appropriate behaviour, making good decisions, controlling themselves properly, apologising and admitting their mistakes, respecting others, etc. One subject teacher considered that this might be difficult for new teachers or less experienced teachers, however they have opportunities every day to learn how to be a good role model for children:

> *"...The more teachers learn from their mistakes, the more they will see how to behave appropriately..."* [Deputy head teacher 1]

However, some teacher interviewees stated that it is really hard to demonstrate appropriate behaviour for children all the time, particularly when they are out of control, even though they are aware and see the importance of this role.

> *"...It is easy to say that I'm a good model for the children, but it is a particularly difficult thing to do. I can't control myself to behave well all the time, especially in controlling my temper when children don't obey me... "*[Teacher 20]

(3) Guidance and support

The head teacher and two deputy head teachers stated that the point of teaching self-discipline is to guide and support children to behave in socially acceptable ways, and that it was not about controlling children's behaviour by punishing them or forcing them to obey teachers.

> *"…Many teachers misunderstand that teaching self-discipline is to control their behaviour to do good things all the time…"* [Deputy head teacher 2]

The interviewees noted that there are several common-sense strategies for effectively guiding the behaviour of young children. Thus, teachers can guide their preschoolers in many ways, including modelling good behaviour, encouraging and supporting good behaviour, and setting consistent limits. Moreover, guiding self-discipline normally involves letting children know what actions are not acceptable and what

behaviours are expected and then helping children to understand why certain behaviours are unacceptable whilst other behaviours are acceptable.

> *"…Letting children know about what actions are acceptable and unacceptable, it is an important thing for teachers to do. And they should explain to children the direct and simple reasons why they should behave like that…"* [Deputy head teacher 3]

Some groups of children were considered to need extra support and guidance from their teachers. For example, children who have delayed development and children with special needs require more guidance and more support than other children. Thus, it may take time to understand some children's unique needs with regard to discipline. Finally, teachers begin to understand how to set boundaries for and support the needs of those children.

> *"… To discipline children with special needs, I need to put more patience into teaching them self-discipline. Initially, I thought it was so hard for me to deal with…I put a lot of effort and took more time to discipline them. Eventually, I have been able to understand their needs and how to support them…"* [Teacher 24]

Supporting appropriate behaviour of children was also noted to be important. The respondents suggested that children with desirable behaviours should be supported because they can make sure that their behaviours are acceptable. They are then likely to repeat those behaviours.

> *"...Teachers have to support their children whenever they behave well; this is something they have never done before..."* [Teacher 16]

Summary of theme 5

The majority of interviewees mentioned that it would be necessary to help children enhance self-discipline starting from when they are younger (2-3 years old) because self-

discipline is a crucial life skill for everyone. Some interviewees mentioned that children who learn to be self-disciplined at an early age are more likely to become independent and successful later in life. At school, teachers play important roles to promote children self-discipline skills. There are three main teacher's roles which were suggested by the interviewees: (1) reinforcement of both negative and positive behaviours, (2) being a role model, and (3) giving advice and encouraging desirable behaviours. Furthermore, they also stated that teachers should understand child development precisely and know the basic methods used to promote children self-discipline and techniques to deal with the behaviour problems in their classes.

Additionally, the majority of teacher interviewees identified that non-collaboration with parents and having a child with special needs in the class are both significant potential barriers affecting the enhancement of self-discipline for children at school. At the first interview before attending the programme, all teachers reported the self-discipline behavioural problems in their classes. It could be grouped into 4 common problem areas: (1) some children did not concentrate or pay attention when teacher was teaching, (2) some children did not follow the classroom rules or regulations of activities, (3) some children did not care about others' feelings, and (4) some children lacked problem solving skills. After the programme, most teacher interviewees stated that they had used the techniques or the methods gained from joining the programme. As a result, the problems as reported above appear to have been ameliorated.

4.4 Summary of this chapter

The findings of the main study are divided into 5 themes; it could be concluded that theme 1 is the programme's effectiveness which was investigated by teacher interviews. The findings showed that the programme was very effective in improving teacher's knowledge and behaviour in enhancing preschoolers' self-discipline, which resulted in an improvement in preschoolers' self-discipline behaviour. Most of the teachers, particularly new teachers, gained benefits from the programme, such as improving their work competence. Moreover, they were satisfied with the programme in relation to four criteria including: place, activities, schedule, and facilities.

Theme 2 is the teachers' knowledge in promoting children's self-discipline which was also investigated by questionnaire. The findings showed that before the programme

teachers responded that the techniques they used to deal with behavioural patterns were negative reinforcements. However, after the programme they were noted to have changed their techniques in order to guide and support children towards desirable behaviours.

Theme 3 is the teachers' behaviour in promoting children's self-discipline. It was investigated by three tools: the behaviour checklists, the semi-structured observations and the classroom observations. The findings illustrated that the teachers' behaviours were in contrast to the findings in the interview and the questionnaire, about the understanding of teachers' roles and the methods used to promote preschoolers' self-discipline. After attending the programme, most teachers were noted to have significantly changed their behaviour in several aspects in order to promote children's self-discipline.

Theme 4 focuses on the preschoolers' self-discipline behaviour. It was investigated by three tools: behaviour checklists, semi-structured observations and classroom observations. The findings presented that most children behaved inappropriately before the programme. The children in different age groups had different misbehaviours. After the programme, there was considerable evidence from the three tools; findings from the behaviour checklist, the observation and the classroom observation could insist that most children's behaviour has been greatly improved.

Theme 5 is the general views of self-discipline which was investigated by interviews. The findings confirmed that self-discipline skills are considered by the respondents to be highly important skills for children to acquire. Respondents considered there to be several disadvantages of lack of self-discipline in childhood and that therefore children should be taught self-discipline skills at an early age. The majority of teacher interviewees indicated that there are two crucial obstacles to promoting self-discipline, including non-cooperation between parents and teachers and problems of addressing the needs of children with special needs in the class. The interviewees again mentioned that two kinds of knowledge in promoting preschoolers' self-discipline are required: basic methods and techniques dealing with children's behaviour problems; and child development, which the teacher should already have more knowledge about. The teachers' roles in promoting preschoolers' self-discipline were observed to include giving reinforcement to appropriate behaviours and misbehaviours, setting a good example, giving guidance and being supportive. Finally, all teacher interviewees reported self-

discipline problems of children in their classes prior to the programme but noted that that those problems had been resolved, reduced or ameliorated after the programme.

The next chapter will draw on the main findings from the data outlined above in order to further discuss and analyse the outcomes from the study in relation to previous research findings, as outlined in the literature review section of this submission.

Chapter 5
Data analysis

Introduction

The chapter will analyse the findings derived from the five research tools employed in the study, which included: interviews, questionnaires, behaviour checklists of teachers and preschoolers, observations of teachers and preschoolers, and classroom observations. It will also draw on the literature outlined earlier in this submission in order to place the data into the wider framework of research.

The data is analysed according to four main themes, which are relevant to the themes in the data presentation chapter and to the objectives of the research. The sub-structure of this chapter addresses the following issues:

- effectiveness of the programme
- teachers' knowledge in promoting preschoolers' self-discipline behaviour
- teachers' behaviour in promoting preschoolers' self-discipline behaviour
- preschoolers' self-discipline behaviour

5.1 Theme 1: The effectiveness of the programme

The main research objective was to develop the teacher-training programme in order to improve teachers' knowledge and behaviour in promoting preschoolers' self-discipline and also to improve preschoolers' self-discipline behaviours. Therefore, the first purpose of the research was to examine the effectiveness of the teacher-training programme regarding promoting preschoolers' self-discipline by using the SECI model. The programme was developed in such a way as to apply the processes within the SECI model developed by Nonaka and Takeuchi (1995) to train the preschool teachers.

As revealed in the previopus chapters, based on the data collected from the semi-structured interviews, the results of the programme evaluation showed that the programme was effective for the teachers in helping them to promote preschoolers' self-discipline. The majority of teachers were satisfied with the overall quality of the programme. Some teachers stated that they found the programme very functional because they had not only gained useful knowledge, but had also valuable experience by participating in a

programme based on the SECI model. In this sense the research both confirmed and extended previous findings about the applicability of the SECI model. The rest of this chapter will proceed to examine the specific and original findings of this study in relation to this valuable but still comparatively new model of professional learning.

All activities based on SECI model

All the activities of the programme were drawn from a review of the research literature on the SECI model, which focused on the stages inherent in the model, including: socialisation, externalisation, combination, and internalisation. According to the SECI model, there are two different types of human knowledge: tacit knowledge and explicit knowledge (Lee and Kelkar, 2011; Nonaka, 1994) proposed that 'tacit knowledge is hard to formalise, codify or communicate, whereas explicit knowledge is codified, systematic knowledge that can be transmitted in formal language' (p: 229). According to Nonaka and Konno (1998: 42), the SECI model serves as a conduit for knowledge creation and, although the concepts within the model are quite abstract, they can apply to practice as appropriate. When considering each stage of the SECI model in the programme under scrutiny in this study the following was found in relation to the main phases of the overall model:

Phase 1: Socialisation – This phase was designed to transform teachers' knowledge from tacit knowledge to tacit knowledge throughout the sharing experience activity. The purpose of the sharing experience activity was for teachers to share their experience and skills with colleagues. This was similar to the study of Yang and Pan (2011: 78), in which they identified that the first process of the SECI model is socialisation which is transformation from explicit knowledge to tacit knowledge by sharing methods. Nonaka and Konno (1998: 42-43) stated that socialisation is the process of developing new knowledge through shared personal experiences directly to colleagues.

The majority of teachers responded that the 'sharing experience activity' was their favourite activity because they had an opportunity to learn successful techniques from others to deal with the behavioural problems they were faced with from the children in their care. It is posited that this may be because the teachers were motivated to learn when they could see the need to acquire knowledge to address their problems or situations. This finding supports the work of Knowles, Swanson and Holton (2011), who noted that in the

foundations of adult learning: ‘adults are motivated to learn since they experience need and interests that learning will satisfy’ (p: 39).

We may also theorise that another reason why the ‘sharing experience activity’ was a favourite activity is because it could be easily implemented in a short period of time as well as demonstrating how to use these techniques in the classrooms in a step-by-step format, using clear language with real-life examples.

Phase 2: Externalisation – This phase was meant to transform teachers’ knowledge from tacit knowledge to explicit knowledge through the brainstorming activity. Nonaka and Toyama (2007) explained the second phase of the SECI model that ‘tacit knowledge held by an individual is externalised into explicit knowledge to be shared and synthesised within the organisation, and even beyond’ (p: 17).

In this phase the teachers were encouraged to express their opinions or ideas in the brainstorming activity. Moreover, the teachers in each group were requested to present the ideas of their group after the brainstorming activity. The model asserts that there is a likelihood that when the teachers gave their ideas in order to brainstorm with co-workers, their tacit knowledge would be transformed into explicit knowledge. This was supported by the work of Nonaka and Konno (1998: 43) themselves, when they stated that during the externalisation stage an individual commits to the group and thus becomes one with the group. The sum of the individuals' intentions and ideas fuse and become integrated with the group. It may be achieved by writing an idea, through debates or self-reflections.

Phase 3: Combination – This phase was to transform teachers’ knowledge from explicit knowledge to new explicit knowledge through the leaflet-making activity. According to Nonaka and Takeuchi (1995), combination provides a form of knowledge repository that serves as a resource for others to continue the knowledge management cycle.

By making the leaflet, the teachers could transfer explicit knowledge gained from the group discussion in the brainstorming activity to the leaflets (explicit knowledge) to share with other teachers. This supported the study of Yang and Pan (2011) and Nonaka, Toyama and Nagata (2000). They pointed out that combination phase refers to the ability to transform explicit knowledge into systematic knowledge which was easier to share among the members of the organisation. This situation was consistent with the work of Nonaka and Konno (1998), who explained that in practice, the combination phase relied

on three processes. Firstly, it involved collecting explicit knowledge from inside or outside the school and then combining such data. Secondly, the dissemination of explicit knowledge was based on the process of transferring this form of knowledge directly by using presentations or meetings where new knowledge is spread among the organisational members. Thirdly, the editing or processing of explicit knowledge made it more usable thus emphasising the importance of dissemination strategies in documents such as reports and leaflets (Nonaka and Konno, 1998: 45). Thus, through the making leaflet activity, the teachers were able to organise concepts presented to them into their knowledge systems and share these with other teachers in the school.

Phase 4: Internalisation – This phase was to transform teachers' knowledge from explicit knowledge into tacit knowledge. According to Boland and Tenkasi (1995), they stated that it was the evaluation and integration of knowledge into regular work processes. Thus, in the last phase of the SECI model all teachers analysed their knowledge gained from the programme to use in class in order to promote their preschoolers' self-discipline or to deal with the self-discipline problems in their class.

The majority of teachers commented that they could use the techniques and approaches gained from attending the programme to use with their class effectively. Even though some techniques did not work with their preschoolers, they had gained ideas to deal with self-discipline problems or to promote their preschoolers' self-discipline in the daily routine. This evidence confirms the work of Nonaka and Konno (1998), who mentioned that 'the process of embodying unfamiliar, explicit knowledge into work routines so that it becomes a part of daily custom' (p: 45).

Some teachers also mentioned that they also began to discover suitable techniques by themselves when they were applying the techniques gained from attending the programme with their class. This finding also confirmed the study of Nonaka, Toyama and Byosiere (2001: 497), who identified that 'internalisation is the process of embodying explicit knowledge to tacit knowledge'. This is closely related to what we might colloquially term 'learning-by-doing'. In this way internalised knowledge is used to broaden, extend, and reframe organisational members' tacit knowledge (Nonaka, Toyama and Konno 2001).

It can be concluded that, of the four phases of the SECI model used in the programme, the first phase was socialisation, a process by which tacit knowledge was

created through the exchange of experiences and technical skills among the teachers; followed by externalisation, which transformed tacit knowledge into explicit knowledge. This was accomplished through a process of discussion and brainstorming. The third phase was combination, a process through which explicit knowledge was converted into structured form via leaflets, and it was then disseminated among the preschool teachers of the school. The final phase was internalisation, in which individual teachers converted explicit knowledge into tacit knowledge through practice in the daily routine.

The findings showed that four stages of the SECI model were able to work well with the teacher-training programme in promoting preschoolers' self-discipline. Teacher-training in Thailand has generally been planned, implemented, and managed by the Thai MOE and focused on delivering new knowledge and skills to teachers by lecture-based training. University professors were usually brought into the teacher training to give lectures and transmit their expert knowledge. Teachers, therefore, were expected to acquire new knowledge, apply it in their classrooms, and improve their teaching, together with students' outcome. However, most teachers were unsatisfied with the traditional in-service training because they found that it was not useful in improving their knowledge and practice.

The programme was designed by integration of the SECI model; it was different from traditional training programmes because it was emphasised collective learning of teachers and practice in real situations. Moreover, it was similar to professional learning community meetings in which the teachers shared personal knowledge and experience and learnt together. As Louis, Marks and Kruse (1996) proposed five dimensions of the professional learning community, which include: (1) supportive and shared leadership, (2) shared values and vision, (3) collective learning and application, (4) supportive conditions, and (5) shared personal practice.

In the case of teachers in Thailand, because of long-time tradition of working in self-contained classrooms isolated from peer interaction during the workday, most of them were not accustomed to the style of collective learning or team learning. They might waste the most valuable learning resources – their peers. The programme provided collective learning and collaboratively sought solutions for the teachers. The teachers had an opportunity to share their problems and consult other teachers. In particular, when they faced self-discipline problems in the classrooms, they discussed their problems with other

teachers and collaboratively sought solutions. It was found such collaborative problem solving and collective learning were the most helpful for teacher professional learning and development (Seo, 2013: 348).

The programme provided a rich learning environment where the teachers with broad range of experience and expertise could share, discuss, and improve their professional knowledge and practice and thus offer a new approach to training for teachers which goes beyond the traditional training model. Nonetheless, a note of caution is required here; we should be careful about the amplitude of claims because the findings here are in contrast to the study of Tammets (2012), who analysed the stages of the SECI model. The results illustrated that socialisation and externalisation stages were more performed by the members of the organisation, whereas internalisation and combination phases were less practiced. Equally, Bratianu's (2010) study argued that although the four phases of the SECI model do enable the conversion processes to some extent, only externalisation and internalisation are truly conversions, whereas socialisation and combination are only processes of knowledge transfer.

Advantages of attending the programme

The majority of respondents highlighted that there were several advantages of attending the programme and indicated that they had gained new skills and knowledge as a result of participating in the programme. They further noted that they could then apply those new skills to promoting their preschoolers' self-discipline and, as a result, most of the preschoolers in their care had improved in their self-discipline behaviour.

Although the programme was focused on training teachers in promoting in preschoolers' self-discipline, the evidence seems to support that the programme could also serve to enhance relationships among teachers. Notably, all of the respondents who were newly qualified teachers stated that they found the programme very useful because they had gained valuable encouragement from their colleagues to deal with self-discipline problems. We may conjecture with some justification that this may be because the teachers who attended the programme developed good relationships with other teachers on the programme. If this is correct then this findings support the evidence of the study by Bencsik (2009), whose work confirmed that it is very important to have good relationships with colleagues for effective teamwork to be possible.

In addition, it is clear that the programme provided a chance for the teachers involved to improve their teamwork skills and competences by taking part in group work activities. The evidence for this has been explored in the previous chapter where it was shown that some teachers reported that the programme was gainful and provided them with many benefits, particularly in developing their teamwork competences, which they did not initially expect to get from attending the programme. No doubt this was a key factor leading to the success of the programme. This finding supported the results of Bencsik's (2009: 10) study, which illustrated that if a team is to be successful, members have to work not only in close proximity to each other but also work together to achieve common goals. We may also cite the work of Nonaka, Toyama and Byosiere (2001), who also believed that effective teamwork contributes to the realisation of successful knowledge management and the development of a learning organisation.

Satisfaction with the programme

In the previous chapter the evidence for the effectiveness of the programme also found that the teachers were happy with the content, schedule, facilities, and the classroom setting where their activities took place. They commented that the content of the programme was useful, the schedule was flexible, the facilities provided were in good condition, and the classroom setting was suitable for all activities. This finding is similar to other studies, such as those by Giangreco et al. (2010) and De Meuse et al. (2007), all of which revealed that successful learning on such programme is facilitated when the work is structured appropriately and is carried out in appropriate surroundings with the requisite resources.

As indicated earlier, the teachers consistently felt that they did not receive sufficient training in how to promote self-discipline for young children. Thus, the teachers commented on the utility and relevance of the programme, noting that they felt that it helped them to manage the children in their classes better and also to resolve many of the most common of the behavioural issues of preschoolers in their classroom settings. With these responses in mind it is interesting to note that adult learning theories indicate that adults are motivated to learn something they value (Knowles, Swanson and Holton, 2011: 198). A notion that was supported by the study of Perels et al., (2009: 325), who identified

that the contents of programmes should be chosen according to the situations the participants have to face.

Furthermore, most teachers were satisfied with the schedule of the programme. They commented that all activities were held on a working day after lunchtime, which they considered a perfect time. The critical nature of the timing of such learning opportunities can be noted in the literature, and we may cite the study of Pineda et al. (2011), whose research evaluated teachers' continuing training in the early childhood education sector. The results of their study found that the lack of flexibility in the training timetable was one of problems for early childhood education teaching staff, which caused them problems in attending continuing training The results also revealed that teacher respondents preferred courses which were offered in working hours rather than during weekends. Equally, MacDonald and Stodel (2004: 851) stated that having release time allows participants to allocate more time to the learning programme during work hours and is likely to make the learning experience more enjoyable and fruitful.

It is considered that flexibility is one of the key factors for teacher learning, and we may note that the majority of teachers indicated that they were happy when they had an opportunity to select when to join the activities on the day that they were free. This was also the case in the study conducted by MacDonald and Stodel (2004), who confirmed that 'to be successful the learning program must be flexible enough to allow the learners to engage in the learning process when they can' (p: 851).

Some teachers noted that spending one hour for each activity was an appropriate period of time because they could pay attention and carry out the activities without hurrying or beginning to find the work tedious. However, this finding stood in contrast to the study of MacDonald and Stodel (2004: 851), who indicated that the teacher respondents in their study agreed that 30 minutes would be the optimal length of time for each learning session during work hours. One may conjecture here whether this is a culturally specific finding.

It is clearly a truism that facilities in the training programme should be well organised (Wati, 2011) and the majority of teachers were satisfied with the facilities which were provided. They mentioned that stationary, materials, electronic equipment and technological items were provided in sufficient quantities. This finding supported the result of Cengizhan's study (2011), which showed that education materials and

technologies were used more frequently for informative purposes in theoretical courses and as a supportive tool in applied training courses. Similarly, the study of Oral (2008) showed that education technologies were used more as supportive tools for education. However, this finding was in contrast to the study of Wati (2011), the results of whose work revealed that some materials given in the training programme were not useful for the teachers in developing their effectiveness as English teachers in schools. This we may aver that the required equipment and materials may vary according to such key issues as sector, phase and subject.

In considering the meeting room for doing some of the activities, nearly two thirds of teachers commented that the meeting room setting was suitable, comfortable and large enough for all of the activities. Equally, the majority pointed out that the room temperature was perfect and that this was helpful in their learning. Thus it can be seen that learning environment had an impact on the teacher learners in the same way that Rogers (1996: 177) identified that adult learners will learn much better if the learning environment is well organised, including the room, furniture, lighting and heating.

It can be concluded that the overall effectiveness of the programme was positive. Most teachers had acquired useful knowledge from attending the programme. They could then apply it to solve self-discipline problems in their class and to promote their preschoolers' self-discipline. Moreover, the large majority of respondents' perceptions towards the effectiveness of the training programme in terms of satisfaction were positive, which suggests strongly that programme should be considered for wider use.

5.2 Theme 2: The teacher's knowledge in promoting preschooler's self-discipline

In Eastern epistemology, Nonaka and Takeuchi (1995) identified knowledge as 'a meaningful set of information that constitutes a justified true belief and/or an embodied technical skill' (p: 85). In terms of knowledge in this study, it means practical knowledge to promote preschoolers' self-discipline, which includes: child development, discipline strategies, discipline techniques based on preschooler's developmental stage, and classroom management. This content knowledge may help teachers to encourage individual preschoolers to be more self-discipline effective.

The second research objective was to improve teachers' knowledge in relation to promoting preschoolers' self-discipline. In respect to the effectiveness of the programme

on teachers' knowledge relating to promoting preschoolers' self-discipline, the evidence from the questionnaires showed that after the programme the teachers chose more positive discipline techniques to respond to self-discipline challenges than before the programme. It may be down to the fact that the teachers had gained more knowledge and understanding in promoting self-discipline as well as more discipline techniques to respond to their preschoolers properly.

Before the programme, it was notable that most teachers chose more negative reinforcements than positive reinforcements to respond preschoolers' misbehaviours, including verbal punishments, using negative consequences and ignoring misbehaviours; these types of reinforcement are viewed as negative discipline approaches (UNESCO, 2006b). Durrant (2010) identified that:

> 'To teach self-discipline, many teachers were not trained in classroom management, conflict resolution or child development. As a result, they often relied on their own early school experiences, or local ideas of good teaching, to guide us. In some cases, those experiences and ideas are positive and inspiring ones. But many times they are negative or even violent ones' (p: 10).

