

EVALUATING RELIABILITY AND USE OF THE AGES AND STAGES  
QUESTIONNAIRES: THAI IN NORTHEAST THAI EARLY  
CHILD CARE SETTINGS

by

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A DISSERTATION

Presented to the Department of Special Education  
and Clinical Sciences  
and the Graduate School of the University of Oregon  
in partial fulfillment of the requirements  
for the degree of  
Doctor of Philosophy

December 2009

**University of Oregon Graduate School**

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An Abstract of the Dissertation of  
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in the Department of Special Education and Clinical Sciences  
to be taken December 2009

Title: EVALUATING RELIABILITY AND USE OF THE AGES AND STAGES  
QUESTIONNAIRES: THAI IN NORTHEAST THAI EARLY CHILD CARE  
SETTINGS

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Due to the lack of a screening and early identification system, preschool children who live in rural areas in Northeast Thailand have no opportunity to receive specialized educational services. Most children are identified as having disabilities at school age or older. In this study, the 24-, 30-, and 36-month intervals of the Ages and Stages Questionnaires (ASQ), a parent-completed screening system, were translated and evaluated for reliability and use in Northeast Thai early childcare settings. The study purpose was to investigate the reliability and utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai). Reliability studies included an investigation of internal consistency, test-retest reliability, interobserver reliability, and comparison of

differences between U.S. and Thai scores. Utility studies included surveys of satisfaction of parents/caregivers and early childcare staff as well as brief interviews with parents/caregivers and early childcare staff.

Subjects included 267 children who were 2-3 years old; 267 parents/caregivers; 49 early childcare staff; and 5 early childcare professor experts. The subjects were recruited through the Department of Curriculum and Instruction, the Faculty of Education, Mahasarakham University. Results addressing the reliability and use of ASQ: Thai were promising. Internal consistency ( $\rho = .58 - .89$ ) results were adequate as well as test-retest agreement ( $\rho > .90$ ). A comparison between the ASQ: Thai sample data and the U.S. normative sample found that there were some differences in range, mean, median, interquartile range, and cutoff scores. The back translation of the ASQ: Thai appeared to be adequate in comparison to the original version, as well as culturally appropriate. Early childcare staff and parents/caregivers felt that the ASQ: Thai was easy to use and understand and was culturally appropriate, and they gained knowledge about child development. Early childcare staff and parents/caregivers suggested that the ASQ: Thai should be used in early childcare settings with children when they enter the program.

Future research on the ASQ: Thai is needed. Increased study of cultural, language, and disability issues are areas for further study.

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Saihong, P. (2003). *Storytellers in northeast Thailand*. Unpublished master's thesis. Northern Illinois University, DeKalb, IL.



## ACKNOWLEDGMENTS

The success of my study and my research is due to the helps of and supports from many people and organizations. First of all, I wish to express sincere thanks and appreciation to Dr. Jane Squires who advised, supported, and assisted me throughout my doctoral program. I am grateful to her and Dr. Erin Barton for their assistance in the preparation of this manuscript. In addition, special thanks are due to Professors Deanne Unruh and Kathie Carpenter for being such supportive committee. I also would like to pay special thanks to Early Intervention Program staff, which provided administrative assistance. I would like to thank Mr. Ray Peterson, Ms. Choojit Chaibunrunag, and Mr. Kim Sua for their friendship and help with my lodging in the first few years of my study. I would also like to thank Ms. Yvonne Young, my storyteller friend, who provided a place for me to stay until I finished writing this manuscript. I would like to thank the Elliott family for being my friends and family. I am grateful for the financial supports from Maharakham University as well as the Office of International Program, University of Oregon, which provided scholarships for my tuition and stipends. Without their supports, I could not have been here. My sincere thanks must also go to Dr. Wajuppa Tossa, Mr. Wiset and Jantho Tossa, Grandma Panja Tossa, and Dr. Margaret Read MacDonald. They consistently encouraged me to work hard and keep up on with my study. Lastly, I would like to thank all of the students and staff at the Curriculum and Instruction Department, Maharakham University, as well as the children and staffs at

the child care centers who participated in and helped me in my research study. Their cooperation made my research study done successfully. I would like to make a promise that I will bring the knowledge I had learned from my participants and the Early Intervention Program, UO to help early childhood education in Thailand.

For my parents, who encouraged their children to have best education; my sisters, who  
sacrificed themselves for my education;  
and Dr. Margaret Read MacDonald, my teacher and mentor.

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## CHAPTER I

### INTRODUCTION

Early intervention/early childhood special education (EI/ECSE) services are essential for preventing the development of major disabilities (Hill et al., 2004). For children identified as at risk, interventions began early are likely to be more successful (Bowe, 2007). Children who are identified as developmentally at risk should have the right to receive free services based on each individual's needs. Unfortunately, most children identified as disabled who live in rural areas in Northeast Thailand lack the opportunities to receive EI/ECSE service. They are often identified at an older age and have to live with their disabilities for the rest of their lives.

EI/ECSE is not well known in Thailand. Services and supports are mostly limited to and focused on sensory and severe disabilities only, such as people with hearing or vision impairments and people with severe impairments. Most children at a young age have not been identified nor have received any services, although they are at risk of developmental delays. Due to Buddhism beliefs, parents will let those problems go unaddressed because those children are considered to have had bad karma in their previous lives. Until this decade, in Thailand, EI/ECSE was known as "Inclusive Practice" or "Inclusion Education" (Carter, 2006). Inclusive practice or inclusion education is understood by early childhood educators and teachers as the acceptance of children with disabilities into regular classroom settings. The Education Management for

Individuals with Disabilities Act 2008 specifies that all schools must accept all children without any conditions. Unfortunately, EI/ECSE is still not involved in the process of screening each child who may need extra help. If that child can be identified in any given early childcare setting, barriers to that child receiving special help will eventually fall.

The Ministry of Education of Thailand (MOE) issued an education reform bill in 1997 under which the development of early childhood education was included in the development of a core curriculum and appropriate practices for early childhood programs. The effect of this reform makes all children from three to five years old eligible to receive childcare services from local programs which are located in each sub district council. MOE has not developed, however, any behavioral and developmental screening system for children who will enter these early childcare programs. Behavioral and developmental screening services occur at local public health centers and public hospitals. However, this screening rarely happens unless the public health care staff sees obvious symptoms of disabilities; only then will the screening test occur. In other words, it may then be too late for the child if he is identified as disabled after the preschool years.

Since there have been no prior research looking at an early identification system in Thailand and little knowledge about how to develop early identification instruments, there is a critical need for developing information on effective early identification systems. The results will be useful to other countries that are beginning a special education inclusion program in their early childcare centers in elementary schools and

other childcare settings. Most importantly, ECSE/ EI services will expand and be accessible to most people who live in rural areas.

#### Early Childhood Special Education Movement in Thailand

The Ministry of Education in Thailand has overseen the reform of Thai early childhood education since 1993. The first move in 1997 established early childhood education services for all pre-kindergarten children at all public elementary schools. The second move was to provide guidelines for best practices in early childhood education in 1998. Last was to legalize the Thai National Education Acts of B.E. 2542 or 1999 (NEA) that provided for the regulation and management of education in general. This law specifically defines and makes provisions for early childhood education as well as early childhood special education. In Section 10, the law specifies that all individuals shall have equality and equal opportunities for free-of-charge education. Significantly, individuals with disabilities shall have free-of-charge services beginning at birth or at first diagnosis, and “these persons shall have the right to access the facilities, media, services, and other forms of educational aid in conformity with the criteria and procedures stipulated in the immaterial regulations” (S. 10, 1999). In Section 18, the law provides for the regulation of early childhood settings and practices which consist of early childhood development institutions, schools, and learning centers (S. 18, 1999). Section 18 also regulates the beginnings of inclusion education in all Thai schools which then was mandated in the Education Management for Individuals with Disabilities Act of B.E. 2551 or 2008.

It is significant that the Thai National Education Act 1999 mandated the Basic Education and Early Childhood Education Standards to certify equality in the education of all Thai children. These early childhood standards regulate best practices for early childhood education in all developmental domains based on a child-directed approach and environmentally appropriate settings. In addition, the act urges all agencies to collaborate to work for all children. Recently, the Ministry of Education passed the Education Management for Individuals with Disabilities Acts of B.E. 2551 (MOE, 2008). This law mandates that all public schools adopt an inclusive approach which provides for special education services for children with disabilities. Significantly, the law covers several aspects, including that all children with disabilities have an Individual Education Plan (IEP) and urges government agencies to provide services and assistive technology for individuals with disabilities. This will be the first step toward the development of comprehensive early childhood special education in Thailand.

In summary, laws and regulations in the special education field have just begun to be mandated in Thailand. The laws and regulations urge government and nongovernment agencies to provide appropriate practices, policies, plans, research, and pilot projects for early childhood development. In the future, laws will need to outline the best practices for early childhood development and take into account traditional child-rearing practices in Thailand.

#### Comparison of Early Intervention Systems in the US and in Thailand

Unlike in the US, different belief systems and practices in Thailand affect current early childhood special education/ early intervention (EI/ECSE) practices. However,

since the Ministry of Education of Thailand established the Bureau of Special Education Administration (BSEA) in 2001, the Thai EI/ECSE system has tried to be as close to the US EI/ECSE system as possible. However, the Thai system has both differences and similarities when compared to the US system.

Even though the US Constitution did not specify EI/ECSE services or school requirements for children from birth to age six, it did state the equality of treatment for all citizens and regulated laws and services for all (Bowe, 2007). The legislation and policies of the U.S. EI/ECSE system have been stated clearly in laws for 40 years. As part of U.S. legislation, EI/ECSE policy provides for optional services for children with disabilities and their families as well as for prevention of disabilities (Hill et al, 2004). The Individuals with Disabilities Educational Act (IDEA) is the hallmark legislation for provision of special services in the U.S. IDEA regulates the services for all children with disabilities from birth to age 21 including for those children in early intervention and early childhood special education programs. For infants and toddlers, the law requires each state to identify and evaluate each child. IDEA regulates federal, state, and local agencies to play a role in the EI/ECSE system (SEC 619).

In the U.S., the EI/ECSE system has its own clear legislation and policy. In Thailand, the government is still working on the role of the legislation and policy. Before 1997, special education was known as education for individuals with deafness, blindness, or severe disabilities, with separate schools for each kind of disability. After Thai educational reform was started in 1997, the Ministry of Education of Thailand legalized the Thai National Education Acts of B.E. 2542 (1999) (NEA). The Thai National



Education Acts provided for the regulation and management of education in general, but not clearly for EI/ECSE. However, the Thai NEA did begin to provide for some aspects of early childhood education as well as some in early childhood special education.

In 2008, the first light for EI/ECSE system shone in Thailand when the Education Management for Individuals with Disabilities was mandated and used in the Thai educational system. The main focus of the law is to provide education for individuals with disabilities in any school system in Thailand; all schools must accept all children with disabilities. The law mandated that all schools must have special education teachers to work with the children. Unfortunately, the law did not specify any services for children from birth to age eight, and the law did not specify how much funding the government will spend on the EI/ECSE programs or how much funding each province will receive from the government.

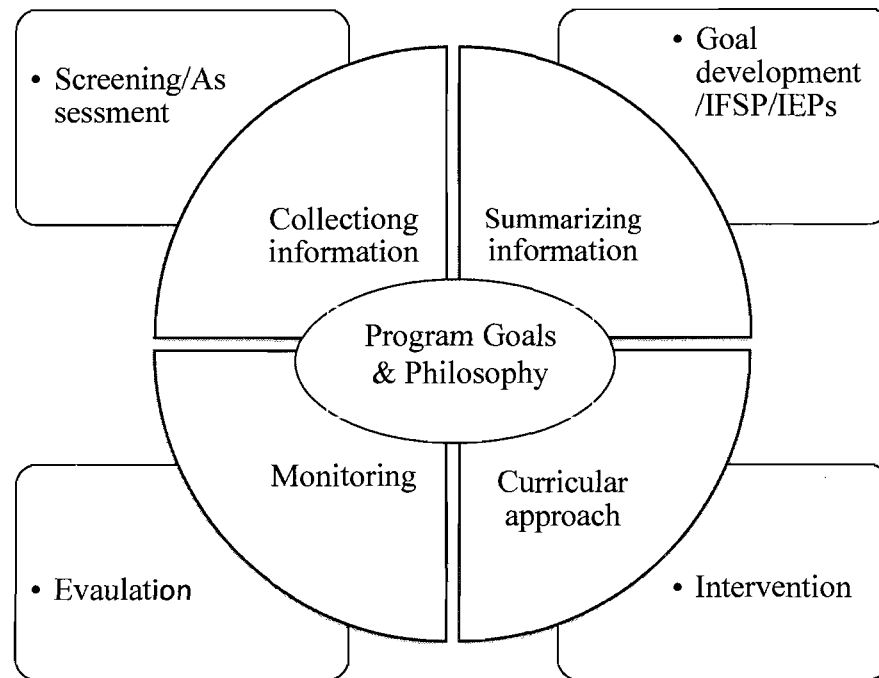
Legislation and policy in U.S. are different. The U.S. system is clear and supportive; the Thai system is as yet not organized and does not provide supportive services for EI/ECSE. Hopefully, the law will be developed and adjusted to fit into Thai society.

#### EI/ECSE System Model

Program models in the U.S. have been evolving during a long period of time, including various models for the EI/ECSE system. Briggs (1997) suggests four models: unidisciplinary model, multidisciplinary model, interdisciplinary model, and transdisciplinary model. In the U.S., the transdisciplinary model is the recommended practice for the EI/ECSE system. In the transdisciplinary model, a child and his family are

the center of the team. The team collaborates in working, sharing, and making progress in order to serve the child and his family's needs and satisfactions (Brigg, 1997). The team members include all specialists who work with the child; the team cannot ignore the knowledge held by the family. All family opinions, stories, ideas, or expertise are included in the team members' evaluation and analysis. Team members cannot work alone; they have to work together as a collaborative team. In Thailand, program models are likely to be unidisciplinary models. When parents take their child to receive services from professionals, the parents will be separated from their child and sometimes are asked what happened to their child. For the evaluation and analysis, the professionals often come to their own conclusions.

The linked system model shown in Figure 1 include a philosophical perspective and an operational set of guidelines for professionals that address the mission, content, methods, and applications for linking at assessment and early intervention (Bagnato at al., 1997). For children from birth to age five, the linked model consists of four basic elements: 1) screening and assessment, 2) goal development, 3) intervention, and 4) evaluation (Bricker, 2002; Squires & Bricker, 2007; Bagnato et al., 1997). Assessment is a process of establishing a baseline or entry-level measurement of the child's skills and desired family outcomes and assumes that a child needs further services or care (Bricker, 2002). Assessment procedures will combine observations, direct tests, and reports from the parents, caregivers, and professional team. Therefore, assessment is the first procedure of the linked system that will relate to the child's goal development, intervention plan and evaluation or monitoring.



*Figure 1.* Linked system approach. Adapted from Squires, J., & Bricker, D. (2007). An activity-based approach to developing young children's social emotion competence.

Baltimore: Paul H. Brookes.

#### Assessment System for Young Children in the U.S.

In the assessment procedure for children from birth to age 5, screening is the first step. Screening is defined as a brief assessment procedure to identify children who should receive more intensive diagnosis or assessment (McLean et al., 2004).

Screening is a quick assessment of the child. If a child is determined to be at risk or with developmental concerns, the child will be asked to participate in a comprehensive diagnostic evaluation with the professional assessment team, which is linked to step two. In step two, Bricker (2002) suggests diagnostic evaluation and standardized norm-referenced tests be used. The diagnostic evaluation test will determine if a child identified as at risk from the screening process is eligible for services. Next is step three -

- linking to a programmatic or curriculum-based assessment for determining IFSP/IEP goals and intervention strategies. Programmatic or curriculum-based assessment formulates a functional and generative IFSP/IEP goal for each child according to his/her abilities. Program goals and intervention plans also are generated through the use of a curriculum-based assessment during the goal development phase for the IFSP/IEP.

Evaluation is the process of comparing the child's performance on selected intervention goals/objectives before and after intervention and comparing the family's progress toward selected family outcomes. Evaluation is the final process in a linked system. In an effective evaluation process, the professionals gather to discuss progress on the child's and family's outcomes/objectives. Family involvement should be included in this process as well as throughout the linked system. Effective steps for the evaluation process include: 1) What are the goals of the child and family to be monitored over time and criteria for success?, 2) How are data collected?, 3) Who will collect data and where and when?, 4) How frequently are the data to be collected, such as weekly, monthly, or quarterly?, and 5) How are the data discussed to make effective program decisions? (Squires, 2007)

The assessment system in Thailand is different from that in the U.S.. Most Thai children do not receive assessment services. The Thais believe that children will show their disabilities when they are in school, except for blindness or other severe disabilities. Thus, many disabilities are not identified until children are in school. For example, children with learning disabilities (LD), attention deficit hyperactive disorder (ADHD) and autism spectrum disorder (ASD) are not identified until children enter the school

system. Most children who receive services from the special education provincial service center are the ones with severe disabilities and most parents must make a trip to different centers to obtain these services. Therefore, it is important to develop an effective assessment system. The adaptation and development of a comprehensive screening system appropriate to Thai culture might be a first step towards improving the early identification system.

#### Screening System for Young Children in Thailand

Thailand does not specify a policy for developmental and behavioral screening in the system for young children. However, both the Ministry of Public Health (MPH) and the Ministry of Education (MOE) have started a screening project. Two agencies from MPH provide screening for young children. First, the Department of Mental Health provides a website for a developmental screening checklist for parents and teachers (<http://www.dmh.go.th/test/cesd/child/>). The screening tool is an adaptation of the tool based on Denver II and Ten Questions. This tool assesses children from six months to six years of age. Second, the Department of Mental Health provides screening instruments for behavioral and mental health screening for young children. For very young children, the Department of Medical Science has established the Thailand National Neonatal Screening Program (<http://www.dmsc.moph.go.th/>). This program implements neonatal screening as one of the health issues for public health care services. With limited government funding, the program provides services for only 13 centers in 13 provincial cities.

MOE established the Bureau of Special Education Administration in 2003. This organization supervises special education centers in all 76 provinces. Roles and duties of the organization are to collect, study, analyze, and collaborate toward the conception of proposals, policies and plans for the education of people with disabilities and those who are disadvantaged, in accordance with the National Education Plan, the Basic Education and Early Childhood Education Improvement Plan, and other relevant national policies. For the assessment system, the organization provides an assessment form for identifying disabilities in clients in each province. The organization does not, however, specify a screening system. The organization merely mentions to schools that each school should screen children for disabilities in order to receive the services from a special education center (<http://special.obec.go.th/>).

Currently in Thailand, when a child is detected as having disabilities or being at risk, the child's family will have several choices for receiving intervention services. Rajanukul Institute provides services for children with autism. Children with vision or hearing impairments will search for institutes that provide services which are limited and scattered all over Thailand. Special education centers provide IEPs for children who receive services. Some centers provide an intervention classroom for those who have disabilities. Overall, the assessment system for developmental and behavioral screening has not widely developed or publicized and it has a limited presence in some areas. Because it is based on a new knowledge base, the proposed screening system must be officially studied in order to assure effective services in Thailand.

### Purpose of the Study and Research Questions

Early Childhood Special Education/Early Intervention involves the provision of services, support, and education for children with disabilities and developmental delays from birth to five years old (Sandal, McLean, & Smith, 2005). Screening children at a young age is one of the missions in this field. The purpose of this study is to determine and investigate the psychometric properties and the utility of a screening system using an adapted version of a widely-used screening test, the Ages and Stages Questionnaires: Thai (ASQ: Thai), in early childcare settings in Northeast Thailand. This system has great potential for adaptation in Thailand. The ASQ is a screening instrument that investigates young children's developmental and behavioral areas (Squires & Bricker, 1999). The original ASQ was translated into Thai and used in a screening system in early childhood education programs in Northeast Thailand. The ASQ: Thai was back-translated by an English professor; then it was reviewed by early childhood professors and special educators in order to study the cultural appropriateness. For the study of reliability and the use of the ASQ: Thai, the investigator first recruited participants from early childcare centers and elementary schools in Northeast Thailand. The participants consisted of children between the ages of 24 to 36 months (2-3 years) and their parents and early childcare staff/teachers. Secondly, the investigator asked parents and early childcare staff/teachers to complete the ASQ: Thai on each child. Finally, interviews were conducted with approximately 25 parents and early childcare staff/teachers. Questions covered the utility and the usefulness of the ASQ: Thai as an early identification instrument in the Thai system. The

data obtained included scores from the ASQ: Thai and information from the interviews from the parents and early childcare staff/teachers. The scores were used for investigating the psychometric qualities of the ASQ: Thai. The interview data helped determine if the ASQ: Thai can be used in an early identification system for enhancing child development for parents and childcare staff/teachers in Northeast Thailand. Four research questions included:

1. Is the ASQ: Thai a culturally appropriate instrument to screen preschoolers for developmental delays in Thailand?
2. What is reliability of the ASQ: Thai?
  - Internal consistency
  - Test-retest reliability
  - Interobserver reliability
3. Are there differences between the scores of Northeast Thai children on the 24, 30, and 36 month interval of the ASQ: Thai and those of U.S. children on the ASQ? What are the differences?
4. What is the utility of the ASQ: Thai, as evaluated by parents and early childcare staff/teachers?

### Summary

No comprehensive studies of a parent-completed screening test have been undertaken in Thailand. In addition, low-cost and economical methods for screening are needed, especially in rural regions such as Northeast Thailand. Further, screening as the first step in a linked system approach is critically needed to develop a comprehensive EI/ECSE system in Thailand. A screening test widely used and respected in U.S. will be



adapted by the researcher into Thai and made appropriate for that culture. This tool might provide the impetus for establishing a central system of EI/ECSE assessment, intervention, and evaluation. Since there is very little research on the development of programs for early childhood educators in Thailand, this research may boost the skills of childcare staff in early intervention as well as increase attention to early childhood education. Further, study results will begin to inform various people in Thai society such as school administrators, teachers, and parents about the importance of early detection, early child development, and quality early childhood education.

## CHAPTER II

### REVIEW OF THE LITERATURE

Thailand is located in the middle of Southeast Asia and has a population of around 65 million (<http://www.dopa.go.th/>). With a change in government 80 years ago, Thailand became democratic, a constitutional monarchy. Thailand is divided into 76 provinces under the centralization of the Thai royal government in Bangkok. Laws and regulations originate from the central government and are then administered through government agencies in each province. Likewise, services associated with Early Intervention/Early Childhood Special Education (EI/ECSE) have to be established from Bangkok under the Ministry of Education of Thailand (MOE). According to the report from the Ministry of Education of Thailand, 3,411 students have been identified as individuals with disabilities; they are classified as “handicapped.” This report has also indicated almost 400,000 preschoolers and kindergarteners are living in at-risk and poor environments (<http://www.moe.go.th/>). So far, there have not been enough services for this portion of the population in Thailand. However, the Ministry of Education founded the Bureau of Special Education Administration (BSEA) in 2001. The Thai EI/ECSE system is modeled closely to the EI/ECSE system model in the United States. In addition, the Education Management for Individuals with Disabilities Act was launched in 2008, which constituted the practice for special education in Thailand. Support in terms of teaching personnel and established systems for individuals with disabilities have

not yet met the demand. Thus, there is an urgent need for building a comprehensive EI/ECSE system, including an early developmental screening system in Thailand. The system will help to create a capacity for teachers and other personnel in understanding appropriate child development theory, establishing system guidelines, and providing support to families and children. Most importantly, the system will enforce the law, and the work of special educators will be more effectively and widely dispersed throughout all parts of the country.

This chapter presents a review of the literature including theories of child development, historical and theoretical foundations, and information about EI/ECSE service delivery systems. Background information on child developmental screening systems in Thailand is also included. This literature review starts with the definition of child development theory. Next, current practices for child with developmental difficulties are explored. A theoretical framework of an effective system for EI/ECSE is discussed next. Descriptions of childrearing practices in Thailand as well as early childhood education follow. Finally, developmental assessment for young children in Thailand and the significance of the adaptation of the Ages and Stages Questionnaires (ASQ) into Thai are explored.

#### Theoretical Framework of an Effective System for EI/ECSE

EI focuses on providing services and education settings for children with disabilities, children with developmental delays, and children who are at risk for delays, and their families from birth to age three. ECSE deals with children who are three to six

years of age (Squires, 2004) with disabilities or at risk for disabilities. This literature review includes both EI and ECSE practices, theory, and background information.

Evidence from EI/ECSE services has shown that the earlier intervention can serve children and their families, the better the children will develop their capacities to manage their routines and live their lives independently (Meisels & Shonkoff, 2000). The approach and delivery of such programs depends on a family's particular situation. For example, a child with autism and a child with Down syndrome need to be served in different ways both in terms of the disability and in terms of family needs.

Even though today EI/ECSE serves many children with disabilities and their families, parents in the past have needed to speak up for their children to be able to receive the same educational rights as children without disabilities. This section will discuss the historical and legal foundations of EI/ECSE including parent rights, the theoretical basis of EI /ECSE, and current preferred practice.

### Historical and Legal Foundations

Specialized services originated in Europe during the 1700s to help reduce barriers to young children with disabilities (Bowe, 2007). Programs started in the U.S. for the same reasons. Both children with disabilities and their parents faced the obstacles of being different from typically developing children and families. Being excluded from the mainstream, children with disabilities did not have the same access to the educational system as did typically developing children. The civil rights movement in the U.S. formed the basis of the struggle for rights for children. In the 1970's legislation that now impacts children with disabilities, such as the Individuals with Disabilities Education Act

(IDEA, 2004) was passed to help in eliminating barriers for those children with disabilities, as well as to help them to get access to the educational system.

Background legislation for IDEA for children with disabilities was enacted first in the 1960s. Even though the federal government's role in special education was initially limited, there was a major turning point for federal support of education in 1965 when Congress passed the Elementary and Secondary Education Act (ESEA). This Act and its subsequent amendment made a large amount of funds available to serve children with disabilities from 3-21 years old. The Bureau of Education for the Handicapped was founded and received funding for research and development projects to improve special education services. Later, the Handicapped Children's Early Education Assistance Act of 1968 (later called IDEA) represented the first major federal recognition of the specific importance of early education and special education. The purpose of this legislation was to support model program development throughout the nation (Fallen & Umansky, 1985; Bowe, 2007).