This finding was concerning since it stood in stark contrast to the study of Mokhele (2006) which noted that 'in promoting discipline in the classroom teachers had to remove other forms of punishment harmful to students, including both physical punishment and emotional castigation; neither of which were felt to have a place in the classroom' (p: 150). The UNESCO (2006b) has also noted that 'punishment focusing on the misbehaviour might do little or nothing to help a child behave better in the future' (p: 11). If we reflect on the reasons why teachers tended to use such negative reinforcement we may conjecture that this may be because teachers misunderstand the concept of self-discipline or that they see external discipline as more effective or appropriate either because of personal experience, training or factors related to school climate or broader cultural expectation. Indeed, the data suggest that they certainly believed that discipline was about controlling preschoolers and punishment was considered as a good method to deal with misbehaviours because it could and would stop the misbehaviour at that moment

in time. However, somewhat counter-intuitively, it is also clear that at least some of the teachers felt that such negative approaches would actually enhance self-discipline.

On the other hand, after the programme there was evidence that the teachers had begun to select more positive reinforcements to address self-discipline problems such as explaining consequences, praising and rewarding desirable behaviour, ignoring mild-misbehaviour, explaining simple reasons for changing behaviour, using time-outs etc. These approaches were consistent with what we may see as 'best-practice' in developing self-discipline in previous studies (see, for instance, Pepper and Henry, 2001; Mokhele, 2006; Durrant, 2010). In these studies Mokhele (2006: 150) stated that positive, constructive discipline should promote the development of self-discipline whilst Pepper and Henry (2001: 267) noted that the use of consequences was one of the most important techniques for improving young children's self-discipline.

Crucially, the findings from the interviews undertaken after attending the programme illustrated that most teachers were thinking of preschooler development as an ongoing and open-ended process. The importance of this lies in the fact that it would be necessary for teachers to provide suitable techniques that were appropriate to preschoolers' stage of development in order to reach long-term goals of self-discipline. According to Durrant (2010), when teachers understand that preschoolers' behaviours reflect their stage of development, they are likely to respond with explanations, reassurance and guidance. These responses strengthen preschoolers' sense of competence, build their self-discipline and teach them problem-solving skills (Durrant, 2010: 96).

It can thus be concluded that the teachers had improved their knowledge and understanding in promoting preschoolers' self-discipline after the programme. This finding was supported by the data from interviews since respondents commented that they had acquired useful knowledge, techniques and more understanding from attending the programme. It is pleasing to find that these findings are also in line with the findings of previous studies (Rae, Mckenzie and Murray, 2011; McKee and Dillenburger, 2012; Wati, 2011), which also found that teachers demonstrated gains in knowledgeable and understanding following the completion of a similar training programme.

The researcher posits that the improvement of teachers' knowledge regarding to promoting preschoolers' self-discipline resulted from several factors. First of all, the results in this study showed that the designed training programme based on the integration

of the SECI model was effective in improving the teachers' knowledge and understanding. This study applied specific concepts of the SECI model to the activities of the programme. Over two thirds of the teacher interviewees mentioned that the two activities: sharing experience and making leaflets activities, enabled them to gain more knowledge in promoting self-discipline and new discipline techniques the most.

To begin with the sharing experience activity in the socialisation phase, the teachers had obtained new knowledge, techniques and methods to promote preschoolers' self-discipline through the sharing experience activity. The activity allowed the teachers to consult their self-discipline problems in classrooms with other teachers and then found out the solutions. This situation was based on the study of Brown and Duguid (2001) who believed the ways of obtaining knowledge in schools were for teachers to construct tacit knowledge by imitating, observing, or chatting in a social environment. Equally, Baran and Cogiltay (2006) note that 'socialisation had a critical role to obtain tacit knowledge' (p: 14).

Additionally, some teachers pointed out that by sharing experiences they had obtained techniques, which could be implemented in a short period of time as well as demonstrating how to use these techniques in the classrooms in a step-by-step format, using clear language and real-life examples. Therefore, it was thought that these specific characteristics of the programme contributed to the increased knowledge and understanding about how to deal with self-discipline problems and how to teach self-discipline to young children. Snyder et al. (2011) believed that 'since interacting with colleagues also offered the teachers the opportunity to reflect on their experiences and to see how strategies were effectively implemented in other classrooms' (p: 339).

This activity was especially beneficial for the first-year beginner teachers who had not yet developed contacts with other preschool teachers and who lacked experience. Crucially, they felt that it was helpful to know that they were not the only teacher experiencing those challenges. However, it seems equally the case that experienced teachers gained at least some benefit from the programme since what was even more crucial to increasing teacher knowledge was interacting with colleagues who have similar experiences (Bagdi and Vacca, 2005).

In addition, the teachers had obtained more knowledge throughout the making leaflets activity in the combination phase. This is because during producing the leaflets,

the teachers had to find out more information and academic knowledge from books, journals and particularly from websites to support the ideas that were contained in the leaflets. Moreover, the teachers also gained more knowledge from the leaflets that had been shared from the other groups. This might help them to understand more about the discipline techniques and how to use them suitably.

In the internalisation phase, the teachers had opportunities for the practice of dealing with self-discipline problems in their classrooms and promoting preschoolers' self-discipline. This phase allowed the teachers to gradually internalise their professional knowledge by practicing techniques and knowledge they had gained into their classrooms and they could acquire new tacit knowledge from doing this. Nonaka and Takeuchi (1995) stated that 'through internalisation phase, the new piece of knowledge became an integral part of their individual and team knowledge' (p: 45).

These activities in the programme appeared to considerably increase teachers' knowledge and understanding in promoting preschoolers' self-discipline. Similarly, the findings of Yeh, Huang and Yeh's (2011) study, they found that a well-designed programme that integrates the SECI model and blended learning could improve pre-service teachers' professional knowledge and personal teaching efficacy pertaining to the instruction of creativity. In addition, Cartelli (2007) also found that integrating the SECI model with information and communication technology (ICT) could improve student learning, knowledge construction, and meaningful learning.

The second factor is that there were very limited teacher training programmes in promoting preschoolers' self-discipline available to the respondents prior to the intervention reported in this study. As stated earlier, most teachers had limited or no opportunities to attend professional development programmess focusing on self-discipline for young children and therefore had no knowledge and experience related to the teaching of these skills. This seems to support previous studies indicating that preschool teachers lack the necessary knowledge for promoting preschools' self-discipline, despite the fact that Wayson (2001: 228), stated that teaching self-discipline required the highest levels of pedagogical skills and a grasp of the full range of teaching-learning processes.

The teachers also mentioned that from attending the programme, they desired to learn how to teach basic self-discipline skills, which were necessary for success in every classroom. After having been informed about self-discipline via the programme for the

first time, the teachers discovered the importance of promoting self-discipline to the preschoolers. By offering them a well-designed training programme (Gulec-Aslan, 2013: 2242), they might improve knowledge and skill in promoting preschoolers' self-discipline in their class.

Finally, the teachers were trained throughout a nine-week period in the topic of self-discipline. This might help teachers obtain more knowledge and understanding in promoting preschoolers' self-discipline. This result was consistent with previous research findings, which showed that short training sessions could improve basic knowledge about intellectual disability (McKenzie et al., 2000). Teachers knowledge at a three month follow-up was also significantly better than a day or short-term training, consistent with studies that have pointed out those training programmes improve knowledge in the longer term (McKenzie et al., 2000; Allen et al., 1997). However, we should note that this was in contrast to the study of Cullen (2000), which indicated that the increases in knowledge due to training might only be temporary.

Overall, the results indicated that the programme was successful in increasing knowledge of promoting preschoolers' self-discipline. While knowledge changes were an important element of the programme's effectiveness, the more meaningful outcome in the long terms was changes in teacher behaviour, which might promote preschoolers' self-discipline. This will be discussed in the next theme.

5.3 Theme 3: The teachers' behaviour in promoting preschooler's self-discipline

The third research objective was to improve teachers' behaviour in promoting preschoolers' self-discipline. By comparing the pre-test and post-test on the teachers' behaviour gained from the teacher behaviour checklists, the results showed that there was a significant difference in the overall scores of teachers' behaviour which reveals that teachers' behaviour in promoting preschoolers' self-discipline had actually changed. This was supported by the data gained from the semi-structured observations, which confirmed that the teachers had improved their behaviour by increasing the frequency of positive behaviour and decreasing the frequency of negative behaviour. This was consistent with previous research indicating that the skills targeted in teacher training result in changes in teachers' behaviour in the classroom (Beauchaine, Webster-Stratton and Reid, 2005). In addition, the study of Snyder et al. (2011) indicated that teachers who never attend

training programme were observed to engage in more criticism, anger and negative control. These findings were similar to previous research findings indicating teachers might become increasingly negative over the school year in response to continuing challenging child behaviour and ongoing classroom demands (Raver, Li-Grining and Metzger, 2009).

When considering each category of teacher behaviour, the results illustrated that there were differences in teachers' behaviour between before and after the programme in all categories: modelling good manners, creating an appropriate classroom environment and responding to children properly.

(1) Modelling good manner

All of the items in the category of modelling good manners asked about the teachers' behaviour in modelling good behaviour for preschoolers. The mean score for this category before the programme was 0.85 and standard deviation was 0.31. It increased to 1.71 and standard deviation was 0.23 after the programme. This category thus showed significant differences in scores pre- and post- intervention. This indicated that the teachers' behaviour as good role models had changed positively after the programme by increasing the rate of modelling appropriate behaviour. The importance of this cannot be overstated since, according to RAPCAN (2008: 14), setting a good example was one of the key practices that helped teachers implement positive discipline effectively because young children learn by observing the adults around them. Thus, teachers should model the positive behaviour that they expected from children such as kindness, patience and tolerance (RAPCAN, 2008). This is reinforced by the work of Miller, Dunn and Currell (2005), which stated that modelling was the most important technique to promote self-discipline for preschool children and that, with modelling, students not only observe the correct or appropriate skills, but they also have the opportunity to implement the desired behaviour without fear of being excluded and making mistakes. Equally, Gresham (1998) has indicated that the most effective social skills teaching techniques were modelling and rehearsing.

However, when considering all items of this category, there were a few behaviours in the teachers that had slightly changed between before and after the programme. For example, in relation to the item 'saying sorry when you upset children', after attending the

programme, three quarters of the teachers indicated that they sometimes said sorry to their preschoolers. This is significant in the general sense in that research in Thailand has exposed strongly that older people rarely say sorry to younger people, even where they have upset younger people or have transgressed in some way. This is found to be particularly true of teachers or parents who rarely say sorry to children (Chaloeysap, 2007). The researcher did not find this a feature in the literature of Western literature on the same topic and therefore one can aver that this is a feature of Thai culture. Thus, the fact that teachers in the study indicated that they had begun to model such behaviour is extremely rewarding.

(2) Creating an appropriate classroom environment

All items in the category of creating appropriate classroom environment asked about creating a classroom environment that included environments that were appropriate in both the social and physical spheres. The mean score for this category before the programme was 1.32 and standard deviation was 0.19. It increased to 1.89 and standard deviation was 0.11 after the programme. This indicated that the classroom environment under the care of the teachers in the study had improved significantly. This was confirmed by the findings from the semi-structured observations, which also revealed that classroom environments had changed for the better in these critical areas after the programme. For example, it was noted that many classrooms had appropriate materials, including toys, for child-centred activities. RAPCAN (2008:5) noted that creating appropriate environment was one of the key elements needed to foster self-discipline for children. Similarly, the study by Pavri and Monda-Amaya (2000) noted that teachers were responsible for creating environments in which students learn the skills and strategies needed for solving social problems, resolving conflicts, developing friendships, learning to work cooperatively with others, and enhancing self-discipline.

Five out of ten items in this category were designed to show what teachers often did after attending the programme. For example, one item addressed ‘establishing clear rules that children can understand’, and it is notable that all teachers rated that they often established the classroom rules clearly. This was confirmed by the semi-structured observations that the classroom rules were more specific and clearer than before. Moreover, the majority of teachers involved proschoolers in participating in creating

classroom rules. UNESCO (2006b: 72) highlighted that teachers must involve students in developing classroom rules.

Another interesting example is the item of 'making a clear daily schedule' since all teachers often made a clear daily schedule after attending the programme. The issue of the importance of developing a clear daily schedule has been addressed by UNESCO (2006b), who noted that 'when teachers developed classroom routines, the opportunity for misbehaviour was lessened because students knew what were expected of them and what they were expected to do' (p: 70).

However, by contrast, the item relating to 'allowing children to think and solve problems themselves' revealed only slight changes in behaviour. Nonetheless, this was in line with the findings from the interviews, which found that the teachers thought that preschoolers were too young to think and solve problems themselves. This is a matter for concern and is in contrast to earlier studies such as those by Caprara et al. (2000), who indicated that the age between 5-6 was critical for gaining problem solving skills and Dereli-İman (2014) who stated that one of the aims of systematic education given in preschool institutions was to help children gain social skills, psycho-social behaviour and problem solving skills in daily life.

(3) Responding to children properly

All the items in the category of responding to children properly asked about the methods that teachers used to respond to preschoolers and related to both negative and positive methods in the teacher behaviour checklist. The mean score for this category before the programme was 1.28 and standard the deviation was 0.18. This increased to 1.58 and standard the deviation was 0.14 after the programme, which revealed that teachers had changed their responses by increasing the use of positive methods and decreasing the use of negative methods. This was confirmed by the findings from semi-structured observations which showed that indeed, teachers used less harsh, less negative verbal discipline, more praise and incentives, more appropriate discipline and more positive verbal discipline.

However, there was a slight change in the item of 'rewarding a child's good behaviour'. Two thirds of teachers sometimes rewarded good behaviour before and after the programme. It was seen that the teachers in this study used limited rewards. Even if

the importance of using rewards was taught in the programme, the number of rewards teachers used did not change significantly. This was in contrast to the study of Lane, Wehby and Barton-Arwood, (2005) and Swinson and Harrop (2001), who believed that rewarding might be effective in shaping the behaviours of the student, in encouraging students to display these behaviours more often, and in decreasing or preventing problem behaviours. Similarly, Guner (2012: 160) stated that undesirable behaviours in classrooms could be decreased or prevented by recognising and rewarding desirable student behaviours.

In data gained from the interviews after the programme, the teachers commented that they had to use several techniques to promote self-discipline for their preschoolers, even when addressing the needs of children of the same age. This is not surprising since, of course, children are all individuals and no single approach to discipline is likely to be successful with all children (Wolfgang, 2005).

Most teachers also commented that they could not identify which kinds of techniques or methods were best to promote self-discipline, since this depended on the characteristics, background, temperament, and age of each preschooler, and upon the teachers' personality, training and experience. Similarly ,Wolfgang (2005) noted that the type of disciplinary model a teacher used might depend on his or her personality, years of experience in the classroom, or the grade level of children.

In brief, both the statistical and observational data revealed that there were significant changes in teachers' behaviours before and after the programme. However, the semi-structured observations showed that although the majority of teachers had positively changed their behaviour to promote preschoolers' self-discipline, some teachers had changed their observable behaviour only slightly. We may speculate that this might be because changes in teachers' behaviour may take time to emerge or greater input than was available in the limited intervention of the programme on which this research is based was required. For instance, Meadan, Ostrosky and Zaghlawan (2012) note that 'changing behaviour for both adults and children took time and assessing children's behaviour change following teachers' behaviour change typically required extensive time' (p: 89). Equally, Letarte, Normandeau and Allard (2010) stated that 'it is believed that more time may be required before change can be observed on behaviour outcomes' (p: 259). Despite these limitations on outcome it is interesting to consider why those teachers who did

change their behaviours did so. Such change in the teachers' behaviour regarding promoting preschoolers' self-discipline might have resulted from several factors. Firstly, the programme emphasised practical applications of the knowledge gained, particularly in the internalisation stage. It also emphasised teaching techniques used in the classroom. The teachers, therefore, were encouraged to apply their newly learned techniques, approaches and knowledge from the programme in their classes swiftly. This approach is supported by the work of Pinar and Sucuoglu (2013: 2248) who noted the importance of developing training programmes for teachers which provide not only information but also experiences in terms of how to use such techniques and teaching strategies in classrooms (Crow and Snyder, 1998). There is also evidence of previous research showing that teaching techniques used during the course of teacher-training play an important role in the effectiveness of programmes with regard to both teacher and student outcomes (Lerman et al., 2008 and Mitchem and Benyo, 2000).

The successes in the programme may relate to the programme's consistency with the SECI model of knowledge creation as conceptualised by Nonaka and Takeuchi (1995), which emphasises the need for participants to have plenty of opportunities to practice and become more competent in their chosen field of endeavour. Jones, Monsen and Franey (2013: 268) pointed out that teacher training programmes which encouraged teachers to examine their own assumptions and beliefs; engage in practice and problem-solving; and develop their understanding, might be more effective in affecting long-term change in teachers' behaviour (Jones, Monsen and Franey, 2013).

Secondly, the teachers had the motivation to change their behaviour in order to promote preschoolers' self-discipline. This finding was supported by the interviews in that most teachers believed that teachers' behaviour was considered as one of major factors to promote preschoolers' self-discipline behaviour. Moreover, several techniques were proposed in the programme that it was hoped would work well in classrooms, and many teachers reported that they benefitted from applying these techniques in their practice. This in itself is likely to have led to changes in teachers' behaviour. For instance, Bundy's (2004: 43) study stated that other significant factors that influence behaviour change included the beliefs underlying the behaviour; the value of such behaviour; the perceived costs and benefits of changing; the barriers to changing; beliefs about our ability to perform the behaviour change; and not least, the support and reinforcement of others.

Finally, the programme was considered as a long-term training programme when compared with other training programmes in Thailand. Short-term forms of training programme, like one or two-day workshops, continue to be most commonly used in Thailand to support teachers in implementing innovative programmes into classrooms. Such short-term forms of training lack continuity and have no follow-up to enhance outcomes, thus leaving teachers to continue their attempts to make improvements on their own (Gningue, 2003).

In this study, the comparatively lengthy, nine-week nature of the programme can be positively associated with the amount of behaviour change that the teachers displayed (Desimone et al., 2002; Garet et al., 2001). This is also supported by the study of Meadan, Ostrosky and Zaghlawan (2012: 89), who stated that changes in teachers' behaviour following training alone were not evident, suggesting that professional development that included only short individual training sessions was not strong enough to result in a change in behaviour. This was confirmed by the study of Gningue (2003), which compared the effectiveness of long-term and short-term training in selected computing technologies on middle and high school mathematics teachers' attitudes and beliefs. The results showed that long-term training tended to be effective in changing teachers' attitudes and beliefs rather than short-term training; it also revealed that long-term training provided teachers with opportunities for active learning in the use of relevant technology tools in general (Gningue, 2003: 207).

On the other hand, we may note that some research studies revealed different results (Barton-Arwood et al., 2005; Pinar and Sucuoglu, 2013; Schepis et al., 2000). For example, Pinar and Sucuoglu's (2013) study reported that training programmes which last for short periods of time were effective in developing teachers' knowledge of social skills and teaching abilities (p: 2248). Nonetheless, the evidence of this study seems to suggest that longer and more extensive training is required in Thai settings than has previously been the norm and, taken as a whole, we may conclude that a focus on practising solutions to real problems tends to change teacher behaviour more effectively than short, knowledge based and formal programmes. Furthermore, the researcher surmised that improving teachers' behaviour did result in positive changes in preschoolers' self-discipline behaviour and this will be discussed in the next theme.

5.4 Theme 4: Preschoolers' self-discipline behaviour

The effectiveness of the programme was also apparent in the positive changes of preschoolers' self-discipline behaviour. As noted in the last chapter, the preschoolers targeted for observation who were taught by the teachers attending the programme displayed increased rates of positive self-discipline behaviour and reduced rates of negative self-discipline behaviour toward peers and teachers. The teachers were asked to rate preschoolers' self-discipline behaviour in the child behaviour checklists at the beginning and end of the programme. With regard to the comparison of preschoolers' self-discipline behaviour before and after the programme, the results demonstrated that there were significantly different scores of preschoolers' self-discipline behaviour overall and in each category. This meant that there is clear evidence that the programme was successful in improving preschoolers' self-discipline behaviour; a pleasing result, which was also confirmed by the findings obtained from the semi-structured observation. This finding was consistent with the studies of Conroy et al. (2013), and Jennings and Greenberg (2009) which revealed that teachers who attended training programmes with training focused on enhancing teachers' social and emotional competence and well-being could optimally support students' social learning and positive behaviour.

Before the programme, the teachers reported that over half of their preschoolers had some behavioural difficulties that interrupted classes and other preschoolers in the class, such as aggression, disruptiveness, and non-compliance. This finding supported the study of Campbell, Shaw and Gilliom (2000), who stated that behaviour problems, including aggression, acting out, and noncompliance were relatively common in preschoolers. However, the results of the study by Harvey et al., (2009) showed that while approximately half of the children exhibiting behavioural problems in preschool will outgrow them, the other half will continue to have substantial difficulties. Moreover, compared to primary school, preschool offers a flexible, less structured environment where teachers can spend time trying to address children's problematic behaviours (Tichovolsky, Arnold and Baker, 2013: 336). Thus, it was necessary to teach self-discipline to preschool children.

After the programme, the teachers reported that overall preschoolers' self-discipline behaviour in their classes had been improved, and most of the preschoolers who had self-discipline behaviour problems before the programme had changed their behaviour

positively. This might result from the teachers using discipline techniques they gained from the programme in the classrooms. However, there were some preschoolers who showed little to no change in self-discipline behaviour. As discussed in the previous sub-section, we might conjecture that this might be because behavioural problems often take a long time to change due to complexities of behavioural issues. Equally, even nine weeks might be too brief a time to determine meaningful significance when comparing differences of gender, characteristic, and age (Riney and Bullock, 2012). Additionally, this might be explained by the fact that preschoolers' behaviour was not a variable, which was directly addressed by the teacher training. Interestingly in this regard, the results of Lundahl, Risser and Lovejoy's (2006) study outlined that parent training tended to generate smaller effects on children's behaviour than on parental behaviour.

According to Snyder et al. (2011: 344), previous research has demonstrated that teacher training has beneficial effects on teacher and child behaviour in the classroom, but it is difficult to assess whether changes in teacher behaviour mediate the impact of training on changes in child behaviour. The lack of formal tests of mediation might reflect a logical assumption that changes in child behaviour must result from changes in teacher behaviour, because training targets teachers and not children (Snyder et al., 2011). However, in this study there was a format test on changes in preschoolers' behaviour before and after the programme, although all preschoolers were not trained directly. It therefore could be illustrated that the programme had beneficial effects on both teachers' and preschoolers' behaviour.

When considering each category in the total of six categories, the findings gained from the child behaviour checklists illustrated that there were significant changes in the category of empathy. As can be seen in the fact that the total mean score before the programme started was 1.19, with standard deviation being 0.39; whilst after the programme it was 1.74 with a standard deviation of 0.25. This was supported by the findings from semi-structured observation, which also showed that most preschoolers could empathise with others' needs and feelings more significantly after the programme. This was similar to the study of Schwenck et al. (2014: 71) which indicated that processes associated with promoting empathy developed early in childhood, and that this development was already completed by entry into schools.