In 1974, the Education of the Handicapped Amendments of 1974 (PL 93-380) added the requirement that states needed to set goals for serving all children with disabilities from birth to 21 years of age (Linder, 1983). The landmark legislation, the Education for All Handicapped Children Act (EAHCA) of 1975 (PL 94-142), mandated that states provide all school-age children with disabilities a free and appropriate public education (FAPE). The law also stated that children should be educated in the least restrictive environment (LRE). Sadly, preschool-age children were not included under

Part B of this act, except in states that already provided public services for typical children at that age in public preschool (Dunlap, 1997; Bowe, 2007).

Congress then passed an amendment to EHA (PL 98-199) in 1983. From 1977 through 1983, states and communities throughout the nation were beginning to expand special education services by including children from birth to five years old. Then, the 1983 amendments provided grants for statewide coordination and planning for services for young children with disabilities, including allocations for children from birth to age three. The Handicapped Children's Early Education Program (HCEEP), now known as EEPED, continued to help create support and different delivery styles for EI/ECSE (Bowe, 2007).

The 1986 amendments (PL 99-475) helped EI/ECSE become an actuality. To be eligible to receive federal funds, all states were required to create a plan to provide appropriate services to all children under the age of six. Part H, now known as Part C, was not well funded but provided the foundation for the new program, called early intervention (Bowe, 2007).

In 1990, PL 101-476 renamed the fundamental legislation from the Education of the Handicapped Act (EHA) to the Individuals with Disabilities Education Act (IDEA). In addition, the Americans with Disabilities Act (ADA) was enacted and as a result people with disabilities were able to have more accessible communities and transportation. The ADA also prohibited discrimination against people with disabilities. In Section 504 of the Rehabilitation Act, Congress mandated responsiveness to some disabilities that were not covered under IDEA. Children with disabilities in particular

had access to early childhood programs, including child care centers and Head Start programs (Bowe, 2007; Hemmeter, Smith, & Mclean, 2005).

With the 1991 IDEA amendments (PL 102-119), Congress provided a seamless transition between Part C from birth to age 3 and Part B from 3 to 21 years old. The act also allowed Part B to serve toddlers with disabilities and toddlers with developmental delays under the age of three, even though such toddlers are not under the Part C program. This law also recognized the need for cultural competence and family involvement (Bowe, 2007).

The 1997 Revised IDEA amendments (PL 105-17) refined the early childhood special education provision. Part C provided grants to states serving toddlers from birth to age three who were developmentally delayed or at risk for such delays, and gave families the right to an Individual Family Service Plan (IFSP). Part B required that children with disabilities who were in the range of 3 to 21 years old receive a free and appropriate public education under an Individualized Education Program (IEP). Section 619 of Part B provided free and appropriate services to children with disabilities between the ages of 3 and 5 and continuity of special education services for children moving out of Part C (Bowe, 2007; Hemmeter, Smith, & Mclean, 2005).

IDEA is a guide for appropriate care; services, support, needs, and education for young people with disabilities by thorough systematic child find efforts. The law requires identification of young children with disabilities by early childhood specialists. Therefore, screening instruments and diagnostic instruments were created and developed in order to provide appropriate services and support for individuals with disabilities.

According to IDEA, services and support are provided for both individuals with disabilities and their families as a primary goal of education programs. As services and support are continued and developed, they become more recognizable and supported in society. These laws and services helped all individuals and children with disabilities to be accepted and recognized in society.

### The Theoretical Basis of EI/ECSE

EI/ECSE has a philosophical base that undergirds services for children with disabilities to develop in the five domains of development; adaptive, cognitive, communication, physical, and social-emotional. This applied philosophy helps children to develop in a holistic manner (Bowe, 2007). Major theorists have focused on children's development from different perspectives. Developmental theory can generally be grouped into four major perspectives; the developmental perspective, the transactional perspective, the family involvement (ecological model), and the educational perspective

The developmental perspective emphasizes a child's development from a maturational perspective and theorizes growth as series of stages. An important theorist of this school, Jean Piaget, believed that children's thought processes were different from those of adults. Piaget suggested that children have their own learning styles by exploring their world or interacting with environments. They are able to create stages of learning themselves from organization, adaptation, and accommodation until they become more independent by themselves. Each step of learning explains their adaptation to environments and their learning new skills when the environments are changed (Piaget, 1971).



The transactional perspective emphasizes the quality of the environment as a vital factor to the development of young children (Sameroff & Chandler, 1975). Related to the transactional perspective, Vygotsky believed in the social context of learning and demonstrated how the environment is important to children's development (Vygotsky, 1978). He showed how interactions between children and caregivers should be encouraged so that children can learn not only how to communicate by using language, but also be taught about their culture and cultural differences. Caregivers are crucial for scaffolding children's learning. Furthermore, a reciprocal relationship between children and caregivers can help to create a positive environment in which children can develop continually (Sameroff & Chandler, 1975). Erikson, another key theorist related to the transactional perspective, explained that children begin to learn in the stage of trust vs. mistrust, which is meaningful for them and helps them transition to the next stage. If positive environments are available, children can first extend their trust to caregivers, which is a required fundamental allowing them to develop steadily into trusting adults (Erikson, 1959; Kohlberg, 1981).

Bronfenbrenner (1979) described how the ecological system model or family involvement model can be part of linking each person in society together and can assist in expanding the relationships of people to be more connected (Bronfenbrenner, 1979). The child is embedded in a family, community, and culture and learns as a result of interactions with the people and units in the system. These systems are potent realities and influences on the family and the child.

At final theory is the educational perspective, which includes many approaches and practices. One particularly important perspective for EI/ECSE is Activity-Based Intervention (ABI). Pretti-Frontczak and Bricker (2004) explain how ABI approach can help children with disabilities to learn.

The main purpose of intervention for young children with disabilities or children who are at risk for disabilities is to assist them in the acquisition and generalization of critical developmental skills so that they can, to the extent possible, achieve independent functioning across environments...an approach is specifically designed to help children reach their individual goals within the context of daily activities (p. 22).

Piaget was also influential in the educational perspective in the way that he postulated that children learned. He stated that children easily learn when they are allowed to participate or interact fully in their environment. In addition, behaviorism (Skinner, 1938) is another approach in this perspective that can help intervention to be more efficient -- development occurs when a child is being rewarded for appropriate behavior, imitation and modeling, and stimulus association.

These theories help to form a foundation that assists in providing appropriate services to young children. Based on these theories, a solid literature supports evidence based practices for intervening with preschool children with developmental delays and their families.

### Current Preferred Practice

Early childhood approaches enable teachers and parents to better intervene with children, particularly children with disabilities, who need more focused care and strategies to achieve optional outcomes. Continued assessments and observations help to develop effective intervention and strategies. Setting intervention goals to help children

to develop is a second priority. Many intervention approaches have been developed to help children with disabilities to learn at their own pace, such as ABI. In the preschool classroom, children can be provided with activities to expand their skills in fine motor, gross motor, adaptive, cognitive, social communication, and social areas (Bricker, 2002). Classroom interventions can help children with disabilities be able to participate in activities with other people, such as typically developing peers. Inclusion of children with disabilities with typically developing peers helps to increase their educational progress. Additionally, current legislation and regulations in the U.S. play a role in supporting children with disabilities to become more proficient in their skills and to live their lives independently in society.

In the U.S., appropriate practices have expanded and provide services for children with disabilities on every corner. Koegel and LaZebnik (2005) reported a successful EI project for children with Autism Spectrum Disorder (ASD) (Koegel & LaZebnik, 2005). Koegel and LaZebnik explained how the project succeeded in decreasing the age at which children with ASD were identified and received early intervention. In the project approach, staff worked with the community to create community awareness for the early signs of autism. The project also worked with families. Koegel and LaZebnik (2005) stated that families always feel supported by being involved in working with their children via the community-based intervention and support agencies and concluded that the model of community and family intervention should be replicated nationwide.

The Early Childhood Coordination Agency for Referrals, Evaluations and Services (EC CARES) is an example of a successful local service delivery program. EC

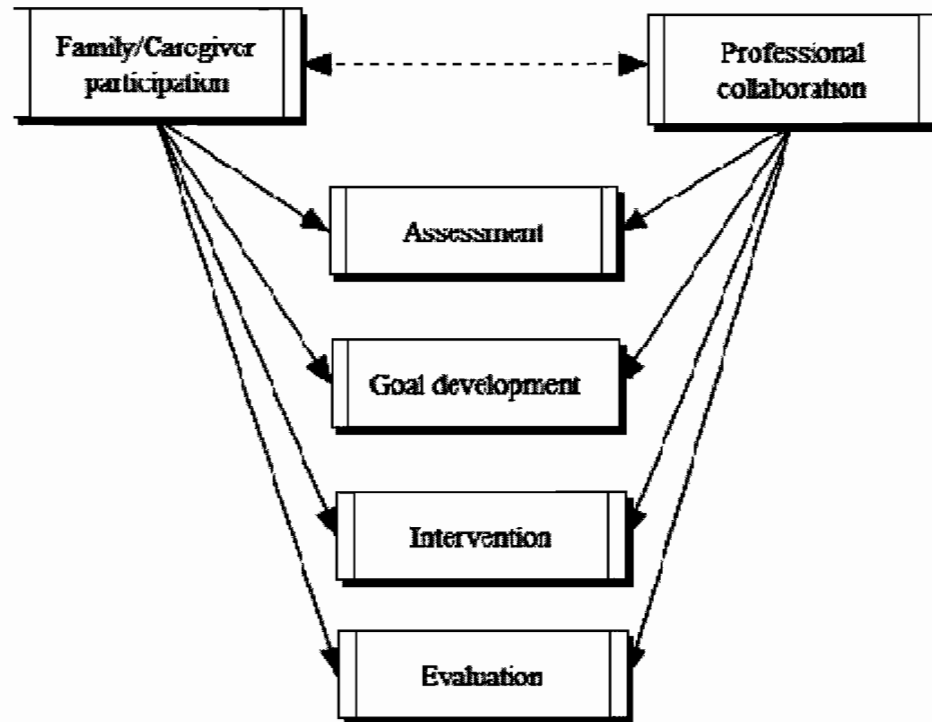
CARES provides early intervention and early childhood special education services to infants, toddlers, and preschool-age children in Lane County, Oregon. When a child is determined to be eligible, EC CARES sets educational services and appropriate goals. The EC CARES team works with the child's family in order to make educational placement and service plans for the child. The child and the family receive various kinds of services based on the child's needs such as home visits, parent-toddler classes, community preschools, specialized preschool classrooms, and speech therapy in either groups or community preschools. The child's progress is monitored frequently by the specialists, family, and EC CARES team.

#### Assessment in Early Intervention

Assessment is necessary for quality EI/ECSE services. The assessment procedure combines observations, direct tests, and reports from parents, caregivers, and a professional team. Therefore, assessment is the first procedure of the linked system that will relate to the child's goal development, intervention plan (IFSP/IEP) and evaluation or monitoring.

Bricker (2002) provides a linked system approach as a best practice model. Four phases in this approach are 1) assessment, a process of collecting information for identifying and diagnosing if a child has a delay or disability, 2) goal development, a process of determining a child's IFSP/IEP and intervention content, 3), intervention, a process of implementing IFSP/IEP goals for the child in a classroom or any service settings, 4) evaluation, a process of monitoring the progress of the child in skill areas that the child needs to improve (Bricker, 2002). In this model, family/caregivers collaborate

with professionals and work together for the child. Collaboration of the family starts at the goal development phase. The family shares ideas, knowledge, and helps professionals to make appropriate goals. Significantly, family/caregivers can help monitor the child's progress during the intervention. Figure 2 shows a linked system approach in which one family and professional collaborate in linked assessment, intervention, and evaluation.



*Figure 2.* A linked assessment-goal development-intervention-evaluation approach to early intervention. Adapted from Bricker, D. (2002). *Assessment, evaluations, programs, systems*. Baltimore: Paul H. Brooks.

## The Linked Assessment Model

In the linked assessment model, Bagnato et al (1997) reviews six main assessment models: (1) criterion-referenced assessment, (2) convergent assessment, (3) functional/adaptive assessment, (4) authentic/performance assessment, (5) dynamic assessment, and (6) play-based assessment. Criterion-referenced assessment, specifically curriculum-based assessment, is commonly used in early intervention programs because it can be used in a linked system model with assessment, intervention, and evaluation (Bagnato et al., 1997). Convergent assessment “refers to the synthesis of information gathered from several sources, instruments, settings, and occasions to produce the most valid appraisal of developmental status and to accomplish the related assessment purposes of identification , prescription, progress evaluation , and prediction” (Bagnato et al., 1997, p. 18). Authentic performance assessment refers to realistic or natural tasks used in the assessment procedure. Dynamic assessment is active engagement of the child in the task, with the emphasis on “learning-to-learn” strategies to foster independent problem solving, and recommendations for arranging instructional techniques. The functional/adaptive assessment model is for use in the assessment process of young children with severe disabilities in order to increase a child’s competence in interacting with people and object in child’s environment (Bagnato et al., 1997). In addition, this assessment helps provide the appropriate interventions for each child’s ability. The play-based assessment model involves parental and professional observations of the child in his/her play session in natural settings (Bagnato et al., 1997). They observe a child using his own toys, playing in playground, or interacting with other children. In addition to

making the linked system model for assessment effective, Bagnato et al. (1999) discussed eight standards for assessment.

### Standard 1: Utility

How useful is an assessment? The assessment must not focus just on the numbers of the test, the diagnosis or the materials, but assessment is much more useful when it identifies more specifically the skills, actions, or characteristics that can be targeted for change. Assessment should be evaluated using these three questions:

1. Is the assessment useful for identifying instructional and therapeutic objectives?
2. Is the assessment useful for selecting methods or approaches for teaching or therapy?
3. Is the assessment useful for detecting change after intervention?

### Standard 2: Acceptability

Acceptability of assessment, or social validity, refers to the perceived value or appropriateness of assessment. Three levels included: (1) acceptability of identified intervention goals, (2) acceptability of assessment methods, and (3) acceptability of changes detected by assessment.

### Standard 3: Authenticity

This standard refers to how real or authentic the materials and assessment are. Authentic materials examine real functioning in real situations. Naturalistic observation, behavior rating scales, interview inventories, and curriculum-based measures are examples of authentic content.

#### Standard 4: Equity

Equity refers to the equality of opportunity, not necessarily equal circumstances. For example, for instruction, equity would mean supplying children with learning materials and arrangements that accommodate for sensory, motor, affective, or cultural differences for "standard" children.

#### Standard 5: Sensitivity

Assessment materials must be used that are appropriate for each circumstance, culture, and that meet diverse children's needs.

#### Standard 6: Convergence

Assessments should not be conducted only one time with a particular child but should include measurement conducted from many perspectives, times, settings, and sources. Assessment should be done in collaboration with parents and professionals.

#### Standard 7: Congruence

Congruence requires that materials be developed and field-tested with children similar to those being assessed. For example, an assessment for children who are blind should be done with materials developed with and accommodating blind children.

#### Standard 8: Collaboration

Collaborative assessment involves sharing efforts, providing materials "friendly" to parents and other professionals, and actually depending on the contributions of others to produce the information needed for collaborative decision-making.

These are suggestions and guidelines of an effective linked assessment model. Strengths and limitations of the linked assessment model are summarized in Table 1.



Table 1

*Strengths and Limitations of the Linked Assessment Model*

Strengths	Limitations
Step 1: Screening	Step 1: Screening
Screening can determine whether most children are learning in an expected manner.	Screening may not detect a child's disability when s/he is an infant. So fast intervention may not occur.
Screening can identify children who need additional support.	Screening may identify some concern as a result for family. The family may ignore
For the social emotional problems, screening can identify social emotional problems or potential problems which link to determine social emotional competence.	the result and wait until the real disability shows when their child grows up.
Screening infants and young children can identify developmental delays and disabilities.	

*Table 1 (continued).*

Strengths	Limitations
<p>Step 2: Diagnostic evaluation</p> <p>The diagnostic assessment will help to determine whether the child has a disability or developmental delay that meets the criteria specified by the state to receive special education services.</p> <p>The diagnostic assessment will determine what kind of disability a child has, which will link to appropriate intervention strategies.</p>	<p>Step 2: Diagnostic evaluation</p> <p>The diagnostic assessment needs qualified assessors; some areas may not have such assessors to conduct the assessment.</p> <p>The diagnostic assessment needs interdisciplinary or multidisciplinary professional team; some rural areas may lack services. The linked system may not occur.</p> <p>Some decisions from the test results may not be applicable in some cultures; ignorance or denial of the family may occur.</p> <p>The assessment process itself may not be authentic to the child's ecological system; inaccurate results may occur.</p> <p>Assessment may cause anxiety for parents who have a child with a disability. They may be concerned about where to get the services or where the professionals are.</p>

*Table 1(continued).*

Strengths	Limitations
<p>Step 3: Programmatic assessment</p> <p>For the curriculum-based assessment, it will help professionals and parents develop IFSP/IEP goals. The assessment results will help the professional team work with the family collaboratively.</p> <p>The assessment is an ongoing process.</p> <p>Children will be assessed over the time they are receiving their intervention. The assessment will keep track of the child's progress and records.</p>	<p>Step 3: Programmatic assessment</p> <p>The requirement of IFSP/IEP from the programmatic assessment could create a burden for childcare staff and the family. If the intervention strategies may not be well implemented.</p>

#### Test Adaptation in Early Childhood Screening

Test adaptation, included in the standards of equity, sensitivity, and authenticity, refers to the preparing of tests in one language and culture for use in a second language and culture (Hambleton, 2005). Test adaptation contains activities, items, and cultural references from the original test. However, a test adaptation needs to be done according to the cultures where it will be used, as well as following the recommended standards from assessment (Hambleton, 2005).

Due to advanced research and practices, there are about 45 countries using mathematics and science tests in 30 languages that were based on the U.S. test projects

(Hambleton, 2005). Test adaptation has shown and be an effective way for testing school achievement and child development. Hambleton (2005) studied cross-cultural tests that were used in other languages, stressing several elements to ensure acceptance of the test. Test development, test score equating, and test score norming are important to make the adaptation more sophisticated (Hambleton, 2005). To make the test adaptation equal to the target culture, the test needs to use in the right concepts, words, and expressions that are culturally, psychologically, and linguistically appropriate to the second language and culture. Referring to guidelines from the American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education (NCME) Standards for Educational and Psychological Testing, Hambleton suggests careful adaptation including providing the sources of error or invalidity in test adaptation.

The following are important standards for test adaptation (see in Hambleton, 2005, p. 5).

Standard 6.2. When a test user makes a substantial change in test format, mode of administration, instructions, language, or content, the user should revalidate the use of the test for the changed conditions or have a rationale supporting the claim that additional validation is not necessary or possible.

Standard 13.4. When a test is translated from one language or dialect to another, its reliability and validity for the uses intended in the linguistic groups to be tested should be established.

Standard 13.6. When it is intended that the two versions of the dual-language tests be comparable, evidence of test comparability should be reported (p. 5).

Most importantly, Hambleton gave three broad categories which include (1) cultural/language differences, (2) technical issues, designs, and methods, and (3) interpretation of results. For the first category, he mentioned that the second language

and culture should be of equivalent construction in order to reduce communication bias during the test administration. For the second category, the test adaptations should select and train translators who have specialty in the field and know the process of translation and how to judge the design of the test. Thus, both a forward and backward translation should be completed for an accurate translation (Hambleton, 2005). Finally, the test should be evaluated through field research and data collection.

The appropriateness of the language and culture in early intervention assessment has been specifically examined. Barrera (1996) suggested that assessment procedures should provide various dimensions of socio-cultural diversity that relate to the families of young children. Test adaptation should have the role of a “culture-language mediator” in interpreting across socio-cultural differences (Barrera, 1996). Bergeson et al. (1999) discussed language and culture affecting behavior, information-gathering strategies, tests, and referral process. Lynch and Hanson (2004) discussed that when the cultural competence was increased, the assessment process and strategies were improved. She continued by noting that the assessment tools should include proper instructions for cross-cultural competence. Santos (2002) suggested that assessment and the information gathering process should provide knowledge in how to confront racial, linguistic, and cultural biases in the school system and teaching styles of educators.

Assessment in early intervention is unique in its use (Shaw et al., 2004). Assessments need to provide sensitivity to the multitude of cultural and linguistic variations in children and their families. They should provide for appropriate procedures during the assessment process as well (Shaw et al., 2004). In test adaptation, the process

of transferring language and culture from one language to a second language is challenging. However, test adaptation of assessment tools should result in a non-biased view of the child's linguistic, cognitive, and adaptive abilities.

Thailand is a diverse culture, in need of adapted, accurate tests to form the basis of an EI/ECSE system. The Thai child development culture will be described next.

### Childrearing and Child Development Needs in Thailand

Several aspects discussed below include: (1) the Thai environment related to childrearing and early development (2) morality and cultural support, and (3) the Thai educational system. The needs and problems surrounding child development in Thailand are also discussed.

#### Environment for Childrearing and Child Development

Children in Northeast Thailand have grown up surrounded by nature and natural resources. Children have a variety of chances to explore the places surrounding them. Children can go to the rice fields and the community forest to play. Sometimes, they go out with their parents to work and find food. In addition, children are watched by community members. Most villages and communities in Northeast Thailand are tied together by a kinship relationship (Amornvivat et al., 1990). Most families are extended families which include grandparents and relatives. When a family has a child, other members in the family will help raise the child. Amornvivat et al., (1990) reported the different functions of each member in a family, the father was the family head with duties to protect, find food, and give moral support for the children; the mother took care of the house work as well as the children. However, sometimes the mother has to work on a

construction site or in a remote area; the grandparents then have a role in helping the parents to raise the children.

### Moral and Cultural Development

Amornviat et al. (1990) also reported that parents and elders teach their children to believe in Buddhism by taking them to temples and Buddhist ceremonies. Parents make sure that the children understand the ideology of *Bun* and *Baab*, which are related to good and bad actions. Moreover, they teach children to respect seniority. Parents prefer that children respect people who are older. In addition, parents like children to be humble and to obey their elders at home and in school. If the children do not do such things, they are considered to be misbehaved children. Children in Northeast Thailand have the chance to follow their parents and grandparents to temple for Buddhist Lent or for the Buddhist monks' food offering. In this way, children are influenced in the Buddhist teaching which will make them good Buddhists. Khemmani (1994) showed that an ideology of moral and cultural development is very important in the child-rearing practices in Thailand. This researcher found that Thai children were raised under the motivation of Buddhist principles, cultural principles, and early childhood education principles. Children are expected to have a spiritual foundation. First, for Buddhist principles, Khemmani reported that children were taught to follow the Buddha's teachings, including the understanding of the nature of human beings and the spiritual basis. Most of all, children were taught to practice following Buddhist's virtues such as being a good person, knowing cause and effect, being temperate.

### Early Childhood Education System

In the school system, children are taught to love Thai language, arts and culture. They also have to be generous, dignified, well-mannered and courteous in their behavior and good manners. Khemmani (1994) stated that these principles of early childhood education affect child development. According to Khemmani, children learn by modeling, through a supportive environment, positive reinforcement, play, communication, and nurturing based on their maturity and readiness. In the Thai school system, children learn and develop their cognitive skills in various environments and interactional stimuli (Amornvivat et al., 1990). Children learn from parental responses to their child's curiosity, self-help skills, work skills, play and games, and through adults' role play. Secondly, children mature in their emotional and social development according to their family relationships and social contacts (Amornvivat et al., 1990; Khemmani, 1994). Most Northeast Thai parents believe that their children develop in stages of emotional and social development according to their ages. Most importantly, children learn from their parents and people in the society.

These aspects of childrearing and child development have initially been applied to early childcare settings. However, some problems have occurred. First, according to Khemmani (2006), Thai children are not always physically cared for. She reported that children still suffer from malnutrition, disease, infection, toxic substances, and accidents. Significantly, some children with disabilities have been abandoned in regular school settings. Amornvivat reported that as far back as 1990, the Ministry of Education provided a plan for regular teachers in early childcare settings but there was not enough structure



for children with disabilities. Second, Khemmani (1993) noted that caregivers were always not effective at childrearing. Parents and caregivers did not have enough knowledge and understanding of appropriate early childhood practices. Therefore, many children with disabilities were neglected or became their parents' responsibilities. Third, the governments did not provide appropriate programs for children who lived in rural areas (UNESCO, 2004). Previous studies reported that childcare services (the building and the centers) had been provided by the government, but personnel development including teacher training was still rare (Khemmani, Tantiwong, & Vidhayasirinun, 1995). UNESCO (2004) reported that the Thai government agencies, such as the Ministry of Education and Ministry of Labor and Employment, organized and required a certain standard for childcare programs and caregivers, as well as kindergarten teachers, but this has not been sufficient. Services, support, and education for children and their families are still far from the reach of children in many remote areas. UNESCO (2004) suggested that a variety of childcare teachers should develop qualifications in order to develop appropriate and effective child development practices. Last, other compounding factors include external problems such as the changing of the structure of society, including women being forced into the workplace.

#### EI/ECSE System in Thailand

Many agencies work for children, including the educational system, medical system, child welfare, social welfare, and Buddhist temples. Collaboration among agencies who work for young children in Thailand is almost non-existent; each agency works independently with its own procedures and methodology. For example, when a

child goes to a clinic for treatment, information about the child will not be sent to the educational system or child welfare agency. This non-collaborative model creates missing links for the child's service program. Ideally, all information from a child's record should be shared and included in any services that the child receives, once the family gives permission, but that seems to rarely occur in Thailand. The ideal EI/ECSE system for Thailand can be developed, but it has to recruit and develop knowledgeable, devoted, and enthusiastic staff to work in EI/ECSE settings.

For intervention strategies, religious bias about *bun*, good *karma*, and *baab*, bad *karma*, will need to be put aside. An attitude about the best progress for each child's outcome should replace the beliefs in good and bad *karma*. Parents or staff who work for the child will first have belief that each child can develop to his/her own physical, intelligent action, and social-emotional repertoire. Presently, it is believed that a child's disabilities might come from the parents' or the child's bad *karma*. Thus, having a child with disabilities reflects the parent's bad deeds in the past. Other people often look down on the parents; thus parents are ashamed. This attitude is very important because when staff or parents find out that their child has a disability, they will first try to deny, ignore, and then refuse to recognize this child has special needs. They might treat their child like a typical one and not give him/her individualized help, which could make the disability more serious. To begin to solve this problem, parents must not feel ashamed of their child's disabilities and others must not discourage the parents; support is needed. When this bias has disappeared, it will make the intervention more workable and successful for all. Intervention plans and strategies can then be implemented in order to facilitate

optimal outcomes for each child. The staff can be more skilled in using targeted intervention strategies effectively.

#### Family Involvement and the EI/ECSE System in Thailand

Family involvement in educational programs in Thailand looks very different from practices in the U.S. In the U.S., the family often works alongside the professional team and the family and their child are the center of the evaluation process (Bailey, 2000). The family is asked for their recommendations, consent, and expertise about their child (Bailey, 2000) and plays a significant role in the system, such as working with their child according to the IEP/IFSP plan (Bowe, 2007). However in Thailand, most of the program models for EI are professionally-centered models. Parents always believe in the professionals, such as teachers, pediatricians, and friends who have experience. Usually they are not involved in the development or teaching of their child's programs. When they find "something wrong" with their child, they most likely go to see the pediatrician or public health care staff in their district. If their child has some behavioral problem or social emotional problems, they will ask the teachers or elders to teach their child.

Currently, it is difficult to highlight the strengths of the EI/ECSE system in Thailand, since there are so few services for young children with disabilities. However, the strengths of the Thai society system and the relationship of people in Thai society helping and sharing with each other, will greatly enhance and contribute to the system in the future. Needs for EI/ECSE in Thailand now include: (1) qualified personnel for EI/ECSE, (2) a quality of screening, assessment, evaluation, and program evaluation

system, (3) ongoing EI/ECSE services, and most importantly, (4) an enthusiastic trained staff who are willing to work for all young children.

Some possible strategies that will meet the needs of an EI/ECSE system in Thailand include the following:

1. Create a system for EI/ECSE personnel preparation.
2. Create a screening system for early identification of delays.
3. Create an assessment, evaluation, and programming system.
4. Train childcare staff and teachers to use screening and assessment tools.
5. Train all early childhood teachers on the practices for young children with disabilities.
6. Show effective projects in the EI/ECSE system to the Thai government in order to get more funding for an EI/ECSE system.
7. Recruit trained skilled administrators to direct an EI/ECSE system

In Thailand, change will come. Since special education has been legalized this year, an experimental program and research can be conducted in the future. Currently, there is no government agency to start an EI/ECSE program. Changes will come to EI/ECSE in Thailand in the future.

#### Developmental Assessment Systems for Young Children in Thailand

The Thai government does not specify a policy for developmental and behavioral screening system for young children. However, both the Ministry of Public Health and the Ministry of Education have started screening system projects. Two agencies from the Ministry of Public Health currently provide screening for young children. First, the

Department of Mental Health provides a website with a developmental screening checklist for parents and teachers at <http://www.dmh.go.th/test/cesd/child/>. The screening tool is an adaptation of the tool based on Denver II and Ten Questions and assesses children from 6 months to 6 years with 9 intervals and 6 “yes” and “no” questions on a checklist. Second, the Department of Mental Health has screening instruments for behavioral screening and mental health screening for young children. For very young children, the Department of Medical Science established the Thailand National Neonatal Screening Program (<http://www.dmsc.moph.go.th/>). The program implements neonatal screening as one of the health issues for public health care services. With limited funding and government investment, the program provides services for only 13 centers in 13 provincial cities.

The Ministry of Education established the Bureau of Special Education Administration in 2003. This organization supervises all 76 special education centers. Roles and duties are to collect, study, and analyze the conception of proposals, policies and plans for the education of people with disabilities and the disadvantaged in accordance with the National Education Plan, the Basic Education and Early Childhood Education Improvement Plan, and other relevant national policies. The assessment system distributes assessment forms for clients with disabilities in each province. The organization does not specify anything about a screening system; it just mentions that each school should screen children for disabilities in order to receive services from a special education center (<http://special.obec.go.th/>).

According to the recent intervention and evaluation system in Thailand, when a child is detected as disabled, at-risk, or disadvantaged, the child's family has several choices for receiving intervention services. For example, Rajanukul Institute provides services for children with autism. Parents of children with vision or hearing impairments have to look for appropriate institutes which are limited and scattered all over Thailand. The special education center provides IEPs for children who receive services. Some centers provide an intervention classroom for those who have disabilities.

#### A Thai Screening System

Overall, the system for developmental and behavioral screening is very limited in scope. Because it is a new concept and system, any screening system must be officially studied in order to be implemented in any single Thai area.

Unlike neither Part C from IDEA in the U.S., the Thai National Education Act (1999) nor the Thai Special Education for Individuals with Disabilities Act (2008) authorizes or requires a screening process for all children from birth to 6 years. The current screening system has been developed by the Ministry of Public Health and Ministry of Education as a means to establish an early childhood education system. It is not the government's plan at this time to further develop and expand this system.

#### Summary

EI/ECSE standards provide recommended methodologies and approaches to help identify and prevent delays in children's development. Early identification can help to maximize children's potentials, reduce harmfulness from at-risk environments, and encourage critical skills in young children (McLean, 2004; Squires, 2007). One important

methodology in EI/ECSE is the early identification process including systematic developmental screening. To develop a screening system in Thailand, a valid and reliable instrument must be based adapted instrument and the field trials for this instrument should be conducted. With development of an effective, adapted screening test, parents and teachers will have an appropriate tool for early identification and to help identify concerns about the children or lags in their development. Early identification will assist with improving developmental outcomes. In the United States, federal legislation, the Individual with Disabilities Education Acts (IDEA), supports and authorizes EI/ECSE service (Bowe, 2004). IDEA outlines guidelines for a way of thinking and developing practices for this professional area (Sandal, McLean, & Smith, 2000), with great potential to be adapted in other countries

In contrast, EI/ECSE is less known in Thailand and legislation needs to be passed. Services and support are limited and focused only on specific impairment cases, such as deafness and blindness. There is no law or legislation to support educational services for young individuals with disabilities. Now is the time to begin work on EI/ECSE in Thailand.

This study aims to offer a best practice model for beginning an EI/ECSE system in Thailand. This model includes adaptation and study of a screening instrument, the ASQ: Thai. Developing a screening system will help early childcare staff and teachers to identify children with delays in a classroom. Accordingly, effective screening will assist with improving outcomes of young children in Thai early childhood centers. This

model will service and inform the Thai government about a potential screening system that may have applicability to all of Thailand.

This study will investigate if the adaptation and use a screening instrument, the ASQ: Thai, can be successful in early childcare settings. As part of an early identification system, this study will investigate (a) an adapted instrument for screening young children, (b) a model for best screening practice, (c) utility as rated by the users, and (e) cultural appropriateness of the instrument and the model.



### CHAPTER III

#### METHOD OF STUDY

The ASQ: Thai version was developed and adapted from the ASQ (Bricker & Squires et al, 1999). The ASQ is a screening instrument used to assess young children's developmental and behavioral areas. As the ASQ is a cost effective and easy to use developmental screening instrument for monitoring the development of young children from age 2 months to 60 months (Squires et al., 1999), it is a worthwhile tool to use for children in Northeast Thailand. The purpose of this study was to determine and investigate the reliability and use of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in early childcare settings in Northeast Thailand. Results from this research will be used for future development of this tool and will be a part of a new strategy in working with young children, emphasizing a child development perspective for parents.

In the study, the subject population had the best ability to determine culturally relevance and accurate practices for a child's developmental evaluation. If early intervention is identified as a need for some children, child outcomes may be improved. Parents' benefits may include the opportunity to participate in assessment, receive information about their child's development, and contribute to early intervention research. Benefits for early childcare staff/teachers include learning about the development of a specific child in their program, and the opportunity to gain

knowledge about and use of the screening process, which will help them better, understand the children in their program.

A reliable and culturally relevant screening instrument that can be used in early childhood education and early childhood special education in Thailand may be the outcome of the study. The instrument will assist parents and teachers in an increased understanding of child development as well as the identification for early intervention of children who are at-risk or who have developmental delays. Importantly, this is a first step in developing a high quality screening system for all young children. In addition, some best practices for children with developmental delays, those who are at-risk, or who have disabilities will be highlighted and taught and may assist with developing high quality educational systems for young children.

The study focused on examination of the ASQ: Thai in the areas of (1) the cultural appropriateness of the instrument, (2) reliability, and (c) utility. Participants, procedures for recruitment, protection of human subjects, selected tests and measures, methods of data collection, and data analysis will be described in this chapter.

#### Participants

Participants consisted of 1) children ages 24-36 months (2-3 years old) in preschool settings, 2) their parents/caregivers, and 3) their teachers/early childcare staff. Participants were recruited in early childcare settings and kindergartens from four provinces in Northeast Thailand: Mahasarakham, Khonkean, Roi-et, and Kalasin. The participants came from villages, district towns, suburbs of big cities, and big cities.

There were several processes of the recruitment. First, the researcher contacted the faculty of Education, Mahasarakham University for the incooperation. The Faculty of Education provided helps by giving the permission to the researcher to use a conference room for the Use of ASQ: Thai Training. Moreover, the Faculty of Education allowed staffs and university students in early childhood education program to assist in the training and participating of the research study. The Faculty of Education also assisted in recruiting early childhood educators by sending letters of invitation to early childcare settings. From this process, 49 early childcare staff/teachers (EC staff) were recruited, and training on ASQ administration was conducted. Then, the research asked EC staff to recruit children and their families to participate in the research study. EC staff looked their children and they selected children and families based on families' volunteering. Each family signed the consent form before the data collection occurred. In the search of participants, random sampling was not used; participants were chosen based on potential to fully participate. . The details of each participant group are described next.

### Children

Preschoolers in Northeast Thailand were selected; 267 children ages between 24-36 months (2-3 years old) were recruited by teachers or childcare staffs in childcare settings in elementary schools, sub-district early childcare centers (under the supervision of district councils), and private early childcare centers. Early childcare staff/teachers who attended the ASQ: Thai training also selected children who received early childhood care services from their childcare settings. In selecting children, early childcare staff/teachers confirmed age, language spoken, and disability status from the school records, and then they sent an

informed letter to each child's parent/caregiver. Most children attended childcare centers in elementary schools in Northeast Thailand.

### Parents/Caregivers

Parents/caregivers of 267 preschoolers who live in Northeast Thailand were invited to participate in this study. The term "parents" included the preschoolers' biological parents, grandparents, aunts, uncles, and legal guardians. All parents were able to read, write, and understand Thai, the official language of Thailand. The parents or caregivers signed an informed consent letter, an in absentia form and any other appropriate forms before any data were collected.

### Teachers/Early Childcare Staff

Forty-nine teachers (i.e. early childcare staff) who provide early childhood education services in kindergartens and early childcare settings participated. Three categories were recruited in this group: a) in-service teachers, b) pre-service teachers, and c) early childcare staff. In-service teachers were defined as regular teachers who had an early childhood teacher position in public elementary schools and private kindergartens. One teacher in each school was invited to attend a workshop on the use of ASQ: Thai.

"Pre-service teachers" was defined as early childhood teachers, most of who will be in the last year of the early childhood education program in the Department of Curriculum and Instruction, Faculty of Education, Mahasarakham University. About 30 pre-service teachers were invited for this study to provide early childhood education in public elementary schools. Finally, "early childcare" staff was defined as the early childhood personnel who work for the departments of early childhood education in sub-district

councils or other educational areas as well as the early childhood personnel in sub-district health centers, or district/provincial hospitals. About 15 early childcare staff were invited to participate.

### Setting

Thailand has five regions: North, South, Central, West, East, and Northeast. The five regions are diverse in cultures, languages, and geography. Early childcare settings in Northeast Thailand were the main focus in this research. The settings for administration of the ASQ-Thai were determined by the type of the early childhood education setting. Only those which accept children from 24 -36 months (2-3 years old) were chosen. For example, elementary schools that provide early education for children two years old and kindergarten for children three years old were included. Settings included district early childcare centers, private early childcare centers, and provincial special education centers. The geographical distribution of the childcare settings were varied, and located in villages, district towns, provincial towns, and communities or suburban areas.

### Protection of Human Subjects

The researcher asked for approval for the study from the University of Oregon Institutional Review Board prior to the recruitment of the subjects. In Thailand, the researcher asked for approval for the study from Mahasarakham University, the educational areas in the four provinces, and the provincial hospitals in the four provinces.

Before the data collection started, parents/caregivers and teachers/early childcare staff were asked to sign a consent form. The parents/caregivers also signed an in absentia

form in order to let the teachers/early childcare staff complete the ASQ: Thai on their children.

Participants' names were coded with identification numbers to protect confidentiality. After the data collection was finished, the names, addresses, phone numbers, emails, and any personal information were separated and kept in a secure location. Data will be kept for three years in case of any further requests from the participants or for further study and will then be destroyed.

During the interviews, risk of participating in the study may have included parental discomfort. Parents were asked to discuss the process of using the ASQ: Thai. If the parents became uncomfortable at any time, the investigator would stop the interview and offer the parent the choice of discontinuing. The investigator was available to speak with parents or early childcare staff/teachers any time. The investigator's contact address, phone number and email were given to the participants for further follow-up or concerns.

In this study, the investigator asked parents and early childcare staff/teachers to provide private information, such as income, education level, ethnic backgrounds, or spoken language, which may have caused them some discomfort and embarrassment. To prevent these risks, the investigator informed the participants that their names would not appear on any survey forms and transcriptions. Instead, identification numbers and pseudonyms would replace their real names. In addition, the investigator informed the participants that their information, data, and scores were treated as confidential and were to be stored in locked files accessible only to the investigator. Consent forms with

identifying information were kept in a locked file separate from the data. Data collectors were trained to maintain confidentiality and the privacy of participants.

### Measures

Six measures were used in this study: 1) Ages and Stages Questionnaire: Thai (ASQ: Thai), 2) Family Information Survey, 3) Early Childcare Staff/Teacher Information Survey, 4) Parent Utility Survey, 5) Early Childcare Staff/Teacher Utility Survey, and 6) Interview Questions.

#### Ages and Stages Questionnaires: Thai (ASQ: Thai)

For this research, the researcher developed and pilot tested the Thai version of the Ages and Stages Questionnaires (ASQ), adapted from the *Ages & Stages Questionnaires (ASQ): A Parent-Completed, Child-Monitoring System*, Second Edition, created by Squires et al (1999). The ASQ is one of the most highly rated screening tools and is widely used in both school and medical settings in the United States, Korea, and China (Heo, Squires, & Yovanff, 2008) and China (Bian, 2009).

The ASQ is a screening instrument administered to children from 1 to 66 months of age in order to determine if a child has a developmental delay. Five domains of the test include communication, gross motor, fine motor, problem solving, and personal-social, each consisting of six items. Each item has three boxes, indicating “yes,” the child performs the item, “sometimes,” and “not yet,” and each item has a point value of 10, 5, or 0, respectively. The total score for each domain is 60; the cutoff scores for each domain were calculated at two standard deviations below the means score of the sample. American derived cutoff score were used initially by the investigator.

### Family Information Survey

Information about a child's gender and birth date, parents' spoken language, education level, age and monthly income were collected in the Family Information Survey. Any concerns the family had about their children's development were also requested.

### Early Childcare Staff/Teacher Information Survey

Information about the early childcare staff/teacher's age, education level, and length of time working with children, income, and gender were gathered. The survey also included the teacher's reasons for being an early childhood educator and readiness for being early childhood education personnel. The survey asked about the resources available in early childhood centers for working with children with atypical development.

### Parent Utility Survey

The survey asked about parent's degree of satisfaction with the ASQ: Thai, after they had completed it. Questions included the length of time that parents/caregivers used for completing the ASQ: Thai, the understanding of the items, and the need for assistance while they were completing the tool. In addition, the survey asked whether the ASQ: Thai made sense to them and whether the tool should be used for every child in Northeast Thailand. The survey also asked whether the tool should be changed in any way in order to make it relevant to a Northeast Thai context.

### Early Childcare Staff/Teacher Utility Survey

This survey explored the perceptions of the early childcare staff/teachers about the utility, content validity, and cultural appropriateness of the ASQ: Thai. The survey



also asked whether the early childcare staff requested the help of parents/caregivers in completing the tool, and whether they would like to use the ASQ: Thai to assess each preschooler entering early childcare settings. In addition, the early childcare staff/teachers were asked to help determine if the test items were appropriate for Northeast Thai children and to comment on how to improve the tool. The survey asked them to make suggestions for making the tool relevant to the Northeast Thai context, and for ways to improve the tool.

### Interview Questions

Five parents/caregivers participants (N=5) and five early childcare staff/teachers (N = 5) were randomly selected for interviews. Each interview was about 15 to 20 minutes long. The interviewees were encouraged to describe their backgrounds, how they raised their children, how they worked with their children at home, and how they structured their classroom at school. The interview also asked them explicitly about the ASQ: Thai. Questions included experiences that they had while they completed the ASQ: Thai, the ideas that occurred to them while completing the test, and the future use of the ASQ: Thai. Most importantly, the participants were asked if they believed that the ASQ: Thai could make assessments for their children's development, and could enable them to seek the appropriate services for their children. The results of the interview suggested ways to improve the tool to be responsive to and appropriate for a Northeast Thai context.

Table 2 describes measures, respondents, and schedule used for data collection.

Table 2

*Measures, and Respondents, and Schedule*

Measure	Description	Respondent	Schedule
The Thai version of the Ages and Stages Questionnaires (ASQ: Thai)	Screening instrument, administered to children from birth to 60 months of age in order to determine if a child has or does not have a developmental delay and to assess the severity of any delay that may present.	Parents/Teachers/Early Childcare Staff	After consent gathered
Family Information Survey	Questionnaire to collect family demographic information	Parents/Caregivers	Before ASQ: Thai data collection
Early Childcare Staff/Teacher Information Survey	Questionnaire to collect early childcare staff/teacher demographic information	Teachers/Early Childcare Staff	Before ASQ: Thai data collection
Parent Utility Survey	Questionnaire to measure the parents' perception of the utility of the ASQ: Thai	Parents/Caregivers	After ASQ: Thai data collection

*Table 2 (continued).*

Measure	Description	Respondent	Schedule
Early Childcare Staff/Teacher Utility survey	Questionnaire to measure early childcare staff/teachers' perception of the utility, validity and cultural appropriateness of the ASQ: Thai	Teachers/Early Childcare Staff	After ASQ: Thai data collection
Interview Questions	A set of questions used for in-depth interviews with parents and teachers/early childcare staff	Parents/Caregivers Teachers/Early Childcare Staff	After ASQ: Thai data collection

## Procedures

Procedures consisted of three phases. First, completion of the translation and adaptation of the ASQ: Thai included translation and back-translation of the ASQ: Thai which was reviewed by a language expert. The second phase was the study of the reliability of the ASQ: Thai, including completion of the ASQ: Thai by parents/caregivers and early childcare staff/teachers with children in early childcare settings. The last phase included the interviewing of parents/teachers about of their use of the ASQ: Thai. Five participants from both the parent and teacher groups participated in an interview. Study procedures are summarized in Table 3.

### Phase I: Development of the ASQ: Thai

Step 1: Translation and Back-Translation. The translation team translated the original ASQ from English to Thai which was then adapted as the instrument. A first draft of the translation was completed and sent back to the team to check for accuracy of the language and the context of Thai culture, as some items may not correspond with a Thai cultural context. After the translation had been adapted, it was sent to an English professor in the department of Western Languages and Linguistics, Mahasaarakham University Thailand to translate back into English.

Step 2: Review and Editing by Experts. Five early childhood educators and special education specialists were invited to participate in this step. The participants received packages of the 24-, 30-, and 36-month intervals of the ASQ: Thai. The participants were asked to give feedback, suggestions, and comments in order to make the ASQ: Thai appropriate for Northeast Thai children. They then sent the ASQ: Thai and their comments

back to the investigator. Finally, a review panel was organized with the participants invited to discuss the cultural appropriateness of the ASQ: Thai. At the end of this process, the investigator and the team revised the ASQ: Thai into the final version to be used for data collection in this study. Table 3 describes the developers of the ASQ: Thai.

Table 3

*Developers of the ASQ: Thai*

Name	Job	ASQ: Thai's Duty			
		1	2	3	4
Prasong Saihong	Researcher	√	√		
Dr. Nalinee Cherwanitchakorn	Pediatrician		√		
Dr. Wajuppa Tossa	English Professor			√	
Srikanyaphat Rangsiwarakul	Early childhood professor		√		√
Sudares Rattanathaworn	Early childhood professor		√		√
Wimonnut Laowisarnsarano	Early interventionist				√
Sirisom Phataraphongsit	Children nurse				√
Ornanong Sanitlun	Early childhood educator				√

*Notes:* 1= Translator, 2 = Editor, 3=Back-translator, 4=Early childhood expert

Phase II: Reliability Study of the ASQ: Thai

Step 1: Recruitment of Participants. The Faculty of Education, Mahasarakham University assisted in participant recruitment. The Dean of the Faculty of Education had agreed to cooperate with the researcher by announcing this study to the student-teachers who were working on their pre-service studies in early childcare settings and kindergartens

and encouraged them to participate in the study. Approximately 30 student teachers/pre-service teachers were recruited.

The faculty of education also provided help for the researcher to contact elementary schools, early childcare settings, and early childhood departments in four provinces. The Faculty of Education authorized the letter of invitation to be given to those early childhood agencies, inviting each early childcare setting to send a staff member to join the ASQ: Thai training. Approximately 30 early childhood teachers and early childcare staff were recruited.

After the recruitment had been done, those participants were asked to sign the consent form which indicated that their participation was completely voluntary. No one withdrew from this project at this point.

Step 2: Training for the Use the ASQ: Thai. The training was organized for two days. All pre-service teachers, in-service teachers, and early childcare staff were required to attend the training before they administer the ASQ: Thai. The training mainly focused on how to use the ASQ: Thai. However, the significance and knowledge of early development and developmental delays were discussed in order to facilitate understanding of the use of the tool. The training also included information about the meanings and administration of the items on the ASQ: Thai and guidelines for introducing the ASQ: Thai to parents. The schedule of the training is described on Table 4.

Table 4

*The Use of the ASQ: Thai Training Schedule*

Date/Time	Topic
November 1, 2008	
8.30 – 8.45 AM	Opening
8.45-9.30 AM	Introduction to Early Intervention/Early Childhood Special Education
9.45-10.30 AM	Screening Assessment and Early Identification System
10.30-11.45 AM	Introduction to the Ages and Stages Questionnaires (ASQ) and the Ages and Stages Questionnaires: Thai (ASQ: Thai)
1.00-2.00 PM	Using the ASQ: Thai: Gross Motor and Fine Motor Domains
2.15-3.00 PM	Using the ASQ: Thai: Communication and Problem Solving Domains
3.000-3.30 PM	Using the ASQ: Thai: Personal-Social Domain
3.30-4.00 PM	Questions and daily evaluation
November 2, 2008	
9.00-10.00 AM	Group discussion on the ASQ: Thai
10.15-11.50 AM	Practice and use of the ASQ: Thai (role play on assessment, home visit, and conversation with parents)
1.00-2.00 PM	Implication of the ASQ: Thai
2.00-3.00 PM	Instruction of research study assistance
3.00-3.30 PM	Evaluation and closing

Step 3: Recruitment of Preschoolers and Their Parents. A letter of invitation was sent to schools and early childcare directors in order to inform them of this study. After schools or early childcare centers had agreed to participate, early childcare staff/teachers asked their students to pass a letter of invitation to their parents. The 267 parents who agreed to join the study were asked to complete the ASQ: Thai with their children at home. If they were not clear about what the instrument was asking, they could ask for assistance from early childcare staff/teachers at schools and early childcare centers.

Step 4: Early Childcare Staff/Teachers Complete the ASQ: Thai. After parents signed their consent forms, 49 early childcare staffs completed the ASQ: Thai for 267 children age 24-36 months by themselves. Each of them completed approximately 5-10 ASQ: Thai on children in their classroom. They completed the questionnaires at schools and early childcare centers or at children's home with parents/caregivers present.

Step 5: Computing reliability Study of the ASQ: Thai for Early Childcare Staff/Teachers. Randomly selected early childcare staff/teachers were asked to complete a second ASQ: Thai within two months of their first administration. Ten to fifteen children each from the 24-month, 30-month, and 36-month intervals were retested.

Step 6: Computing Reliability Study of the ASQ: Thai for Parents. Forty parents completed a second ASQ: Thai on their children. They were asked to complete the ASQ: Thai within 4-6 weeks of their first administration. Ten to twenty children each from the 24-month, 30-month, and 36-month intervals were retested. Approximately 60 children were asked to participate.



Phase III: Utility Study of the ASQ: Thai.

Step 1: Early Childcare Staff/Teacher Utility Survey. Sixty early childcare staff/teachers completed the early childcare staff/teachers utility survey. They received the survey after they finished completing the ASQ: Thai. They returned it to the investigator by mail. Five of the teachers were selected for interviewing.

Step 2: Parents Complete the Parent Utility Survey. Early childcare staff/teachers asked parents if they liked to complete the utility survey after they finished completing the ASQ: Thai with their children. If they agreed, teachers would send the survey home with their children. The parents returned it by mail or in person to the teachers. If parents were not clear about the survey, they could ask for assistance from teachers and early childcare staff at their children's schools. In addition, five parents were selected for a short interview in order to get in-depth information for the utility study.

In Table 5, it describes the list the frequency, duration, and data collection method for each activity.

Table 5

*List the Frequency, Duration and Data Collection Method for Each Activity.*

Activity	Time used	Participant	Week completed													
			1	2	3	4	5	6	7	8	9	10	11	12		
Translation	1 month	Investigator & team*														
Back translation	1 week	An English professor*														
Review and edit by experts	1 month	Early childhood educators Special education specialists*														
Revision of ASQ: Thai	1 week	Investigator*														
Recruitment of participants	1 month	Investigator*														
Training for the use of the ASQ: Thai	2 days	Investigator & Early childcare staff/teachers	√													
Complete the ASQ: Thai	15-20 minutes	60 early childcare staff/teachers & 250 parents		√	√	√	√	√	√	√	√	√	√	√	√	√

Table 5 (continued).

Activity	Time used	Participant	Week completed												
			1	2	3	4	5	6	7	8	9	10	11	12	
Retest the ASQ: Thai	15-20 minutes	Early childcare staff/teachers & 40 parents										√	√	√	√
Utility surveys	5-10 minutes	Early childcare staff/teachers & parents		√	√	√	√	√	√	√	√	√	√	√	√
Interview	20-30 minutes	Early childcare staff/teachers & parents										√	√	√	√

Note: \* These activities occurred before the data collection period.