To improve preschoolers' empathy, the teachers gently guided their preschoolers to encourage empathy by being a kind and empathic role model, describing how others are feeling, and asking open-ended questions. Moreover, the teachers taught empathy through role playing and storytelling. This was consistent with the study of Hunter and Eder (2010: 227), which indicated that storytelling offered complexity and multi-dimensionality to the discussion of ethical issues, and children demonstrated their own interpretations of the context as it applied to their daily lives. Equally, we may note that according to Winston (1999), the use of storytelling could contribute to the cognitive power of these emotions, making particular contributions to moral learning.

On the other hand, there were only slight changes in the category of self-reliance. The preschool teachers rated their preschoolers behaviour in self-reliance before the programme, and the total mean score was 1.57 with standard deviation of 0.31. After the programme the finding were that the total mean score was 1.85 with a standard deviation of 0.19. Of course, this may be because most preschoolers were already showing good self-reliance before the programme and, if this was indeed the case, then the increase in the rating for preschoolers' in terms of self-reliance does not indicate any inadequacy in the programme, and even a slight improvement may indicate the utility and effectiveness of what was learned by the teachers. This finding was supported by the teacher interviews; they commented that most preschoolers had been taught from home to help themselves do things in their routine, such as toileting and eating. Clearly, further research would be required to make any definitive claims in this area. However, we may note that the study of Lizhu and Xiaoyan's (2005) pointed out that 'three to five year old children's independence tends to become increasingly more stable with age' (p: 117). That same study also found that preschoolers' independence varied in different situations and that, in terms of self-reliance, four and five years old preschoolers were distinctly influenced by the difficulty of the task, whereas three year old preschoolers did not show a remarkable difference on this point, as both tasks proved difficult for them to complete (Lizhu and Xiaoyan, 2005).

Thus, the positive changes in the preschoolers' self-discipline behaviour might be attributed to the fact that the teachers became more skilled by attending the programme and then the preschoolers were taught to be more self-disciplined despite the fact that preschoolers' self-discipline behaviour was not variable, which was directly addressed by

the programme. This could be explained further that the teachers used several well-established techniques to respond to both positive and negative behaviour of their preschoolers in order to encourage them to be more self-disciplined. Comparing assertion to other research in the past, the study of Merritt et al. (2012: 155) stated that children who exhibited signs of aggression or showed poor self-discipline in early years had many obstacles to overcome, but positive responses and emotional supports from teachers might be approaches to reduce the prevalence of these problems in the first grade. Similarly, the study of Dinkmeyer and Dreikurs (2000) promoted the idea that children's behaviour could be changed and managed through encouragement, which was a technical skill that could be learned by teachers.

Furthermore, these results might be a result of a supportive environment. In socially supportive environments in which teachers both allowed and encouraged their preschoolers to share ideas and talk to others, preschoolers found more opportunities to help, share, and cooperate (Spivak and Farran, 2012: 635). With multiple opportunities to engage with teachers and peers, preschoolers might begin to understand how to interact with peers as well as see the positive effects of their behaviour; these experiences might positively influence preschoolers' self-discipline behaviour (Staub, 2003).

Moreover, the teachers in the study began to show good behaviour towards their preschoolers by acting as good role models; this situation might be a significant factor in promoting preschoolers' self-discipline. According to social learning theory outlined by Bandura (1977): 'most human behaviour was learned observationally through modelling: from observing others one forms an idea of how new behaviours were performed, and on later occasions this coded information served as a guide for action' (p: 22). Thus, it would be possible the improvements in the self-discipline behaviour of the preschoolers resulted from modelled good behaviour by the teachers since teachers act as role models to young children (The American Academy of Child and Adolescent Psychiatry, 2011).

It can be concluded that improvements in the teachers' knowledge and behaviour may be related to changes in preschoolers' self-discipline behaviour. This finding was consistent with the previous research (Webster-Stratton and Reid, 2008) which indicated that teacher training positively impacts child behaviour in the classroom, and beneficial child effects can be generated by teacher training alone without the addition of parent training or child skills training components. This was supported by the study of Snyder et

al. (2011: 344), which indicated that teacher training positively impacts children's behaviour in the classroom.

Chapter six will present the conclusion of this research including the main aim and research approaches, main findings of the study, professional recommendations, an adapted SECI model for the in-service education, reflections, recommendations for further research, and final conclusion research.

Chapter 6
Conclusion

Introduction

This chapter is in seven parts and will commence with a summary of the main aims and research approaches employed in this study. It will then present the main findings derived from the data that was presented and analysed in the previous chapter by focusing on the key issues that have emerged from the study. Following this, professional recommendations are introduced for the Thai Ministry of Education, Local Administrative Organisations, schools and educators. Importantly, an adapted SECI model for in-service education is then introduced and discussed. The chapter will then progress to reflections on research challenges, and this is then followed by recommendations for further research. Finally, a brief summative conclusion to the chapter and to the study as a whole is presented.

6.1 Summary of main aim and research approaches

The main aim of this study was to develop and evaluate the effectiveness of a teacher-training programme that was developed as part of this research study, which was based on the SECI model of knowledge development and transfer. As has been outlined in some detail, this programme focused on teachers' knowledge and behaviour in promoting preschoolers' self-discipline in one Thai school in the hope that the findings from such a study might elucidate this important topic. The evaluation itself focused on what knowledge, if any, was acquired by teachers and on the perceived behaviour changes in both teachers and pupils after the programme of intervention.

The study was conducted at one nursery school and took the form of a case study. The total sample consisted 555 participants: one head teacher, three deputy head teachers, 24 preschool teachers and 527 preschoolers. All of the 24 preschool teachers volunteered to participate in the programme and they were able to participate throughout the nine-week of the programme, excluding pre- and post-test.

This study combined quantitative and qualitative research methods and was a mixed-method design. The two quantitative research tools that were employed included

both a questionnaire and behaviour checklists. In addition three instruments were used to gather quantitative data, which were:

1. a questionnaire for preschool teachers,
2. behaviour checklists of preschool teachers in three domains related to promoting preschoolers' self-discipline, and
3. behaviour checklists relating to preschoolers in six domains of self-discipline.

All of these instruments were used twice, that is pre- and post-test.

As for qualitative methods, three methods were employed:

1. semi-structured interviews,
2. semi-structured observations, and
3. classroom observations.

There were four semi-structured interview schedules used to interview the head teacher, deputy head teachers and preschool teachers, consisting of: semi-structured interviews with the head teacher and deputy head teachers before the programme; semi-structured interviews with the head teacher and deputy head teachers after the programme; semi-structured interviews with preschool teachers before the programme; and, semi-structured interviews with preschool teachers after the programme. For the observation element of the study, three instruments were used to observe the behaviours of both teachers and preschoolers and interactions between teachers and preschoolers. These were: semi-structured observations of teachers' behaviour related to promoting preschoolers' self-discipline; semi-structured observations of preschoolers' self-discipline behaviour; and classroom observations. It is important to note that all observation instruments were used twice as pre- and post-test.

The implementation process in gathering data consisted of a pre-test, the intervention, and then a post-test. A pre-test was conducted over the 2 weeks before the intervention. During the pre-test period, the head teacher, deputy head teachers and preschool teachers were interviewed to explore their general views of self-discipline and those that were specific in their school or their classrooms. The teachers were asked to complete a questionnaire and rate their behaviour using a teacher behaviour checklist and

then rate their preschoolers' self-discipline behaviour using a child behaviour checklist. Moreover, six of the teachers and twenty of the preschoolers were chosen for in-depth observation using semi-structured observations and classroom observations. The teacher selection criteria were the length of experience in preschool teaching, the teaching qualification held (e.g. Bachelor's degree or Master's degree), and the recommendation of the head teachers and other staff members in the school. Meanwhile, the preschooler selection criteria were the recommendation of the teachers involved in their care.

During the training period, all of the 24 teachers attended the activities of the programme for 9 weeks, with each session lasting for 60-90 minutes per week. Two weeks after the intervention, the post-test was conducted. The head teacher, deputy head teachers and preschool teachers were interviewed again to explore any improvement in self-discipline in their school or their classrooms after the teachers had attended the programme. The teachers were asked to complete the same questionnaire and rate their behaviour using the same teacher behaviour checklist and then rate their preschoolers' self-discipline behaviour using the same child behaviour checklist in order to examine any change in their behaviour. Moreover, the six teachers and twenty preschoolers observed by the researcher in the pre-test, were observed again as the post-test.

6.2 Main findings

This study demonstrated that the teachers who attended the programme had indeed gained more knowledge, understanding and skills in promoting preschoolers' self-discipline. As a result, they were more successful in promoting preschoolers' self-discipline, as evidenced by the preschoolers' self-discipline behaviour changes observed after the programme. Moreover, several key findings were made in this study, as follows:

- The findings of this study indicated that the programme was successful in improving teachers' knowledge and behaviour related to promoting preschoolers' self-discipline and that, as a concomitant, this resulted in improvements in preschoolers' self-discipline. It is hard to judge the extent to which this was related to the fact that the programme was based on the SECI model or whether other factors were involved in this perceived success. However, it is notable that the SECI model focuses on not only acquiring specialised knowledge, but also focuses on creating new knowledge by

allowing the participants in this approach to professional development to share their professional knowledge and experiences with each other and then combine this with theoretical knowledge. The researcher observes that this approach appeared to be consistent with the needs of the teachers involved in the study. Consequently, teachers obtained new knowledge from others and accordingly improved their capacity to solve challenging situations or problems by effectively applying that knowledge to practice in real classroom situations. In addition, the teachers were involved in all of the processes of the programme, and they played a crucial role in participating in and committing to the programme by sharing their experiences and outlining their own practical knowledge to other teachers. They then worked together to create new practical knowledge to help them to solve self-discipline problems in classrooms. The researcher would thus posit that these may well be the most significant reasons why the adapted SECI model was successful in meeting the needs of teachers.

- The results of the evaluation of the programme process showed that the clear and well-organised activities and content with ample time for learning, practicing and applying new ideas were important characteristics for the development of a successful programme. Additionally, the programme was considered well-managed concerning time, place, the use of multimedia, and also in providing appropriate food and beverages during the activities. Whilst such matters may appear comparatively trivial it is clear that these factors helped the participants the teachers to gain a good impression of the programme and to participate fully. For these reasons, it is clear that such matters should not be overlooked.
- The findings from observations revealed that after the programme, the teachers had gained more skills in promoting preschoolers' self-discipline by identifying appropriate behaviours to preschoolers. It was also clear that they could then follow this by rewarding good behaviour so that the preschoolers began to know and understand the behaviour expectations from their teachers, and they could thus associate the reward with the good behaviour. Rewards that were used by the teachers included smiles, words of praise and other signs of affection, special activities, extra privileges, and material items. After the

programme, the teachers seldom used punishment to discipline preschoolers, such as verbal punishment, time-out, and taking away privileges, all of which had been a feature of at least some classrooms prior to the intervention. Moreover, the finding was that the teachers who used a variety of disciplinary techniques were the most effective in enhancing preschoolers' self-discipline behaviours. Unfortunately, the researcher could not identify which disciplinary technique was most effective in terms that were generalisable because of preschoolers' different experiences, social backgrounds and learning styles. Nonetheless, these findings are significant in the broadest sense and appear to offer positive possibilities in terms of developing new approaches to developing self-discipline in Thai pre-schools and schools.

- It has been noted earlier in this document that, in general, in-service teacher-training in Thailand tends to be focused on the acquisition of knowledge through direct instruction in the form of lectures or presentations, and that most programmes provided for teachers consist of attendance at a full day intensive programme. The main purpose of such programmes is for teachers to acquire academic knowledge related to the subjects that they teach and classroom management. However, there is evidence that most teachers believe that such knowledge does not always serve to solve the practical problems that they face in their classrooms and that it is not possible to gain an understanding of the behaviours and the teaching skills of which they wish to become congisant through such approaches. Moreover, such programmes lack follow-up of either teachers' or students' outcomes in terms of whether teachers can apply the knowledge obtained from such programmes to their students or classes. Crucially, the training programme employed in this study was different from other training programmes by creating a programme of a nine-week duration that not only focused on acquiring knowledge, but also on classroom practice. Through this extended programme, it was possible to follow-up the teacher's outcomes of applying the knowledge into their classrooms by discussion and advice in succeeding sessions if they were unsuccessful in solving and/or promoting self-discipline in their classes. This revealed the value of such

extended programmes in terms of the ways in which they can meet the development needs of the children in their care.

- The teachers believed that self-discipline played an important role in the social and emotional development of preschoolers, and that in order to develop preschoolers' self-discipline, both schools and homes needed to take responsibility for a child's behaviour together. The teachers indicated that parents could in fact be one of barriers to promoting preschoolers' self-discipline because many parents were considered to 'spoil' or unnecessarily indulge their children and did not promote self-discipline at home. They also concluded that both teachers and parents, therefore, had to work together in promoting their children's self-discipline.
- The notion of a community of practice is not widespread amongst teachers in many schools in Thailand. Indeed, many teachers have to work to deal with the problems that occur in their classes by themselves, without any support or help from their colleges. The programme seemed to open up new possibilities of a teacher community of practice in the school under scrutiny through groups of teachers sharing specific interest and knowledge about classroom practices. The crucial element in the processes in the programme was that the training was relevant and that there was an ongoing interaction between teachers. The teachers then deepened their knowledge and expertise about this topic in a collective setting and they created knowledge together. Moreover, the primary purpose of the programme was for the preschool teachers at all levels to learn from one another, which was similar to the purpose of a community of practice originally outlined by Wenger (1998). In particular, new teachers benefitted from the knowledge and experience of seasoned colleagues. In turn, senior teachers could learn from new teachers who had recently graduated. This approach is clearly worthy of further exploration in the Thai context.

6.3 Professional recommendations

In this section, the researcher will make recommendations for the Thai Ministry of Education (MOE), Local Administrative Organisation (LAO), schools and educators that will, it is hoped, assist in promoting self-discipline for students in all levels. Since, as,

mentioned previously, enhanced training of teachers is considered as one of the most effective ways to enhance students' self-discipline, the researcher will focus especially on recommendations for developing in-service teacher training. Thus, it is hoped the work of this study will help to promote self-discipline for students, and that it will also help to develop in-service training for teachers in Thailand in directions that are currently comparatively unfamiliar.

6.3.1 Recommendations for the Thai Ministry of Education, Local Administrative Organisation and ITT programmes in promoting students' self-discipline

Recommendations for the Thai MOE, the LAO and ITT programmes in promoting students' self-discipline include the following:

- The Thai MOE should lead the transformation of in-service teacher training with a strategy based upon enhancing self-discipline that includes a programme or programmes for improving self-discipline in students since teacher training programmes, which focus on self-discipline, have been limited in number and in scope up to this point.
- The LAO is responsible for the childcare centres including both those established by the relevant LAO and those transferred to them by other agencies. Up to this point its caregivers in childcare centres under the Jurisdiction of LAO rarely participate in both official and unofficial training programmes. The Department of Local Administration should provide training programmes, particularly in promoting children's self-discipline, for those caregivers in order to make them better prepared to promote children's self-discipline effectively and efficiently.
- It is recommended that programmes based on the SECI model would be at least one suitable form of training for caregivers because such an approach can give caregivers both content knowledge and understanding of authentic practice, which can be used effectively while working with young children.
- ITT programmes for preschool teachers in Thailand currently do not contain content on self-discipline issues. Based on the suggestions made in previous studies, together with the comments from respondents in this study, it is clear

that it is necessary to provide knowledge of self-discipline as part of the pre-service education for Thai trainee teachers. The faculties of education in all universities should create at least one module or programme focusing on self-discipline for trainee teachers. This is not only relevant to trainee teachers in early childhood education, but also to trainee teachers in all levels such as primary education, secondary and high-school education, as well as to those interested in special needs education. It is essential that all teachers should have more in-depth knowledge, understanding and skills about promoting students' self-discipline. Such modules or programmes should be compulsory in order to ensure that all trainee teachers will have been equipped to address this most important of issues before they graduate and enter the world of work as educational professionals.

6.3.2 Recommendations for school administrators and teachers in promoting self-discipline in schools

Recommendations for school administrators and teachers in promoting self-discipline in schools include the following:

- School administrators should set out a clear strategy for handling pupils with discipline problems in schools. They should emphasise that a school's primary goal is to foster self-discipline because correcting misbehaviour is often necessary and appropriate. Thus, the goal of developing self-discipline for students should always be kept to the fore in the school policies.
- School administrators and teachers should develop a school discipline plan by considering several features of their school including its organisation, social culture, student welfare and individual development programmes. All of these should be integral components of the school's discipline plan.
- School administrators should provide workshops or training where teachers can share their experiences of implementing ideas about self-discipline where they can consult with specialists about the self-discipline problems in their class. The workshops or training should include specific knowledge of self-discipline such as the definition, theories relating to self-discipline, and techniques to promote self-discipline for students.

- New teachers should be provided with a handbook of discipline techniques to deal with students' self-discipline problems in classrooms since this is the easiest way to support teachers who have not been trained about self-discipline in their previous training. These handbooks should contain relevant examples of situations where self-discipline problems occur frequently in the classroom and also suggest possible ways to address such issues that are appropriate and fit within the school's policies.
- Teachers should communicate with parents on what the school or classroom is doing to promote self-discipline and parents should be encouraged and enabled to help and support their children's self-discipline at home.

6.3.3 Recommendations for the Thai ministry of education about in-service teacher training

Recommendations for the Thai ministry of education about in-service teacher training include the following:

- It has been noted that both official and unofficial training programmes in Thailand tend to be traditional in nature and focus on lecture-based training and workshops. These are not practical, relevant or effective since they tend to be isolated from real classroom situations and thus they are not good enough for teachers to enhance their professional or teaching abilities. Therefore, the Thai MOE should develop in-service training programmes that are practical and relevant for teachers' professional development by creating programmes that are more extensive in nature and that allow staff both to gain relevant knowledge and to share best practice.
- Teachers' professional education is viewed as one of the most important factors in improving students' learning more widely. Unfortunately, the history of early years education in Thailand shows that formal training for preschool teachers was not considered essential. Thus, in-service programmes should be provided to enhance the general professional competence of teachers who teach at nursery and preschool levels.

6.3.4 Recommendations for school administrators about teachers' professional development in schools

Recommendations for school administrators about teachers' professional development in schools include the following:

- Teachers should be provided with a range of professional development activities in schools in order to improve their knowledge and skills at least twice an academic year. Even though there are only limited numbers of teachers' professional development programmes provided by the Thai MOE, school administrators can create training programmes for training their teachers in issues relevant to their schools, including in such areas as self-discipline.
- Time and heavy workload are considered as common critical factors that discourage teachers from participating in continuous professional development (Carney, 2003; Day and Gu, 2010; Quaglia, Marion and McIntire, 1991). This implies that the school administrators should give more time for facilitating teachers' continuous professional development by allowing continuous professional development activities to be conducted within school hours and arranging time for teachers to have more space to engage in reflection and in undertaking relevant training programmes.

6.4 An adapted SECI model for the in service education of teachers

This study used an adapted SECI model to develop a training programme for preschool teachers since the SECI model focuses not only on knowledge transfer but also on knowledge creation. Moreover, the SECI model has been widely used in many research areas, such as organisational learning (Nonaka, Toyama and Nagata, 2000), but it is still only rarely applied to educational research issues. It is important to note, of course, that it is also new to the context of teacher-training in Thailand. This study, therefore developed an original training programme that integrated the SECI model in order to improve teachers' knowledge and behaviour in promoting preschoolers' self-discipline in a new location.

The main element of the programme focused on the processes within the SECI model, which are divided into the four phases: socialisation, externalisation, combination and internalisation. As has been explained extensively in this thesis, the key point of the

SECI model lies the transformation of the tacit knowledge into explicit knowledge (Nonaka and Takechi, 1995). To rehearse further the central issues, we may outline the adapted SECI model as the following:

- *Socialisation*, is the first phase of developing new knowledge through shared personal experiences. In this study, this happened when individual teachers participated in the sharing experience activity by interacting with their colleagues in groups and sharing experiences about the self-discipline problems in their classrooms. Admittedly, the teachers talked and shared information during work processes without pre-defined shared goals and they followed their own personal agendas. Nonetheless, the main aim of the socialisation phase in this study was for teachers to talk through and share their experiences with others in the setting of a training programme. As a result, the first phase worked effectively because the teachers were willing to share experience and knowledge and thus many teachers gained new knowledge to apply in their classes.

- *Externalisation*, this phase occurred when the teachers were asked to transfer their tacit knowledge to explicit knowledge throughout the brainstorming activity. In the brainstorming activity, the teachers had to express their understanding and knowledge of developing self-discipline in young children and reflect why, how and what they did in promoting preschoolers' self-discipline in their professional practice. By doing this, the programme allowed presentations of individual pieces of knowledge in a commonly accepted format. Afterwards, participants brainstormed to find out the most effective discipline techniques to solve each self-discipline problem of the preschoolers that had occurred in their classrooms. The outcomes from the brainstorming activity created a basis for the wider distribution of knowledge.

- *Combination*, the leaflet making activity in this phase was primarily group-based and was supported by collaborative teacher group work. The aim of the combination phase was to combine the pieces of knowledge expressed during the externalisation phase with theories in the social and moral development of children and the academic knowledge related to these topics. Thus, this led to the creation of new pieces of knowledge. By carrying out the leaflet making activity, at the end of each session of training the teachers had to discuss externalised knowledge objects, modify them with theories and academic knowledge, and then produce leaflets as new knowledge which they could use in future

practice in new self-discipline situations. After this all leaflets were shared with all preschool teachers in the school.

- *Internalisation*, the final phase was an individual process. The leaflets created in the combination phase could be accessed and used as guidelines for dealing with self-discipline problems and also promoting preschoolers' self-discipline in classrooms. Moreover, the teachers were able to apply the knowledge from sharing experience in the socialisation phase and discussion in the externalisation phase into the real self-discipline situations in their classes. This new internalised knowledge would increase the level of individual teacher's knowledge, understanding and skills. It also increased the chances of individual participation in a socialisation phase of the new circle of knowledge creation. In sharing tacit knowledge and contributing in this way the process led to the upward development of the knowledge spiral.

Accordingly, the researcher argues strongly that this study reveals clear evidence that the SECI model can be adapted to develop training programmes for teachers, including in the context of Thailand. Moreover, it can be concluded that all activities used in each phase of the SECI model have been employed in the research reported in this document including those elements that are deployed in order to transfer tacit knowledge to tacit knowledge; tacit knowledge to explicit knowledge; explicit knowledge to explicit knowledge and explicit knowledge to tacit knowledge – see Figure 1.