## Data Analysis

In this section, research questions, outcome measures, and analysis strategies were explained. The outcome measures were used to answer the research questions and to assess the independent and dependent variables. Analysis strategies helped to interpret the findings. At the final part of this section, the research Hypothesizes or the Research Questions, Outcome Measure, & Analytical Strategy are summarized in Table 6.

Table 6

*Describe the Research Hypothesis (es) or the Research Question(s), Outcome Measure, & Analytical Strategy.*

Research Question	Outcome Measure	Analytical Strategy
Is the ASQ: Thai a culturally appropriate instrument to screen preschoolers for developmental delays in Thailand?	Translation of the original ASQ into Thai Back translation by an English professor Expert review panel	Percentage of agreement Summary of the suggestions from experts
What is the reliability of the ASQ: Thai?	ASQ: Thai	Cronbach's correlation
Internal consistency		Pearson correlation
Test-retest reliability		T-test
Interobserver reliability		

*Table 6 (continued).*

Research Question	Outcome Measure	Analytical Strategy
Are there differences between the scores of Northeast Thai children of 24-, 30-, and 36-month ASQ: Thai and those of U.S. children on the ASQ? What are the differences?	ASQ: Thai ASQ	ANOVA 2 SD for Thai cutoff score calculation Difference between means, SD, & cutoff of ASQ: Thai and 2009 American ASQ score
What is the utility of the ASQ: Thai, as evaluated by parents/caregivers and early childcare staff/teachers?	Utility Survey Interview	Descriptive statistics Summary of interview results

Research Question I: Is the ASQ: Thai a Culturally Appropriate Instrument to Screen Preschoolers for Developmental Delays in Thailand?

To answer this question, several tasks were completed. First, the editing and adapting of the ASQ: Thai were conducted by the researcher and a translation team. The team consisted of early childhood education professors from Mahasarakham University and a pediatrician from Bangkok Hospital. Second, a back translation was made by an English professor from Mahasarakham University. Third, the updated ASQ: Thai and measurement checklist were sent to early childhood education specialists and childhood special education specialists, and pediatricians. These experts analyzed whether each item

was appropriate and fit into the Northeast Thai cultural context. Specialists were able to answer whether they “agree,” “not agree,” and “please make an improvement,” for each ASQ: Thai items. In addition, at the end of each item there was a space for adding suggestions and other comments. Fourth, a panel of experts conducted a review session. They reviewed the tool and discussed cultural relevance of the ASQ: Thai. They also gave suggestions for improvements, or for making the ASQ: Thai more relevant for use in the Northeast Thai cultural context.

Descriptive statistics summarized results from the questionnaire. The results from this process provided information on whether the ASQ: Thai was a culturally appropriate instrument that can be used to assess preschoolers in Northeast Thailand. The process also provided confirmation of the cultural appropriateness and content validity for use in the early childcare settings in Northeast Thailand.

#### Research Question II: What Is the Reliability of the ASQ: Thai?

Investigation into the reliability helped to assure that the instrument was consistent and useful for referral and decision-making (Salvia & Ysseldyke, 2006). Reliability refers to the investigation into which scores are free from errors. If the ASQ: Thai 24-, 30-, and 36-month intervals have few internal errors and have consistency across settings and examiners, then the ASQ: Thai has high reliability. Reliability in this study included 1) internal consistency, 2) test-retest reliability, and 3) inter-observer reliability.

Internal Consistency. To determine internal consistency, the ASQ: Thai was analyzed for correlations and consistency across the items. Correlation analyses and Cronbach’s coefficient alpha were calculated. The Cronbach’s alpha of .70. Alpha

(Cronbach) is a model of internal consistency, based on the average inter-item correlation. Cronbach's Alpha measured how well a set of variables or items measured a single, unidimensional latent construct (Cronbach, 1951). An F-test is a statistical test in which the test statistic has an F-distribution if the null hypothesis is true. It is most often used when comparing statistical models that have been fit to a data set, in order to identify the model that best fits the population from which the data were sampled (Lomax, 2007). To analyze this property, SPSS 15 software was used to calculate coefficient alpha.

Test-Retest Reliability. Test-retest reliability test included the Paired-Samples T Test procedure in which the means of two variables were compared for a single group. The procedure computed the differences between values of the two variables for each case and tested whether the average differs from 0. Observations for each pair should be made under the same conditions. To determine test-retest reliability, the two sets of scores from the parents/caregivers as well as from the early childcare staff/teachers were compared. Selected parents/caregivers and early childcare staff/teachers completed the tool twice in a 2-months time period. To obtain a Paired-Samples T Test, the SPSS software was used for the analysis. An agreement of 90% between scores from the first and scored completion would be considered as reflecting high interobserver reliability.

Interobserver Reliability Interobserver reliability is the measurement of percentage agreement between classifications based on the questionnaires by two groups of observers (Landis & Koch, 1977). An interobserver reliability analysis using Pearson's correlation coefficients was performed to determine consistency among observers. To obtain to statistics, SPSS software was used. In this study, the two sets of scores from

parents/caregivers and early childcare staff/teachers were compared. An agreement of 90% would be considered as high reliability.

Research Question III: Are There Differences Between the Scores of Northeast Thai Children on the 24-, 30-, and 36-Month ASQ: Thai and Those of U.S. Children on the ASQ? What Are the Differences?

Means scores of the 267 Northeast Thai children were compared with the U.S. data held by the Early Intervention Program, University of Oregon. The comparison indicated many differences in item statistics between Northeast Thai and American children. The means, standard deviations, cutoff scores, ranges, medians, and range of the 24-month, 30-month, and 36-month Northeast Thai data were compared with the 2009 American data. In order to determine differences between the ASQ: Thai and American scores, the means domain scores of the ASQ: Thai sample were compared with the means domain scores of the U.S. sample 2009. This process used an analysis of variance (ANOVA) in order to analyze differences across domain scores and intervals for both samples. Statistically, ANOVA is a collection of statistical models, and their associated procedures, in which the observed variance is partitioned into components due to different explanatory variables (Ferguson & Takane, 2005 and gives a statistical measure of whether the means of ASQ: Thai score and American ASQ score were equal or different;  $p < .05$  is considered as significant.



Research Question IV: What Is the Utility of the ASQ: Thai, as Evaluated by  
Parents/Caregivers and Early Childcare Staff/Teachers?

Utility is based on the satisfaction and feedback from the parents/caregivers and early childcare staff/teachers who completed an ASQ: Thai satisfaction survey.

Satisfaction surveys provided information on the opinions, perceptions, and response to the use of the ASQ: Thai by parents and teachers. Percentages were calculated in order to summarize items from the survey forms. Interviews were conducted in order to more thoroughly explore some of the questions. In the interview sessions, the interviewees were selected based on the availability and ease to be visited. Each of them signed an audio consent form for recording. In the interview process, note taking had been done with the recording. Later, the record of each interview was transcribed and summarized. From the interview, responses were summarized for each question. The data from the surveys and the interviews were summarized as descriptive statistics and in narrative. The samples of interview questions are shown at Table 7.

Table 7

*Interview Questions for Parents/Caregivers and EC Staff*

No.	Question
1.	Tell me about your child, explain about your child, what is strength, weakness?
2.	How do you keep up with development in each month?
3.	Did you child have developmental problems? If yes, how did you solve the problems?
4.	How can you notice or identify if your child has a concern?
5.	Who do you trust most about your child development?
6.	Did you know about screening instrument before? If yes, what kind, did you bring your child to take the screening test?
7.	When you take your child to a doctor, could you tell me what did the doctor do with your child for screening?
8.	Tell me about how, what do you do to tell about your child development? How can you tell if your child had a concern?
9.	How did you feel when you were completing the test to your child?
10.	Have you seen a test like the ASQ: Thai before? If yes, what is it, how do you know it, did you child take the test ?
11.	Do you think the ASQ: Thai can help your child development? How?
12.	Do you think the ASQ: Thai should be given to all Thai children? Why?

## CHAPTER IV

### RESULTS

The results of the study are described in this chapter. There are four main outcomes worth noting. First demographic information is presented. Second, the appropriateness of the translation and culture are discussed. Third, the psychometric qualities are described including reliability (i.e., internal consistency, test-retest reliability, and interobserver reliability), and analysis of the differences between the scores of the U.S. ASQ and ASQ: Thai. Finally, the utility results for the ASQ: Thai are summarized.

#### Participants

##### Children

Children between the ages of 22 and 26 months were administered the 24-month age interval of the ASQ: Thai; children between the ages of 27 and 32 months were administered the 30-month age interval; and children between the ages of 33 and 39 months were administered the 36-month age interval study. Children were recruited by teachers and early childcare educators from their early childcare preschool classroom. Demographic characteristics of the participant children are summarized in Table 8.

Table 8

*Demographic Characteristics of Children in the ASQ: Thai Sample (N = 267).*

	ASQ: Thai Interval					
	24-month		30-month		36-month	
	Questionnaire		Questionnaire		Questionnaire	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>						
Male	30	54.55	53	51.96	59	53.64
Female	25	45.45	49	48.04	51	46.36
Total	55	100.00	102	100.00	110	100.00

#### Parents/Caregivers

A total of 267 parents/caregivers completed the 24-, 30-, and 36-month age intervals of the ASQ: Thai. All parents were recruited by their children's teachers and early childhood educators. Some parents/caregivers were recruited by teachers or early childcare educators at their children to schools or childcare centers; and others were recruited during home visits. Informed consents were signed by parents prior to data collection. Parents/caregivers were asked to provide personal information, including respondent status, ethnicity, language, income, and income resources.

The majority of respondents who participated were fathers or mothers (215 for 80.5%) and 40 (15%) were grandparents. For ethnicity and languages, a total of 267 (100%) families claimed their ethnicity as Thai; a total of 219 (82.02%) specified using the Thai language in communication and 48 (17.98%) specified using the Lao language.

For the parents'/caregivers' education level, the majority reported that they had received bachelor degrees ( $n = 103$ ), while others had achieved either Mathayom 6 (Grade 12 diploma) ( $n = 60$ ), Mathayom 3 (Grade 9 diploma) ( $n = 25$ ), or Prathom 4 (Grade 4 diploma) ( $n = 25$ ).

Regarding income levels, 39.33% ( $N = 105$ ) earned around 1,000 to 6,000 baht or 30-175 U.S. dollars per month ( $\$1 = 35$  baht); 30% ( $N = 79$ ) earned around 6,000 to 15,000 baht or 175 to 429 U.S. dollars per month; 15% ( $N = 39$ ) earned around 15,000 to 30,000 baht or 286 to 860 U.S. dollars; ten percent ( $N = 30$ ) earned more than 30,000 baht or 860 U.S. dollars per month. The sources of income were from various places including government support, selling crop products such as rice, cassava, sugar cane, and trading. Demographic characteristics of the families are presented in detail in Table 9.

Table 9

*Demographic Characteristics of Families in the ASQ: Thai Sample (N = 267).*

	ASQ: Thai Interval					
	24-month		30-month		36-month	
	Questionnaire		Questionnaire		Questionnaire	
	(n = 55)		(n = 102)		(n = 110)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Respondent</b>						
Father/mother	45	81.82	87	85.29	83	75.45
Uncle/aunt	3	5.45	2	1.96	0	0.00
Grandparent	4	7.28	10	9.80	26	23.64
Sibling	3	5.45	3	2.94	1	0.91
<b>Ethnicity</b>						
Thai	55	100.00	102	100.00	110	100.00
<b>Language</b>						
Thai	47	85.45	90	88.24	82	74.55
Lao	8	14.55	12	11.76	28	25.45
<b>Education level</b>						
Graduate	2	3.64	8	7.84	7	6.36
Bachelor	19	34.55	40	39.22	44	40.00
Certificate	4	7.27	6	5.88	10	9.09
Mathayom 6 (grade 12)	14	25.45	30	29.41	16	14.55

Table 9 (continued).

	ASQ: Thai Interval					
	24-month		30-month		36-month	
	Questionnaire		Questionnaire		Questionnaire	
	(n = 55)		(n = 102)		(n = 110)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Mathayom 3 (grade 9)	9	16.36	6	5.88	10	9.09
Prathom 6 (grade 6)	4	7.27	9	8.82	4	3.64
Prathom 4 (grade 4)	3	5.45	3	2.94	19	17.27
Income Source						
Selling crop products	17	30.90	21	20.60	35	31.80
Monthly income	21	38.20	47	46.10	36	32.70
Trading	7	12.70	26	25.50	24	21.80
Other	10	18.20	8	7.80	15	13.60
Income/month (baht)						
Less than 1,000	7	12.72	7	6.86	0	0.00
1,000-6,000	13	23.65	32	31.37	60	54.55
6,000-15,000	20	36.36	37	36.27	22	20.00
15,000-30,000	8	14.55	15	14.72	16	14.55
More than 30,000	7	12.72	11	10.78	12	10.90

### Teachers/Early Childcare Staff

A total of 49 teachers/early childhood educators attended the ASQ: Thai training. All were recruited by letter of invitation from the faculty of education at Mahasarakham University. Demographic information on the teachers/early childhood educators is described in Table 10.

Table 10

#### *Demographic Characteristics of Teachers/Early Childcare Educators.*

Teachers/Early Childcare Educators ( $n = 49$ )		
	<i>n</i>	%
Level of education		
B.A. in Early childhood Education	6	12.20
In-service training	39	79.60
Certificate in ECE	4	8.20
Length of experience		
1-2 years	35	71.40
2-3 years	14	28.60
Income		
1,000-3,000 baht	35	71.40
6,000-10,000 baht	14	28.60



## Cultural Appropriateness

Several processes were followed in order to observe the content validity of cultural appropriateness. In the beginning, the researcher and translation team translated and edited the ASQ. This included adapting it to be appropriate for Thai cultural and linguistic contexts. After that, the final adapted edition was translated back into English in order to proof and compare the accuracy with the original version. To answer the question of cultural appropriateness of the ASQ: Thai, this section will describe the results of the back translation, the review by a panel of experts, and suggestions for improvement from the parents/caregivers and early childcare staff/teachers.

### Results of the Back Translation

The back translation was completed by Dr. Wajuppa Tossa, who is an English professor at the Faculty of Humanity and Social Science at Mahasarakham University. In Dr. Tossa's back translation, there were several points that differ from the original version. First, the structure of sentences was changed. For example, in the instruction section, the original version says, "On the following pages are questions about activities children do." When translated back, it said, "The following questions are about activities that children do." Another example is on the 30-month interval, communication domain item 5. The original read, "Without giving him help by pointing or using gestures, ask your child..."; the back translation said "Can your child follow two instructions in a row for example,...correctly without help of any kind." Second, Thai grammar is different from English. When translated into Thai, "can" the transitive verb is added in Thai. Therefore, in the back translation version, most items had the phrase "Can your child make..." instead

of “Does your child make...” Third, some terms, objects, or equipment in the original version were used as borrowing words, for example, blocks and ball. Fourth, the names in the original were changed into Thai names in order to make more sense in Thai. Therefore, the back translation version used the Thai names that are different from the original. Next, some conjunction or transition words appear in the back translation version. For example, the words “but,” “even though,” “then,” and “or” were used when translated back. An example sentence is in the 30-month interval; Personal-social domain, item 2. The original version is; “Does your child use a spoon to feed himself with little spilling?” The back translation read “Can your child use a spoon to feed him/herself even though he/she spills some food?” Finally, the back translation used “he/she” and “him/herself” when a sentence refers to the child instead of using only “he” and “himself” as in the original version.

The back translation of the ASQ: Thai appears to be adequate in comparison to the original version. The translator pointed out that the ASQ: Thai was trying to keep the structure of each sentence parallel to the original. As a result of the excellent back translation, there were no major concerns on the comparison of the two versions. However, the translator suggested that the ASQ: Thai should be read and edited by professionals who offer services in the early childhood education and special education fields.

#### Results of the Panel of Experts Review

The panel of experts was asked to verify the cultural appropriateness and content validity of the ASQ: Thai. There were two steps in this process: using a checklist, and participating on a panel discussion. Ten invitations were sent out to recruit the experts in early childhood/special education; five responded.

In the checklist, the five experts were asked to input how much they agreed on each item of the ASQ: Thai. They were asked to complete a survey regarding the language appropriateness and the cultural appropriateness of the ASQ: Thai for Northeast Thai clients. The checklist consisted of 4 rating scales: 1 = Poor, 2 = Fair, 3 = Good and 4 = Excellent. For each item on the checklist, the experts mostly agreed to rate 3 = Good for both language and cultural appropriateness. In the panel discussion, they agreed that the ASQ: Thai was appropriate to a Northeast Thai cultural setting. In addition, they agreed that the activities in the ASQ were typical practices in Thai early childhood development. However, they asked for some changes in words and new terms that were more appropriate to Northeast Thai environments and changes to some cultural aspects that would match Northeast Thai child rearing practices.

In the discussion panel, all experts suggested these following concerns and changes. First, on the 24-month interval, Fine Motor domain, item 4, the experts suggested the clarification of a light switch that was used in the activity. The experts made the clarification that it should be a switch from a fan. They gave the view point that children were generally not allowed to turn a light switch or any kinds of switches and that a fan switch was safe. Second, the experts suggested that Thai teachers or parents who live in urban areas prefer to use the more polite suffix in front of a pronoun, such as “*Khun*,” a polite suffix to address a person. The experts prefer to use “*Khun*” in front of the words “Mother,” “Father,” “Teacher,” “Grandma,” etc. Next, the experts made the comment that normally Thai children (who were taught in the Thai school system) like to call themselves by using their nicknames and when children call their friends, they usually use the friends’

nicknames. They suggested the item on the Personal-Social domain, item 6, 24-month should stick with the nickname of the child instead of using “I.”

The next concern is cultural appropriateness. The experts singled out some objects and actions that are used in the activities. They found that on the interval 30-month, Communication domain, item 5, the question asked a child to put a pair of shoes on a table and put a book under the table. They pointed out that Thai children were taught to respect books and all kinds of knowledge sources and therefore would not feel comfortable placing a book under the table. They also pointed out that Thai children also learn that showing shoes in front of another person is not polite. Therefore, they suggested to change the command phrases from “put the shoes on the table” to “put the shoes under the table” and “put the book under the table” to “put the book on the chair.” Finally, the experts suggested adding more objects, tools, toys, and equipment that could be found in the local areas. They suggested adding “cut straws” instead of “beads.” They discussed that the ASQ: Thai was friendly to all parents. They expected that when an assessor met a parent and her child, the parent would easily be able to look for objects and tools to work with her child.

At the end of the discussion, the experts agreed that the ASQ: Thai was the best tool to use to screen young children. Besides these concerns, they believed that the ASQ: Thai will be a good starting tool improving for child development at area in Northeast Thailand.

Results on Parent Satisfaction Survey

A total of 173 parents responded to the survey. They were asked to complete two questions relating to the cultural appropriateness of the ASQ: Thai. First was asked, “Was it easy to understand the questions?” The second question was, “Were the questions with three choices appropriate for my child’s age?” Each question had three answer choices which were “Yes,” “Sometimes,” and “No.” In response to the first question, 67.10% (N = 116) parents/caregivers agreed that the questions were easy to understand and 32.90% (N = 57) answered “Sometimes.” For the second question, 46.20% (N = 80) parents/caregiver answered “Yes” and 53.80% ( N =93) parents/caregivers answered “Sometimes.” Figures 3 and 4 show the percentage of answers of the parents/caregivers on cultural appropriateness of the ASQ: Thai.

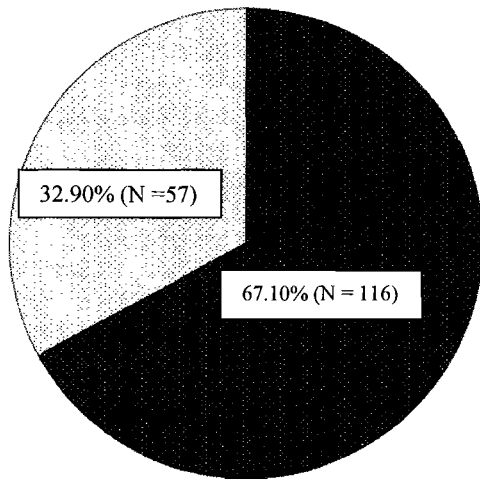


Figure 3: Was it easy to understand the questions?

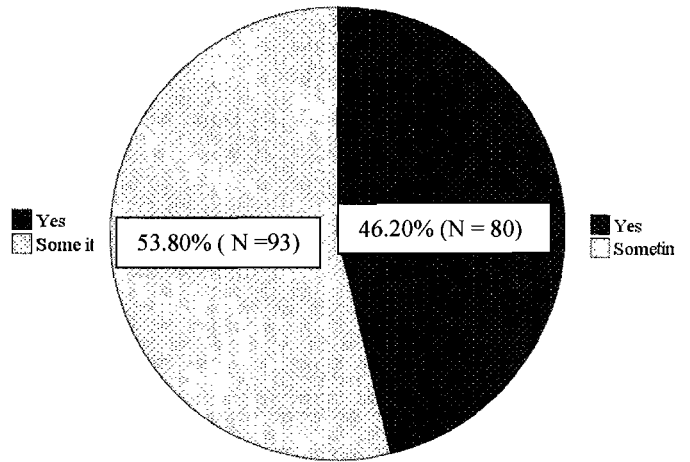


Figure 4: Were the questions appropriate for my child’s age?

### Results of the Early Childcare Staff/Teachers Satisfaction Survey

A total of 49 early childcare staff/teachers responded to the survey. They were asked to complete three questions relating to the cultural appropriateness of the ASQ: Thai. These were: 1) “Were the questions appropriate for the children’s ages?”; 2) “Was the language clear and easy to understand?”; and 3) “Were the questions culturally appropriate?” Each question had three answer choices: “Yes,” “Sometimes,” and “No.” Table 11 shows the percentage of early childcare staff/teachers answers on the cultural appropriateness of the ASQ: Thai.

Table 11

*Summary of Early Childcare Staff/Teachers' Satisfaction Survey: Opinion on ASQ: Thai*

EC staff/teachers' responses	ASQ: Thai	
	<i>n</i>	%
The questions were appropriate for the children's ages:		
Yes	20	40.80
Sometimes	29	59.20
No	00	0.00
Total	49	100.00
The language was clear and easy to understand:		
Very much	22	44.90
Sometimes	27	51.10
Not confident	0	0.00
Total	49	100.00
The questions were culturally appropriate:		
Yes	25	51.00
Sometimes	24	49.00
No	0	00.00
Total	49	100.00

## Reliability

### Internal Reliability

Cronbach's coefficient alpha is a model of internal consistency based on the average inter-item correlation and measures how well a set of variables or items measures a single, one-dimensional latent construct (Cronbach, 1951). According to Cohen (1960), an alpha of .80 is a strong agreement, .60-.80 is a good agreement, and .40 - .60 is a moderate agreement. Cronbach's coefficient alpha was calculated for area scores on individual questionnaires. Two sets of sample scores were calculated, early childcare staff/teachers' scores and parents/caregivers' scores. For the communication area, alphas ranged from .79 at 30 months of EC staff's scores to .85 at 24 months of EC staff's scores and at 36 months of parents/caregivers' scores. For the gross motor area, alphas ranged from .76 at 24 months of parents/caregivers' scores to .89 at 36 of EC staff and parents/caregivers' scores. For the fine motor area, alphas ranged from .75 at 24 months of EC staff's scores to .88 at 36 months of parents/caregivers' scores. For the problem solving area, alphas ranged from .75 at 36 months of EC staff's scores to .89 at 30 months of parents/caregivers' scores. Last, for the personal-social area, alphas ranged from .58 at 36 months of EC staff's scores to .79 at 24 months of parents/caregivers' scores. Table 12 presents the alphas of the EC staff and parents/caregivers.



Table 12

*Cronbach's Coefficient Alpha for the 24-, 30-, and 36- Month ASQ Thai*

Interval and domain	Alpha (EC Staff)	Alpha (Parents)
24-month ( <i>n</i> =55)		
Communication	.85*	.82*
Gross motor	.79*	.76*
Fine motor	.75*	.81*
Problem solving	.85*	.88*
Personal-social	.77*	.79*
30-month ( <i>n</i> = 102)		
Communication	.79*	.80*
Gross motor	.79*	.80*
Fine motor	.79*	.82*
Problem solving	.87*	.89*
Personal-social	.75*	.75*
36-month ( <i>n</i> =110)		
Communication	.82*	.85*
Gross motor	.89*	.89*
Fine motor	.86*	.88*
Problem solving	.75*	.81*
Personal-social	.58*	.64*

*Note.* \* The Cronbach's alpha of .70

Pearson Product Moment correlation coefficients were calculated between the developmental area and overall scores across questionnaires. Scores between all domains in both EC staff and parents/caregivers were significantly correlated at  $p < .01$ . Correlations between total score and individual domain scores ranged from .40 to .60. Results are shown in Table 13 and Table 14.

Table 13

*Correlations between Domains and Total Score for the ASQ: Thai's EC Staff Scores*

Area	Communication	Gross motor	Fine motor	Problem solving	Personal-social
Communication					
Gross motor	.51				
Fine motor	.49	.55			
Problem solving	.57	.59	.65		
Personal-social	.60	.51	.55	.66	
Overall	.44	.43	.48	.60	.53

*Note.* N=267. All correlations are significant at  $p < .01$ .

Table 14

*Correlations between Domains and Total Score for the ASQ: Thai's Parents/Caregivers Scores*

Area	Communication	Gross motor	Fine motor	Problem solving	Personal-social
Communication					
Gross motor	.50				
Fine motor	.48	.54			
Problem solving	.62	.53	.62		
Personal-social	.64	.46	.50	.66	
Overall	.50	.40	.45	.60	.56

*Note.* N=267. All correlations are significant at  $p < .01$ .

Test-Retest Reliability

Test-retest reliability was measured by comparing the results of two questionnaires completed by parents/caregivers and EC staff in a 2-month time period. The total scores from the parents' results were compared to the second completed set from the EC staff. The percentage agreements of the parents/caregivers completed scores for each area were higher than 90% or  $\rho > .90$ . And there were no differences greater than 5 points. Test-retest reliability of parents/caregivers is as shown in Table 15 and of EC staff on Table 16.

Table 15

*ASQ Mean and Standard Deviations between Time 1 and Time 2 of the Parent/Caregiver Report, and Correlations.*

	<i>M</i>	<i>M</i>	
	<i>(SD)</i>	<i>(SD)</i>	
ASQ: Thai Domain ( <i>n</i> = 58)	<i>Time 1</i>	<i>Time 2</i>	<i>Pr</i>
Communication	54.48	52.84	.94**
	(8.87)	(7.73)	
Gross Motor	52.93	51.72	.98**
	(10.52)	(9.89)	
Fine Motor	45.86	45.78	.96**
	(13.48)	(12.66)	
Problem Solving	50.86	50.43	.99**
	(11.21)	(11.09)	
Personal-Social	52.16	51.03	.96**
	(7.62)	(7.12)	

Table 16

*Means and Standard Deviations between Time 1 and Time 2 of the Early Childcare Staff/Teachers Report, and Correlations.*

	<i>M</i>	<i>M</i>	
	<i>(SD)</i>	<i>(SD)</i>	
<i>ASQ: Thai Domain (n = 58)</i>	<i>Time 1</i>	<i>Time 2</i>	<i>Pr</i>
Communication	53.36	51.72	.95**
	(9.57)	(8.41)	
Gross Motor	50.95	50.52	.98**
	(10.53)	(10.37)	
Fine Motor	43.45	43.45	.96**
	(12.33)	(12.18)	
Problem Solving	48.62	47.41	.96**
	(10.38)	(9.83)	
Personal-Social	51.12	50.43	.95**
	(7.38)	(6.96)	

#### Interobserver Reliability

Interobserver reliability was examined by comparing children's classifications based on questionnaires completed by parents/caregivers with the classifications based on questionnaires completed by EC staff. A total of 267 questionnaires were completed

across children from the 24-months to 36-months intervals. Interobserver reliability measured percentage agreement based on two classifications; Pearson correlations were used for measuring both association and mean differences between raters were calculated for measuring the significance of the association and mean differences between raters. Mean scores, standard deviations, and Pearson's coefficients correlation for parents/caregivers and EC staff are shown in Table 17.

Table 17.

*Means and Standard Deviations between the Early Childcare Staff/Teachers and Parent/Caregiver Reports, and Correlations.*

	<i>M</i>	<i>M</i>	
ASQ: Thai	<i>(SD)</i>	<i>(SD)</i>	
Domain ( <i>n</i> = 267)	<i>EC Staff/Teachers</i>	<i>Parents/Caregivers</i>	<i>Pr</i>
Communication	53.95	53.11	.79
	(9.20)	(9.77)	
Gross Motor	52.88	51.69	.76
	(10.97)	(10.63)	
Fine Motor	45.21	44.14	.84
	(13.23)	(12.94)	
Problem Solving	49.14	47.85	.86
	(13.61)	(12.94)	
Personal-Social	51.66	50.26	.78
	(9.16)	(8.84)	

Differences between the Scores of the U.S. ASQ and ASQ: Thai

Two hundred sixty seven children ASQ: Thai completed by EC staff and parents/caregivers in Northeast Thailand were compared to the U.S. data. The range, mean, median, interquartile range, and cutoff score of the 24-month, 30-month, and 36-month ASQ from Thai and U.S. data are represented in the Table 18 for Thai EC staff.

Table 18

*The Range, Mean, Median, Interquartile Range, SD, and Cutoff Scores of the 24-, 30-, and 36-month ASQ: Thai from Northeast Thai EC Staff and U.S. Data.*

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
24 Communication							
Thai	55	20-60	51.91	55	10	10.61	30.69
U.S.	1,434	0-60	51.26	60	10	12.99	25.17
Differences		-20	00.65	-5	00	-2.38	5.42
Gross motor							
Thai	55	20-60	51.09	55	15	10.87	29.35
U.S.	1,434	0-60	54.72	60	10	8.33	38.07
Differences		-20	-3.63	-5	5	2.54	-8.72
Fine motor							
Thai	55	10-60	41.00	45	20	12.63	15.74
U.S.	1,434	0-60	51.70	55	15	8.27	35.16

Table 18 (continued).

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
Problem solving							
Thai	55	0-60	41.55	45	25	15.92	9.71
U.S.	1,434	0-60	49.42	50	10	9.78	29.78
Differences		00	-7.87	-5	10	6.14	-20.07
Personal-social							
Thai	55	15-60	47.91	50	15	10.96	25.99
U.S.	1,434	0-60	51.17	55	15	9.74	31.54
Differences		-15	-3.26	-5	00	1.22	-5.55
30	Communication						
Thai	102	20-60	54.26	60	10	8.66	36.94
U.S.	950	0-60	53.81	60	10	10.26	33.30
Differences		-10	0.45	00	00	-1.60	3.64
Gross motor							
Thai	102	20-60	52.75	55	10	10.10	32.55
U.S.	950	10-60	53.53	55	10	8.71	36.14
Differences		-10	-2.01	00	5	1.39	-3.59
Fine motor							
Thai	102	10-60	44.26	45	15	12.59	19.08
U.S.	950	0-60	46.79	50	20	13.77	19.25
Differences		-10	-0.78	-5	-5	-1.18	-0.17



Table 18 (continued).

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
Problem solving							
Thai	102	0-60	47.94	55	20	14.37	19.20
U.S.	950	5-60	50.17	55	15	11.55	27.08
Differences		5	-2.23	00	5	2.82	-7.88
Personal-social							
Thai	102	15-60	51.26	55	10	9.47	32.32
U.S.	950	0-60	51.87	55	10	9.93	32.01
Differences		-15	-0.61	00	00	-0.46	0.31
36	Communication						
Thai	110	10-60	54.68	55	5	8.89	36.90
U.S.	995	0-60	51.93	55	10	10.43	30.99
Differences		-10	2.75	00	-5	-1.54	5.91
Gross motor							
Thai	110	5-60	53.91	60	5	11.74	30.43
U.S.	995	0-60	54.70	60	10	8.84	36.99
Differences		-5	-0.02	00	-5	2.90	-6.56
Fine motor							
Thai	110	0-60	48.18	50	25	13.51	21.16
U.S.	995	0-60	47.10	50	20	14.49	18.07
Differences		00	1.08	00	5	-0.98	3.09

*Table 18 (continued).*

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
Problem solving							
Thai	110	15-60	54.05	60	10	8.95	36.15
U.S.	995	0-60	52.00	55	10	10.85	30.29
Differences		-15	2.05	5	00	-1.73	5.86
Personal-social							
Thai	110	25-60	53.91	55	10	7.05	39.81
U.S.	995	12-60	52.83	55	15	9.74	35.33
Differences		-13	1.08	00	-5	-2.69	4.48

The range, mean, median, interquartile range, and cutoff score of the 24-month, 30-month, and 36-month ASQ from Thai and U.S. data are represented in Table 19 for parents/caregivers.

Table 19

*The Range, Mean, Median, Interquartile Range, SD, and Cutoff Scores of the 24-, 30-, and 36-month ASQ: Parents/Caregivers Data.*

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
24 Communication							
Thai	55	20-60	51.27	55	10	11.23	28.81
U.S.	1,434	0-60	51.26	60	10	12.99	25.17
Differences		20	00.01	-5	00	-1.76	3.64
Gross motor							
Thai	55	20-60	50.18	55	15	10.05	30.08
U.S.	1,434	0-60	54.72	60	10	8.33	38.07
Differences		20	-4.54	-5	5	1.27	-7.99
Fine motor							
Thai	55	10-60	39.73	40	20	11.80	16.13
U.S.	1,434	0-60	51.70	55	15	8.27	35.16
Differences		10	-11.97	-15	5	3.53	-19.03
Problem solving							
Thai	55	0-60	41.55	45	20	14.56	12.43
U.S.	1,434	0-60	49.42	50	10	9.78	29.78
Differences		00	-7.87	-5	10	4.78	-17.35
Personal-social							
Thai	55	15-60	47.82	50	15	10.17	27.48

Table 19 (continued).

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
U.S.	1,434	0-60	51.17	55	15	9.74	31.54
Differences		15	-3.35	-5	00	0.43	-4.06
30 Communication							
Thai	102	15-60	53.77	55	10	9.02	35.73
U.S.	950	0-60	53.81	60	10	10.26	33.30
Differences		15	-0.04	-5	00	-1.24	2.43
Gross motor							
Thai	102	20-60	51.52	55	15	9.69	32.14
U.S.	950	10-60	53.53	55	10	8.71	36.14
Differences		10	-2.01	00	5	0.98	-4.00
Fine motor							
Thai	102	5-60	43.28	45	20	12.38	18.52
U.S.	950	0-60	46.79	50	20	13.77	19.25
Differences		5	-3.51	-5	00	-1.39	-0.73
Problem solving							
Thai	102	0-60	46.67	50	20	13.97	18.73
U.S.	950	5-60	50.17	55	15	11.55	27.08
Differences		-5	-3.5	-5	5	2.42	-8.35
Personal-social							
Thai	102	15-60	50.25	55	11	9.50	31.25

Table 19 (continued).

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
U.S.	950	0-60	51.87	55	10	9.93	32.01
Differences		15	-1.62	00	-1	-0.43	-0.76
36 Communication							
Thai	110	5-60	53.41	55	10	9.62	34.17
U.S.	995	0-60	51.93	55	10	10.43	30.99
Differences		-5	1.48	00	00	-0.81	3.18
Gross motor							
Thai	110	5-60	52.60	60	10	11.71	29.18
U.S.	995	0-60	54.70	60	10	8.84	36.99
Differences		-5	-2.1	00	00	2.87	-7.81
Fine motor							
Thai	110	5-60	47.14	50	25	13.35	20.44
U.S.	995	0-60	47.10	50	20	14.49	18.07
Differences		-5	0.04	00	5	-1.14	2.37
Problem solving							
Thai	110	15-60	52.09	55	15	9.12	33.85
U.S.	995	0-60	52.00	55	10	10.85	30.29
Differences		-15	0.09	00	5	-1.73	3.56
Personal-social							
Thai	110	25-60	51.50	50	5	7.15	37.20

*Table 19 (continued).*

Interval & domain	<i>n</i>	Range	Mean	Median	Interquartile	SD	Cutoff
U.S.	995	12-60	52.83	55	15	9.74	35.33
Differences		-13	-1.33	-5	-10	-2.59	1.87

The comparisons of the identified children (children who had below cutoff score from Thai and U.S. data are shown on Table 20 and 21.

Table 20

*The Comparison of the Percentage of Thai and U.S. Children Who Had Score Below the U.S. ASQ Cutoff: EC Staff Completed.*

	Communication		Gross motor		Fine motor		Problem solving		Personal-social	
	Cutoff	%ID	Cutoff	%ID	Cutoff	%ID	Cutoff	%ID	Cutoff	%ID
24 months	25.49		38.34		35.40		29.91		31.81	
Thai		7.27(4)		14.54(8)		43.63(24)		21.82(12)		7.27(4)
U.S.		7.70		4.00		5.70		2.90		4.90
30 months	33.33		36.14		19.23		27.13		32.00	
Thai		2.94(3)		12.74(13)		13.72(14)		13.72(14)		4.90(5)
U.S.		5.90		6.00		3.60		5.40		4.80
36 months	30.96		36.96		18.03		30.21		35.18	
Thai		3.63(4)		12.72(14)		2.72(3)		2.72(3)		3.63(4)
U.S.		5.90		6.20		5.30		6.80		7.10

*Notes:* Thai sample population: 24-month (n = 55), 30-month (n = 102), and 36-month; U.S. sample population: 24-month (n = 1,445), 30-month (n = 952), and 36-month (n = 996). In parentheses ( ) = the number of Thai children who had score below the U.S. ASQ cutoff.

Table 21

*The Comparison of the Percentage of Thai and U.S. Children Who Had Score Below the U.S. ASQ Cutoff: Parents/Caregivers Completed.*

	Communication		Gross motor		Fine motor		Problem solving		Personal-social	
	Cutoff	%ID	Cutoff	%ID	Cutoff	%ID	Cutoff	%ID	Cutoff	%ID
24 months	25.49		38.34		35.40		29.91		31.81	
Thai		5.45(3)		14.54(8)		36.36(20)		21.81(12)		12.72(7)
U.S.		7.70		4.00		5.70		2.90		4.90
30 months	33.33		36.14		19.23		27.13		32.00	
Thai		3.92(4)		10.78(11)		2.94(3)		11.76(12)		11.76(7)
U.S.		5.90		6.00		3.60		5.40		4.80
36 months	30.96		36.96		18.03		30.21		35.18	
Thai		3.63(4)		9.09(10)		11.18(2)		2.72(3)		3.63(4)
U.S.		5.90		6.20		5.30		6.80		7.10

*Notes:* Thai sample population: 24-month (n = 55), 30-month (n = 102), and 36-month; U.S. sample population: 24-month (n = 1,445), 30-month (n = 952), and 36-month (n = 996). In parentheses ( ) = the number of Thai children who had score below the U.S. ASQ cutoff.



## Utility

For this research question, the reported utility from parents and EC staff is the main finding. Results are summarized from 1) parents/caregivers and EC staff satisfaction surveys and 2) from interviews with parents/caregivers and EC staff.

### Utility of Parents/Caregivers

Parents/caregivers were asked three satisfaction questions. Overall, parents/caregivers reported 10-20 minutes for answering the questionnaire or about 48% ( $n = 83$ ). They also thought the ASQ: Thai was interesting and helped them to think of their child development. The results are represented in Table 22.

Table 22

*Summary of Parents/Caregivers' Satisfaction Survey*

Parents/caregivers' responses	ASQ: Thai	
	<i>n</i>	%
Time consuming		
Less than 10 minutes	23	13.30
10-20 minutes	83	48.00
20-30 minutes	42	24.30
More than 30 minutes	25	14.50
Total	173	100.00
Assistance needs		
Yes	68	39.30
Sometimes	19	11.00
No	86	49.70
Total	173	100.00
Opinions		
Was interesting	73	42.20
Helped me think about my child's development	88	50.90
Took too long	10	5.80
Was a waste of time	2	1.20
Didn't tell me much	0	0.00
Total	173	100.00

### Utility of EC Staff

Table 23 represents time spent by EC staff to conduct the assessment for each child. Over 70% felt it was not too time consuming. The results are represented in Table 23.

Table 23

#### *Summary of Early Childcare Staff/Teachers' Satisfaction Survey: Time*

Parents/caregivers' responses	ASQ: Thai	
	<i>n</i>	%
Time to use		
Less than 10 minutes	19	38.80
10-20 minutes	19	38.80
20-30 minutes	11	22.40
More than 30 minutes	0	0.00
Total	49	100.00
Is it time-consuming?		
Yes	2	4.10
Sometimes	12	24.50
No	35	71.40
Total	49	100.00

### Knowledge of Screening Instruments

Table 24 summarized EC staff rating of the knowledge of screening instruments. Over 85 % reported they gained more experience on child development due to using the instrument. The results are represented in Table 24.

Table 24

*Summary of Early Childcare Staff/Teachers' Satisfaction Survey: Knowledge of Screening Instruments*

Parents/caregivers' responses	ASQ: Thai	
	<i>n</i>	%
Did you hear about any screening instruments before this research?		
Yes	7	14.30
Sometimes	4	8.20
Never	38	77.50
Total	49	100.00
Did you learn more about child development from using the tool?		
Yes	42	85.70
Sometimes	7	14.30
No	0	0.00
Total	49	100.00

### Opinions About the Instrument

The opinions of the EC staff about using the ASQ: Thai are summarized in Table 25. Most are positive opinions on each question. Nearly three fourths said they would consider using the ASQ: Thai in the future and 90% felt it was helpful for screening.

Table 25

*Summary of Early Childcare Staff/Teachers' Satisfaction Survey: Opinion on ASQ: Thai*

EC staff/teachers' responses	ASQ: Thai	
	<i>n</i>	%
Is the tool easy to implement?		
Yes	33	67.30
Sometimes	16	32.70
No	00	0.00
Total	49	100.00
How confident are you with the results of the screening tool?		
Very much	28	57.10
Sometimes	21	42.90
Not confident	0	0.00
Total	49	100.00
Would you consider using this questionnaire in the future?		
Yes	36	73.50
Sometimes	13	26.50

Table 25 (continued).

EC staff/teachers' responses	ASQ: Thai	
	<i>n</i>	%
No	0	00.00
Total	49	100.00
Do you think that this questionnaire is helpful for screening?		
Yes	44	89.80
Sometimes	5	10.20
No	0	00.00
Total	49	100.00

#### Interview with Parents/Caregivers and EC Staff

Open-ended questions were asked of parents/caregivers and EC staff in order to understand more about their knowledge and opinions on child development and the early screening process. Ten participants attended the interviews. The results of the interviews are provided in the following categories.

Understanding of Child Development and the Early Screening Process. EC staff discussed their knowledge of child development from preservice and inservice training. They had spent at least four years learning about theories and applications of child development. They confirmed they gained confidence for working with children as a result of completing the ASQ: Thai. When asked to describe how many developmental areas exist in child development, they gave the answer of four areas: 1) physical development, 2) emotional and mind development, 3) social development, and 4)

cognitive/ mental development (Ministry of Education, Thailand, 2003). According to the core early childhood education curriculum, early childcare staff must provide activities that support all four areas (Ministry of Education, Thailand, 2003). In working with the ASQ, they said that they had gained new knowledge on child developmental theories. In the ASQ, there are five developmental areas which assess a child's development in each stage of age (Squires & Bricker, 1999). They agreed that the instrument gave them more details on child development. When they were asked how many screening tools they knew about, they said there were no tools that were used with their children. They added that they had known mostly routine checklists, health progress checklists, and the four developmental area checklists from the Ministry of Education, Thailand (Ministry of Education, Thailand, 2003).

For parents, most of them said they did not know much about new child developmental theories. They knew that if their child could talk, walk, eat, and play normally, they had a normal child. But when a problem occurred with their child, they would have access to a pediatrician or a public care provider who provided services in a district hospital or a sub district health care center. For their children's education, they expected their child would be learning from schools. They also expected that the school would teach their child how to write, calculate, and speak English. When asked about the early screening instrument, they had not known any kinds of screening instruments before. They knew that their child would have a booklet for the health care record from a health care provider.

What Parents/Caregivers and EC Staff Learned from the Use of the ASQ: Thai.

Parents/caregivers and EC staff agreed that the ASQ: Thai contained useful questions that raised much awareness about child development as well as helping with concerns they might have about childhood problems. For EC staff, they found that they had been exposed to new issues that had not existed in child development in Thailand. One staff member discussed that parents who lived in one rural area did not have any awareness about teaching their child's gender awareness. The parents did not tell their child whether she/he was a boy or a girl. Children just told their names when the staff asked "Are you a boy or a girl?" She said that parents never thought this was an issue. For her, it was a good point to teach children to know about their gender because it would help children learn about themselves, which is important for their social development. In addition, EC staff found that the screening instrument gave them more insight about child observation. Before using the instrument, they had just provided games, lessons, or activities for children. They knew that all children in their classrooms could do certain activities. After using the ASQ: Thai, they had gained more ideas about how to observe and informally assess children. They said they had to observe how a child kicked a ball, touched a ball, rolled a ball, threw a ball, and walked up the stairs. They added that some children could not kick a ball. They realized that if children could not do an easy task, they had to teach them and provide time for the child to practice the skill.

EC staff found that the screening tool made them understand more about child development milestones. Because of the ASQ: Thai, they found they could understand child development at each stage. Moreover, EC staff found that the screening instrument



helped them to gain knowledge about working with children. They had more knowledge of how to identify which children had disabilities. They found they could add more activities to their teaching repertoire. They gave as an example that “some children cannot use their fingers on a pencil, they cannot write, but the parents force them to learn how to write” or “some children cannot roll or kick a ball, but the parents did not see that does not matter with their children.” The teachers realized that according to the ASQ: Thai, some children may be delayed in their development. They mentioned that all children should have preparation for their readiness to learn. They found that the screening tool alerted them to what activities children should practice and be able to do.

Besides those points, EC staff discussed children with disabilities in their schools. After using this tool, they learned that they had to talk to parents who had a child with disabilities. They had more awareness about working with those children. They also tried to point out these issues related to children’s disabilities to school masters, directors, and their coworkers.

Before using the instrument, parents/caregivers just had concerns about their children acquiring academic skills from the school lessons, even young children at 2 years old. However, after using the ASQ, they had many questions about general child development. For example, one parent discussed her child’s social issues. Her child could not speak or repeat a sentence after her. Sometimes her child did not make eye contact while talking. She asked if her child had any problems. One parent talked about the fact that her child did not pay attention in the classroom. Her child just sat alone while other children played together. From the interviews, the parents had learned that

preparation for readiness for all developmental areas was significant for child development and later academic learning.

Suggestions from Parents/Caregivers and EC Staff in the Use of the ASQ: Thai.

All parents and teachers suggested that the questionnaire should be used by teachers, because teachers were with the children for the whole day. Moreover, parents/caregivers strongly suggested that the screening should be given at a child's intake interviews when each child entered the first year of school. Parents/caregivers hoped that the ASQ would facilitate progress in child development. EC staff agreed that the items in the instrument could help them to understand the stages of development of children in each age level. They suggested that each school should the screening instrument use with children, especially at the beginning of each school year. Parents and EC staff suggested that the ASQ: Thai could focus the attention of teachers and parents to work together. They also expressed that the ASQ: Thai could help the parents and EC staff sees how their children are growing, and what areas they should focus on in their child's development. As parents found the screening instrument alerted them about their child's developmental problems, they suggested that all intervals of the questionnaires should be used for their child in school. Parents also said they would welcome working with teachers in the screening process to facilitate getting the best results for their child.

To use ASQ: Thai, The EC staff suggested that it should be used at the beginning of each term in order to check each child's development level. Then, the instrument should be used again if there were concerns about any of the children. They agreed that

children should be assessed every school term. EC staff also suggested that parents should be involved in the screening process as well.

### Summary

Interviews with parents and EC staff suggested that the ASQ: Thai changed the attitudes of EC staff and parents/caregivers. The ASQ: Thai focused their attention on child development issues. Moreover, it made them feel confident that they had provided appropriate supports for their children. The instrument also helped them gain new knowledge on child development and made them think of potential developmental problems in their children.

## CHAPTER V

### DISCUSSION

Several agencies provide services and support for early intervention/early childhood special education (EI/ECSE) in Thailand, but research and study for early childhood development and assessment processes are not well developed as yet. There remain limited services and supports for children and their families who live in remote areas. Therefore, the adaptation of the ASQ system is significant as a starting point for an early identification system in Thailand.

This research study has investigated and determined the reliability and utility of a screening system using an adapted and translated version of the Ages and Stages Questionnaires (ASQ), the Ages and Stages Questionnaires: Thai (ASQ: Thai), in early childcare settings in Northeast Thailand. The ASQ: Thai was used in early childcare settings, which allowed parents and early childcare staff to work together on common goals for the child. The research result suggested that the ASQ: Thai contributed to the awareness of child development by parents and early childcare staff. Moreover, the results reflected positive outcomes and a basis for future study.

This chapter discusses and interprets of the findings including the choice of participants, cultural appropriateness, reliability, and utility. The last section focuses on the implications and limitations of the research.

## Participants

Three categories of participants included children, parents/caregivers, and early childcare staff/teachers. Children were between 22 and 39 months of age and attended and received early childhood education services in early childcare centers and elementary schools in Northeast Thailand. A total of 267 children were recruited and were divided into three age grouping for completing the 24-month, 30-month, and 36-month questionnaires. There were 54.55% ( $n = 30$ ) males and 45.45% ( $n = 25$ ) females at the 24-months interval, 51.96% ( $n = 59$ ) males and 48.04% ( $n = 51$ ) females at the 30-months, and 53.64% ( $n = 59$ ) males and 46.36% ( $n = 51$ ) females at the 36-month questionnaires. There were no clinical reports for disabilities on any child; all children were in classrooms for typically developing children..

Over 80% completed of ASQ: Thai questionnaires were filled out by either fathers or mothers ( $n = 215$ ); and grandparents completed 15% ( $n = 40$ ) completed. Grandparents frequently completed the ASQ: Thai because some children were left with their grandparents while their parents worked in remote areas. The language that families used with their children was central Thai. However, some families reported that they used the Lao language with their children. However, the ASQ: Thai did not seem to cause any difficulty with understanding. Forty percent of parents/caregivers reported that they had received bachelor degrees ( $n = 103$ ), Grade 12 diploma ( $n = 60$ ), Grade 9 diploma ( $n = 25$ ); and Grade 4 diploma ( $n = 25$ ). However, almost half of participants earned around 1,000 to 6,000 baht or 30-175 U.S. dollars per month. This is a low income level compared to the government standard income which is about 10,000 baht or

285 U.S. dollars per month. The income of families who earned less than 6,000 baht may have come from selling crop products or trading. The families who live in villages mainly earn their income from these trades. A total of 30% (N = 79) of families earned more than 6,000 baht; most of these families lived in urban areas.

Early childcare staff and teachers were important participants in this research study. They helped to distribute research forms to parents and caregivers as well as recruit children in their classrooms and communities. Moreover, the early childcare staff and teachers helped to assess children and collect the surveys from parents. About 28.6% (n = 14) were early childcare staff and 71.40% (n = 35) were pre-service training teachers in early childhood education. All early childcare staff had earned a bachelor degree in early childhood education and a certificate in early childhood education, and had of at least two years experience working in early childcare settings. The pre-service training teachers were working on a bachelor degree in early childhood education at the Faculty of Education, Mahasarakham University, and had been studying for 5 years toward their degree. All of the preschool teachers were in the fifth year of the program, and had been training to work in early childcare settings since the third year of their program.

#### Cultural Appropriateness

##### Research Question I: Content Validity of the ASQ: Thai

Divergent processes had been under taken to assess the content validity of the ASQ: Thai, including of the translations and adaptations for Thai cultural and linguistic contexts, a back translation, the review of the translation by a panel of experts, and suggestions for improvement from parents/caregivers and early childcare staff/teachers.

In the back translation, an expert, Dr. Wajuppa Tossa, observed that the ASQ: Thai was adequate in comparison to the original version. She pointed out that the ASQ: Thai kept the structure of each sentence parallel to the original and had no major concerns and felt it was appropriate for use in Thai early childhood settings. Further collaboration in the development of the ASQ: Thai should include professionals who offer services in early childhood education and special education fields in other settings in Thailand.

For another measure of content validity, a panel of experts pointed out some concerns about the ASQ: Thai regarding cultural appropriateness. They suggested some changes in replacing the objects used, some words, and some activities in order to make the test more appropriate. However, over all, the experts mentioned that the ASQ: Thai was the best tool to use for screening young children because the ASQ: Thai could be a good starting tool for screening and improving child development in Northeast Thailand.