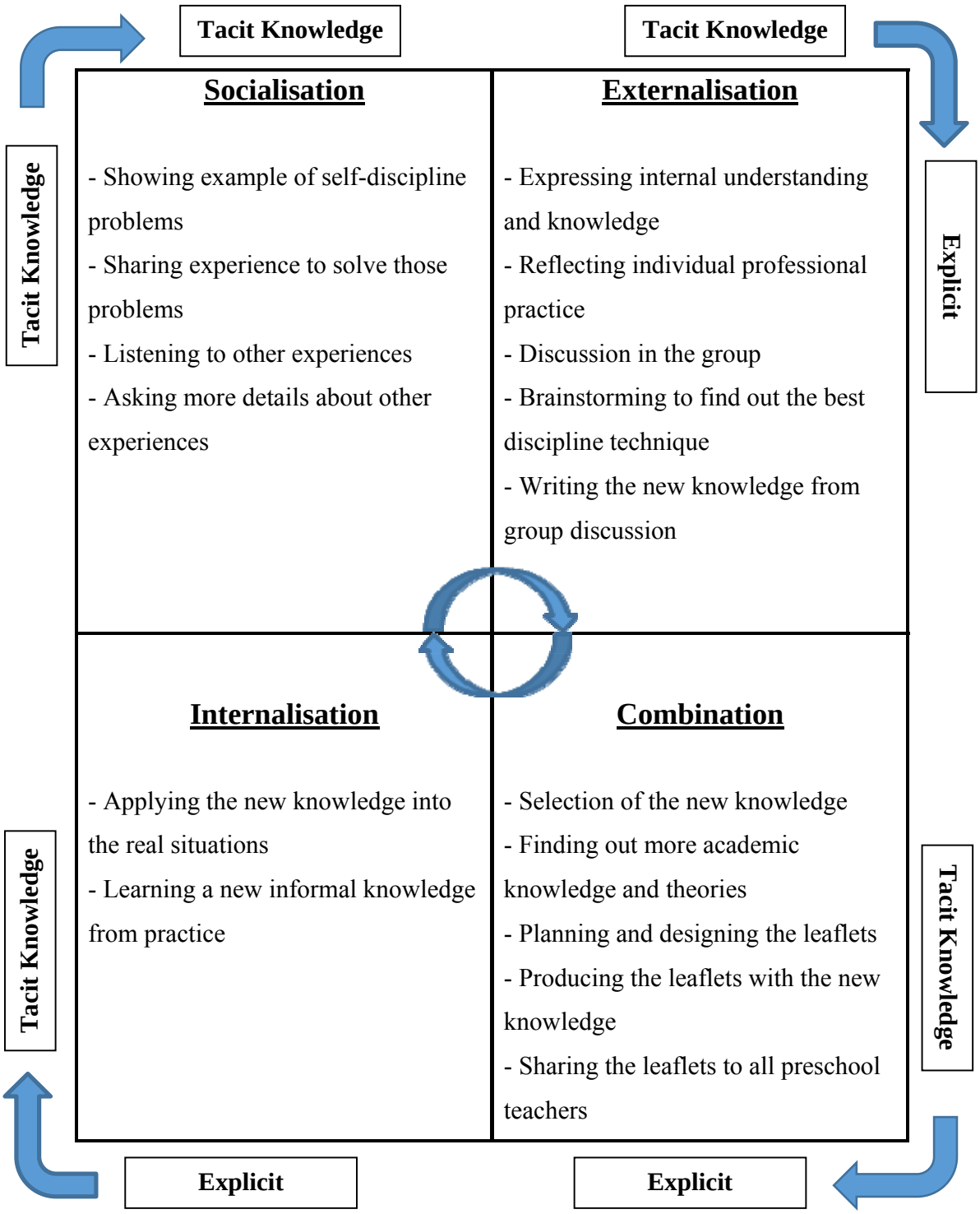

Figure 1: Activities in four phases of SECI model

Despite the assertion above, it should be noted that there are some limitations in using the SECI model in this type of programme. Firstly, teaching experience was noted as a critical factor in this study because it was related to the amount of knowledge created over time for any given individual, and this seemed to influence participants' ease of engagement with specific phases of the SECI process. Notably, socialisation and internalisation were the dominant phases for the new teachers and less experienced teachers, as they were acquiring knowledge from various sources in order to develop their competence. More time and effort were spent gathering and processing information and verifying with their colleagues, and in increasing their knowledge and skills. On the other hand, externalisation and combination were the dominant phases for senior teachers, as they had a broader and deeper well of knowledge to rely on and thus were able to provide others with direction and expertise, as well as seeking relevant new information and academic knowledge to add to their existing knowledge base.

In addition, the application of the SECI model in the programme required the use of empirical knowledge and the practice and transfer of skills. In doing so, it enabled the teachers to apply knowledge gained from the programme to real self-discipline situations. Thus, it seems clear that the failures and successes in the learning process depend on the primacy and acceptance of personal professional learning processes. In other words, it is crucial that participants are prepared to engage fully in the programme. Moreover, it is very important to create a learning community in the school where the teachers are willing to share and learn together. It is also necessary to find a group leader, who has the ability to communicate, give and receive feedback and deal with concerns in a timely and sensitive way as well as possessing the ability to manage group activities.

However, the evidence revealed that a programme based on the SECI model could be used effectively with the preschool teachers. The model enabled individual teachers to become more skillful and more effective in promoting preschoolers' self-discipline. As discussed above, the model led to greater development of new knowledge about professional practice by sharing knowledge with peers and to a broader understanding of the problems that confront teachers through reflection on practice. Thus, the model can be considered as containing elements of a reflective practice model based on teachers being given the time and space to reflect on and discuss their work with other professionals. In this way the SECI model has links to the reflective practice model, often traced back to the

work of Schön (1983), who posited that reflective practice is the capacity to reflect on action and to engage in a process of continuous learning, which is one of the defining characteristics of professional practice. This model is, of course, used widely in education and is deemed an important tool in professional learning settings where teachers learn from their own professional experiences, rather than from formal knowledge in order to transform and apply such knowledge into different practical scenarios (Duffy, 2009). In this sense, it can be argued that the SECI model locates itself within an already well-accepted approach to teacher development.

6.5 Reflections on research challenges

In this section, the key challenges that emerged during collecting of data in this study will be considered. The researcher faced several challenges, including challenges in relation to devising the programme, conducting the programme, gathering and analysis the data.

Firstly, one of the biggest challenges was the devising of a programme that was relevant to teachers based on the SECI model. As noted in chapter 2, the SECI model has mostly been applied in the business field and this study was original in developing the model for use in teacher-training in Thailand. In order to develop a programme based on SECI model, the researcher had to study the literature on the SECI model carefully in order to understand fully its strengths and limitations, especially since it was developed in Japan and has rarely been employed in the Thai cultural context. The researcher also had to examine carefully the background to in-service teacher training in Thailand and the nature and work patterns of Thai teachers. This resulted in the discovery and realisation that most Thai teachers would prefer a greater focus on practical knowledge rather than theoretical knowledge, and the further realisation that a significant source of teachers' knowledge is their interaction with other teachers by talking, discussing and sharing teaching experience, information and knowledge. Such an approach is, of course, highly consonant with the use of the SECI model. Thus, after much effort, the SECI model was adapted to create suitable activities for Thai teachers in the form of the training programme outlined in this study.

The next challenge was that the training programme, which was central to the study, consisted of long-term training for nine weeks, which required the researcher to

encourage and stimulate all the teachers to participate throughout the whole programme. This was because the number of the preschoolers in each classroom was very high and the workload of the teachers was heavy, thus it seemed likely that many teachers might not participate in some or all of activities of the programme. For this reason, during the study, it was important to maintain frequent contact with all the teachers, either by telephone or by visits to the classroom.

In addition, some difficulties occurred during the activities, especially in sharing experiences and the brainstorming activity, where keeping the participants involved and on task talking about the same topic proved problematic at the time. Thus, the researcher tried to engage the teacher involved by asking questions which focused on 'What if …?' and 'What else..?' and by complimenting the interesting ideas of the teachers individually. Moreover, the researcher began with warm up activities before starting on the main activities of the programme in order to stimulate and engage the participants. In the leaflet making activity, the teachers sometimes found it difficult to produce effective leaflets because of teacher workload or extra work from the school. For this reason, the researcher helped in some stages of making the leaflets such as designing the leaflets digitally as a template, finding out more information related to the topics, editing and doing final checks.

Finally, one of the greatest challenges was that of handling of the complexities of having a variety of different forms of data gathering and analysis. As noted previously, a mixed-method approach was employed in this study and thus the researcher had to develop a number of tools to gather both qualitative and quantitative data in order to ensure that all data gathered from this study was comprehensive and accurate. Accordingly, the many tools used in gathering data, together with the conditions of time to collect the data before and after the programme, necessitated that the researcher set up well-planned schedules in order to avoid any risks in terms of failing to gather the data in a systematic way. Nonetheless, even though the schedules for observations and interviews were set up and confirmed by the teachers, there were some teachers who asked to postpone on the day. Therefore, the researcher had to carry out a second schedule for observations and interviews whenever the activities had been changed unexpectedly. In addition, none of the preschool teachers took any breaks throughout the day, from 8.30 am until 4.30 pm, and there were only three periods of time that they were available to be

interviewed: in the morning before class, after lunchtime when the children were napping, and after school. The challenge this caused was to interview 24 teachers within two weeks with such limited availability before the programme started. Thus, the researcher had to interview some of the respondents at the weekend in public places. In addition, although the qualitative and quantitative data were analysed separately, the challenge was to demonstrate that data triangulation by distinctly different methods could lead to confirmation and explain the circumstances in this study. Finally the presentation of the data gained from both methods in itself caused challenges. This was overcome by the way in which the quantitative data were illustrated first and the qualitative data were then presented and analysed to describe the phenomenon in depth.

6.6 Recommendations for further research

The programme was designed to train preschool teachers through a new and revised application of the SECI model. The purpose of the programme was for preschool teachers to develop knowledge, understanding and skills in promoting self-discipline for preschoolers and also to improve preschoolers' self-discipline behaviour. In this study, both qualitative and quantitative approaches to self-reporting occurred, which took the form of interviews, questionnaires, and rating scales used with staff in the school under scrutiny. However, the data obtained through self-reporting methods were corroborated by the use of data gained though observation methods, which provided triangulation in the study. This approach was essential in order to explore the topic fully and, as Barker, Pistrang and Elliott (2002) have stated, such self-reporting can be used to obtain information in situations where observational data are not normally available (p: 96). Thus, the quality of research data can be assured.

The study's findings revealed that the application of the SECI model can improve teachers' development of knowledge and skills in promoting preschoolers' development of self-discipline. The evidence suggests that the teachers obtained practical knowledge through extended interaction and reflection on practice with colleagues. Further, the evidence revealed that experienced teachers were enabled to share successful strategies and approaches with other colleagues which resulted in improving preschoolers' development of self-discipline.

These findings lead to some further considerations for future research. It seems clear that the study was limited by the fact that it took place in only one school with only one phase of education. Thus more extensive research in other phases of education is required to try to replicate and elaborate the findings. Therefore, it is recommended that further research should be conducted on other phases and types of school such as primary schools, secondary schools and tertiary education institutions in Thaialnd. In so doing it is further recommended that case studies should be conducted institutions of different types, sizes and social locations in Thailand in order to confirm that the SECI model has clear benefits for the training and development of teachers in relation to other school issues and challenges in all phases of education.

In addition, there should be a retest of the effectiveness of the programme when applied in other subject areas, together with teachers of other phases of education by using various outcome measurements. It would also help to examine the effectiveness of the programme in different contexts. Moreover, this study did not conduct any follow-up of the maintenance outcomes after the programme. Further research should follow-up the maintenance of teachers' knowledge and behaviours after the programme in order to assess the effectiveness, long-term, of the programme. A final recommendation would be that there should be a study of the effectiveness of a similar programme for the training of parents in this critical issue in order to improve parenting skills, since the programme in this study was designed only to train adult learners who have valuable experience, knowledge, skills and professional status.

6.7 Final conclusion

The findings of the study as a whole reveal that the programme of training based on the SECI model, which was designed to assist preschool teachers in promoting preschoolers' self-discipline, achieved its broad purpose. The evidence revealed that the teachers gained more knowledge, understanding, skills and basic experiences in promoting self-discipline for the preschoolers effectively, and these outcomes resulted in the improved self-discipline of the preschoolers in their care. Thus, the results of the present study indicated the programme provided both knowledge and practical skills that can improve teachers' efficiency in working with children. For this reason the researcher feels emboldened to contend that teachers' continuous professional development in Thailand

needs to be continued throughout their professional career and that the Thai MOE and related organisations should, therefore, provide the resources and strategy to serve the needs of such a training programme. On a practical level, the importance of appropriate timings and proper venues was made clear by the study and such features need to be attended to and considered carefully in any such programme.

The study's findings lead to some further considerations, perhaps the most important of which is the need for further and greater consideration of this vital issue including further research to clarify and extend this work. For this reason there should be a retest of the effectiveness of the programme in other nursery schools and a follow-up study should be implemented in order to assess the maintenance of teachers' knowledge and behaviour after such a programme. Furthermore, further research should study the effectiveness of programmes of this type by conducting similar research in other subject areas and other phases of education. In addition, a parental training programme in the development of children's self-discipline should be studied in detail.

Finally, and perhaps most crucially, this study seems to show that an adapted version of the SECI model of education and training can work effectively in the context of the Thai education system.

References

Adler, P. A. and Adler, P. (1994) Observational techniques. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: SAGE.

Adult Education Centre. (2005) *Facilitation skills: Working with adult leaders* [Online]. Available at: www. ucd.ie/adulted/resources/pages/facil_adnrogog.htm. [Accessed: 15th October, 2014]

Alavi, M. and Leidner, D. (2001) Review: knowledge management and knowledge management systems: Conceptual foundations and research issues, *MIS Quarterly,* 25 (1): 107-137.

Alberta Learning (2012) *Guidelines for using timeout in schools* [Online]. Available at: http://www.education.alberta.ca/media/547960/timeout_oct_2002. pdf. [Accessed: 5th July, 2014]

Albrecht, K. (2006) *Social intelligence: The new science of success*. San Francisco: Jossey-Bass.

Allen, D., McDonald, L., Dunn, C. and Doyle, T. (1997) Changing care staff approaches to the prevention and management of aggressive behaviour in a residential treatment unit for persons with mental retardation and challenging, *Research in Developmental Disabilities*, 18 (2): 101-112.

Ambrosini, V. and Bowman, C. (2001) Tacit knowledge: Some suggestions for Operationalization, *Journal of Management Studies,* 38 (6): 811-829.

American Academy of Pediatrics (1998) Guidance for effective discipline, *Pediatrics,* 101 (4): 723-728.

Andreeva, T. and Ikhilchik, I. (2011) Applicability of the SECI Model of Knowledge Creation in Russian Cultural Context: Theoretical Analysis, *Knowledge and Process Management,* 18 (1): 56–66.

Astor, R. A., Guerra, N., and Van Acker, R. (2006) *School violence and school safety: from research to practice.* Mahwah, NJ: Erlbaum.

Atkins, L. and Wallace, S. (2012) *Qualitative Research in Education.* London: Sage.

Bagdi, A. and Vacca, J. (2005) Supporting early childhood social-emotional well being: The building blocks for early learning and school success, *Early Childhood Education Journal,* 33 (3): 145-150.

Bandura, A. (1977) *Social learning theory.* London: Prentice Hall.

Bandura, A. (1986) *Social foundation of thought and action.* Englewoood Cliffs, NJ: Prentice Hall.

Bandura, A. (1999) A social cognitive theory of personality. In Pervin, L. and John, O. *Handbook of personality* (2nd ed.). New York: Guilford.

Bandura, A. (2001) Social cognitive theory: An agentic perspective, *Annual review of psychology* 52(1): 1-26.

Baran, B. and Cogiltay, K. (2006) Knowledge management and online communities of practice in teacher education, *The Turkish Journal of Educational Technology,* 5 (3): 12-19.

Barbour, R. S. (1999) The case for combining qualitative and quantitative approaches in health and services research, *Journal of Health Services Research & Policy,* 4: 39-43.

Barker, C., Pistrang, N. and Elliott, R. (2002) *Research methods in clinical psychology: An introduction for students and practitioners* (2nd ed.). Chester: John Wiley & Sons, Ltd.

Barton-Arwood, S., Morrow, L., Lane, K. L. and Jolivette, K. (2005) Project improve: Improving teachers' ability to address students' social needs, *Education and Treatment of Children,* 28 (4): 430-443.

Bear, G. G. (2010) *School discipline and self-discipline: A practical guide to promoting prosocial student behavior.* New York: The Guilford Press.

Bear, G. G. and Duquette, J. F. (2008) Fostering self-discipline. *Principal Leadership,* 9 (October): 10-14.

Beauchaine, T. P., Webster-Stratton, C. and Reid, M. J. (2005) Mediators, moderators, and predictors of 1-year outcomes among children treated for early-onset conduct problems: A latent growth curve analysis, *Journal of Consulting and Clinical Psychology*, 73 (3): 371-388.

Bencsik, A. (2009) Teamwork in education, *Problems of education in the 21st Century,* 10: 9-20.

Berkowitz, L. (1989) Frustration-aggression hypothesis: Examination and reformulation, *Psychology Bulletin,* 106: 59-73.

Bickman, L. and Rog, D. J. (1998) *Handbook of applied social research methods*. California: SAGE.

Boland, R. J. and Tenkasi, R. V. (1995) Perspective making and perspective taking in communities of knowing, *Organisation Science,* 6 (4): 350-372.

Blumberg, B., Cooper, D. R. and Schindler, P. S. (2005) *Business Research Methods.* Maidenhead: McGraw-hill.

Bonner, A. and Tolhurst, G. (2002) Insider-outsider perspectives of participant observation, *Nurse Researcher,* 9 (4): 7-19.

Boynton, P. M. and Greenhalgh, T. (2004) *Selecting, designing, and developing your questionnaire.* [Online] Available at: http://bmj.com/cgi/content/full/328/7451/1312. [Accessed: 24th June, 2014]

Bratianu, C. (2010) A Critical Analysis of Nonaka's Model of Knowledge Dynamics. *Electronic Journal of Knowledge Management,* 8 (2): 193-200.

Bratianu, C. and Orzea, I. (2010) Organization Knowledge Creation. *Management, Marketing Challenges for Knowledge Society,* 5 (3): 41-62.

Bratianu, C. and Orzea, I. (2012) Organization knowledge creation in the perspective of sustainable development, *Review of General Management,* 15 (1): 13-21.

Breen, L. J. (2007) The researcher 'in the middle': Negotiating the insider/outsider dichotomy, *The Australian Community Psychologist,* 19 (1): 163-174.

Bronson, M. B. (2000) Recognizing and supporting the development of self-regulation in young children, *Young Children*, 55: 32-37.

Brooks, R. and Goldstein, S. (2007) *Raising a self-disciplined child.* New York: McGraw-Hill.

Brown, J. S. and Duguid, P. (2001) Knowledge and organisation: A social-practice perspective, *Organisation Science,* 12 (2): 198-213.

Bryman, A. and Bell, E. (2003) *Business research methods*. Oxford: Oxford University Press.

Bryman, A. and Burgess, R. G. (1999) *Qualitative research*. London: Sage.

Bubb, S. and Earley, P. (2006) Induction rites and wrong: the educational vandalism of new teachers' professional development. *Journal of In-service Education,* 32 (March): 5-12.

Bundy, C. (2004) Changing behaviour: using motivational interviewing techniques, *Journal of the royal society of medicine,* 44 (97): 43-47.

Bureau of International Cooperation (2005) *Supporting Professional Development*. Bangkok: The Office of the Permanent Secretary for Education.

Burns, R. B. (1994) *Introduction to research methods in education*. Cheshire: Longman.

Burns, N. and Grove, S. (2003) *The practice of nursing research: conduct, critique and utilization* (5th ed.). Philadelphia: W.B.Saunders.

Burton, N., Brundrett, M. and Jones, M. (2009) *Doing your Education Research Project*. London: Sage Publications.

Campbell, S. B., Shaw, D. S. and Gilliom, M. (2000) Early externalising behaviour problems: Toddlers and preschoolers at risk for later maladjustment, *Development and Psychopathology,* (12): 467-488.

Canter, L. and Canter, M. (2001) *Assertive discipline: Positive behavior management for today's classroom* (3rd ed.). Seal Beach, CA: Canter.

Caprara, G. V., Bararanelli, C., Pastorelli, C., Bandura, A., and Zimbardo, P. (2000) Prosocial foundations of children's academic achievement, *Psychological Science,* 11: 302-306.

Carney, S. (2003) Learning from school-based teaching training: possibilities and constraint for experienced teachers, *Scandinavian Journal of Education Research,* 47 (4): 413-429.

Cartelli, A. (2007) ICT and knowledge construction: Towards new features for the socio-technical approach, *The learning organization,* 145: 436-449.

Cengizhan, S. (2011) Effective use of instructional materials and technologies in teacher training: expectations and opinions of teacher candidates, *International Journal of Educational Sciences,* 3 (2): 641-662.

Chaloeysap, S. (2007) Thai youths moral crisis….Whose responsibilities?. *Viddhayajarn 6* (April): 70-72.

Chanbanchong, C. (2010) Towards further reform of teacher education in Thailand. In *The 2nd East Asian International Conference.* Hong Kong, 15th December 2010: 1-6.

Choi, B. and Lee, H. (2003) An empirical investigation of KM styles and their effect on corporate performance, *Information & Management,* 40: 403-417.

Cohen, L. Manion, L and Morrision, K. (2007) *Research Methods in Education* (6th ed.). London: Routledge.

Collins, H. M. (2001) Tacit knowledge, trust, and the Q of sapphire. *Social studies of Science,* 31 (1): 71-85.

Combs, A. (2001) Achieving self-discipline: some basic principles, *Theory into practice,* 24 (4): 260-263.

Conroy, M. A., Sutherland, K. S., Vo, A. K., Carr, S. E. and Ogston, P. (2013) Early childhood teachers' use of effective instructional practices and the collateral effects on young children's behaviour, *Journal of Positive Behaviour Interventions,* 16 (2): 81-92.

Creswell, J. W. (2009) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). Los Angeles: Sage.

Creswell, J. W. and Plano Clark, V. L. (2011) *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

Crow, R. E. and Snyder, P. (1998) Organizational behavior management in early intervention: Status and impli- cations for research and development, *Journal of Organizational Behavior Management,* 18: 131-156.

Cullen C. (2000) *A review of some important issues in research and services for people with learning disabilities and challenging behaviour: Scottish executive review of services for people with a learning disability.* Edinburgh: Scottish Executive.

Darke, P., Shanks, G. and Broadbent M. (1998) Successfully completing case study research: combining rigour, relevance and pragmatism, *Information Systems Journal,* 8 (4): 273-289.

Day, C. and Gu, Q. (2010) *The New Lives of Teachers.* London: Routledge.

DeLyser, D. (2001) "Do you really live here?" Thoughts on insider research, *Geographical Review,* 91 (1): 441-453.

De Meuse, K. P., Hostager, T. J., Claire, E. and O'Neill, K. S. (2007) Longitudinal evaluation of senior managers' perceptions and attitudes of a workplace diversity training programme, *Human Resource Planning*, 30 (2): 38-46.

Denler, H., Wolters, C. and Benzon, M. (2014) *Social Cognitive Theory* [Online]. Available at: http://www.education.com/reference/article/social-cognitive-theory. [Accessed: 15th October, 2014]

Denzin, N. K. and Lincoln, Y. S. (2005) *The sage handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

Dereli-İman, E. (2014) The Effect of the Values Education Programme on 5.5-6 Year old Children's Social Development: Social Skills, Psycho-social Development and Social Problem Solving Skills, *Educational Sciences: Theory & Practice,* 14 (1) 262-268.

Desimone, L. M., Porter, A. C., Garet, M., Yoon, K. S. and Birman, B. (2002) Does professional development change teachers'instruction? Results from a three-year study, *Educational Evaluation and Policy Analysis,* 24 (2): 81-112.

DeVaus, D. A. (2002) *Surveys in Social Research* (5th ed.). Crows Nest: Allen and Unwin.

Dinkmeyer, D. and Dreikurs, R. (2000) *Encouraging Children to Learn*. New York: Routledge.

Downer, J. and Pianta, R. C. (2006) Academic and cognitive functioning in first grade: Associations with earlier home and child care predictors and with concurrent home and classroom experiences, *School Psychology Review,* 35(1): 11-30.

Docking, J. (1996*) Managing behaviour in the primary school* (2nd ed.). London: David Fulton Publishers.

Duckworth, A. and Seligman, M. (2005) Self-discipline outdoes IQ in predicting academic performance of adolescents, *Psychological Science,*16: 939-944.

Duffy, A. (2009) Guiding students through reflective practice the preceptors experiences: A qualitative descriptive study, *Nurse education in practice*, 9: 166-175.

Duke, D. L. (2002) *Creating safe schools for children.* Boston: Allyn & Bacon.

Durrant, J. E. (2010) *Positive discipline in everyday teaching: guideline for educators.* Bangkok: Save the children Sweden.

Easa, N. F. and Fincham, R. (2012) The Application of the Socialisation, Externalisation, Combination and Internalisation Model in Cross-cultural Contexts: Theoretical Analysis, *Knowledge and Process Management,* 19 (2): 103-109.

Economic and Social Research Council (ESRC) (2010) *Framework for research ethics.* [Online] Available at: http://www.esrc.ac.uk/about-esrc/information/research-ethics.aspx [Accessed: 20th April 2013]

Evertson, C. M., Emmer, E. T., and Worsham, M. E. (2003) *Classroom management for elementary teachers* (6th ed.). Boston: Allyn and Bacon.

Faculty of Education, Chulalongkorn University (2012) *Curriculum of Early Childhood Education in Bachelor's Degree* [online] Available at: http://www.programmee.com/cu_web/curiculum/b1.html [Accessed 12th October, 2013]

Field, A. (2009) *Discovering Statistics Using SPSS* (3rd ed.). London: SAGE.

Finley, D. and Sathe, V. (2013) Nonaka's SECI framework: Case study evidence and an extension, *Kindai Management Review,* 1: 59-68.

Frazee, B. and Rudnitski, R. A. (1995) *Integrated teaching methods: Theory, classroom applications, field-based connections.* New York: Delmar Publishers.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F. and Yoon, K. S. (2001) What makes professional development effective? Analysis of a national sample of teachers, *American Educational Research Journal,* 38 (3): 915-945.

Gartrell, D. (2001) Replacing time-out: Part One-using guidance to build an encouraging classroom, *Young Children,* November: 1-16.

Giangreco, A., Carugati, A., Sebastiano, A. and Della Bella, D. (2010) Trainees' reactions to training: shaping groups and courses for happier trainees, *International Journal of Human Resource Management*, 21(3): 2468-2487.

Glisby, M. and Holden, N. (2003) Contextual constraints in knowledge management theory: The cultural embeddedness of Nonaka's knowledge-creating company, *Knowledge and Process Management*, 10 (1): 29–36.

Gningue, S. M. (2003) The effectiveness of long term vs. short term training in selected computing technologies on middle and high school mathematics teachers' attitudes and beliefs, *Journal of Computers in Mathematics and Science Teaching, 22* (3): 207-224.

Goodman, M. E. (2001) *The caring teacher's guide to discipline: Helping young students learn self-control, responsibility and respect* (2nd ed.). California: Corwin Press.

Gordon, A. M. and Browne, K. W. (1996) *Guiding young children in a diverse society.* Maryland: Allyn and Bacon.

Grant, K. and Grant, C. (2008) The knowledge management capabilities of the major Canadian financial institutions, *The international Conference on Knowledge Management*.

Gray, D. E. (2009) *Doing research in the real world* (2nd ed.). London: SAGE.

Greene, J. C. (2007) *Mixed methods in social inquiry.* San Francisco, CA: John Wiley & Sons.

Greiner, M., Bohmann, T. and Krcmar, H. (2007) A strategy for knowledge management, *Journal of Knowledge Management,* 11 (6): 3-15.

Gresham, F. M. (1998) Social skills training with children: social learning and applied behavioural analytic approaches. In Watson, T. S. and Gresham, F M. (Eds.), *Handbook of children behaviour therapy*. New York: Plenum Press.

Gulec-Aslan, Y. (2013) *A Training Programme for a Teacher Working with a Student with ASD: An Action Research Student with ASD.* [Online] Available at: http://www.edam.com.tr/kuyeb/pdf/tr/1f966f3a7f3b9a43ba4ec9fecbf9859fcMZP3.Pdf. [Accessed: 14th June 2014]

Gullo, D. F. (2008) *K Today teaching and learning in the kindergarten year.* Washington: National Association for the Education of Young.

Guner, N. (2012) The effect of preventive classroom management training program on approval and disapproval behaviours of teachers, *International Journal of Instruction,* 5 (1): 153-166.

Haag, M., Duan, Y. and Mathews, B. (2010) The impact of culture on the application of the SECI model. In Harorimana, D. H. (Eds). *Cultural Implications of Knowledge Sharing, Management and Transfer: Identifying Competitive Advantage*. PA: Information Science Reference.

Halley, A. and Beaulieu, M. (2005) Knowledge management practices in the context of supply chain integration: the Canadian experience, *Supply Chain Forum: An International Journal,* 6 (1): 66–81.

Harvey, E. A., Youngwirth, S. D., Thakar, D. A. and Errazuriz, P. A. (2009) Predicting attention-deficit/ hyperactivity disorder and oppositional defiant disorder from preschool diagnostic assessments, *Journal of Consulting and Clinical Psychology*, 77: 349-354.

Heckman, J. J. and Rubinstein, Y. (2001) The Importance of Non-cognitive Skills: Lessons from the GED Testing Program, *The benefit of skills,* 91 (2): 145-149.

Hendrick, J. (1996) *The whole child: Developmental education for early years* (6th ed.). New Jersey: Pearson Hall.

Henderson, H. L. and Ronald, F. (2010) How to use verbal reprimands in a positive manner, *Physical Educator,* 47 (4): 193-196.

Henning, E. (2004) *Finding your way in qualitative research.* Pretoria: Van Schaik.

Hesse-Biber, S. N. (2010) *Mixed Methods Research: Merging Theory with Practice*. New York: Guilford.

Hewitt-Taylor, J. (2002) Insider knowledge: Issues in insider research, *Nursing Standard,* 16 (46): 33-35.

Hislop, D. (2002) Mission impossible? Communicating and sharing knowledge via information technology, *Journal of Information technology,* 17: 165-177.

Hockey, J. (1993) Research methods – Researching peers and familiar settings, *Research Papers in Education,* 16 (2): 1-15.

Hofstede, G. and Hofstede, G. J. (2005) *Cultures and Organizations: Software of the Mind* (2nd ed.). New York: McGraw-Hill.

Holden, G. W. (2002) Perspectives on the Effects of Corporal Punishment, *Psychological Bulletin,*128 (4): 590-595.

Hosseini, S.M. (2011) The application of SECI model as a framework of knowledge creation in virtual learning, *Asia Pacific Education Review*, 12 (2): 263-270.

Howard, B. J. (1996) Advising parents on discipline: What works, *Pediatrics*, 98: 809-815.

Hunter, C. and Eder, D. (2010) The role of storytelling in understanding children's moral/ethic decision-making, *Multicultural Perspectives,* 12 (4): 223-228.

Hutchings, K. and Michailova, S. (2003) *Facilitating knowledge sharing in Russian and Chinese subsidiaries: The importance of groups and personal networks.* Copenhagen: Copenhagen Business School.

Jacobson, M. F. (2004) *Constructive classroom rewards: preventing good habits whiles protecting children's health.* [Online] Available at: http://district.schoolnutritionandfitness.com/laurelsd/files/Healthy_Classroom_Rewards.pdf. [Accessed: 18th June, 2014]

Jennings, P.A. and Greenberg, M.T. (2009) The prosocial classroom: Teacher social and emotional competence in relation to child and classroom outcomes, *Review of Educational Research,* 79: 491-525.

Johnson, B. and Christensen, L. (2004) *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (2nd ed.). Boston, MA: Pearson Education, Inc.

Johnson, R. B. and Onwuegbuzie, A. J. (2004) Mixed methods research: A research paradigm whose time has come, *Educational Researchers,* 33 (7): 14-26.

Johnson, R., Onwuegbuzie, A. and Turner, L. (2007) Toward a definition of mixed methods research, *Journal of Mixed Methods Research,* 1 (2): 112-133.

Jones, D., Monsen, J., and Franey, J. (2013) Using the Staff Sharing Scheme to support school staff in managing challenging behaviour more effectively, *Educational Psychology in Practice,* 29 (3): 258-277.

Jones, K., Lori, N. and Leonard, K. (2009) *From tacit knowledge to organizational knowledge for successful KM.* [Online] Available at: http://www.uky.edu/~ gmswan3/575/ From_ Tacit_to_OK.pdf. [Accessed: 15th April, 2014]

Jones, V. and Jones, L. (2010) *Comprehensive classroom management: Creating communities of support and solving problems* (9th ed.). Upper Saddle River, NJ: Merrill.

Kantawong, P., Nethanomsak, T. and Luang-ungkool, N. (2012) Inclusive education in Thailand after 1999 National Education Act: A review of a pre-service teacher education system, S*ocial and Behavioral Sciences,* 69: 1043-1051.

Knowles, M. (1980) *The modern practice of adult education*: *From pedagogy to andragogy*. Chicago: Follett.

Knowles, M. (1984) *The adult learner* (3rd ed.). Houston, TX: Gulf Pub.

Knowles, M., Holton, E. and Swanson, R. (2005) *The adult learner: The definitive classic in adult education and human resource development* (6th ed.). Houston, TX: Gulf Publishing Company.

Knowles, M., Swanson, R. and Holton, E. (2011) *The adult learner: The Definitive classic in adult education and human resource development* (7th ed.). California: Elsevier Inc.

Krogh, G. V., Ichijo, K. and Nonaka, I. (2000) *Enabling knowledge creation: How to unlock the mystery of Tacit knowledge and release the power of innovation*. New York: Oxford University Press.

Labaree, R. V. (2002) The risk of 'going observationalist': negotiating the hidden dilemmas of being an insider participant observer, *Qualitative Research,* 2 (1): 97-122.

Lake, L. (2008) *A teacher's guide to positive discipline* [Online] Available from: http://www.rapcan.org.za/File_uploads/Resources/teaching%-20positive%20discipline%20screen.pdf. [Accessed: 8th December, 2012]

Lane, K. L., Wehby, J. H. and Barton-Arwood, S. (2005) Students with and at-risk for emotional and behavioral disorders: Meeting their social and academic needs, *Preventing School Failure,* 49 (2): 6-9.

Laudon, K. C. and Laudon J. P. (2004) *Management Information System*. Upper Saddle River, NJ: Prentice Hall.

Lee, C. S. and Kelkar, R.S. (2011) *ICT and knowledge management: perspectives from the SECI model,* The Electronic Library 31 (2): 226-243. [Online] Available at: http://www.emeraldinsight.com/0264-0473.htm [Accessed: 24th May, 2014]

Lerman, D. C., Tetreault, A., Hovanetz, A., Strobel, M. and Garro, J. (2008) Further evaluation of a brief, intensive teacher-training model, *Journal of Applied Behavior Analysis,* 41 (2): 243-248.

Letarte, M., Normandeau, S., and Allard, J. (2010) Effectiveness of a parent training program 'Incredible years' in a child protection service. *Child abuse and neglect,* 34 (4): 253-261.

Liew, A. (2007) Understanding data, information, knowledge and their inter-relationships, *Journal of Knowledge Management Practice,* 8 (2). [Online] Available at: http://www.tlainc.com/articl134.htm. [Accessed: 18th June, 2014]

Little, S., Quintas, P. and Ray, T. (2002) *Managing Knowledge: An essential reader*. London: Sage.

Lizhu, Y. and Xiaoyan, Z. (2005) A study of the cross-situational stability of three- to five-year-old children's independence, *International Journal of Early Years Education,* 13 (2): 171-178.

Louis, K. S., Marks, H. M. and Kruse, S. (1996) Teachers' professional community in restructuring school, *American Educational Research Journal,* 33(4): 757-798.

Lundahl, B. W., Risser, H. J. and Lovejoy, M. C. (2006) A meta-analysis of parent training: Moderators and follow-up effects, *Clinical Psychology Review*, 26: 86-104.

MacDonald, C. J. and Stodel, E. J. (2004) Plaining an e-learning dementia care programme for healthcare teams in long-term care facilities: The learners' perspectives, *Educational Gerontology,* 30: 845–864.

Malmgren, K. W., Trezek, B. J., and Pual, P. V. (2005) Models of classroom management as applied to the secondary classroom, *The caring house,* 379 (1): 36-39.

Masten, A. S., Roisman, G. I., Long, J. D., Burt, K. B., Obradovic, J., Riley, J. R., Boelcke-Stennes, K. and Tellegen, A. (2005) Developmental cascades: Linking academic achievement and externalizing and internalizing symptoms over 20 years, *Developmental Psychology,* 41 (5): 733-746.

Marshall, C. and Rossman, G. B. (2006) *Designing qualitative research* (4th ed.). London: SAGE.

Marshall, M. (1998) Fostering social responsibility and handling disruptive behaviour. *NASSP Bulletin*, 82 (596): 31-39.

Marshall, M. (2001) *Discipline without stress punishments or rewards: How teachers and parents promote responsibility and learning.* California: Piper Press.

Martensson, M. (2000) A critical review of knowledge management as a management tool, *Journal of Knowledge Management,* 4 (3): 204-216.

Martealla, R. C., Nelson, J. R., Marchand-Martella, N. E. and O' Reilly, M. (2012) *Comprehensive Behavior Management Individualized, Classroom, and Schoolwide Approaches* (2nd ed.). London: SAGE.

Martin-de-Castro, G., Lopez-Saez, P. and Navas-Lopez, J. E. (2007) *Knowledge creation processes*: *Theory and empirical evidence from knowledge – Intensive Firms*. New York: Palgrave Macmillan.

McCracken, G. (1988) *The Long Interview*. New York: Sage.

McGonigal, K. (2005) Teaching for Transformation: from Learning Theory to Teaching Strategies [Online]. Available at: http://www.stanford.edu/dept/CTL/cgi-bin/docs/newsletter/transformation.pdf. [Accessed: 15th October, 2014]

McKee, B. E. and Dillenburger, K. (2012) Effectiveness of child protection training for pre-service early childhood educators, *International Journal of Educational Research,* 53: 348–359.

McKenzie, K., Matheson, E., McKaskie, K., Hamilton, L. and Murray, G. C. (2000) Impact of group training on emotion recognition in individuals with a learning disability, *British journal of learning disabilities,* 28: 143-147.

Meadan, H., Ostrosky, M., Zaghlawan, H., Yu, S. (2012) Using coaching with preschool teachers to support the social skills of children with and without autism spectrum disorders, *International Journal of Early Childhood Special Education*, 4 (2): 74-94.

Mertens, D. M. (1998) *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches*. London: Sage.

Merrell, K. W. (2008) *Excerpted from School Social Behavior Scales* (2nd ed.). Baltimore: Brookes Publishing.

Merritt, E. G., Wanless, S. B., Rimm-Kaufman, S. E., Cameron, C. and Peugh, J. L. (2012) The contribution of teachers' emotional support to children's social behaviours and self- regulatory skills in first grade, *School Psychology Review,* 41 (2): 141-159.

Mezirow, J. (1991) *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.

Middleton, M. and Midgley, C. (2002) Beyond motivation: middle school students' perception of press for understanding math, *Contemporary Educational Psychology,* 27: 373-391.

Miller, M., Dunn, T. and Currell, K. (2005) Learning and the importance of knowing: student perspectives on centralising indigenous knowledge in their preparation as teachers. In: Phillips, J. and Lampert, J. (Eds.), *Introductory Indigenous Studies in Education*: the importance of knowing. Pearson: Frenchs Forest.

Minichiello, V., Aroni, R., Timewell, E., and Alexander, L. (1995) *In-depth interviewing: Principles, techniques, analysis* (2nd ed.). Melbourne: Addison Welsey Longman.

Ministry of Education (MOE) (2003) *Early Childhood Curriculum B.E. 2546 for Children of 3-5 Years Old.* Bangkok: Kurusapa Ladprao Printing Press.

Ministry of Education (MOE) (2008) *The Basic Education Core Curriculum B.E. 2551 (A.D. 2008).* Bangkok: Agriculture Co-Operative Printing.

Mitchem, K. and Benyo, J. (2000) *A classwide peer-assisted self-management program all teachers can use: Adaptations and implications for rural educators. Retrieved from The Educational Resources Information Center (ERIC).* [Online] Available at: http://www.eric.ed.gov/PDFS/ED439868.pdf [Accessed: 14th June 2014]

Mohsuwan, L. (2004) *How Thai youths lead their lives.* Bangkok: Lim Brothers Printing.

Mokhele, P. R. (2006) The teacher–learner relationship in the management of discipline in public high schools, *Africa Education Review,* 3: 148-159.

Molina-Azorin, J. F. (2011) The use and added value of mixed methods in management research, *Journal of Mixed Methods Research*, 5: 7-24.

Morgan, D. L. (2007) Paradigms lost and pragmatism regained. Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research,* 1: 48-76.

Morrisey, B. (2010) *Time Out' as a Discipline Technique.* [Online] Available at: http://www.kidsdevelopment.co.uk/TimeOutDisciplineTechnique. html. [Accessed: 5th April, 2013]

Morrison, K. R. B. (1983) *Planning and accomplishing school-centred evaluation.* Nor Folk: Peter Francis Publishers.

Myers, C. L. (2013) Comparing results from the clinical assessment of behaviour and child behaviour checklist with referred preschoolers, *Psychology in the schools,* 50 (1): 1-12.

Myers, M. D. and Avison, D. (2002) *Qualitative research in information systems*. London: Sage.

Nelsen, J. (2014) *Natural consequences.* [Online] Available at: http://blog.positivediscipline.com/2012/04/natural-consequences.html. [Accessed: 5th July, 2014]

NHS Fife Department of Psychology (2013) *Ignoring misbehaviour.* [Online] Available from: http://www.moodcafe.co.uk/media/22666/Ignoring%20misbehaviour.pdf [Accessed: 18th June, 2014]

Nonaka, I. (1994) A dynamic theory of organizational knowledge creation, *Organization Science*, 5 (1): 14-37.

Nonaka, I. and Konno, N. (1998) The concept of "Ba": Building a foundation for knowledge creation. *California Management Review*, 40 (3): 40-54.

Nonaka, I. and Takeuchi, H. (1995) *The Knowledge-Creating Company*. New York: Oxford University Press, Inc.

Nonaka, I. and Toyama, R. (2003) The knowledge-creating theory revisited: knowledge creation as a synthesizing process, *Knowledge Management Research and Practice* 1: 2-10.

Nonaka, I. and Toyama, R. (2007) Why Do Firms Differ? The Theory of the Knowledge-Creating Firm. In, Ichijo, K., and Nonaka, I. (Eds). *Knowledge creation and management: New challenges for manager.* Oxford: Oxford University Press.

Nonaka, I., Toyama, R., and Byosiere, Ph. (2001) A theory of organizational knowledge creation: understanding the dynamic process of creating knowledge. In Dierkes, M., Antal, A. B., Child, J., and Nonaka, I. (Eds). *Handbook of organizational learning and Knowledge*. Oxford: Oxford University Press.

Nonaka, I., Toyama, R., and Konno, N. (2001) SECI, Ba and leadership: a unified model of dynamic knowledge creation, *Long Range Planning*, 33(1): 5-34.

Nonaka, I., Toyama, R., and Nagata, A. (2000) A firm as a knowledge-creating entity: A new perspective on the theory of the firm. *Industrial and Corporate Change*, 9 (1): 1-20.

Nordness, P. D., Epstein, M. H. and Synhorst, L. (2009) Convergent validity and test-retest reliability of the preschool behavioral and emotional behavior rating scale: Parents as respondents, *Special Education and Communication Disorders Faculty Publications.*[Online] Available at: http://digitalcommons.unomaha.edu/spedfacpub [Accessed: 24th May 2014]

O'Cathain, A., Murphy, E. and Nicholl, J. (2007) Why, and how, mixed methods research is undertaken in health services research: a mixed methods study, *BMC* Health Services Research, 7:85. [Online] Available at: http://www.biomedcentral. com/ 1472-6963/7/85. [Accessed: 6th April, 2012]

Office of the Basic Education Commission (OBEC) (2008) *Early Childhood Education Standards for Internal Quality Assurance.* Bangkok: Ministry of Education.

Office of the Education Council (OEC) (2004) *Education in Thailand 2004.* Bangkok: Amarin Printing and Publishing, 2004.

Office of the Education Council (OEC) (2012) *National Strategic Plan for Early Childhood Development.* Bangkok, Prigwan Graphic Co., Ltd.

Office of the Education Council (OEC) (2013) *Early Childhood Care and Education in Thailand (Global Monitoring Report: Goal1).* Bangkok: Ministry of Education.

Office of the Minister for Children and Youths Affairs (2010) *Children's perspectives on parenting styles and discipline: A developmental approach.* Dublin: The Stationery Office.

Office of the National Education Commission (ONEC) (2002a) *The National Education Plan (2002-2016).* Bangkok: Office of National Education Committee.

Office of the National Education Commission (ONEC) (2002b) *Teacher development for quality learning.* [Online] Available at: http://www.edthai.com/publication /0005/content.htm [Accessed: 12th October, 2012]

Office of the National Education Commission (ONEC) (2003a) *The National Scheme of Education of B.E. 2545-2559 (2002-2016).* Bangkok: Prig wan.

Office of the National Education Commission (ONCE) (2003b) *The National Education Act, BE. 2542 (1999). Amendments (Second National Education Act B.E. 2545 (2002)*. Bangkok: Pimdeekarnpim Co.Ltd.

Office of the National Education Commission (ONEC) (2008) *Education in Thailand 2007.* Bangkok: Amarin Printing and Publishing.

Office of Prime Minister (1995) *Thailand in the 90s.* Bangkok: National Identity Office.

Office of Teachers' Council of Thailand (2005) *Education professional standards.* Bangkok: Kurusapha Publishers.

Onwuegbuzie, A. J., and Leech, N. L. (2004) Enhancing the interpretation of "significant" findings: The role of mixed methods research. *The Qualitative Report, 9*, 770-792. [Online] Available at: http://www.nova.edu/ssss/QR/QR9-4/onwuegbuzie.pdf. [Accessed: 6th April, 2012]

Oppenheim, A. N. (1992) *Questionnaire design, interviewing and attitude measurement.* London: Pinter.

Oral, B. (2008) The evaluation of the student teachers' attitudes toward internet and democracy. Computers and Instructional, 50: 437-445.

Ostrosky, M. M., Jung, E. Y., Hemmeter, M. L. and Thomas, D. (2007) *Helping Children Understand Routines and Classroom Schedules.* [Online] Available at: http://csefel.vanderbilt.edu/resources/wwb/wwb3.html. [Accessed: 15th October, 2013]

Ostrosky, M. M. and Jung, E. Y. (2008) *Building Positive Teacher-Child Relationships.* [Online] Available at: http://csefel.vanderbilt.edu/briefs/wwb12.pdf [Accessed: 15th October, 2013]

Pallant, J. (2005*) SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (Version 12)*. Maidenhead: Open University Press.