The responses from parents' satisfaction surveys were positive. There were three choices of "Yes," "Sometimes," and "No" in the parent survey form asking about the understanding and the appropriateness of the ASQ: Thai. All 100% (N =173) of the parents responded with "Yes" and "Sometimes" choices.

According to the early childcare staff/teachers' responses, the ASQ: Thai appeared to be culturally appropriate, age appropriate, and easy to understand. Fully 100% (N = 49) of the early childcare staff and teachers gave the answers "Yes" and "Sometimes" on those topics.

No one respondent answered "No" on the questionnaire. Generally, the answer "NO" is not typically used in Northeast Thai society. If someone wants to refuse a

request, he/she rarely says “No.” He/she would rather say “sometimes” or “OK.” The interpretation of these cases may show only half acceptance with the satisfaction associated with using the ASQ: Thai. Providers and parents may be happy with the ASQ: Thai when they know that the instrument is useful and effective for helping their children. In this discussion, the content validity observations appeared positive to these parents and caregivers.

From the results, the translation appeared clear and adequately close to the original one; the expert panel agreed the ASQ: Thai could be used for screening and the satisfaction of the parents and early childcare staff and teachers was high. In conclusion, the ASQ: Thai appeared culturally appropriate for use in early childcare settings.

### Reliability

#### Research Question II: Reliability of the ASQ: Thai

Reliability of the ASQ: Thai is described in terms of internal consistency, test-retest reliability, and interobserver reliability. Internal consistency analyses included analyses of correlation and completion of Cronbach’s coefficient alpha (Cronbach, 1951).

Internal Consistency. To analyze internal consistency, Cronbach’s coefficient alpha and Pearson correlation analyses were used. According to Cohen (1960), an alpha of .80 is a strong agreement, .60-.80 is a good agreement, and .40 -.60 is a moderate agreement. Therefore, Cronbach’s coefficient alphas mostly reflected strong agreement; however, some domains had only moderate agreement, such as on personal-social domain of the ASQ: Thai, as completed by EC staff, ( $r = .58$ ). The highest alpha was .89



for the problem solving domain (parent completed) and the gross motor domain 36-month interval on the completed by both EC staff and parents.

Pearson product moment correlation coefficients were calculated between the developmental area and overall scores across the questionnaires. Pearson correlation coefficients were quite strong for both sets of scores. According to Cohen (1960), these correlations reflected moderate to good agreement, ranging from 0.40 to 0.60. Scores between all domains in ASQ: Thais completed by both EC staff and parents/caregivers were significantly correlated at  $p > .90$ .

Test-Retest Reliability. The comparison of test-retest reliability yielded strong results between questionnaires completed by parents/caregivers and on EC staff the same child within a 2-month time period. Test-retest information was collected by asking parents/caregivers and EC staff to assess 58 children across the three age intervals. All children were randomly selected to receive second tests. Correlations were based on the response of parents/caregivers and EC staffs between the two questionnaires and exceeded 90%.

Interobserver Reliability. Interobserver reliability was examined by comparing children's classifications (i.e. typical, risk) based on questionnaires completed by parents/caregivers with the classifications (i.e. typical, risk) based on questionnaires completed by EC staff in the same period of time. Agreement between 49 EC staff and 267 parents/caregivers was quite strong, greater than 76%.

## Differences between the U.S. ASQ and the ASQ: Thai

### Research Question III: Differences Between the Scores of Northeast Thai Children of 24-, 30-, and 36-Month ASQ: Thai and Those of U.S. Children on the Same ASQ Intervals

The range, mean, median, interquartile range, and cutoff scores on the 24-, 30-, and 36-month ASQ: Thai (comparing parents/caregivers and EC staff separately) and U.S. data sample were compared. Means (M) of the Thai data set and U.S. data set were somewhat different across intervals and domain. The main differences were in the standard deviation (SD) units. Due to the large differences in the two sample sets, the SD of ASQ: Thai was very different from the U.S. SD. Therefore, the cutoff scores of ASQ: Thai were different from those derived from U.S. population. The cutoff scores of ASQ: Thai were either much higher or much lower from the U.S.. The reasons would occur parents and EC staff completed the ASQ: Thai, they gave higher scores to their children. Some parents and EC staff may have had biases about their children abilities. They may think their children could not do such activities which were difficult. Therefore, they gave children low scores. Another reason is some parents and EC staff may not feel the test was serious. They may have ignored trying activities with their children. Another reason that may affect the scores is the size of sample. The differences might be minimized if the Thai sample was larger and more diverse. The EC staff had more training on the use of ASQ: Thai, scores might have been different.

## Utility

### Research Question IV: Utility of the ASQ: Thai

Parents/Caregivers' Time Use and Assistance Needs. Parents and caregivers were asked to fill out a survey about the amount of time spent on completing the ASQ: Thai. Forty eight percent parents reported they took about 10-20 minutes. Nearly 38.80% took more than 20 minutes. These numbers demonstrate that the parents/caregivers spent time reading and understanding each question. Sometimes, they asked EC staff to help them answer the questions when they could not understand. Nearly 40% reported they needed help computing the ASQ: Thai. As reported in the interview, they asked EC staff to help them. About 11% asked EC staff for help sometimes. It is clear that about half of the parents needed help in order to assess their children. Therefore, the collaboration of parents and EC staff should be formally arranged in an ASQ: Thai system.

Parents/Caregivers' Implementation. Nearly 51% of parents/caregivers thought ASQ: Thai helped them to think about their child's development. According to the interview, they had previously just paid attention to their children's academic skills related to classroom learning. The ASQ: Thai focused on developmental areas that they had not previously recognized. Over 42% thought ASQ: Thai was interesting and that they could see their child's developmental picture more clearly. They could see the developmental levels where their children should be. Seven percent of the parents answered that the test was too long and wasted their time. There were no concerns that

the questionnaire would be overwhelming by giving them too much to do. Overall parents/caregivers liked the time they spent completing the ASQ: Thai.

EC Staff's Time Use. For EC staff, 38.80% reported they used less than 10 minutes to assess each child, and 38.80% used about 10-20 minutes to complete the assessment on each child. No one took more than 20 minutes. Furthermore, 71.40% reported that the ASQ: Thai was not time-consuming.

EC Staff's Implementation. Most of the EC staff reported ASQ: Thai was easy to implement in early childcare settings. As they suggested, ASQ: Thai could be used with preschool children when they entered early childcare settings; they learned that the ASQ: Thai helped them to recognize and track each child's developmental level in the classroom. EC staff also reported that ASQ: Thai was helpful for developmental screening and recognition of the developmental delays.

From the interview with parents/caregivers and EC staff, ASQ: Thai represented a greater understanding and increase in their knowledge and skills related to child development and the early screening process. Neither group had any previous knowledge of hands-on screening instruments. When using ASQ: Thai, they gained more knowledge about child development. Therefore, completing the ASQ: Thai was a way to learn about child development as well as screen for developmental delays. Both parents/caregivers and EC staff pointed out that the ASQ: Thai gave them details about child development and future steps for learning.

### Limitations

There were several limitations to this current research study. These included: 1) lack of a diverse population, 2) lack of training for conducting the screening assessment, 3) lack of time for monitoring each assessor, 4) lack of comparative tests for concurrent findings, and 5) lack of a real understanding by early childhood staff of early identification in Thailand.

The demographic study showed that half of the parents and caregivers earned more than 6,000 baht a month, which means they most likely lived in an urban area. While the researcher tried to recruit the sample from parents/caregivers who lived in villages or rural areas, most EC staff taught in schools located in a provincial town, where the majority of parents lived and earned a monthly salary in this urban area.

Training on the use of the ASQ: Thai training took place during a 2-day period, which was not enough for providing in-depth training in the ASQ assessment process. Even though the EC staff had 2-4 years in early childhood training, they needed more training and skills related to knowledge of EI/ECSE and early identification.

Data collection took about three months in Northeast Thailand. There was no random sampling. All samples were selected based on EC staff. The EC personnel were scattered all over Northeast Thailand so it took time to follow up with the EC staff and parents/caregivers. More time was also needed to make family visits. However, there was inadequate time for home visits as well as no funding for transportation. This issue will be considered in the next research project.

As mentioned, an early identification system in Thailand was not well known nor well established. Therefore this line research requires much more infrastructure and training. There are also no assessment tools that have been studied in Thailand that could served as concurrent validity measures. More investigation is also needed to develop robust procedures to establish concurrent validity of the ASQ: Thai.

Finally, EI/ECSE is a relatively new field in early childhood education in Thailand. The EC staff had been trained only in delivering the core curriculum from the Ministry of Education. Knowledge about special needs and EI/ECSE service delivery is not embedded in the training. This lack of knowledge and training issues may have affected the research results.

### Implications

#### Research

Initial results and findings regarding content and cultural validity of ASQ: Thai were positive, suggesting an adequate translation and strong agreement from the experts. For reliability, the findings were significant although the sample population was small. Completed questionnaires by both parents/caregivers and EC staff were found significantly correlated, with positive correlations, and strong agreement for test-retest reliability. In addition, satisfaction surveys reflected high satisfaction from parents/caregivers and EC staff. Future research on the ASQ needs to be expanded, looking at young children aged 2 months to 66 months in Northeast Thailand.

For future research, psychometric properties of concurrent validity, sensitivity, and specificity must be studied. The ASQ: Thai must be compared with another

assessment instrument or battery of assessment or professional evaluation that has already been studied and used in Thailand. While there are a couple of instruments currently used in Thailand, they have no psychometric studies supporting their use. For sensitivity and specificity studies, children with developmental delays and disabilities must be included in this research. A diverse, normative sample throughout Thailand must be included in future research as well. A broad population of EC staff as well as parents/caregivers must be recruited in order to get accurate results. The sample for this current study did not include a diverse population. Therefore, future research must be based on a larger, more diverse sample.

#### Practice

Results from this study suggest guidelines future practices for establishing an early childhood screening system for Thai environment. The following areas are suggested for concentration.

Suggested Practice for a Thai Screening System. Initially, a system for developmental and behavioral screening should be field tested and studied in specific locales such as urban and rural areas. Any new concept and screening system must be officially evaluated in order to be implemented in any single Thai area. Therefore, a regional screening system must be developed and then used in available at early childhood education settings and service delivery systems and these systems should be carefully studied and evaluated as they are implemented.

Results from this research should include the following ideas. First, screening systems must start from legislation and policy from the royal government. The Thai

royal government must mandate a screening law. Next, the Ministry of Education, Ministry of Public Health, Ministry of the Interior, and Ministry of Social Development and Human Security must have regulations for the screening system and enforce the law so it is widely used and understood in all government agencies. Government agencies under the supervision of the four ministries will then need to collaborate in order to serve the people within each area.

Second, an effective screening instrument must be officially planned, adapted, and implemented. During the planning phase, a screening test will need to be chosen, adopted, and studied in order to find the most appropriate instrument. The cultural appropriateness of the screening instrument will need to be studied so that it is appropriate for children in all cultures in Thailand.

Third, personnel working in the screening system will need to be trained. Centers must be developed in each province around the country. The center can then recruit early child development personnel and staff from district public health centers, district and provincial hospitals, private pediatric clinics, early childhood departments from district councils, and elementary schools personal to receive training in the screening instrument and system. During training and implementation, the idea of family involvement needs to be included. As the screening procedure is a collaborative process between parents and assessors, screening personnel will be asked to do the screening assessment between with the family.

Fourth, the screening system including screening tests will need to be distributed to all official offices who work with young children, such as district public health centers,



hospitals, schools, and special education centers. Each office will need to offer the developmental screening test for the children who live under the provision of the office area. The staff will collect data from the test, refer children as needed according to results, and ask the parents to visit the office again within the following four or six months in order to be rescreened so that the developmental progress of the child can be monitored over time.

Fifth, evaluation of the screening system is as critical as the development of the test. The center staff will need to collect and analyze screening data, including outcomes for children identified with delays. If parents find their children as at-risk or with concerns, they must be asked to assist with simple general interventions with the child. The child who receives a result indicating possible delayed development must be referred to pediatricians or specialists in hospitals and other institutions for follow-up.

Finally, all early childhood settings will be part of the screening system. Each setting will screen every child as part of the enrollment process. If a child is detected as at-risk or with concerns, the early childhood staff will collaborate with a specialist in order to monitor and follow the child's progress.

Suggestion Practices for EI/ECSE Personnel Preparation. For a personnel preparation system for early childhood teachers, the most effective intervention programs, models, and experimental projects can be used as examples and adapted to the Thai system. Since Thailand has few EI/ECSE settings, effective examples from abroad will be essential to use in the beginning. Success stories in Thailand in EI/ECSE can be presented as models to early childhood educators. Peered-coaching models, both

reciprocal and professional, can be implemented in early childhood personnel preparation by trained coaches. However, the system will at first need to be a modeling process, with EI/ECSE staff first observing EI/ECSE programs from abroad and then comparing and contrasting them with examples from Thailand. Selected staff can be trained initially by U.S. EI/ECSE personnel. Then, the staff can work as EI/ECSE personnel preparation trainers.

In order to develop a system, several personnel preparation strategies are suggested:

1. Train early childhood personnel to use a development screening test in order to identify preschool age children with disabilities.
2. Set up child development programs that include placements for children with disabilities.
3. Set up professional education programs with minors and majors in EI/ECSE in colleges of education.
4. Set up in-service training centers for early childhood educators and early childcare staff, including centers in rural areas.
5. Recruit visiting scholars from abroad to visit the child development programs and give observations and constructive coaching as well as trainings to the staff.
6. Publish reports, papers, and works of EI/ECSE Thai professionals.
7. Create an EI/ECSE training and support network, electronically as well as traditionally.

Application of Best Practices to an EI/ECSE system in Thailand. The Division for Early Childhood (DEC) has policies and advances in evidence-based practices that support families and enhance the optimal development of young children who have or are at risk for developmental delays and disabilities (Sandall et al., 2005). DEC provides recommended practices for personnel preparation, which are suitable for early childhood special educators and early interventionists. DEC-recommended practices can provide a scaffold for development of the Thai EI/ECSE system.

DEC Recommended Practices highlight the work of both early childhood special educators and the staff who work and intervene in early childhood settings (Sandall et al., 2005). The guidelines of DEC are clear, specific, and readily available to apply in personnel preparation and intervention. DEC Recommended Practices suggests the participation of families in the delivery of training services, in increasing the quality of pre-service and in-service trainings, increasing family-centered practices, and promoting cultural and linguistic diversity (Sandall et al., 2005). DEC Recommended Practices also promote an interdisciplinary and collaborative model with family involvement and effective training in evidence-based practice. These models could form the basis of an effective Thai system and could help to organize a personnel preparation system for Thai early childhood teachers. Because of these important and relevant features, DEC Recommended Practices have the potential to be adapted to promote culturally competent approaches for EC personnel and children in Thailand.

Changes in Thailand in the practices of early childhood educators and staff must be implemented. Personnel preparation in early childhood must include provisions for

young children with disabilities. Standards adapted from DEC Recommended Practices for personnel preparation are the most fitting for early childhood education in Thailand. Therefore, personnel preparation must include a focus on family involvement, multicultural and social contexts, learning through play, the uniqueness of each child, and the child's interests and needs as a basis for intervention for implementation in a Thai personnel program for several reasons.

Personnel Training. First, as Thailand has diversity in language, religion, and areas, DEC Recommended Practices will help early childhood educators to recognize bias in race, culture, and the hierarchical systems in Thai society. Second, guidelines and recommended practices for early childhood settings can form a comprehensive and standardized personnel system that can be used throughout the country. Third, these guidelines will help to promote a new structure for an early childhood education system in Thailand. For example, collaboration among agencies and personnel can be encouraged through various practices such as an empowerment model, peer coaching, and ongoing evaluation of programs. This will help to increase the quality of early childhood programs by training early childhood education personnel to learn these strategies. Finally, the DEC guidelines will encourage field experiences that allow early childhood teachers to experience real situations and be prepared to provide authentic services using recommended practices for children and families. Early childhood teachers will have many opportunities to practice implementing recommended practices in real settings to become competent, highly qualified early childhood educators.

Two strands from DEC Recommended Practices, Family Involvement (Strand PP1) and Community Participating (Strand PP3), can be adapted and applied effectively in Thailand. The strand PP1 states: “Family involvement begins early and continues throughout all aspects of the pre-service program” (p. 78). As a best practice, family involvement is an ideal that must be adapted to Thai culture. So, this strand can be adapted to “Family involvement is encouraged to be included in the pre-service program” (p. 78). For PP3, “Community agency and school personnel are involved in the preparation program,” the community agency may not want to work with the personnel preparation program. Therefore, this strand can be adapted to encourage community agencies to partner with school personnel and school personnel to encourage the community agency to get involved in preparation programs; and school personnel will be encouraged to get involved with the community (Sandall et al., 2005). In addition, DEC Recommended Practices highlight the significance of learning activities including the study of cultural and linguistic diversity. Cultural and linguistic diversity can be embedded into personnel training programs and may enhance early childhood teachers’ experiences.

### Conclusion

The findings from this research study suggest that the ASQ: Thai is appropriate and can be used in early childcare settings in Thailand. More importantly, the research provides a foundation for developing a screening system development in Thailand. The research points out that a screening system must start with regulation from the central government. Therefore, the government needs to provide funds and support for this area.

Then, research will need to start at the universities and early childhood development centers in order to develop an appropriate screening process. Next, personnel training will need to be undertaken. Early childhood staff in all settings will need to receive training on screening procedures, on-going follow up and mentoring. Collaboration across ministries and professionals must take place in order for staff training and system implementation to be successful. For example, staff from schools must work with staff from hospitals and public health centers. Significantly, the aims and goals for optimal child development must be developed and disseminated in early childhood settings and among staff that will in turn link to the greater screening and intervention system.

Future research on the ASQ: Thai is needed. Governmental agencies must start working on early identification in order to develop a foundation for EI/ECSE in Thailand. Increased study of cultural, language, and disability issues must be included. Collaboration among families, specialists, EC staff, and community members is critical for this system. With coordinated and integrated training and services, developmental outcomes for young children in Thailand will be improved.

APPENDIX A

LETTER OF INVITATION: FACULTY OF EDUCATION, MAHASARAKHAM

UNIVERSITY



UNIVERSITY OF OREGON  
College of Education

งานวิชาการ-วิจัย-จิตศึกษา
คณะศึกษาศาสตร์
วันที่ 1179
วันที่ 15/10/51
เวลา 16.00 น.

คณะศึกษาศาสตร์
วันที่ 15/10/51
เวลา 16.00
ชื่อผู้รับ
ชื่อผู้ส่ง

วันที่ 11 ตุลาคม 2551

เรื่อง ขอบความอนุเคราะห์ให้ความร่วมมือในการวิจัยเพื่อประกอบการศึกษาระดับปริญญาเอก

เรียน คณบดี คณะศึกษาศาสตร์ มหาวิทยาลัยมหาสารคาม

ข้าพเจ้า นายประสงค์ สาขหงษ์ ผู้ริเริ่มทุนโครงการพัฒนาอาจารย์รุ่นใหม่ คณะศึกษาศาสตร์ มหาวิทยาลัยมหาสารคาม ขณะนี้ข้าพเจ้ากำลังศึกษาต่อระดับปริญญาเอก สาขา การศึกษาพิเศษ สำหรับ เด็กปฐมวัย (Early Intervention/Early Childhood Special Education) ณ โครงการการศึกษาพิเศษสำหรับ เด็กปฐมวัย (Early Intervention Program) วิทยาลัยการศึกษา (College of Education) มหาวิทยาลัยแห่งรัฐโอเรกอน (University of Oregon) ขณะนี้ข้าพเจ้าเริ่มทำการศึกษาวิจัยระดับปริญญาเอกในหัวข้อ Evaluating the Use and the Psychometric Properties of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand

ขั้นตอนการวิจัยมีดังต่อไปนี้ 1) อบรมเจ้าหน้าที่ประเมินแบบทดสอบ 2) นำแบบทดสอบไปประเมินเด็กปฐมวัยอายุ 24 เดือน ถึง 36 เดือน (2-3 ปี) 3) ช่วงผู้ปกครองในการทำแบบทดสอบ และ 4) สังเกต และสัมภาษณ์ผู้ประเมินแบบทดสอบ

ขั้นตอนดังกล่าวเป็นขั้นตอนที่ใช้ผู้ร่วมมือเป็นจำนวนมาก และ ใช้การผลิตอุปกรณ์งานกับสถานที่ราชการที่ให้บริการเด็กปฐมวัยที่เข้มนอนได้อย่างทั่วถึง ข้าพเจ้าจึงใคร่ขอความอนุเคราะห์ความร่วมมือทางหน่วยงานของท่าน ดังต่อไปนี้

1. ขอบความอนุเคราะห์ออกหนังสือเพื่อขอความร่วมมือกับหน่วยงานการศึกษาปฐมวัยในภาคอีสาน
2. ขอบความอนุเคราะห์ส่งบุคลากรเข้ารับการอบรมเรื่องการใช้เครื่องมือคัดกรองเด็กปฐมวัย
3. ขอบความอนุเคราะห์ให้เจ้าหน้าที่ประจำหน่วยงานบริการเด็กปฐมวัยในสังกัดของท่าน ได้ประเมินแบบคัดกรอง ทดสอบเด็กนักเรียนระดับปฐมวัยในสถานศึกษาของท่าน
4. ขอบความอนุเคราะห์หน่วยงานของท่านได้เชิญชวนผู้ปกครองของนักเรียนระดับปฐมวัย (24-36 เดือน) เข้าร่วมการ ศึกษาวิจัยในครั้งนี้ ณ สถานศึกษาของท่าน

หากท่านมีข้อสงสัยเกี่ยวกับขั้นตอนการวิจัยดังกล่าว กรุณาติดต่อข้าพเจ้าได้ที่ อีเมล psahong@chestmail.com โทรศัพท์ 043-970-566 หรือ อาจารย์ที่ปรึกษาของข้าพเจ้า ดร. เจน สควีร์ อีเมล jsquires@uoregon.edu หรือทางจดหมาย และ โทรศัพท์ ที่ Jane Squires, Early Intervention Program, 901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์ ขอขอบพระคุณ

(นายประสงค์ สาขหงษ์)

นักศึกษาระดับปริญญาเอก โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย  
วิทยาลัยการศึกษาและการวิจัย มหาวิทยาลัยโอเรกอน

Early Intervention Program  
901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

An equal-opportunity. Affirmative-action institution committed to cultural diversity and compliance with the Americans with Disabilities Act

ผอ. งานมาตรฐาน  
นางสาว อรุณมาศ ตันตติยะกุล  
16/10/51





UNIVERSITY OF OREGON  
College of Education

Assoc. Prof. Dr. Pravit Erawan  
Dean of Faculty of Education  
Mahasarakham University  
Amphoe Muang, Mahasarakham  
44000

October 11, 2008

My name is Prasong Saihong. I am a doctoral candidate at the Early Intervention Program, College of Education, University of Oregon, USA. I'm calling to talk to you about participating in my research study. I am recently beginning my research dissertation entitled "Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand." The procedures of the research are 1) to train teachers and childcare staff to use the ASQ: Thai, 2) to use the ASQ: Thai to screen children age 24 months to 36 months (2-3 years old), 3) to help parents and caregivers to use the ASQ: Thai, and 4) to observe and interview the ASQ: Thai users.

This study requires various participations. You're eligible to be in this study because your institute could provide resources and contacts that will be helpful for this study. To make this study success, I would like to request your kind assistance and cooperation from your institution in the following topics:

1. to issue an official letter requesting cooperation from Early Childhood Institutions in northeast Thailand.
2. to give permission to your staff to attend the workshop of the use of screening instrument.
3. to give permission for assessment staff to give a screening test for the early childhood students in your school or center.
4. to help invite the parents of 24-36 months students to participate in this study.

If you have any more questions about this process or if you need to contact me about participation, I may be reached at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or at 043-970566. You could also contact my academic advisor, Dr. Jane Squires, for more information, via e-mail at [jsquires@uoregon.edu-or](mailto:jsquires@uoregon.edu-or). She could also be contacted via airmail service at Early Intervention Program, 5253, University of Oregon, Eugene, OR97403-52533 USA.

Respectfully Yours,

*Prasong Saihong*

Prasong Saihong  
Doctoral Candidate, Ph.D.