Pavri, S. and Monda-Amaya, L. (2000) Loneliness and students with learning disabilities in inclusive classrooms: Self-perceptions, coping strategies and preferred interventions, *Learning disabilities research and practice,* 15 (1): 22-33.

Pepper, F. C. and Henry, S. L. (2001) Using developmental and Democratic practices to teach self-discipline, *Theory into practice,* 4: 264-270.

Percy, R. M. (2005) The Contribution of Transformative Learning Theory to the Practice of Participatory Research and Extension: Theoretical Reflections, *Agriculture and Human Values,* 22: 127-136.

Perels, F., Merget-Kullmann, M. Wende, M., Schmitz, B. and Buchbinder, C. (2009) Improving self-regulated learning of preschool children: Evaluation of training for kindergarten teachers, *British journal of educational psychology,* 79: 311-327.

Pham, T. (2008) *Intra-Organizational Knowledge Transfer Process in Vietnam's Information Technology Companies*. A Thesis Submitted in partial fulfilment of the Requirements of University of Fribourg for the Degree of Doctor of Philosophy. Fribourg: University of Fribourg.

Pianta, R., and Stuhlman, M. (2004) Teach and child relationships and children's success in the first years of school, *School Psychology,* 33 (3): 444-458.

Pinar, E. S. and Sucuoglu, B. (2013) The outcomes of a social skills teaching program for inclusive classroom teachers, *Educational Sciences: Theory and Practice,* 13 (4): 2247-2261.

Pineda, P., Ucar, X., Moreno, V. and Belvis, E. (2011) Evaluation of teachers' continuing training in the early childhood education sector in Spain, *Teacher Development,* 15 (2): 205-218.

Pinyoanuntapong, S. (2013) The development of Thai early ehildhood education curriculum to promote desirable characteristics of preschool children, *Social and Behavioral Sciences*, 88: 321-327.

Polanyi, M. (1983) *The tacit dimension*. Gloucester Massachusetts: Peter Smith.

Polit, D. and Beck, C. (2006) *Essentials of Nursing Research: Methods, Appraisal and Utilization* (6th ed.). Philadelphia: Lippincott Williams and Wilkins.

Polit, D. F. and Hungler, B. P. (1995) *Nursing research: Principles and methods* (5th ed.). Philadelphia: Lippincott.

Pongpaibool, P. (2000) *Education for all: The year 2000 assessment Thailand country report.* [Online] Available at: http://www.unesco.org/education/wef/country reports/thailand/contents.html#cont. [Accessed: 5th August, 2014]

Potter, J. and Hepburn, A. (2005) Qualitative interviews in psychology: problems and possibilities, *Qualitative Research in Psychology*, 2: 38-55.

Posner, P. L. (2009) The Pracademic: An Agenda for Re-Engaging Practitioners and Academics. *Public Budgeting and Finance*, 29 (1): 12-26.

Quaglia, R., Marion, S., and McIntire, W. (1991) The relationship of teacher satisfaction to perceptions of school organization, teacher empowerment, work conditions, and community status. *Education,* 112: 206-217.

Rae, H., McKenzie, K., and Murray, G. (2011) The impact of training on teacher knowledge about children with an intellectual disability, *Journal of intellectual disabilities,* 15 (1): 21-30.

Raver, G. C., Li-Grining, C., and Metzger, M. W. (2009) Targeting children's behavior problems in preschool classrooms: A cluster-randomized controlled trial, *Journal of consulting and clinical psychology,* 77 (2): 302-316.

RAPCAN (2008) *A Teacher's Guide to Positive Discipline.* Diep River: RAPCAN.

Reider, B. (2005) *Teach more and discipline less: preventing problem behaviours in the K-6 classroom.* Carifornia: Corwin Press.

Riney, S. S. and Bullock, L. M. (2012) Teachers' perspectives on student problematic behaviour and social skills, *Emotional and Behavioural Difficulties,* 17 (2): 195-211.

Robson, C. (2011) *Real world research: a resource for users of social research methods in applied settings.* Oxford: Wiley-Blackwell.

Rogers, A. (1996) *Teaching Adults* (2nd ed.). Buckingham: Open University Press.

Rowley, J. (2002) Using case studies in research, *Management Research News,* 25 (1): 16-27.

Rogus, J. (2001) Promoting self-discipline: a comprehensive approach, *Theory into practice,* 24 (4): 271-276.

Roy, A. and Gupta, R. K. (2007) Knowledge Processes in Small Manufacturing: Re-examining Nonaka and Takeuchis' model in the Indian Context, *Journal of Entrepreneurship*, 16: 77-93.

Samuel, V. (2009) Punishment or positive discipline? [Online] Avaliable at: http://www.supernanny.co.uk/Advice/-/Parenting-Skills/-/Discipline-and-Reward/Punishment-or-positive-discipline.aspx. [Accessed: 25th October, 2013]

Sally, S. (2006) *An Overview of Adult Learning Processes* [Online]. Available at: http://www.medscape.com/viewarticle/547417_2. [Accessed: 15th October, 2014]

Sasson, R. (2013). *Self-discipline: Its benefits and importance.* [Online] Available at: http://www.slife.org/virtues/self-esteem/3156-self-discipline-its-benefits-and-importance. [Accessed: 9th March, 2014]

Seo, K. (2013) Professional learning of observers, collaborators, and contributors in a teacher-created online community in Korea, *Asia Pacific Journal of Education,* 34 (3): 337–350.

Scarlett, W. G., Ponte, I. C., and Singh, J. P. (2009) *Approaches to behaviour and classroom management.* London: SAGE.

Scheerens, J. (2010) *Teachers' professional development Europe in international*

comparison. Belgium: Luxembourg.

Schön, D. (1983) *The Reflective Practitioner: how professionals think in action.* London: Temple Smith.

Schwenck, C., Göhle, B., Hauf, J., Warnke, A., Freitag, C. M. and Schneider, W. (2014) Cognitive and emotional empathy in typically developing children: The influence of age, gender, and intelligence, *European journal of developmental psychology,* 11 (1): 63-76.

Schepis, M. M., Ownbey, J. B., Parson, M. B. and Reid, D.H. (2000) Training support staff for teaching young children with disabilities in an inclusive preschool setting, *Journal of Positive Behavior Interventions,* 2 (3): 170-178.

Sechrest, L. and Sidana, S. (1995) Quantitative and qualitative methods: Is there an alternative?, *Evaluation and Program Planning*, 18: 77-87.

Shenton, A. K. (2004) Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22* (2): 63-75.

Silverman, D. (2010) *Doing Qualitative Research* (3rd ed.). London: SAGE.

Smith, C. J. and Laslett, R. (1995*) Effective classroom management: A teacher's guide.* (2nd ed.). London: Routledge.

Smith, F. (2002) *Research Methods in Pharmacy Practice*. Cornwall: Pharmaceutical Press.

Smyth, A. and Holian, R. (2008) Credibility Issues in Research from within Organisations. In: Sikes, P. and Potts, A. (Eds.), *Researching education from the inside*. New York: Taylor & Francis.

Snyder, J., Low, S., Schultz, T., Barner, S., Moreno, D., Garst, M., Leiker, R., Swink, N. and Schrepferman, L. (2011) The impact of brief teacher training on classroom management and child behaviour in at-risk preschool settings: Mediators and treatment utility, *Journal of Applied Developmental Psychology,* 32 (6): 336-345.

Spivak, A. L. and Farran, D. C. (2012) First-grade teacher behaviors and children's prosocial actions in classrooms, *Early Education & Development,* 23: 623-639.

Straus, M. A. (1996) Spanking and the making of a violent society, *Pediatrice,* 98:837-842.

Staub, E. (2003) *The psychology of good and evil: Why children, adults, and groups help and harm others.* Cambridge: Cambridge University Press.

Swinson, J. and Harrop, A. (2001) The differential effects of teacher approval and disapproval in junior and infant classrooms, *Educational Psychology in Practice,* 17 (2): 157-167.

Tammets, K. (2012) *Meta-Analysis Of Nonaka & Takeuchi's Knowledge Management Model In The Context Of Lifelong Learning* [Online]. Available at: http://www.tlainc.com/articl319.htm. [Accessed: 14th October, 2014]

Tan, N. L., Lye, Y. H., Ng, T. H. and Lim, Y. S. (2010) Motivational factors in influencing knowledge sharing among banks in Malaysia, *International Research Journal of Finance and Economics*, 44: 191-201.

Tannirat, T. (2010) A comparison of 4-and 5-year teacher education programmes: A multi–research method study. *Journal of Education*, 21 (3): 41-56.

Tantranont, N. (2009) *Continuing professional development for teachers in Thailand.* A Thesis Submitted in partial fulfillment of the Requirements of University of Warwick for the Degree of Doctor of Philosophy. Coventry: University of Warwick.

Taylor, B., Kermode, S. and Roberts, K. (2007) *Research in Nursing and Health Care: Evidence for Practice* (3rd ed.). Sydney: Thomson.

Taylor, B., and Kroth, M. (2009). Angragogy's transition into the future: Meta-analysisof andragogy and its search for a measurable instrument, *Journal of Adult Education,* 39 (1): 1-11.

Taylor, C. (2011) *How to teach a child self-discipline* [Online]. Available at: http://www.livestrong.com/article/78280-teach-child-selfdiscipline/. [Accessed 18th October, 2011]

Teddlie, C. and Tashakkori, A. (2009) *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences.* Thousand Oaks, CA: Sage.

Teddlie, C. and Tashakkori, A. (2010) *Mixed Methods in Social & Behavioral Research*. London: Sage.

Thailand Education Reform Project. (2002) *Teacher Development for Quality Learning*. Bangkok: Office of Commercial Services.

The American Academy of Child and Adolescent Psychiatry (2011) *Children and role models: Facts for families.* [Online] Available at:http://www.aacap.org/App_Themes/ AACAP/docs/ facts_for_families/99_children_and_role_models.pdf.

[Accessed: 14th June 2014]

The Canadian Paediatric Society (2004) Effective discipline for children, *Paediatric Child Health,* 9 (1): 37-41.

Thomas, M. (2013) *Early childhood development in Thailand.* [Online] Available at: http://www.unicef.org/thailand/education_14938.html [Accessed 16th March. 2014]

Tian, J., and Nakamori, Y. and Wierzbicki, A. P. (2009) Knowledge management and knowledge creation in academia: A study based on surveys in a Japanese research university, *Journal of Knowledge Management,* 13 (2): 76-92.

Tichovolsky, M. H., Arnold, D. H., and Baker, C. N. (2013) Parent predictors of changes in child behaviour problems, *Journal of Applied Developmental Psychology,* 34: 336–345.

Tominey, S. L. and McClelland, M. M. (2011) Red light, purple light: Findings from a randomized trial using circle time games to improve behavioral self-regulation in preschool. *Early Education and Development*, 22 (3): 489-519.

Tomlin, C. (2008) *Guiding Children in Self Discipline Techniques.* [Online] Available from: http://www.earlychildhoodnews.com/earlychildhood/article_ view. aspx? ArticleID=396. [Accessed: 8th July, 2014]

Toncharean, R. (2010) *Development and Trend of Early Childhood Curriculum in Thailand*. Bangkok: Srinakharinwirot University.

Tsoukas, H. (2003) Do we really understand tacit knowledge? In Easterby-Smith, M. and Lyles, M. A. (Eds). *The Blackwell Handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell Publishing Ltd.

Trangkasombat, U. (2005) *How to discipline your child.* Bangkok: Santa Printing.

Tua, H. (2000) Difficulties in diffusion of tacit knowledge in organizations, *Journal of Intellectual Capital* 1 (4): 357-365.

Tuomi, I. (1999) Data is more than knowledge: Implications of the reversed knowledge hierarchy to knowledge management and organizational memory, *The 32nd Hawaii International Conference on Systems Sciences*, Computer Society Press, USA.

Turansky, S. and Miller, J. (2011) *Helping children develop self-discipline* [Online] Available at: http://www.effectiveparenting.org/tips4.asp [Accessed: 18th October, 2011]

UNESCO (2004) *Early childhood care and education in South-East Asia: Working for access, quality and inclusion in Thailand, the Philippines and Viet Nam.* Bangkok: UNESCO Bangkok.

UNESCO (2006a) *Early Childhood Care and Education Regional Report: Asia and the Pacific* [Online] Available at: http://unesdoc.unesco.org/images/0018/001892/189210E.pdf. [Accessed: 28th June, 2014]

UNESCO (2006b) *Positive discipline in the inclusive, learning-friendly classroom: a guide for teachers and teacher educators*. Bangkok: UNESCO Bangkok.

UNESCO (2006c) *Thailand early childhood care and education (ECCE) programme* [Online] Available at: http://unesdoc.unesco.org/images/0014/001472/147249e.pdf. [Accessed: 10th May, 2014]

UNESCO (2008) *Secondary education regional information base: country profile Thailand.* Bangkok: UNESCO Bangkok.

UNESCO (2011a) *World Data on Education* (7th ed.). Bangkok: UNESCO Bangkok.

UNESCO (2011b) *Higher Education and Technical and Vocational Education and Training.* [online] Available at: http://www.unescobkk.org/education/resources/resources/education-system-profiles/thailand/higher-tvet/. [Accessed 5th June, 2014]

UNESCO (2013) *Handbook on education policy analysis and programming.* Bangkok: UNESCO Bangkok.

UNESCO International Bureau of Education (IBE) (2006) *Thailand: Early Childhood Care and Education (ECCE) programmes.* Geneva: UNESCO International Bureau of Education.

UNICEF (2012) *Early childhood development.* [Online] Available at: http://www.unicef.org/thailand/education_14938.html [Accessed: 18th June, 2014]

Unluer, S. (2012) Being an Insider Researcher While Conducting Case Study Research, *The Qualitative Report,* 17 (58): 1-14.

Vasiloff, B. C. (2003) *Teaching self-discipline to children: fifteen essential skills.* Mystic, CT: Twenty-Third Publications.

Villegas-Reimers, E. (2003) *Teacher professional development: an international review of the literature.* Paris: UNESCO International Institute for Educational Planning.

Wallace, D. (2007) *Knowledge Management: Historical and Cross-Disciplinary Themes* (2nd ed.). Colorado: Libraries Unlimited, Inc.

Walsham, G. (1995) Interpretive case studies in IS research: nature and method. *European Journal on Information Systems,* 4: 74-81.

Wati, H. (2011) The effectiveness of Indonesian English teachers training programms improving confidence and motivation, *International Journal of Instruction,* 4 (1): 79-104.

Wayson, W. W. (2001) Opening windows to teaching: Empowering educations to teach self-discipline, *Theory into practice,* 4: 227-232.

Webster-Stratton, C. and Reid, J. M. (2008) Adapting the incredible years child dinosaur social, emotional, and problem solving intervention to address comorbid diagnoses, *Journal of children's services*, 3: 17-30.

Weinstein, C. S. (2006) *Secondary classroom management: Lessons from research and practice* (4th ed.). New York: McGraw-Hill.

Weinstein, C. S. and Mignano, A. J. (2007) *Elementary classroom management: Lessons from research and practice* (4th ed.). Boston: McGraw-Hill.

Weir, D. and Hutchings, K. (2005) Cultural embeddedness and contextual constraints: knowledge sharing in Chinese and Arab cultures. *Knowledge and Process Management,* 12 (2): 89-98.

Wenger, E. (1998) *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Weri, D. and Hutchings, K. (2005) Cultural embeddedness and contextual Constraints: Knowledge sharing in Chinese and Arab cultures, *Knowledge and process management,* 12 (2): 89-98.

Wiersma, W. and Jurs, S. G. (2005) *Research methods in education* (8th ed.). Boston: Allyn & Bacon.

Williford, A. P., Vick Whittaker, J. E., Vitiello, V. E. and Downer, J. T. (2013) Children's engagement within the preschool classroom and their development of self-regulation, *Early education and development,* 24: 162-187.

Wilson, E. (1998) Guiding young children series responses to misbehavior. [Online] Available at: http:// *pods.dasnr.okstate.edu/docushare/dsweb/.../T-2327web.pdf* [Accessed: 24th June 2014]

Winston, J. (1999) Theorizing drama as moral education, *The Journal of Moral Education,* 28 (4): 459-71.

Wissow, L. S. (2002) Child discipline in the first three years of life. In, N. Halfon, K. T. McLearn and M. A. Schuster (eds.), *Child-rearing in America: Challenges facing parents with young children*. New York: Cambridge University Press.

Wolfgang, C. H. (2005) *Solving discipline and classroom management problems: methods and models for today's teachers.* Hoboken: John Wiley and Sons, Inc.

Wragg, E. (2001) *Class management in the primary school.* London: Routledge Falmer.

Yang, J. and Pan, Y. (2011) Analysis on teaching methods of industrial and commercial management based on knowledge transform expansion model of SECI, *I.J. Education and Management Engineering,* 6: 467-473.

Yeh, Y., Huang, L. and Yeh, Y. (2011) Knowledge management in blended learning: Effects on professional development in creativity instruction, *Computers and Education,* 56: 146-156.

Yin, R. K. (1994) *Case study research: Design and methods* (2nd ed.). Newbury Park, CA: Sage.

Yinger, R. J. (1980) A study of teacher plaining, *Elementary school journal,* 80: 107-127.

Yurekli, A. (2013) The six-category intervention analysis: A classroom observation reference, *ELT Journal,* 67 (1): 1-11.

Zack, M. H. (1999) Managing codified knowledge, *Sloan Management review,* 40: 45-58.

Zainal, Z. (2007) Case study as a research method, *Jurnal Kemanusiaan,* 9: 1-6.

Zmeyov, S. I. (1998) Andragogy: Origins, developments and trends, *International Review of Education* 4: 103-108.

Zolten, K. and Long, N. (2006) *Time-out as a discipline technique.* [Online] Available at: http://www.parenting-ed.org/handouts/timeout.pdf. [Accessed: 18th June, 2014]

Appendices

Appendix 1.1 Interview schedule before the prgramme for
head teacher and deputy head teacher

Interviewer……..…… Interviewee…….……..…..
Date of Interview…… Time of Interview ……..……to..…….….
Place of interview…….. Length of Interview interval……..…….

Induction:

Thank you very much for agreeing to be interviewed. The researcher is undertaking a PhD thesis about development of the programme for enhancement of teachers' knowledge and behaviours in promoting preschoolers' self-discipline.

Answers will remain anonymous and can be accessed by the researcher only. All information will be used solely as part of my PhD studies and will be destroyed at the end of the study. This is guaranteed by the researcher.

Section 1. Importance of self-discipline

1.1 Main question: Self-discipline is one of the biggest issues in social skills of preschoolers. This concerns educators and parents because nursery-age children should be developed in their self-discipline. Turning to the main question, how important do you think self-discipline is for children? And if you do think it important, why is that?

1.2 Probe: Many classroom management books mention that children's self-discipline can help teachers to manage their classroom better. Similarly, children are able to more successfully succeed in their studies. Do you agree or disagree with the statement? Please give an explanation for your answer.

1.3 Prompt1: Could you give some examples of the benefits of children using self-discipline?

1.4 Prompt2: Could you give some examples of the effects of lack of children's self-discipline on your classroom management?

Section 2. Behaviour of teacher in promoting preschoolers' self-discipline

2.1 Main question: It is believed that teachers' behaviours have an effect on children's behaviours. Moreover, they play an important role in helping children enhance their self-discipline by methods and techniques used with their children. Additionally, many teachers have a different style of behaviour with children, but the aim is for children to have self-discipline. Turning to the main question, generally, what are the main characteristics of preschool teachers in promoting preschoolers' self-discipline?

2.2 Prompt 1: Could you give me five positive aspects of preschool teachers' behaviour that influences children's self-discipline in your school?

2.2 Prompt 2: Could you give me five negative issues of preschool teachers' behaviour that have an impact on children's self-discipline in your school?

Section 3. Main issues of self-discipline problems

3.1 Main question: Many schools are increasing in the amount of discipline problems. Some educators believe that children today are lacking in self-discipline this makes it more difficult for the teacher, who has to deal with classes of 25-30 students at a time. Turning to the main question, could you describe the main issues of self-discipline problems in your school?

3.2 Prompt 1: Could you give me five self-discipline issues that the children in your school lack?

3.3 Prompt 2: Could you give me five self-discipline aspects that the children in your school have?

Thank you for agreeing to be interviewed.

Appendix 1.2 Interview schedule before the programme for teachers

Interviewer…….. Interviewee……..
Date of Interview…… Time of Interview …..……to……..
Place of Interview…….. Length of Interview interval……...

Induction:

Thank you very much for agreeing to be interviewed. The researcher is undertaking a PhD thesis about development of the programme for enhancement of teachers' knowledge and behaviours in promoting preschoolers' self-discipline.

Answers will remain anonymous and can be accessed by the researcher only. All information will be used solely as part of my PhD studies and will be destroyed at the end of the study. This is guaranteed by the researcher.

Section 1. Importance of self-discipline.

1.1 Main question: Admittedly, self-discipline is one of the biggest issues in social skills of preschoolers. This concerns educators and parents because nursery-age children should be developed in their self-discipline. Turning to the main question, how important do you think self-discipline is for children? And if you do think it important, why is that?

1.2 Probe: Many classroom management books mention that children's self-discipline can help teachers to manage their classroom better. Similarly, children are able to more successfully succeed in their studies.

Do you agree or disagree with this statement? Please give an explanation for your answer.

1.3 Prompt1: Could you give some examples of the benefits of children using self-discipline?

1.4 Prompt2: Could you give some examples of the effects of lack of children's self-discipline on your classroom management?

Section 2. Teachers' knowledge in promoting preschoolers' self-discipline.

2.1 Main question: There are several areas of knowledge on promoting children's self-discipline such as theories related to self-discipline, roles of teachers, how to respond to children etc.

Turning to the main question, what knowledge do you think would be most useful to know about promoting self-discipline for children?

2.2 Probe: Teachers have several ways to gain knowledge of self-discipline; some teachers have learned by reading books or watching TV programme, while others might obtain via sharing experience with others.

In your case, how have you gained knowledge of self-discipline?

2.3 Prompt1: Could you describe knowledge that you gained from a resource above?

2.4 Prompt2: Could you give me an example of knowledge that you currently use to promote children's self-discipline in your class?

Section 3. Behaviour of teachers in promoting preschoolers' self-discipline.

3.1 Main question: It is believed that teachers' behaviours have an effect on children's behaviours. Moreover, they play an important role in helping children enhance their self-discipline by methods and techniques used with their children. Additionally, many teachers have a different style of behaviour with children, but the aim is for children to have self-discipline. Turning to the main question, in your opinion what are of your own behaviours do you think would encourage children to enhance their self-discipline?

3.2 Probe: There is research which supports that teachers are good models for children. For example, if they would like children to use appropriate language, they should use appropriate language themselves. Could you give me another example that is important for encouraging children to enhance their self-discipline?

3.3 Prompt 1: Could you give me five positive aspects of your behaviour that influences your children's self-discipline?

3.4 Prompt 2: Could you give me an example of a situation in your classroom when your behaviours influenced the children's self-discipline?

Section 4. Main issues of self-discipline problems.

4.1 Main question: Many teachers are facing children behaviour management problems in their classroom such as children running around the classroom, hitting friends, breaking rules etc. Could you describe the main issues of self-discipline problems in your classroom?