APPENDIX B

LETTER OF INVITATIONS TO SCHOOL DIRECTORS, EC STAFF, AND  
PARENTS/CAREGIVERS



UNIVERSITY OF OREGON  
College of Education

วันที่ พฤศจิกายน 2551

เรื่อง ขอความอนุเคราะห์ให้ความร่วมมือในการวิจัยเพื่อประกอบการศึกษาระดับปริญญาเอก

เรียน

ข้าพเจ้านายประสงค์ สาขหงษ์ ผู้รับทุนโครงการพัฒนาอาจารย์รุ่นใหม่ คณะศึกษาศาสตร์ มหาวิทยาลัยมหาสารคาม ขณะนี้ข้าพเจ้ากำลังศึกษาระดับปริญญาเอก สาขา การศึกษาพิเศษ สำหรับ เด็กปฐมวัย (Early Intervention/Early Childhood Special Education) ณ โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย (Early Intervention Program) วิทยาลัยการศึกษา (College of Education) มหาวิทยาลัยแห่งรัฐโอเรกอน (University of Oregon) ขณะนี้ข้าพเจ้าดำเนินการศึกษาระดับปริญญาเอกในหัวข้อ Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand หรือ การประเมินคุณภาพแบบวัดทางจิตวิทยา และระดับความพึงพอใจของผู้ใช้แบบสอบถามคัดกรองพัฒนาการเด็กปฐมวัย (ASQ: Thai) ในภาคตะวันออกเฉียงเหนือ โดยมีขั้นตอนการวิจัยมีดังต่อไปนี้ 1) อบรมเจ้าหน้าที่ประเมินแบบทดสอบ 2) นำแบบทดสอบไปประเมินเด็กปฐมวัยอายุ 24 เดือน ถึง 36 เดือน (2-3 ปี) 3) ช่วยผู้ปกครองในการทำแบบทดสอบ และ 4) สัมภาษณ์และสัมภาษณ์ผู้ประเมินแบบทดสอบ

ในการนี้ ข้าพเจ้าจึงใคร่ขอเชิญท่านเข้าร่วมการวิจัยในครั้งนี้ ในฐานะท่านเป็นผู้ปกครอง หรือผู้ดูแลเด็กปฐมวัย ระดับอายุ 2-3 ขวบ หากท่านยินดีเข้าร่วมโครงการ ท่านจะได้เข้าร่วมขั้นตอนต่อไปนี้

- 1) อนุญาตให้บุตร หรือเด็กในความดูแลของท่าน เข้าร่วมการทดสอบประเมินพัฒนาการ โดยครูประจำชั้น หรือเจ้าหน้าที่ประเมินผลพัฒนาการเด็กปฐมวัย
- 2) เข้าร่วมการวิจัย โดยประเมินพัฒนาการบุตรหรือเด็กในความดูแลของท่าน โดยใช้แบบประเมินพัฒนาการเด็กปฐมวัย ๙ ส่วนที่ผู้วิจัยได้จัดเตรียมไว้ และกรอกข้อมูลเกี่ยวกับตัวบุตรหรือเด็กในความดูแลของท่าน และตัวท่าน พร้อมกรอกแบบสอบถามความพึงพอใจในการใช้แบบทดสอบประเมินพัฒนาการ ๙ ดังกล่าว

หากท่านมีข้อสงสัยเกี่ยวกับขั้นตอนการวิจัยดังกล่าว กรุณาติดต่อข้าพเจ้าได้ที่ อีเมลล์ [prasukhong@uoregon.edu](mailto:prasukhong@uoregon.edu) โทรศัพท์ 043-970-566 หรือ อาจารย์ที่ปรึกษาของข้าพเจ้า ดร. เจน สก็วีส อีเมลล์ [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu) หรือทางจดหมาย และ โทรศัพท์ ที่ Jane Squires, Early Intervention Program, 901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์ และขอขอบพระคุณ มา ณ โอกาสนี้

(นายประสงค์ สาขหงษ์)

นักศึกษาระดับปริญญาเอก โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย  
วิทยาลัยการศึกษาระดับปริญญาโท มหาวิทยาลัยโอเรกอน



UNIVERSITY OF OREGON  
College of Education

Dear Parent/Legal Guardian,

October 2008

My name is Prasong Saihong. I am a doctoral candidate at the Early Intervention Program, College of Education, University of Oregon, USA. I'm calling to talk to you about participating in my research study. I am recently beginning my research dissertation entitled "Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand." The procedures of the research are 1) to train teachers and childcare staff to use the ASQ: Thai, 2) to use the ASQ: Thai to screen children age 24 months to 36 months (2-3 years old), 3) to help parents and caregivers to use the ASQ: Thai, and 4) to observe and interview the ASQ: Thai users.

**I would like to invite you to take part and to give your child to participate in the study, it should take you less than 30 minutes. You would be asked to complete these surveys: the Ages Stages Questionnaire: Thai with your child, the Family Information Survey and the Family Utility Survey. Your child will be completed the ASQ: Thai by his/her teachers.**

If you have any more questions about this process or if you need to contact me about participation, I may be reached at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or at 043-970566. You could also contact my academic advisor, Dr. Jane Squires, for more information, via e-mail at [jsquires@uoregon.edu-or](mailto:jsquires@uoregon.edu-or). She could also be contacted via airmail service at

Early Intervention Program, 5253, University of Oregon, Eugene,  
OR97403-52533 USA.

Respectfully Yours,

Prasong Saihong  
Doctoral Candidate, Ph.D.  
Early Intervention Program



UNIVERSITY OF OREGON  
College of Education

วันที่ ตุลาคม 2551

เรื่อง ขอความอนุเคราะห์ให้ความร่วมมือในการวิจัยเพื่อประกอบการศึกษาาระดับปริญญาเอก

เรียน

ข้าพเจ้า นายประสงค์ สายหงษ์ ผู้ริเริ่ม โครงการพัฒนาอาจารย์รุ่นใหม่ คณะศึกษาศาสตร์ มหาวิทยาลัยมหาสารคาม ขณะนี้ข้าพเจ้ากำลังศึกษาต่อระดับปริญญาเอก สาขา การศึกษาพิเศษ สำหรับ เด็กปฐมวัย (Early Intervention/Early Childhood Special Education) ณ โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย (Early Intervention Program) วิทยาลัยการศึกษา (College of Education) มหาวิทยาลัยแห่งรัฐ โอเรกอน (University of Oregon) ขณะนี้ข้าพเจ้า เริ่มทำการศึกษาวิจัยระดับปริญญาเอกในหัวข้อ Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand ขั้นตอนการ วิจัยมีดังต่อไปนี้  
1) อบรมเจ้าหน้าที่ประเมินแบบทดสอบ 2) นำแบบทดสอบไปประเมินเด็กปฐมวัยอายุ 24 เดือน ถึง 36 เดือน (2-3 ปี) 3) ช่วย ผู้ปกครองในการทำแบบทดสอบ และ 4) สังเกต และสัมภาษณ์ผู้ประเมินแบบทดสอบ

ขั้นตอนดังกล่าวเป็นขั้นตอนที่ใช้ผู้ร่วมวิจัยเป็นจำนวนมาก และใช้การติดต่อประสานงานกับสถานที่ราชการที่ ให้บริการเด็กปฐมวัยที่เข้าเรียน ได้อย่างทั่วถึง ข้าพเจ้าจึงใคร่ขอความอนุเคราะห์ความร่วมมือกับทางหน่วยงานของท่าน ดังต่อไปนี้

1. ขอความอนุเคราะห์ส่งบุคลากรมารับการอบรมเรื่องการ ใช้เครื่องมือคัดกรองเด็กปฐมวัย
2. ขอความอนุเคราะห์ให้เจ้าหน้าที่ประจำหน่วยงานบริการเด็กปฐมวัยในสังกัดของท่าน ได้ประเมินผลเด็กปฐมวัย ทดสอบเด็กนักเรียนระดับปฐมวัยในสถานศึกษาของท่าน
3. ขอความอนุเคราะห์หน่วยงานของท่านได้เชิญชวนผู้ปกครองของนักเรียนระดับปฐมวัย (24-36 เดือน) เข้าร่วมการ ศึกษาวิจัยในครั้งนี้ ณ สถานศึกษาของท่าน

หากท่านมีข้อสงสัยเกี่ยวกับขั้นตอนการวิจัยดังกล่าว กรุณาติดต่อข้าพเจ้าได้ที่ อีเมลล์ psathong@hotmail.com โทรศัพท์ 043-970-566 หรือ อาจารย์ที่ปรึกษาของข้าพเจ้า ดร. เจน สควีร์ส อีเมลล์ jsquires@uoregon.edu หรือทางจดหมาย และ โทรศัพท์ ที่ Jane Squires, Early Intervention Program, 901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์ ขอขอบพระคุณ

(นายประสงค์ สายหงษ์)

นักศึกษาระดับปริญญาเอก โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย  
วิทยาลัยการศึกษาและการวิจัย มหาวิทยาลัยโอเรกอน

Early Intervention Program  
901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639



UNIVERSITY OF OREGON

College of Education

Dear Early Childcare/School Director

October 1, 2008

My name is Prasong Saihong. I am a doctoral candidate at the Early Intervention Program, College of Education, University of Oregon, USA. I'm calling to talk to you about participating in my research study. I am recently beginning my research dissertation entitled "Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand." The procedures of the research are 1) to train teachers and childcare staff to use the ASQ: Thai, 2) to use the ASQ: Thai to screen children age 24 months to 36 months (2-3 years old), 3) to help parents and caregivers to use the ASQ: Thai, and 4) to observe and interview the ASQ: Thai users.

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1. to give permission to your staff to attend the workshop of the use of screening instrument.
2. to give permission for assessment staff to give a screening test for the early childhood students in your school or center.
3. to help invite the parents of 24-36 months students to participate in this study.

If you have any more questions about this process or if you need to contact me about participation, I may be reached at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or at 043-970566. You could also contact my academic advisor, Dr. Jane Squires, for more information, via e-mail at [jsquires@uoregon.edu-or](mailto:jsquires@uoregon.edu-or). She could also be contacted via airmail service at Early Intervention Program, 5253, University of Oregon, Eugene, OR97403-5253 USA.

Respectfully Yours,

Prasong Saihong  
 Doctoral Candidate, Ph.D.  
 Early Intervention Program

Early Intervention Program

901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

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College of Education

วันที่ ตุลาคม 2551

เรื่อง ขงเชิญเข้าร่วมการวิจัยเรื่องเครื่องมือคัดกรองเด็กปฐมวัย

เรียน

ข้าพเจ้า นายประสงค์ สายหงษ์ ผู้รับผิดชอบโครงการพัฒนาอาจารย์รุ่นใหม่ คณะศึกษาศาสตร์ มหาวิทยาลัยมหาสารคาม ขณะนี้ข้าพเจ้ากำลังศึกษาต่อระดับปริญญาเอก สาขา การศึกษาศิลปะ สำหรับ เด็กปฐมวัย (Early Intervention/Early Childhood Special Education) ณ โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย (Early Intervention Program) วิทยาลัยการศึกษา (College of Education) มหาวิทยาลัยโอเรกอน (University of Oregon) ขณะนี้ข้าพเจ้า เริ่มทำการศึกษาวิจัยระดับปริญญาเอกในหัวข้อ Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand

ขณะนี้ข้าพเจ้า และคณะ ได้พัฒนาเครื่องมือคัดกรองเด็กปฐมวัยสำหรับเด็กอายุ 2-3 ขวบ จากต้นแบบแบบคัดกรองชื่อ Ages and Stages Questionnaires โดย ดร. ไชยเดช นริสเศษฐ์ และ ดร. เจน สควีร์ส ข้าพเจ้าได้รับการช่วยเหลือจาก ดร. วรพลา ทศตะ อาจารยี่ประจำ ภาควิชาภาษาศาสตร์และวัฒนธรรมและภาควิชาศึกษาศาสตร์ มหาวิทยาลัยมหาสารคาม ในการปรับปรุงเครื่องมือ เพื่อให้เครื่องมือมีความถูกต้องและสอดคล้องกับสัณฐานวัฒนธรรมที่สุด ในขั้นตอนนี้ต่อไปขอจด ขอพัฒนาเครื่องมือ คือการนำเครื่องมือให้ ผู้เชี่ยวชาญวิจัยระดับ โคร และ เชนยอน และ ปรับปรุง

ข้าพเจ้าจึงขอเรียนเชิญท่านเข้าร่วมงานวิจัยในขั้นตอนนี้ โดยท่านได้รับเชิญให้เข้าร่วมการวิจัยในครั้งนี้ เนื่องจากท่าน เป็นเจ้าหน้าที่ทำงานเพื่อเด็กปฐมวัย ข้าพเจ้าขอเรียนเชิญท่านจะได้เข้าร่วมขั้นตอนต่อไปนี้

1. ตรวจสอบความเหมาะสมของภาษาที่ใช้ในแบบคัดกรอง
2. ตรวจสอบความเหมาะสมของความสัมพันธ์ทางวัฒนธรรมของเครื่องมือ ว่ามีความสอดคล้องกับวัฒนธรรมใน ภาควิชา วันออกเขียนหาข้อประเทศไทยเพียงใด
3. โยค้นแนะนำเสนอแนะแนวทางเพื่อใช้ในการพัฒนา และ ปรับปรุงเครื่องมือ

หากท่านมีข้อสงสัยเกี่ยวกับขั้นตอนการวิจัยดังกล่าว กรุณาติดต่อข้าพเจ้าได้ที่ อีเมลล์ [prongs@uoregon.edu](mailto:prongs@uoregon.edu)

โทรศัพท์ 043-970-566 หรือ อางเรย์ที่ปรึกษาของข้าพเจ้า ดร. เจน สควีร์ส อีเมลล์ [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu) หรือทางจดหมายและ โทรศัพท์ ที่ Jane Squires, Early Intervention Program, 901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

จึงขอเรียนเพื่อโปรดพิจารณาให้ความอนุเคราะห์ ของขอบพระคุณ

(นายประสงค์ สายหงษ์)

นักศึกษานิพนธ์เอก โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย  
วิทยาลัยการศึกษาและการวิจัย มหาวิทยาลัยโอเรกอน

Early Intervention Program

901 E 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

An equal-opportunity Affirmance-action institution committed to cultural diversity and compliance with the Americans with Disabilities Act



UNIVERSITY OF OREGON  
College of Education

Dear

October 6, 2008

My name is Prasong Saihong. I am a doctoral candidate at the Early Intervention Program, College of Education, University of Oregon, USA. I'm calling to talk to you about participating in my research study. I am recently beginning my research dissertation entitled "Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand." The procedures of the research are 1) to train teachers and childcare staff to use the ASQ: Thai, 2) to use the ASQ: Thai to screen children age 2-3 years old, 3) to help parents and caregivers to use the ASQ: Thai, and 4) to observe and interview the ASQ: Thai users.

You are invited as a possible participant because you providing services for children who are 2-3 years old. If you decide to participate in this project, you will do these following tasks:

1. to attend the workshop of the use of screening instrument.
2. to give a screening test for the early childhood students in your school or center.
3. to help invite the parents of 22-36 months students to participate in this study.

If you have any more questions about this process or if you need to contact me about participation, I may be reached at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or at 043-970566. You could also contact my academic advisor, Dr. Jane Squires, for more information, via e-mail at [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu). She could also be contacted via airmail service at Early Intervention Program, 5253, University of Oregon, Eugene, OR 97403-5253 USA.

Respectfully Yours,

Prasong Saihong  
Doctoral Candidate, Ph.D.  
Early Intervention Program





UNIVERSITY OF OREGON  
College of Education

วันที่ ตุลาคม 2551

เรื่อง ขอความอนุเคราะห์ให้ช่วยร่วมมือในการวิจัยเพื่อประกอบการศึกษาระดับปริญญาเอก

เรียน

ข้าพเจ้า นายประสงค์ สายทรงมี ผู้รับทุน โครงการพัฒนาเอเชีย วุฒิปริญญาโท และศึกษาศาสตรบัณฑิต มหาวิทยาลัยมหาสารคาม ขอเชิญข้าพเจ้าเข้าศึกษาต่อระดับปริญญาเอก สาขาการศึกษาพิเศษสำหรับเด็กปฐมวัย (Early Intervention/Early Childhood Special Education) ณ โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย (Early Intervention Program) วิทยาลัยการศึกษา (College of Education) มหาวิทยาลัยแห่งรัฐโอเรกอน (University of Oregon) ขณะนี้ข้าพเจ้ามีแผนการศึกษาระดับปริญญาเอกในหัวข้อ Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand หรือ การประเมินคุณภาพพัฒนาการเด็กต่างจังหวัดไทย และระดับความพึงพอใจของผู้ใช้แบบสอบถามคัดกรองพัฒนาการตามระดับเด็กปฐมวัย (ASQ: Thai) ในภาคตะวันออกเฉียงเหนือ โดยมีขั้นตอนการวิจัยมีดังต่อไปนี้ 1) สหประชาชาติที่ประเมินแบบทดสอบ 2) ำแบบทดสอบไปประเมินเด็กปฐมวัยอายุ 24 เดือน ถึง 36 เดือน (2-3 ปี) 3) ช่วยผู้ปกครองในการนำแบบทดสอบ และ 4) สังเกต และสัมภาษณ์ผู้ประเมินแบบทดสอบ

ในกรณี ข้าพเจ้าจึงใคร่ขอเชิญท่านเข้าร่วมการวิจัยในครั้งนี้ ในฐานะเป็นผู้สอน และเป็นผู้ที่เกี่ยวข้องกับเด็กปฐมวัย ระดับอายุ 2-3 ขวบอย่างใกล้ชิด หากท่านยินดีเข้าร่วมการศึกษาวีชี้อย่างเต็มที่ ท่านจะได้เข้าร่วมชั้นเรียนต่อไป

1. เข้าร่วมอบรมเรื่องการใช้เครื่องมือคัดกรองเด็กปฐมวัยเป็นเวลา 2 วัน
2. ประเมินผลเด็กปฐมวัย และเก็บรวบรวมข้อมูลเกี่ยวกับเด็กนักเรียนระดับปฐมวัยอายุ 2-3 ขวบไปสถานศึกษาของท่าน
3. ขอความร่วมมือที่ละเอียดจากผู้ปกครองของเด็กปฐมวัย (24-36 เดือน) เข้าร่วมให้ข้อมูลในการศึกษาวิจัยในครั้งนี้

หากท่านมีข้อสงสัยเกี่ยวกับขั้นตอนการวิจัยดังกล่าว กรุณาติดต่อข้าพเจ้าได้ที่ อีเมล [psade@uog.edu](mailto:psade@uog.edu) โทรศัพท์ 043-970-566 หรือ อีเมลที่ปรึกษาของข้าพเจ้า ดร. เจน สควีร์ส อีเมล [jsquires@uog.edu](mailto:jsquires@uog.edu) หรือทางจดหมายและโทรศัพท์ ที่ Jane Squires, Early Intervention Program, 901 E. 18th Avenue, Eugene, OR 97403 T. (541) 346-0807 F. (541) 346-5639

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์ และขอขอบพระคุณมา ณ โอกาสนี้

(นายประสงค์ สายทรงมี)

นักศึกษาระดับปริญญาเอก โครงการการศึกษาพิเศษสำหรับเด็กปฐมวัย  
วิทยาลัยการศึกษา และการศึกษา มหาวิทยาลัยโอเรกอน



UNIVERSITY OF OREGON  
College of Education

Dear

October 6, 2008

My name is Prasong Saihong. I am a doctoral candidate at the Early Intervention Program, College of Education, University of Oregon, USA. I'm calling to talk to you about participating in my research study. I am recently beginning my research dissertation entitled "Evaluating the Psychometric Properties and the Utility of the Ages and Stages Questionnaires: Thai (ASQ: Thai) in Northeast Thailand." The procedures of the research are 1) to train teachers and childcare staff to use the ASQ: Thai, 2) to use the ASQ: Thai to screen children age 2-3 years old, 3) to help parents and caregivers to use the ASQ: Thai, and 4) to observe and interview the ASQ: Thai users.

You are invited as a possible participant because you providing services for children who are 2-3 years old. If you decide to participate in this project, you will do these following tasks:

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If you have any more questions about this process or if you need to contact me about participation, I may be reached at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or at 043-970566. You could also contact my academic advisor, Dr. Jane Squires, for more information, via e-mail at [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu). She could also be contacted via airmail service at

Early Intervention Program, 5253, University of Oregon, Eugene,  
OR97403-5253 USA.

Respectfully Yours,

Prasong Saihong  
Doctoral Candidate, Ph.D.  
Early Intervention Program

APPENDIX C  
CONSENT FORMS

Graduate Research Study  
Audio Consent Form

Dear Parents/Early childcare staffs/teachers,

You are invited to take an interview part in a research study conducted by Prasong Saihong from the University of Oregon, Early Intervention Program. . The goal of the study is to study the usefulness of the Ages Stages Questionnaire: Thai (ASQ: Thai) to screen young children's developmental and behavioral areas in Northeast Thailand. You were selected as a possible participant because you are providing services for children who are 2-3 years. Before you participate in this study, there are several things you should know.

- Your participation is voluntary. You can choose to participate in this study or not. You are also free to stop your involvement in the project at any time.
- Some of the questions you will be asked are about your personal experience. You do not have to answer any questions that make you uncomfortable.
- You will be interviewed in person on time 20-30 minutes.
- You will be asked your opinion about using the Ages Stages Questionnaire: Thai.
- Your interview sessions will be audio recorded to insure an accurate record of your comments. All records of the interview will be destroyed after the project is completed.
- The answers you provide to the questions are completely confidential. When the researcher writes up what the researcher learned from your interview, the researcher will remove your real name to keep your identity private.
- The things you say during the interview will not be discussed with anyone except the researcher advisor and researcher.

If you have any questions regarding this project, you may contact the researcher at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or call me at 043-970566 or e-mail the faculty advisor, Dr. Jane Squires at [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu)-or write to her at Early Intervention Program, 5253, University of Oregon, Eugene, OR97403-5253 USA.

Your signatures indicates that you (a) have read and understand all of these points, (b) are willing to participate, (c) understand that your participation is voluntary, (d) can choose to stop your participation at any time, (e) understand that the interview will be audio recorded, and (f) have received a copy of this form.

\_\_\_\_\_ I have read this letter and agree to participate in the study.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Name (please print) \_\_\_\_\_

การศึกษาวิจัยระดับบัณฑิตศึกษา  
แบบแสดงความยินยอมในการอัดเทปบันทึกเสียง

เรียน ผู้ปกครอง อาจารย์ผู้สอน หรือเจ้าหน้าที่ที่เกี่ยวข้อง

กระผม นายประสงค์ สายหงษ์ นักศึกษาปริญญาเอก ภาควิชาการศึกษาพิเศษสำหรับเด็กปฐมวัย มหาวิทยาลัยแห่งรัฐโอเรกอน ของเรียนเชิญท่านเข้าร่วมให้สัมภาษณ์ ซึ่งเป็นส่วนหนึ่งของการศึกษาวิจัยในครั้งนี้ จุดมุ่งหมายของการศึกษาวิจัยนี้คือ การประเมิน และตรวจสอบผลสัมฤทธิ์ของการใช้แบบประเมินพัฒนาการตามระดับอายุของเด็กปฐมวัย (ฉบับภาษาไทย) (The Ages and Stages Questionnaires: Thai) เพื่อใช้ในการคัดกรองด้านพัฒนาการและพฤติกรรมของเด็กปฐมวัยในภาคตะวันออกเฉียงเหนือของประเทศไทย ท่านได้รับการเชิญชวนเนื่องจากท่านได้ทำงานและจัดบริการเพื่อเด็กที่มีอายุระหว่าง 24-36 เดือน หรือ 2-3 ปี ก่อนเริ่มการวิจัยส่วนนี้ ท่านจะให้ความร่วมมือดังต่อไปนี้

- การเข้าร่วมงานวิจัยนี้ เป็นความสมัครใจของท่าน ท่านสามารถหยุดให้ความร่วมมือเมื่อไหร่ก็ได้
- คำถามต่าง ๆ ต่อไปนี้ จะถามเกี่ยวกับประสบการณ์ส่วนตัวของท่าน ท่านไม่จำเป็นต้องตอบคำถามทุกอย่าง หรือตอบคำถามที่ทำให้ท่านไม่สบายใจ
- การสัมภาษณ์นี้จะใช้เวลาประมาณ 20-30 นาที
- ท่านจะตอบคำถามเกี่ยวข้องกับความคิดเห็น และทัศนคติส่วนตัวของท่านในการเช่นแบบประเมินพัฒนาเด็กปฐมวัย ฉบับภาษาไทย (ASQ: Thai)
- คำสัมภาษณ์ของท่านจะได้รับการบันทึกเสียงเพื่อความสะดวกแก่การถอดเทปของคำสัมภาษณ์ท่าน เทปบันทึกเสียงทั้งหมดจะถูกทำลายหลังจากงานวิจัยนี้ได้สิ้นสุดลง
- คำสัมภาษณ์ของท่านจะถูกเก็บเป็นความลับทั้งหมด คำสัมภาษณ์ของท่านจะได้รับการบันทึกเป็นลายลักษณ์อักษร โดยจะลบชื่อจริงของท่าน เพื่อเก็บเป็นรักษาความเป็นส่วนตัวของท่าน
- สิ่งต่าง ๆ ที่ท่านให้สัมภาษณ์จะไม่ถูกนำไปเปิดเผยในที่ต่าง ๆ นอกจากอาจารย์ที่ปรึกษางานวิจัย และนักวิจัย (ข้าพเจ้า)

ถ้าท่านสงสัย กรุณาติดต่อกระผม ที่อีเมลล์ psaihong@hotmail.com หรือ โทรศัพท์ที่ หรือ ติดต่ออาจารย์ที่ปรึกษาของ 566-970-043 เจน สไควร์ส ที่ ข้าพเจ้า ดรjsquires@uoregon.edu หรือ ส่งจดหมายที่ Early Intervention Program, 5253, University of Oregon, Eugene, OR97403-5253, USA.

ท่านได้แสดงความยินยอมในการเข้าร่วมการศึกษาวิจัยในครั้งนี้ด้วยการลงลายมือชื่อ เพื่อแสดงว่า (ก) ท่านได้อ่านและเข้าใจข้อความต่าง ๆ ข้างต้น (ข) ท่านเต็มใจเข้าร่วมงานวิจัยนี้ (ค) ท่านทราบว่าการศึกษาวิจัยนี้เป็นความสมัครใจของท่าน (ง) ท่านสามารถหยุดให้ความร่วมมือเมื่อไหร่ก็ได้ (ฉ) ท่านเข้าใจว่าการสัมภาษณ์ครั้งนี้จะได้รับการบันทึกเทปเสียง (ช) ท่านจะได้รับแบบแสดงความยินยอมนี้เป็นหลักฐาน

\_\_\_\_\_ ข้าพเจ้าได้อ่านข้อความทั้งหมด และขอแสดงความจำนงเข้าร่วมในการศึกษาวิจัยในครั้งนี้

ลายมือชื่อ \_\_\_\_\_ ว/ด/ป \_\_\_\_\_

ชื่อ และ นามสกุล \_\_\_\_\_

Graduate Research Study  
Consent Form

Dear Parent(s)/Legal Guardian,

You and your child are invited to take part in a research study conducted by Prasong Saihong from the University of Oregon, Early Intervention Program, USA. The goal of the study is to study the usefulness of the Ages Stages Questionnaire: Thai (ASQ: Thai) to screen young children's developmental and behavioral areas in Northeast Thailand. You were selected because you have a child who is 2-3 years old. Your child is selected because he/she is 2-3 years old. Therefore, I would like to ask permission from you to give your child participate in the study.

If you decide you would like to take part and to give your child to participate in the study, it should take you less than 30 minutes. You would be asked to complete these surveys: the Ages Stages Questionnaire: Thai with your child, the Family Information Survey and the Family Utility Survey. Your child will be completed the ASQ: Thai by his/her teachers.

The Ages Stages Questionnaire: Thai is a screening tool to identify young children for developmental and behavioral issues for referral and intervention. Early intervention has been proven by scientific research to benefit young children with development problems. Identifying young children with these issues early would assist in the provision of early intervention for these children in order to prevent further problems.

*Benefit-* You may not feel comfortable filling up a form about your child but it may help you to understand your child's development and if he/she needs a further assessment.

Any information gathered in this study that can be identified with you and your child will remain confidential and will be disclosed only with your permission. Numbers will be assigned to your materials to protect your privacy.