4.2 Probe: Some teachers believe that small behavioural problems of children can lead to bigger problems in the future. Therefore, they try to stop them in order to prevent big problems happening in their class. However others ignore small behavioural problems of children because they believe that when children grow up their behaviour will improve. In your opinion, what do you think about small behavioural problems of children in your classroom and how do you deal with them?

4.3 Prompt 1: Could you give me up to five self-discipline issues that the children in your classroom lack?

4.4 Prompt 2: Could you give me an example of a situation or problem that you believe it is difficult to deal with?

Thank you for agreeing to be interviewed.

Appendix 1.3 Interview schedule after the prgramme for
head teacher and deputy head teacher

Interviewer…….. Interviewee……..
Date of Interview…… Time of Interview …..……to……..
Place of Interview…….. Length of Interview interval……...

Induction:

Thank you very much for agreeing to be interviewed. As you know the researcher is undertaking a PhD thesis about development of the programme for enhancement of teachers knowledge and behaviours in promoting preschoolers' self-discipline.

Answers will remain anonymous and can be accessed by the researcher only. All information will be used solely as part of my PhD studies and will be destroyed at the end of the study. This is guaranteed by the researcher.

Section 1. Teachers' behaviours in promoting preschoolers' self-discipline

1.1 Main question: After the teacher attended the programme and gained knowledge from the programme, could you describe what did they improve significantly on in their own behaviour in order to promote preschoolers' self-discipline?

1.2 Probe: As you can remember before the programme started, I interviewed you about five positive aspects of teacher behaviour that influences children's self-discipline. That you answered 1)…… 2)…….. 3)…….4)…….. 5)……. What would you like to add more positive aspects?

1.3 Prompt: Could you describe to me an example of a major change in teacher behaviour before and after you attended the programme?

Section 2. Preschoolers' self-discipline behaviour

2.1 Main question: As you can remember before the programme started, I interviewed you about five self-discipline issues that the children in your school lack. You answered 1)…… 2)…….. 3)…….4)…….. 5)…….

After the teachers attended the programme and gained knowledge to manage their classes, have they improved?

2.2 Probe: Some children have changed a little in their behaviour, whereas others have significantly changed. It depends on several factors such as background family, temperaments and their own social skills development etc. Could you describe overall how the children have changed their behaviour that you can notice?

2.3 Prompt: Could you describe to me an example of a major change in the children's behaviour before and after you attended the programme?

Thank you for agreeing to be interviewed.

Appendix 1.4 Interview schedule after the prgramme for teachers

Interviewer…….. Interviewee……..
Date of Interview…… Time of Interview …..……to……..
Place of Interview…….. Length of Interview interval……...

Induction:

Thank you very much for agreeing to be interviewed. As you know the researcher is undertaking a PhD thesis about development of the programme for enhancement of teachers knowledge and behaviours in promoting preschoolers' self-discipline.

Answers will remain anonymous and can be accessed by the researcher only. All information will be used solely as part of my PhD studies and will be destroyed at the end of the study. This is guaranteed by the researcher.

Section 1. The effectiveness of programme.

1.1 Main question: What did you think about the programme?

1.2 Probe: What were the strengths and the weaknesses of the programme?

1.3 Prompt: What more could be done to improve the effectiveness of the programme?

Section 2. Teachers' knowledge in promoting preschoolers' self-discipline.

2.1 Main question: As you can remember before the programme started, I interviewed you about what knowledge would be most useful to know.

After the programme, did you gain all areas of knowledge that you expected to?

2.2 Probe: What kind of knowledge gained from the programme is the most useful for your classroom management?

2.3 Prompt: Could you give me an example of when you were able to apply a concept or knowledge from the programme to solve children's behavioural problems in your classroom?

Section 3. Teachers' behaviours in promoting preschoolers' self-discipline.

3.1 Main question: After you attended the programme and gained knowledge from the researcher and your colleagues, could you describe what did you improve significantly on in your own behaviour in order to promote preschoolers' self-discipline?

3.2 Probe: As you can remember from before the programme started, I interviewed you about five positive aspects of your behaviour that influences your children's self-discipline. That you answered 1)…… 2)……..
3)…….4)……5)……What would you like to add as example of additional positive aspects?

3.3 Prompt: Could you describe to me an example of a major change in your behaviour before and after you attended the programme?

Section 4. Preschoolers' self-discipline behaviour.

4.1 Main question: As you can remember before the programme started, I interviewed you about five self-discipline issues that the children in your classroom lack. You answered 1)…… 2)…….. 3)…….4)…….. 5)……After you attended the programme and gained knowledge to manage your class, have they improved, and if so, how?

4.1 Probe: Some children have changed a little in their behaviour, whereas others have significantly changed. It depends on several factors such as background family, temperaments and their own social skills development etc. Could you describe overall how have your children changed their behaviour that you can notice?

4.2 Prompt: Could you describe to me an example of a major change in your children's behaviour before and after you attended the programme?

Thank you for agreeing to be interviewed.

Appendix 2: Questionnaire

Induction:

Thank you very much for sparing time to complete this questionnaire. As you know the researcher is undertaking a PhD thesis about development of the programme for enhancement of teachers knowledge and behaviours in promoting preschoolers' self-discipline.

Answers will remain anonymous and can be accessed by the researcher only. All information will be used solely as part of my PhD studies and will be destroyed at the end of the study. This is guaranteed by the researcher.

Direction:

Teachers must choose the answer which is most representative to how they would react in each scenario. Please place a tick in the box in front of the answer.

☐ Before the program ☐ After the program

Section 1: Lack of self-control

1. If a child runs in the classroom, the teacher should…

☐ A. Call out the name of the child and say "stop running"

☐ B. Explain reasons why he cannot run around the classroom

☐ C. Establish it as one of the classroom rules and remind him when he breaks the rules

☐ D. Make him stand in the corner for time-out and then allow him go back to do the activity

☐ E. Other……..

2. If a child hurts another child e.g. hitting, punching, kicking, the teacher should…

☐ A. Give her time-out in the defined place immediately

☐ B. Stop her behaviour and tell her to say sorry to the child who gets hurt

☐ C. Take her away from her friends and explain to her why she cannot behave like that

☐ D. Give her a punishment in order to prevent other children behaving in the same way

☐ E. Other……..

3. When two preschoolers are fighting over a toy, the teacher should...

☐ A. Offer two limited choices and ask them to choose

☐ B. Take that toy away and give them other toys to play with instead

☐ C. Let them solve the problem by themselves without interfering

☐ D. Call out the name of the child and say “don't grab the toy, your friend is playing with that”

☐ E. Other……..

4. If a child leaves the classroom without permission, the teacher should…

☐ A. Blame him immediately when he leaves the classroom

☐ B. Teach him to ask for permission before leaving the classroom

☐ C. Not allow him to return to the classroom until the next activity

☐ D. Explain the reason why he should ask for permission before leaving the classroom

☐ E. Other……..

5. If a child does not queue up, the teacher should…

☐ A. Remind her to queue up

☐ B. Praise a child who queues up nicely

☐ C. Let the other children warn her to queue up

☐ D. Give her a punishment in order to prevent other children behaving in the same way

☐ E. Other……..

Section 2: Lace of self-responsibility

6. If a child cannot finish activities on time, the teacher should…

- ☐ A. Move on to another activity as scheduled
- ☐ B. Allow her more time to finish activities
- ☐ C. Give her warnings to let her anticipate before the time is up
- ☐ D. Use a clock at the front of the classroom to show start and finish times of an activity
- ☐ E. Other……..

7. A child always finishes his work quickly but without completing it. When the teacher encourages him to make more effort, he replies that he has finished and his work is good. The teacher should…

- ☐ A. Give him more work to do
- ☐ B. Allow him to do other activities
- ☐ C. Motivate him to try harder
- ☐ D. Not allow him to do other activities until he completes his work
- ☐ E. Other……..

8. If a child does not tidy up the toys when finished playing. The teacher should…

- ☐ A. Not allow her to play with the toys again
- ☐ B. Explain reasons why she has to tidy up toys
- ☐ C. Tell her to always tidy up the toys when she has finished playing
- ☐ D. Praise other children who tidy up toys when they have finished playing
- ☐ E. Other……..

9. If a child talks to others when teacher is teaching, the teacher should…

- ☐ A. Warn him to stop talking
- ☐ B. Ignore him and continue teaching
- ☐ C. Make him stand when everyone else is sitting
- ☐ D. Point out that this behaviour is inappropriate immediately
- ☐ E. Other……..

10. If a child does not listen to others when they speak, the teacher should…

- ☐ A. Explain reasons why he has to be a good listener
- ☐ B. Be a good listener when he speaks as a good role model
- ☐ C. Praise him when he is listening to others when they speak
- ☐ D. Give him the logical consequence e.g. others do not listening when he is speaking
- ☐ E. Other……..

Section 3: Lack of self-reliance

11. If a child needs help all the time during routine activities such as changing clothes making bed and tidying up toys, the teacher should…

- ☐ A. Ignore her when she asks for help
- ☐ B. Praise her when she does things by herself
- ☐ C. Take time to teach her step-by-step about self-reliance
- ☐ D. Encourage her to be confident so that she can do these things by herself
- ☐ E. Other……..

12. If a child does not take care of her personal belongings, the teacher should…

- ☐ A. Give her the natural consequences
- ☐ B. Praise her whenever she takes care of her personal belongings
- ☐ C. Warn her about natural consequences e.g. losing her personal belongings
- ☐ D. Set the example of expected behaviour at all times and being a good role model
- ☐ E. Others……..

13. If a child does not flush the toilet after use, the teacher should…

- ☐ A. Remind her every time when she is going to the toilet
- ☐ B. Give her one to one assistance every time she uses the toilet
- ☐ C. Put a sign on the door to remind children to flush the toilet after use
- ☐ D. Take time to teach her step-by-step how to clean up the toilet after use
- ☐ E. Others……..

14. If a child does not display good habits whilst eating such as talking to others and playing with the food on the plate, the teacher should…

- ☐ A. Praise other children who display good habits
- ☐ B. Remind her what good habits are whilst eating and how to behave.
- ☐ C. Take time to teach her step-by-step about good habits whilst eating
- ☐ D. Eat with the children as often as possible to set an example of good habits whilst eating
- ☐ E. Other……..

15. If a child does not make decisions by himself, the teacher should…

- ☐ A. Tell him directly what he should do in some situations
- ☐ B. Give praise for his efforts when he tries to make decisions
- ☐ C. Give him choices between two or three courses of action and let him choose only one
- ☐ D. Encourage him to make decision as often as possible and then encourage him to express his own ideas
- ☐ E. Other……..

Section 4: Lack of cooperation

16. If a child breaks the classroom rules, the teacher should…

- ☐ A. Tell him a brief reminder of the rules
- ☐ B. Punish him when he breaks the classroom rules
- ☐ C. Call out the name of the child and tell him to stop the behaviour
- ☐ D. Give him the consequences of what will happen if he chooses to break the classroom rules
- ☐ E. Other……..

17. If a child quarrels with friends, the teacher should…

- ☐ A. Ignore the quarrelling and let them solve the problem by themselves
- ☐ B. Immediately give them time-out for a while in the defined place
- ☐ C. Punish them in order to prevent other children behaving in the same way
- ☐ D. Talk to them about negative results of quarrelling and find other ways that a

problem can be resolved

☐ E. Other……..

18. A child interrupts the class by being noisy, the teacher should…

☐ A. Warn him to stop being noisy

☐ B. Ignore him and continue teaching

☐ C. Send him out of class for 5 minutes

☐ D. Point out that this behaviour is inappropriate immediately

☐ E. Other……..

19. If a child does not bring materials related to the lesson as assigned, the teacher should…

☐ A. Not allow her to participate in the activity

☐ B. Remind her often to bring the materials for the lesson

☐ C. Praise her when she does bring materials for the lesson

☐ D. Tell her parents directly to bring the materials for the lesson

☐ E. Others……..

20. If a child does not help the teacher to prepare materials being used in activities when asked, the teacher should…

☐ A. Ask her for help politely whenever the teacher needs help

☐ B. Praise her when she does help to prepare materials being used in activities

☐ C. Praise a different child who helps to prepare materials being used in activities

☐ D. Set an age-appropriate volunteer work for children to help teacher preparing materials being used in activities

☐ E. Other……..

Section 5: Lack of empathy

21. If a child uses inappropriate language. The teacher should...

☐ A. Stop talking with him until he uses appropriate language

☐ B. Ignore those words and keep speaking politely with him

☐ C. Point out an example of a child who speaks politely and praise that child

☐ D. Say to him, “That’s a word we don’t use here” and explain in a simple way

☐ E. Others……..

22. If a child does not help others when they ask for help, the teacher should…

☐ A. Praise another child who always helps others

☐ B. Praise her in front of others whenever she helps others

☐ C. Direct her to help others when they ask for help

☐ D. Provide her with the logical consequences for when she does not help others and explain the positive consequences of helping others

☐ E. Other……..

23. If a child does not take turns when he plays with friends, the teacher should…

☐ A. Play with the children and show them how to take turns properly

☐ B. Warn of the consequences of not taking turns e.g. not having anyone to play with

☐ C. Let him think and solve this problem himself because this is a good challenge for him

☐ D. Explain to him why he must take turns and ask him to think of some things that would be fun for him and his peers to play with together

☐ E. Other……..

24. A child does not say ‘Sorry’ when he or she has done something wrong, the teacher should…

☐ A. Stop talking with her

☐ B. Praise a child who says ‘Sorry’

☐ C. Keep speaking politely with her as a good role model

☐ D. Remind her to say ‘Sorry’ whenever she has done something wrong

☐ E. Other……..

25. If a child does not use ‘Please’ and ‘Thank you’, the teacher should…

☐ A. Keep speaking politely with her as a good role model

☐ B. Praise another child who is uses ‘Please’ and ‘Thank you’

☐ C. Stop talking with her until she says ‘Please’ or ‘Thank you’

☐ D. Remind her to say ‘Please’ and ‘Thank you’ when appropriate

☐ E. Other……..

Section 6: Lack of problem solving

26. If a child cries when she cannot deal with a problem, the teacher should…

☐ A. Assist him in solving his own problems

☐ B. Ignore him for a while until he stops crying

☐ C. Encourage him to think of a way to deal with the problem himself

☐ D. Offer two limited choices to solve the problem and ask him to choose

☐ E. Other……..

27. If a child always asks for help from others when problems arise, the teacher should...

☐ A. Ignore her when she asks for help

☐ B. Assist her when a problem arises

☐ C. Offer her one or two options to choose from in order to deal with the problem

☐ D. Give her more time to think and encourage her to express her own ideas to solve problems

☐ E. Other……..

28. If a child does not make choices for solving problems. The teacher should…

☐ A. Tell him step by step how to deal with the problem

☐ B. Encourage him to keep trying to solve a problem until it is resolved

☐ C. Offer him variety of choices that range from bad to good and let him choose the best choice by himself

☐ D. Allow him to make a choice and then face the negative or positive Consequences (provided he is still safe)

☐ E. Other……..

29. If a child does not choose appropriate ways to solve problems, the teacher should…

☐ A. Tell her the pros and cons of her choice

☐ B. Give her an example of an appropriate solution to deal with the problem

☐ C. Ask her some questions to make her reconsider her own solution until she can come up with a better one

☐ D. Allow her face the negative or positive consequences (provided she is still safe) and encourage her to think of another better way

☐ E. Other……..

30. If a child cannot explain why he chooses solutions problems, the teacher should…

☐ A. Give him an example of an explanation

☐ B. Tell him the pros and cons of the solution that he has chosen

☐ C. Do nothing because he can solve problems himself, which is fine

☐ D. Ask him some questions in order to guide him in thinking over his own ideas

☐ E. Other……..

Appendix 3.1 Teacher behaviour checklist

Teacher Class ……

Direction:

The teachers will be to rate their own behaviour into the teacher behaviour checklist before the programme. They will then be asked to rate their own behaviour again after the programme using the same checklist.

Please read the list of behaviours and put a mark in the appropriate box.

☐ Before the programme ☐ After the programme

Items	Never	Sometimes	Often
1. Modelling good manner 1.1 Putting things away neatly			
1.2 Tidying up equipment in the right place when finished			
1.3 Talking with children warmly and politely			
1.4 Using the appropriate tone of voice			
1.5 Using 'Please' and 'Thank you' whenever receiving or asking for help from children			
1.6 Saying sorry whenever he/she has upset children			
1.7 Paying attention when children speak			
1.8 Keeping his/her temper			
1.9 Keeping to a similar routine every day			
1.10 Respecting and following the rules in the classroom regularly			

Items	Never	Sometimes	Often
2. Creating an appropriate classroom environment 2.1 Establishing clear rules that children can understand			
2.2 Allowing children to participate in creating the rules in their classroom			
2.3 Providing an adequate amount of equipment and toys			
2.4 Making a clear daily schedule			
2.5 Providing a quiet zone for children to use when necessary			
2.6 Providing personal lockers in the classroom for children			
2.7 Encouraging children to take good care of themselves as well as others			
2.8 Allowing children to think and solve problems themselves			
2.9 Treating each child without bias			
2.10 Providing a variety of activities			
3. Responding to children properly 3.1 Giving clear and simple directions			
3.2 Rewarding a child's good behaviour			
3.3 Praising a child's good behaviour			
3.4 Using physical punishment of undesirable behaviours			
3.5 Using social punishment of undesirable behaviours			
3.6 Telling off a child in front of others			
3.7 Giving short and clear explanation			
3.8 Ignoring misbehaviour that is not harmful			
3.9 Asking for and paying attention to reasons from children			
3.10 Setting aside a time each day to spend with each child individually			

Thank you for taking your time to complete the behaviour checklist

Appendix 3.2 Observation guides for observing teacher's behaviour

Observer ..... Teacher class .....

Date of observation ..... Time of observation ..... to .....

Place of observation..... Length of observation interval .....

1. Modelling good manner
2. Creating appropriate classroom environment
3. Responding to children properly

Appendix 4.1 Child behaviour checklist

Child Number ……..…. Class……

Directions:

Children will be observed by their teacher before the programme and then rated on their behaviour, individually, using the child behaviour checklist . They will then be observed and rated again after the programme.

Please read the list of behaviours and put a mark in the appropriate box.

☐ Before the programme ☐ After the programme

Items	Never	Sometimes	Often
1. Self-control 1.1 Does he/she queue up?			
1.2 Does he/she hit friends?			
1.3 Does he/she take toys from friends?			
1.4 Does he/she leave the classroom without permission?			
1.5 Does he/she run around the classroom?			
2. Self –responsibility 2.1 Can he/she finish activities on time?			
2.2 Does he/she put a lot of effort into their work?			
2.3 Does he/she tidy up toys in the right place when finished playing?			
2.4 Does he/she talk to others when teacher is teaching?			
2.5 Does he/she listen to others when they speak?			
3. Self-reliance 3.1 Does he/she make the bed himself?			
3.2 Does he/she leave his/her belongings around?			

Items	Never	Sometimes	Often
3.3 Does he/she flush the toilet after use?			
3.4 Can he/she eat and complete their meal by him/herself?			
3.5 Does he/she make decisions by him/herself?			
4. Cooperation 4.1 Does he/she follow the rules in the classroom?			
4.2 Does he/she follow the regulations in each activity?			
4.3 Does he/she make high-pitched noise in the classroom?			
4.4 Does he/she bring materials related to the lesson as assigned?			
4.5 Does he/she help the teacher? E.g. to tidy up after finishing activities.			
5. **Empathy** 5.1 Does he/she use appropriate language with others?			
5.2 Can he/she help others when they ask for?			
5.3 Will he/she take turns?			
5.4 Does he/she say 'Sorry' when he/she has done something wrong?			
5.5 Does he/she use 'Please' and 'Thank you'?			
6. Problem solving 6.1 Does he/she cry when unable to deal with a problem?			
6.2 Does he/she ask for help from others when some problems arise?			
6.3 Can he/she solve problems him/herself?			
6.4 Does he/she choose appropriate ways to solve problems?			
6.5 Can he/she explain why he/she chooses these solutions to problems?			

Thank you for taking your time to complete the behaviour checklist

Appendix 4.2 Observation guides for observing child's behaviour

Observer ..... Child .....

Date of observation ..... Time of observation .....

Place of observation..... Length of observation interval .....

1. Self-control
Example of behaviour: don't take toys from friends, don't hit friends, queuing up, don't leave the classroom without permission, don't run around the classroom etc.

2. Self –responsibility
Example of behaviour: finishing activities on time, tidying up toys when finished playing, paying attention during activities, putting a lot of effort into their work, listening to others when they speak etc.

3. Self-reliance
Example of behaviour: acting independently, using the toilet independently, making decisions by themselves, eating on their own, taking care of personal belonging etc.
4. Cooperation
Example of behaviour: helping the teacher to prepare materials being used in activities, bringing materials related to the lesson as assigned, not breaking rules in the classroom, helping others when asked, helping the teacher etc.

5. Empathy
Example of behaviour: using appropriate language with others, not making noise to interrupt the classroom, taking turns, using ‘Please’ and ‘Thank you’, saying ‘Sorry’ when he/she has done something wrong etc.

6. Problem solving
Example of behaviour: making choices for solving problems, choosing appropriate ways to solve problems, asking for help from others when problems arise, quarrelling with friends, not crying when unable to deal with a problem etc.

Appendix 5 Classroom observation

Observer ..... Class.....

Date of observation ..... Time of observation ..... to .....

Place of observation..... Length of observation.....

The researcher will observe and make notes against the following criteria.

1. The behavioral problems of the children.

……

……

……

2. The techniques being used by teachers in order to respond to the behavioral problems of the children.

……

……

……

3. Whether the children react to the intervention of their teacher.

……

……

……

4. Whether the children change in their behaviour after intervention.

……

……

……

5. Additional comments.

……

……

……

Appendix 6.1 Invitation letter for head teacher

Dear Head Teacher,

This letter is an invitation to consider participating in a study entitled "***the development of teachers' knowledge and behaviours in promoting preschoolers' self-discipline in Thailand".*** I am conducting as part of my PhD degree in the Faculty of Education, Community and Leisure at Liverpool John Moores University under the supervision of Professor Mark Brundrett.

The decision about participation is, of course, entirely yours. To help you in this decision, I have enclosed an information sheet for you to look at, which should help you to decide whether or not you and your school should take part in the pilot study.

Should you be kind enough to allow your school to take part in the study, you may decide to withdraw the school's participation at any time. Moreover, all participants can withdraw their individual permission at any time during the study simply by indicating this decision to the researcher. Please note, that the main research methods include observations and interviews and there are no known or anticipated risks to participation in this study.

It would be appreciated if you would like your school to take part in the pilot study. Please complete the attached consent form, stating whether or not you would like to participate, and return it to me by the end of this month.

If you have any questions about the study, or if you would like additional information to assist you in reaching a decision, please feel free to contact me or Professor Mark Brundrett at Faculty of Education, Community and Leisure, Liverpool John Moores University, I.M. Marsh Campus, Barkhill Road, Liverpool L17 6BD, UK. Or by e-mail:

Professor Mark Brundrett : M.Brundrett@ljmu.ac.uk

Phornchulee Lungka : P.Lungka@2011.ljmu.ac.uk

Thank you for taking the time to read this letter.
I look forward to hearing from you.

Yours sincerely,

Phornchulee Lungka

Appendix 6.2 Information sheet for gatekeeper

LIVERPOOL JOHN MOORES UNIVERSITY

GATEKEEPER INFORMATION SHEET

Title of Project:	The development of teachers' knowledge and behaviours in promoting preschoolers' self-discipline in Thailand
Name of Researcher	Miss Phornchulee Lungka
Faculty	Education, Community and Leisure, LJMU

You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. Please take time to decide if you want to take part or not.

1. What is the purpose of the study?

Lack of self-discipline is likely to be one of the most important problems in our society. Many theories note that kindergarten-age is the most appropriate age to develop self-discipline. In addition, preschool teachers play an important role in helping their students build up their self-discipline because children in this age group spend most of their time (approximately eight to ten hours a day) with their teachers. Therefore, the teacher is a key player in children's self-discipline development. Thus, this research study aims to create a programme for the enhancement of teachers' knowledge and behaviour in promoting preschoolers' self-discipline using SECI model.

2. Do I have to take part?

Your school is participating voluntarily, so it depends on your decision whether or not you take part. If you do you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights/any future treatment/service you receive.

3. What are school involvements if it takes part?

Once I have received your consent to approach learners to participate in the study, I will

- arrange for informed consent to be obtained from participants.
- arrange a time with your school for data collection to take place.
- obtain informed consent from participants.

4. Are there any risks / benefits involved?

It is expected that any risks, discomforts, or inconveniences will be minor and I believe that they are unlikely to happen. If discomforts become a problem, you may discontinue your participation.

There are two main participant groups who can get potential benefits from taking part in the study as well as benefits to the wider society.

• Benefits to the preschool teachers may include gaining more knowledge about promoting preschoolers' self-discipline and a better understanding of how to manage children in classroom. Therefore, they can manage their class better and have more positive and effective teaching.

• Benefits to the preschoolers may include enhancing their self-discipline. Their behaviours can be formed in the appropriate ways in order to behave well, be reasonable and to be able to control one-self well. As a result, they can live with family members and others in society happily.

• Benefits to society may include a better understanding of how teachers promote the development of preschoolers' self-discipline in the appropriate way.

5. Will my taking part in the study be kept confidential?

All data obtained will be anonymous and strictly confidential. It will be securely maintained by password protection system on the LJMU data system. Personal information including age, qualification and background of teaching, etc will be destroyed once data has been verified. Only the research team, investigator and supervisory team, are able to access to the data generated with regard to revising and verifying the completion of data and analysis. All data relating to the study will be kept until at the end of the study. The findings will only be published without any reference to individuals or individual responses.

Appendix 6.3 Written consent form for gatekeeper

LIVERPOOL JOHN MOORES UNIVERSITY
GATEKEEPER CONSENT FORM

LIVERPOOL JOHN MOORES UNIVERSITY

Title of Project:	The development of teachers' knowledge and behaviours in promoting preschoolers' self-discipline in Thailand
Name of Researcher	Miss Phornchulee Lungka
Faculty	Education, Community and Leisure, LJMU

1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason, and that this will not affect my legal rights. ☐

3. I understand that any personal information collected during the study will be anonymised and remain confidential ☐

4. I allow my school to take part in the study ☐

Name of Participant	Date	Signature
Name of Researcher	Date	Signature

Note: When completed 1 copy for participant and 1 copy for researche

Appendix 7.1 Invitation letter for teacher

Dear teachers,

This letter is an invitation to consider participating in a research study entitled ***"the development of teachers' knowledge and behaviours in promoting preschoolers' self-discipline in Thailand".*** I am conducting this study as part of my PhD degree in the Faculty of Education, Community and Leisure at Liverpool John Moores University in the UK under the supervision of Professor Mark Brundrett.

The study is expected to include interviews about your opinion of children's self-discipline and your behaviour may be observed in the classroom. You then will be asked to complete a questionnaire and rate your own behaviour and preschoolers' behaviour in your class by using a behaviour checklist. Next, you will attend the programme for 9 weeks. After the programme, you will be interviewed again, asked to rate your own and preschoolers' behaviour in your class by using the same behaviour checklists and will be asked to complete the same questionnaire. To help you in this decision, I have enclosed an information sheet for you to look at, which should help you to decide whether or not to take part in this study.

All information you provide will be considered confidential and grouped with responses from other participants. However, information based on the result of the group of participants will be provided. Further, you will not be identified by name in my thesis or in any report or publication resulting from this study.

Taking part in the study is your decision. You do not have to be in this study if you do not want to; participation is voluntary. Also, you can withdraw your permission at any time during the study simply by indicating this decision to the researcher. There are no known or anticipated risks to participation in this study.

It would be appreciated if you would take part in the study, as I believe it will contribute to furthering knowledge of preschoolers' self-discipline development. Please complete the attached consent form, stating whether or not you would like to participate, and return it to the school by the end of this month.

If you have any questions about the study, or if you would like additional information to assist you in reaching a decision, please feel free to contact me or Professor Mark Brundrett at Faculty of Education, Community and Leisure, Liverpool John Moores University, I.M. Marsh Campus, Barkhill Road, Liverpool L17 6BD, UK. Or by e-mail:

Professor Mark Brundrett : M.Brundrett@ljmu.ac.uk
Phornchulee Lungka : P.Lungka@2011.ljmu.ac.uk

Thank you for taking the time to read this letter.
I look forward to hearing from you.

Yours sincerely,

Phornchulee Lungka

Appendix 7.2 Information sheet for teacher

LIVERPOOL JOHN MOORES UNIVERSITY

PARTICIPANT INFORMATION SHEET

You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. Please take time to decide if you want to take part or not.

1. What is the purpose of the study?

Lack of self-discipline is likely to be one of the most important problems in our society. Many theories always note that kindergarten-age is the most appropriate age to develop self-discipline. In additional, preschool teachers play an important role in helping their students build up their self-discipline because children in this age group spend most of their time (approximately eight to ten hours a day) with their teachers. Therefore, the teacher is a key player in children's self-discipline development. Thus, this research study aims to create a programme for the enhancement of teachers' knowledge and behaviour in promoting preschoolers' self-discipline using SECI model.

2. Do I have to take part?

Participation is voluntary, so it depends on your decision whether or not you take part. If you do you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights/any future treatment/service you receive.

3. What will happen to me if I take part?

As a teacher participant in this study, you will be involved in this study for 17 weeks. It will be divided into three phases; as follows,

Phase 1: Before the programme

Week 1-2 -You will be interviewed by the researcher about the views of self-discipline with regard to the wider issues connected with the promotion of preschoolers'self-discipline. This interview will use the interview schedule for teachers before the programme.

-You will be asked to rate your own behaviour using the teacher behaviour checklist and the behaviour of preschoolers in your class using the child behaviour checklist.

- You may be observed by the researcher using the observation schedule on teachers' behaviour in the classroom.

- You will be asked to complete the questionnaire.

Phase 2: The programme.

Week 3-11 - The teacher will attend the activities of the programme for nine weeks.

Phase 3: After the programme

Week 12-13 - You will be interviewed by using the interview schedule for teachers after the programme.

- You will be asked to rate your own behaviour and your preschoolers behaviour using the same behaviour checklists.

- You may be observed by using the same observation schedule.

- You will be asked to complete the same questionnaire.

4. Are there any risks / benefits involved?

It is expected that any risks, discomforts, or inconveniences will be minor and I believe that they are unlikely to happen. If discomforts become a problem, you may discontinue your participation.

There are two main participant groups who can get potential benefits from taking part in the study as well as benefits to the wider society.

• Benefits to the preschool teachers may include gaining more knowledge about promoting preschoolers' self-discipline and a better understanding of how to manage children in classroom. Therefore, they can manage their class better and have more positive and effective teaching.

• Benefits to the preschoolers may include enhancing their self-discipline. Their behaviours can be formed in the appropriate ways in order to behave well, be reasonable and to be able to control one-self well. As a result, they can live with family members and others in society happily.

• Benefits to society may include a better understanding of how teachers promote the development of preschoolers' self-discipline in the appropriate ways.

5. Will my taking part in the study be kept confidential?

All data obtained will be anonymous and strictly confidential. It will be securely maintained by password protection system on the LJMU data system. Personal information including age, qualification and background of teaching and all others, will be destroyed once data has been verified. Only the research team, investigator and supervisory team, are able to access to the data generated with regard to revising and verifying the completion of data and analysis. All data relating to the study will be kept until at the end of the study. The findings will only be published without any reference to individuals or individual responses.

Appendix 7.3 Written consent form for teachers

LIVERPOOL JOHN MOORES UNIVERSITY
PARTICIPANT CONSENT FORM

LIVERPOOL JOHN MOORES UNIVERSITY

Title of Project:	The development of teachers' knowledge and behaviours in promoting preschoolers' self-discipline in Thailand
Name of Researcher	Miss Phornchulee Lungka
Faculty	Education, Community and Leisure, LJMU

1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights. ☐

3. I understand that any personal information collected during the study will be anonymised and remain confidential. ☐

4. I agree to take part in the above study. ☐

5. I understand that the interview will be audio recorded and I am happy to proceed. ☐

6. I understand that parts of our conversation may be used verbatim in future publications or presentations but that such quotes will be anonymised. ☐

Name of Participant	Date	Signature
Name of Researcher	Date	Signature

Note: When completed 1 copy for participant and 1 copy for researcher

Appendix 8.1 Invitation letter for parent

Dear Parent,

This letter is an invitation to ask your permission for your child to participate in the study entitled “the development of teachers' knowledge and behaviours in promoting preschoolers’ self-discipline in Thailand”. I am conducting this study as part of my PhD degree in the Faculty of Education, community and Leisure at Liverpool John Moores University in the UK, under the supervision of Professor Mark Brundrett. Moreover, I have got the permission of the head teacher of the school to do the study in the school.

If you agree that your child can be included in the study it is expected that your child will be observed in their classroom by the teacher and the researcher during school time. However, the decision about participation is yours. To help you in this decision, I have enclosed an information sheet for you to look at, which should help you to decide whether or not to permit your child to take part.

All material such as notes derived from the observations will be strictly confidential and individual children’s results will not be shared with others. However, information based on the result of the group of participants will be provided, if required. Only children who have parental permission will be involved in the study and children or parents may withdraw their permission at any time during the study without penalty by indicating this decision to the researcher. Please note that there are no known or anticipated risks to participation in this study. I emphasize, once again, that participation is voluntary and children or parents can withdraw their permission at any time during the study simply by indicating this decision to the researcher and there are no known or anticipated risks to participation in this study.

It would be appreciated if you would permit your child to participate in this study. Please complete the attached consent form, whether or not you give permission for your child to participate, and return it to the school by the end of this month.

If you have any questions about the study, or if you would like additional information to assist you in reaching a decision, please feel free to contact me or Professor Mark Brundrett at Faculty of Education, Community and Leisure, Liverpool John Moores University, I.M. Marsh Campus, Barkhill Road, Liverpool L17 6BD, UK. Or by e-mail:

Professor Mark Brundrett : M.Brundrett@ljmu.ac.uk

Phornchulee Lungka : P.Lungka@2011.ljmu.ac.uk

Thank you for taking the time to read this letter.

I look forward to hearing from you.

Yours sincerely,

Phornchulee Lungka

Appendix 8.2 Information sheet for parent

LIVERPOOL JOHN MOORES UNIVERSITY

PARENT INFORMATION SHEET

Title of Project:	The development of teachers' knowledge and behaviours in promoting preschoolers' self-discipline in Thailand
Name of Researcher	Miss Phornchulee Lungka
Faculty	Education, Community and Leisure, LJMU

You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. Please take time to decide if you want to take part or not.

1. What is the purpose of the study?

Lack of self-discipline is likely to be one of the most important problems in our society. Many theories always note that kindergarten-age is the most appropriate age to develop self-discipline. In additional, preschool teachers play an important role in helping their students build up their self-discipline because children in this age group spend most of their time (approximately eight to ten hours a day) with their teachers. Therefore, the teacher is the key player in children's self-discipline development. Thus, this research study aims to create a programme for the enhancement of teachers' knowledge and behaviour in promoting preschoolers' self-discipline using SECI model.

2. Do I have to take part?

Participation is voluntary, so it depends on your decision whether or not you take part. If you do you will be given this information sheet and asked to sign a consent form. You are

still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights/any future treatment/service you receive.

3. What will happen to me if I take part?

As a preschooler participant in this study, your child will be observed on his/her behaviour during school time by his/her teacher using an observation checklist on preschoolers' self-discipline behaviours. There are 20 out of 400 preschoolers who will be observed on their behaviours by the researcher using the observation schedule on preschoolers' self-discipline behaviours. After the programme has ended, your child will be observed on his/her behaviour again by their teacher and the researcher using the same instruments in order to examine the change of preschoolers' self-discipline.

4. Are there any risks / benefits involved?

It is expected that any risks, discomforts, or inconveniences will be minor and I believe that they are unlikely to happen. If discomforts become a problem, you may discontinue your participation.

There are two main participant groups who can get potential benefits from taking part in the study as well as benefits to wider society.

- Benefits to the preschool teachers may include gaining more knowledge about promoting preschoolers' self-discipline and a better understanding of how to manage children in classroom. Therefore, they can manage their class better and have more positive and effective teaching.
- Benefits to the preschoolers may include enhancing their self-discipline. Their behaviours can be formed in the appropriate way in order to behave well, be reasonable and to be able to control one-self well. As a result, they can live with family members and others in society happily.
- Benefits to society may include a better understanding of how teachers promote the development of preschoolers' self-discipline in the appropriate way.

5. Will my taking part in the study be kept confidential?

All data obtained will be anonymous and strictly confidential. It will be securely maintained by password protection system on the LJMU data system. Personal information including age, qualification and background of teaching and all others, will be destroyed once data has been verified. Only the research team, investigator and supervisory team, are able to access to the data generated with regard to revising and verifying the completion of data and analysis. All data relating to the study will be kept until at the end of the study. The findings will only be published without any reference to individuals or individual responses.

Appendix 8.3 Written consent form for parent

LIVERPOOL JOHN MOORES UNIVERSITY
ASSENT FORM FOR CHILDREN
(to be completed by parent/guardian)

Title of Project:	The development of teachers' knowledge and behaviours in promoting preschoolers' self-discipline in Thailand
Name of Researcher	Miss Phornchulee Lungka
Faculty	Education, Community and Leisure, LJMU

Child (or if unable, parent/guardian on their behalf)/young person to circle all they agree with

Have you read (or had read to you) information about this project?	Yes / No
Has somebody else explained this project to you?	Yes / No
Do you understand what this project is about?	Yes / No
Have you asked all the questions you want?	Yes / No
Have you had your questions answered in a way you understand?	Yes / No
Do you understand it's OK to stop taking part at any time?	Yes / No
Are you happy to take part?	Yes / No

If any answers are 'no' or you **don't** want to take part, don't sign your name!

If you **do** want to take part, you can write your name below

Your name _____

Date _____

Your parent or guardian must write their name here if they are happy for you to do the project.

Print Name _____

Sign _____

Date _____

The researcher who explained this project to you needs to sign too.

Print Name _____

Sign _____

Date _____

Appendix 9 Interview transcript –Teacher 2 (Before the programme)

Opening statement:

Thank you very much for agreeing to be interviewed. The researcher is undertaking a PhD thesis about development of the programme for enhancement of teachers' knowledge and behaviours in promoting preschoolers' self-discipline.

Answers will remain anonymous and can be accessed by the researcher only. All information will be used solely as part of my PhD studies and will be destroyed at the end of the study. This is guaranteed by the researcher.

Q1: Self-discipline is one of the biggest issues in social skills of preschoolers. This concerns educators and parents because nursery-age children should be developed in their self-discipline. Turning to the main question, how important do you think self-discipline is for children?

T2: Actually, self-discipline of children should start at home and school should help to reinforce and continue on from this. Self-discipline is regarded as an important tool for children to get along well in society. When talking about self-discipline most people think about punishment but actually it's not. We should practise positive reinforcement; for example, if children tidy up we praise them, we don't order them to do it. Sometimes teachers will use songs or games in order to get children to tidy up, so that when the children hear the song they will know automatically that it's time to tidy up. For little children repetition is considered very important. It is easier for them to gain understanding this way than if they are scared of punishment.

Q2: Many classroom management books mention that children's self-discipline can help teachers to manage their classroom better. Similarly, children are able to more successfully succeed in their studies. Do you agree or disagree with the statement?

T2: I agree. Especially for children who've just started their first year at school. Teachers should put emphasis on promoting self-discipline from the start. I think if children have

self-discipline they will be prepared to do activities, listen to the teacher and gain knowledge from the activities the teacher sets up. On the other hand, if children don't have self-discipline they won't feel the obligation to do the correct thing at the correct time. Sometimes this will distract other children in class also. For example, if a child starts running around during class, the teacher must stop teaching and attend to that child. This can make the other children behave chaoticly because children around this age have a short attention span. Restrictions of short attention span mean that the teacher needs to use this time as wisely as possible. These are the reasons why teachers need to promote self-discipline from the beginning of term.

Q3. Could you give some examples of the benefits of children using self -discipline?

T2: The benefits for the classroom are that the teacher can manage classroom activities well because the children are ready to learn and do activities. The benefits for the children themselves include the children knowing their duties at specific times, for example, after playing they know they must tidy up the toys. These will help to reinforce characteristics of good behaviour in the future. For children, sometimes they might not understand why they have to do something but they know they have to do it.

Q4. What about the benefits for the other students in the class?

T2: Children of this age love to copy, whether it's good behaviour or bad. For example, if a child falls on the floor another child will copy. They can't see that this might then cause an accident. So if children in the class have self-discipline it should reduce the likeliness of accidents happening.

Q5. What techniques do you, yourself, use to promote self-discipline of pre-schoolers?

T2: I use songs and rhymes and play alongside the children. With little children, they often have to do things at the same time as their friends and so I use 'waiting' songs, which we sing together whilst waiting for the rest of the students to join us. We always sing the same song, so that the children know we are waiting for them to come and line up. I think

this is a good self-discipline technique to use with very little children. Children who've just started school from home are in a completely new environment, with new friends and a new teacher. If the teacher shouts and orders them around the children are going to feel scared and not want to come to school. And so the teacher must build a good a classroom atmosphere so that the children are happy and want to come to school. They won't feel forced to do things. All of these things help the child to trust the teacher.

Q6: For little children, what type of self-discipline is needed?

T2: The first thing, children have to learn to be patient because at home they've never had to wait for anything. If they want to do something they can just do it. Therefore is very difficult for children when they come to school to have to be patient and wait for things. Hmm...the second thing is learning independence in their everyday routine. At home most parents do everything for their children, because nowadays in Bangkok everything is done is a hurry, parents don't have time to let their children do everything themselves as it takes too long. Another reason is parent think that this is something to be learnt at school, and the duty of the teachers. But actually, I think that children of this age should be able to do these things themselves, which gives them a sense of achievement. Children of this age like doing new things and doing things independently. These things help to build their self-confidence as they grow up.
The third thing, learning to put away things in the correct place, for example their personal belongings and toys. The fourth thing, children should learn what to do at the right time.

Q7. What is the role of teachers in promoting self-discipline?

T2: In my opinion, how the teacher behaves, the children will behave also. Children copy the teacher and so the teacher should be a good role model.

Q8. What is a good teacher role model?

T2: Consistency of applying the classroom rules. Not applying the rules in a situation one day but the next day ignoring them. You should be consistent. Moreover, a teacher should be flexible with each child as each child has not got the same abilities.

Q9. What kind of teacher behaviour encourages self-discipline of students?

T2: It depends on the views and attitudes of each teacher. For example, drinking milk. For some teachers they insist on children all drinking their milk together at the same time. But for other teachers children are allowed to continue with activities and drink their milk whenever they're thirsty. This doesn't necessarily mean that the teacher isn't interested in self-discipline but they just have a different approach. They might like to give the children more freedom in getting on with their activity, rather than placing more importance on drinking milk. Pre-school teachers must have some flexibility and can't be strict about everything. For example, a child who is making a house from blocks and is almost finished when the teacher says it's time to tidy up. It would be mean for the teacher not to let the child finish and ruin their dream when they could just give them a few extra minutes to finish.

Q10: What kind of teacher behaviour discourages self-discipline of students?

T2. I think not planning a self-discipline strategy for students. For example, one day disciplining them and the next not bothering or forgetting. Some teachers are so strict so that students are so scared of making mistakes in front of the teacher and so behave really well whilst the teacher is present. But when the teacher is out of the classroom they can then really misbehave. This is believed to be negative discipline, which although it can stop bad behaviour immediately, does not promote good behaviour in the long-term.

Q11. In your opinion what are of your own behaviours do you think would encourage children to enhance their self-discipline?

T2: A repetitive daily routine, which the children are used to and so helps them to predict what is going to happen next. For example, in the morning children come in, sit down, listen to prayer, wash their hands, drink their milk etc. And so in the first three weeks the teacher needs to set up the routine. After these first three weeks the teacher can then start to introduce other activities into the routine, for example, music activities or going to the library. This makes children feel safe and understand what is going to happen next. However, teachers should let the children know in advance when the routine is going to change and there will be a special activity.

Q12. How do you do this?

T2: In the morning during homeroom class I have a conversation with the children about what is going to happen that day. For example, I'll tell them on Monday we are going to go swimming after we've had our milk. So that the children can learn about timings of different events.

Q13. What is the best area of self-discipline of children in your classroom?

T2: The first thing would be that students are determined to learn and pay attention in class and during activities. They are also good at sharing things with other students, for example, art materials and toys. This might be because every classroom has a lot of materials and toys, which is enough for each class. The students are also good at following classroom rules and are able to feed themselves. All of these things I've mentioned have come from parent feedback, and from other schools that have taught children who've moved from this school. Feedback from other schools that we've heard through parents of ex-students has been that our students are very independent and have good self-discipline and self-confidence. They're also good at sharing.

Q14. Could you please describe the main issues of self-discipline problems in your classroom?

T2: We just started a new term. The biggest problem with behaviour is independence in the daily routine, for example, putting their shoes outside of the classroom. Also, children using each other's belongings, for example using each other's water-cups at break time. Another problem is children not tidying up their toys after playing and not using toys in the correct manner. I understand that children often forget to put away the toy they're playing with when they come across a new toy that's more interesting.
Another problem is not waiting for each other and pushing in to be the first. These are the main problems we are facing now with preschool. It's these things the class teachers need to plan to avoid, by promoting self-discipline step-by-step. At the beginning of the term teachers will be very tired from spending a lot of time on promoting self-discipline of students. Even in second year of pre-school the children must learn again because they forget during the school break and also they must adapt to their new class teacher. Each teacher uses different techniques for self-discipline. Some teachers can accept small mistakes whereas other teachers might not and might view it as a big deal. For example some teachers would be happy with children just putting away the toys, but for other teachers they would expect the toys to be put away neatly as well.

Q15. In what areas are children lacking self-discipline?

T2: In greeting adults appropriately and politely outside of school. This probably is due to the fact that there are lots of teachers at this school, over 100, and so children don't know all teachers and which they should greet or not. Also students at this school are prone to interrupting when the teacher is talking. But I don't see this as a big problem because we teach the children to say what they are thinking straight away and usually the teacher will give the students the opportunity to give their opinion. We try to teach them to wait until the appropriate time to do this.

Q16. Any other problems?

T2: I don't see that there are really any other big problems. We like students to have freedom to do and think for themselves and so we are not so strict with the rules. We expect children to have basic self-discipline, that's all.

Thank you for giving me your time. It has been interesting interview.