You and your child participation are voluntary. Your decision whether or not to participate will not affect the school enrollment of your child. If you decide to participate, you are free to withdraw at any time without affecting the services for you. If you have any questions, please feel free to e-mail the researcher at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or call me at 043-970566 or e-mail the faculty advisor, Dr. Jane Squires at [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu) or write to her at Early Intervention Program, 5253, University of Oregon, Eugene, OR97403-5253 USA or e-mail: [human\\_subjects@orsa.uoregon.edu](mailto:human_subjects@orsa.uoregon.edu).

Your signatures indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, and that you have received a copy of this form. If you have questions about you and/or your child's rights as a research participant, contact Human Subjects Compliance, Riverfront Research Park, Suite 105, University of Oregon, Eugene, OR 97403-5237.

\_\_\_\_\_ I have read this letter and agree to allow my child to participate in the study.

I DO NOT give consent for my child (name) \_\_\_\_\_ to participate in this study

Parent/Legal Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent/Legal Guardian Name (please print) \_\_\_\_\_

การศึกษาวิจัยระดับบัณฑิตศึกษา

แบบแสดงความคิดเห็น

เรียน คุณ .....

กระผมนายประสงก์ สยงรัมย์ นักศึกษามหาวิทยาลัยมหาสารคาม ภาควิชาบรรณารักษศาสตร์และสารนิเทศศึกษา มหาวิทยาลัยมหาสารคาม ขอเรียนเชิญท่านเข้าร่วมเป็นส่วนหนึ่งของการศึกษาวิจัยในครั้งนี้ ซึ่งมุ่งหมายของการศึกษานี้คือ การประเมิน และตรวจสอบความสอดคล้องของการใช้แบบประเมินพัฒนาการระดับปฐมวัยของเด็กปฐมวัย (ฉบับภาษาไทย) (The Ages and Stages Questionnaires: Thai) เพื่อใช้ในการคัดกรองค้นหาพัฒนาการและพฤติกรรมของเด็กปฐมวัยในสถานะ โอลิโกเนื้องอกชนิดซิมเพลกซ์ไทย ท่านได้รับการเชิญชวนเนื่องจากท่านเป็นผู้ปกครองของ เด็กที่มีอายุระหว่าง 24-36 เดือน หรือ 2-3 ปี

ในการเข้าร่วมการศึกษาวิจัยในครั้งนี้ ท่านจะใช้เวลาประมาณ 30 นาที ในการกรอกแบบประเมินพัฒนาการระดับปฐมวัยของลูกปฐมวัย ซึ่งบุตรของพวกคุณแบบสำรวจความพึงพอใจ

แบบประเมินพัฒนาการระดับปฐมวัย (ภาษาไทย) เป็นเครื่องมือคัดกรองปัญหาพัฒนาการและพฤติกรรมที่อาจเกิดขึ้นกับเด็กปฐมวัย เพื่อใช้ในการชี้แนะและช่วยเหลือให้ระยะเริ่มแรก การเข้าคหคึกปฐมวัยในระยะเริ่มแรกได้รับการรับรอง โดยการศึกษาวิจัยทางวิทยาศาสตร์ว่าเด็กที่มีควมผิดปกติจะได้รับผลประโยชน์ที่ได้รับกว่าช่วยเหลือในระยะเริ่มแรก การคัดกรองเด็กปฐมวัยที่อ่อน การมีผิดปกติในระยะเริ่มแรกจะเป็นผลดีในการช่วยเหลือหรือเสริมอื่นจะส่งผลในการป้องกันปัญหาที่จะเกิดขึ้นในอนาคต

ความเสี่ยง- การเข้าร่วมการศึกษาวิจัยในครั้งนี้อาจมีกรรณเสี่ยงบ้างในขั้นตอนการคัดกรองเด็กปฐมวัย ผู้ปกครองเด็กอาจมีข้อสงสัยในขั้นตอนดังกล่าว ท่านสามารถสอบถามผู้ปกครองว่ามีเครื่องมือคัดกรองนี้จะอยู่ตำแหน่งตลอดเวลาจะ ไม่ไปใช้ประโยชน์ใด ๆ ในการบอกความผิดปกติของเด็ก หรือขั้นตอนการคัดกรองประเมินผลแล้ว

ประโยชน์ที่ได้รับ- ท่านจะได้รับ ใบสอยใจในการขอตอบสอยแบบต่าง ๆ แลขอใช้ที่นาระอีก 60 การกรอกแบบสอยแบบนี้จะช่วยให้แพทย์ที่จะระดับพัฒนาการลูกของท่าน

ข้อมูลต่าง ๆ ที่รวบรวมได้รวรวมเกี่ยวกับท่านและลูกของท่านจะได้รับเก็บรักษาไว้เป็นความลับที่สุด กระผมจะเผยแพร่ข้อมูลเมื่อท่าน ใ้ยินยอมเฉพาะในเฉพาะที่กระผมจะ ใช้สำหรับวิจัยเพื่อใช้ติดตามชื่อท่าน และชื่อลูกของท่าน เพื่อปกป้องความเป็นส่วนตัวของท่าน

การที่ร่วมการศึกษาวิจัยในครั้งนี้เป็นความเต็มใจของท่าน ท่านตัดสินใจเข้าร่วมหรือไม่เข้าร่วมจะ ไม่มีผลกระทบต่อกการศึกษาเล่าเรียนของลูกท่าน ถ้าท่านตัดสินใจเข้าร่วม ท่านสามารถถอนตัว ณ เวลาใดก็ได้โดยไม่มีผลกระทดต่อการบริการของท่าน ถ้าท่านมีข้อสงสัย กรุณาติดต่อ กระผม ที่อีเมล [psabongk@hsu.ac.th](mailto:psabongk@hsu.ac.th) โทร โทรศัพท์ที่ 043-970-466 หรือ ติดต่อขอขเรย์ที่ปรึกษาของข้าพช้ฯ ดร. เบน สไตน์ ที่ [ben.stein@uoregon.edu](mailto:ben.stein@uoregon.edu) หรือ ติดต่อขอขเรย์ที่ปรึกษาของข้าพช้ฯ ดร. เบน สไตน์ ที่ [human\\_subjects@uoregon.edu](mailto:human_subjects@uoregon.edu)

ท่านได้แสดงความคิดเห็นในการเข้าร่วมการศึกษาวิจัยในครั้งนี้โดย รรณลามีชื่อชื่อ ท่านได้ดื่มน้ำและเข้าห้องน้ำแล้ว จังแล้ว กระผมเต็มใจในกาเข้าร่วมการศึกษาวิจัยในครั้งนี้ ท่านสามารถถอนการยินยอมในการเข้าร่วมการศึกษาวิจัยในครั้งนี้ได้ตลอดเวลาไม่มีข้อผูกมัด ท่านจะได้รับเอกสารนี้หนึ่งฉบับ ถ้าท่านมีข้อสงสัยเกี่ยวกับสิทธิของตัวท่านและ หรือลูกของท่านในฐานะผู้เข้าร่วมวิจัย กรุณาติดต่อ ที่ Human Subjects Compliance, Riverfront Research Park, Suite 105, University of Oregon, Eugene, OR 97403-5237.

ข้าพช้ฯ ได้อ่านข้อความทั้งหมด และขอแสดงความจำนงร่วมในการศึกษาวิจัยในครั้งนี้

ลายมือชื่อ \_\_\_\_\_ วงเล็บ

ชื่อ และ นามสกุล \_\_\_\_\_

Graduate Research Study  
Consent Form

Dear Early childcare staffs/teachers,

You are invited to take part in a research study conducted by Prasong Saihong from the University of Oregon, Early Intervention Program, USA. The goal of the study is to determine and investigate the usefulness of the Ages Stages Questionnaire: Thai to screen young children's developmental and behavioral areas in Northeast Thailand. You were selected because you are providing services for children who are 2-3 years old.

If you decide you would like to participate, the time will be 10 weeks. The research will take place in your workplace (school, childcare center).

The procedure includes: Early childcare staff/teachers will attend the workshop of the use of the ASQ: Thai screening instrument for 2 day: Early childcare staff/teachers inviting parents visiting your childcare center or school to complete the Ages Stages Questionnaire: Thai Family Information Survey and the Parent Satisfaction Survey. This process should take less than 30 minutes. You will also be asked to score each child on the ASQ: Thai. After you have collected the data from all the parents who have agreed to participate in this study, you would be asked to complete the Early Childcare Staff Utility Survey and Early Childcare Staff Information Survey. It will take approximately 5 minutes to complete these surveys.

The Ages Stages Questionnaire: Thai is a screening tool to identify young children for developmental and behavioral issues for referral and intervention. Early intervention has been proven by scientific research to benefit young children with development problems. Identifying young children with these issues early would assist in the provision of early intervention for these children in order to prevent further problems.

*Risk*- The potential risk of participating in the study may include loss of confidentiality, psychological risks and social risks. If you are not comfortable to give any information in relation to those risks, you can stop this process any time. During the screening process, you may have stress dealing with parents. Parents may ask to discuss this process of screening system. You just let them know that there will be no referral or provided follow-up.

*Benefit*- The benefit may include a better understanding of young children's development and the screening process. However, this benefit cannot be guaranteed.

Any information gathered in this study that can be identified with you will remain confidential and will be disclosed only with your permission. Numbers will be assigned to your materials to protect your privacy.

Your participation is voluntary. If you decide to participate, you are free to withdraw at any time without affecting the services for you. If you have any questions, please feel free to e-mail the researcher at [psaihong@hotmail.com](mailto:psaihong@hotmail.com), or call me at 043-970566 or e-mail the faculty advisor, Dr. Jane Squires at [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu)-or write to her at Early Intervention Program, 5253, University of Oregon, Eugene, OR97403-5253, USA.

Your signatures indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, and that you have received a copy of this form. If you have questions about you and/or your child's rights as a research participant, contact Human Subjects Compliance, Riverfront Research Park, Suite 105, University of Oregon, Eugene, OR 97403-5237 or e-mail: [human.subjects@orsa.uoregon.edu](mailto:human.subjects@orsa.uoregon.edu).

\_\_\_\_\_ I have read this letter and agree to participate in the study.

Childcare Staff/Teacher Signature \_\_\_\_\_ Date \_\_\_\_\_

Childcare Staff/Teacher Name (please print) \_\_\_\_\_



## การศึกษาวิจัยระดับบัณฑิตศึกษา

## แบบแสดงความยินยอม

เรียน อาจารย์ผู้สอน หรือเจ้าหน้าที่ที่เกี่ยวข้อง

กระผม นายประสงค์ สายหงษ์ นักศึกษาระดับปริญญาเอก ภาควิชาการศึกษาพิเศษสำหรับเด็กปฐมวัย มหาวิทยาลัยแห่งรัฐโอเรกอน ของเรียนเชิญท่านเข้าร่วมเป็นส่วนหนึ่งของการศึกษาวิจัยในครั้งนี้ จุดมุ่งหมายของการศึกษาวิจัยนี้คือ การประเมิน และตรวจสอบผลสัมฤทธิ์ของการใช้แบบประเมินพัฒนาการตามระดับอายุของเด็กปฐมวัย (ฉบับภาษาไทย) (The Ages and Stages Questionnaires: Thai) เพื่อใช้ในการคัดกรองด้านพัฒนาการและพฤติกรรมของเด็กปฐมวัยในภาคตะวันออกเฉียงเหนือของประเทศไทย ท่านได้รับการเชิญชวนเนื่องจากท่านได้ทำงานและจัดบริการเพื่อเด็กที่มีอายุระหว่าง 2ก-36 เดือน หรือ 2-3 ปี

ในการเข้าร่วมการศึกษาวิจัยในครั้งนี้ จะใช้เวลาประมาณ 10 สัปดาห์ การวิจัยนี้จะเกิดขึ้นที่สถานที่ทำงานของท่าน เช่น โรงเรียน หรือศูนย์เด็กปฐมวัย ขั้นตอนการวิจัยมีดังต่อไปนี้ เจ้าหน้าที่ครูสอนเด็กปฐมวัยจะเชิญชวนผู้ปกครองมาเยี่ยมชมศูนย์เด็กปฐมวัยหรือโรงเรียนของท่านเพื่อกรอกข้อมูลลงในกรอกแบบประเมินพัฒนาการตามระดับอายุของเด็กปฐมวัย ข้อมูลครอบครัว และแบบสำรวจความพึงพอใจ ขั้นตอนนี้จะใช้เวลาประมาณ 30 นาที เจ้าหน้าที่ครูสอนเด็กปฐมวัยกรอกข้อมูล ในการกรอกแบบประเมินพัฒนาการตามระดับอายุของเด็กปฐมวัย และ แบบคัดกรองเด็กปฐมวัย เจ้าหน้าที่ครูสอนเด็กปฐมวัยกรอกข้อมูลส่วนตัวของท่าน และแบบสำรวจความพึงพอใจ แบบประเมินพัฒนาการตามระดับอายุของเด็กปฐมวัย (ภาษาไทย) เป็นเครื่องมือคัดกรองปัญหาพัฒนาการและพฤติกรรมที่อาจเกิดขึ้นกับเด็กปฐมวัย เพื่อใช้ในการชี้แนะและช่วยเหลือให้ระยะเริ่มแรก การช่วยเหลือเด็กปฐมวัยในระยะเริ่มแรกได้รับการรับรองโดยการศึกษาวิจัยทางวิทยาศาสตร์ว่าเด็กที่มีความผิดปกติจะได้รับผลประโยชน์หากได้รับการช่วยเหลือในระยะเริ่มแรก การคัดกรองเด็กปฐมวัยเพื่อหาความผิดปกติในระยะเริ่มแรกจะเป็นผลดีในการช่วยเหลือแรกเริ่มอันจะส่งผลในการป้องกันปัญหาที่จะเกิดขึ้นในอนาคต

ประโยชน์ที่ได้รับ – ท่านอาจจะไม่สบายใจในการกรอกแบบสอบถามต่าง ๆ แต่ขอให้ท่านระลึกว่า การกรอกแบบสอบถามนี้จะช่วยให้ท่านเข้าใจระดับพัฒนาการของท่าน

ข้อมูลต่าง ๆ ที่กระผมได้รวบรวมเกี่ยวกับท่านและลูกของท่านจะได้รับเก็บไว้ด้วยความลับที่สุด กระผมจะเผยแพร่ก็ต่อเมื่อท่านได้ให้อนุญาตให้เผยแพร่ กระผมจะใช้เลขประจำตัวเพื่อใช้แทนชื่อท่าน และชื่อลูกของท่าน เพื่อปกป้องความเป็นส่วนตัวของท่าน การเข้าร่วมการศึกษาวิจัยในครั้งนี้เป็นความเต็มใจของท่าน ท่านตัดสินใจเข้าร่วม หรือไม่เข้าร่วมจะไม่มีผลกระทบต่อการศึกษาเล่าเรียนของลูกท่าน ถ้าท่านตัดสินใจเข้าร่วม ท่านสามารถถอนตัว ณ เวลาใดก็ได้โดยไม่มีผลกระทบต่อค่าบริการของท่าน ถ้าท่านข้อสงสัย กรุณาติดต่อกระผม ที่อีเมลล์ [psathong@hotmail.com](mailto:psathong@hotmail.com) หรือ โทรศัพท์ที่ เจน สไตน์ ที่ หรือ ติดต่ออาจารย์ที่ปรึกษาของข้าพเจ้า ดร 566-970-0433 [jsquires@uoregon.edu](mailto:jsquires@uoregon.edu) หรือ ส่งจดหมายที่ Early Intervention Program, 5253, University of Oregon, Eugene, OR 97403-5253, USA.

ท่านได้แสดงความยินยอมในการเข้าร่วมการศึกษาวิจัยในครั้งนี้ด้วยการลงลายมือชื่อ ท่านได้อ่านและเข้าใจข้อมูลต่างๆ ข้างต้น และท่านเต็มใจในการเข้าร่วมการศึกษาวิจัยในครั้งนี้ ท่านสามารถถอนการยินยอมในการเข้าร่วมการศึกษาวิจัยนี้ได้ทุกเวลาโดยไม่มีข้อผูกมัด ท่านจะได้รับเอกสารนี้ หนึ่งฉบับ ถ้าท่านมีข้อสงสัยเกี่ยวกับสิทธิของตัวเองและ หรือลูกของท่าน ในฐานะผู้เข้าร่วมวิจัย กรุณาติดต่อ ที่/Human Subjects Compliance, Riverfront Research Park, Suite 105, University of Oregon, Eugene, OR 97403-5237 or e-mail: [human.subjects@uoregon.edu](mailto:human.subjects@uoregon.edu).

ข้าพเจ้าได้อ่านข้อความทั้งหมด และขอแสดงความยินยอมเข้าร่วมในการศึกษาวิจัยในครั้งนี้

ลายมือชื่อ \_\_\_\_\_ วัตถุประสงค์ \_\_\_\_\_

ชื่อ และ นามสกุล \_\_\_\_\_

APPENDIX D  
THE ASQ: THAI PROTOCOLS

แบบสอบถามคัดกรองพัฒนาการตามระดับอายุเด็กปฐมวัย-ระบบกรอกข้อมูลและติดตามประเมินผลเด็กโดยผู้ปกครอง

ฉบับปรับปรุงครั้งที่ 2

แปลและเรียบเรียง โดย ประสงค์ สายหงษ์ และคณะ

## แบบสอบถามสำหรับเด็กอายุ






# 24 เดือน/ 2 ปี



คำถามต่อไปนี้จะถามเกี่ยวกับกิจกรรมต่าง ๆ ที่เด็กทั่วไปทำได้ ลูกของคุณอาจทำ กิจกรรมบางอย่างได้แล้ว แต่ อาจจะมีกิจกรรมบางอย่างที่ลูกของคุณยังทำไม่ได้ ดังนั้นขอให้คุณกรอกหมายเลขลงในช่องสี่เหลี่ยม  ใน คำถามแต่ละข้อ เพื่อแสดงว่าลูกของคุณสามารถ  ทำได้,  บางครั้ง, หรือ,  ทำไม่ได้

### ข้อสำคัญที่ควรรู้

- ก่อนกาเครื่องหมายลงในช่องสี่เหลี่ยม ขอให้คุณแน่ใจว่า คุณได้ลงทำกิจกรรมต่าง ๆ กับลูกของคุณ
- พยายามหาการเล่นที่สนุกสนาน สำหรับคุณและลูกของคุณระหว่างการทำแบบประเมินฯ
- ถ้าเราให้แน่ใจว่าลูกของคุณได้พักผ่อนเพียงพอ กินอาหาร เรียบร้อย และพร้อมที่จะทำกิจกรรมการต่าง ๆ ตามแบบประเมินฯ
- กรุณาส่งแบบประเมินฯ ภายในวันที่ \_\_\_\_\_
- ถ้าคุณมีข้อสงสัยหรือกังวลเกี่ยวกับการพัฒนาการของลูกคุณ หรือเกี่ยวกับแบบประเมินฯ กรุณาติดต่อที่ \_\_\_\_\_
- คุณมีความประสงค์จะทำแบบประเมินฯ อีกครั้งภายใน วันที่ \_\_\_\_\_ เดือน \_\_\_\_\_ พ.ศ. \_\_\_\_\_

	ทำได้	บางครั้ง	ทำไม่ได้	
<b>พัฒนาการด้านก้ามเนื้อมัดใหญ่</b> กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามคำแนะนำต่อไปนี้				
1. ลูกของคุณเดินลงบันได โดยคุณช่วยจับมือข้างใดข้างหนึ่ง ได้หรือไม่ (คุณ สามารถสังเกตได้ที่ร้านค้า สนามเด็กเล่น หรือที่บ้าน)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. เมื่อคุณเตะลูกบอลให้ลูกดู เขาพยายามเตะลูกบอลโดยการเตะขา ไปข้างหน้าหรือเดินเข้าไปหาลูกบอล หรือไม่ (ถ้าลูกของคุณ สามารถเตะลูกบอลได้แล้ว ให้กาลงในช่อง "ใช่" ในคำถามนี้)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
				
3. ลูกของคุณเดินขึ้นหรือลงบันได อย่างน้อยสองก้าวด้วย ตนเองได้หรือไม่ (คุณสามารถสังเกตได้ที่ร้านค้า สนามเด็ก เล่น หรือที่บ้าน) (ให้กาลงในช่อง "ทำได้" ถึงแม้ว่าลูกของ คุณจะจับราวบันได หรือหนึ่ง)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
				
4. ลูกของคุณวิ่งได้ก่อนข้างดี และหยุดด้วยตนเองโดยไม่สะดุดกับ สิ่งของ หรือหกล้มได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
				
5. ลูกของคุณกระโดด โดยเท้าทั้งสองข้างพื้นอ हाพื้นพร้อม กันได้หรือไม่ (ดูตามรูป)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
				
6. ลูกของคุณเตะลูกบอลด้วยการเตะขาไปข้างหน้า โดยมือ ไม่ได้เกาะกับสิ่งกับสิ่งใด ๆ ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
				
	<b>คะแนนรวม</b>			
	ทำได้	บางครั้ง	ทำไม่ได้	
<b>พัฒนาการด้านก้ามเนื้อมัดเล็ก</b> กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามคำแนะนำต่อไปนี้				
1. ลูกของคุณใช้ช้อนอย่างถูกวิธี โดยไม่ทำให้อาหารหก ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. ลูกของคุณเปิดหน้าหนังสือด้วยตนเองได้หรือไม่ (เขาอาจเปิดหนังสือ มากกว่าหนึ่งหน้า ต่อหนึ่งครั้ง)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. ลูกของคุณหมุนข้อมือขณะพยายามบิดลูกบิดประตู บิดของเล่น เปิดฝาขวด เกลียว หรือหมุนฝาขวดต่าง ๆ ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. ลูกของคุณเปิด-ปิด สวิตช์ไฟฟ้าได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. ลูกของคุณวางกล่อง หรือของเล่นชิ้นเล็ก ๆ 6 ชิ้นทับซ้อนกันด้วยตนเองได้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

หรือไม้ (คุณอาจใช้เชือกร้อยกลอง หรือของเล่นขนาดประมาณ 1 นิ้วเข้าด้วยกัน ในกิจกรรมนี้)

6. ลูกของคุณร้อยลูกบิดด้วยเชือก หรือเชือกทรงเท้าได้หรือไม่

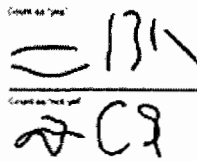


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 คะแนนรวม \_\_\_\_\_

ทำได้ บางครั้ง ทำไม่ได้

**พัฒนาการด้านสติปัญญา** *กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามลำดับต่อไปนี้*

1. ให้ลูกลากเส้นแนวตั้งจากบนลงล่างบนกระดาษด้วยสีเขียน (หรือดินสอ หรือปากกา) เป็นตัวอักษร แล้วให้ลูกวาดตาม ลูกของคุณลอกแบบลายคุณ โดยขีดเส้นลงบนกระดาษไปทิศทางไหนก็ได้ ได้หรือไม่ (ไม่นับการขีด ๆ เขียน ๆ ไปมา)



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2. เมื่อคุณเอาขนมก้อนเล็กลงใส่ในขวดใส (และปิดฝาไว้) ลูกของคุณแหวกเพื่อที่จะเอาขนมออกอีกหรือไม่ (ไม่ต้องทำให้ลูกดู)

\_\_\_\_\_

3. ลูกของคุณเอาสิ่งของสิ่งหนึ่งมาเล่นเป็นสิ่งของอีกสิ่งหนึ่งหรือไม่ ตัวอย่างเช่น ลูกของคุณเอาถ้วยกาแฟมาแนบไว้ที่หู โดยสมมุติว่าเป็นโทรศัพท์หรือไม่ ลูกของคุณเอากล่องมาใส่ไว้ที่หัว โดยสมมุติว่าเป็นหมวกหรือไม่ ลูกของคุณเอาบล็อก หรือของเล่นชิ้นเล็ก โดยสมมุติว่ากำลังทำอาหารหรือไม่

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4. ลูกของคุณเก็บของเข้าที่เดิมหรือไม่ เช่น เขาเอาของเล่นวางบนชั้นวาง เขาผ้าห่มไปไว้ที่เตียงนอน เขาก็ก๊วยจานไปไว้ในครัว หรือไม่

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5. ถ้าลูกของคุณหยิบของบางอย่างไม่ถึง เขาหาเก้าอี้หรือกล่องมาป็นชั้นเพื่อหยิบของนั้นหรือไม่

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6. ในขณะที่ลูกดูการเอาวัตถุ 4 อย่าง เช่น กลองหรือรถ มาวางต่อเรียงกันเป็นแถว ลูกของคุณทำตามคุณโดยนำเอาวัตถุ 4 ชิ้นมาวางต่อกัน (ลักษณะตามรูป) ได้หรือไม่ (คุณอาจเอาเชือกร้อยกลอง หรือของเล่นเข้าด้วยกัน)



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คะแนนรวม \_\_\_\_\_

	ทำได้	บางครั้ง	ทำไม่ได้	
<b>พัฒนาการด้านการปรับตัวเข้าสังคม</b> กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามที่ถามต่อไปนี้				
1. ลูกของคุณเล่นน้ำจากแก้วน้ำมีหู หรือถ้วยกาแฟ แล้ววางลงบนพื้น โดยหกเล็กน้อยได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. ลูกของคุณทำกิจกรรมต่าง ๆ ในบ้าน ตามคุณหรือไม่ เช่น เช็ดอาหารที่หก หล่น กวาดบ้าน โยนขวด หรือหิวลม	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. ลูกของคุณใช้ช้อนหรือส้อม กินอาหารได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. เมื่อลูกของคุณเล่นกับตุ๊กตาสัตว์ขี้ตม หรือตุ๊กตาคณ เขาเอาตุ๊กตามาอุ้ม แล้วสายไปมา ป้อนอาหาร เปลี่ยนผ้าอ้อม เอาเข้านอน และอื่น ๆ หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. ลูกของคุณผลักรถเข็น (หรือล้อลาก) ไปรอบ ๆ สิ่งกีดขวาง แล้วคอยหลัง เวลาเจอสิ่งกีดขวาง ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. ลูกของคุณเรียกตัวเองว่า "หนู" "ผม" "ผมเอง" หรือว่า "หนูเอง" บ่อยครั้งกว่าพูดชื่อของตนเองหรือไม่ ตัวอย่างเช่น "หนูทำเอง" มากกว่าพูดว่า "ส้มทำเอง" (ในกรณีที่พ่อแม่ให้ลูกใช้ชื่อเล่นแทนคำว่า "ผม" "หนู" และเด็กพูดชื่อตนเองแทนคำว่า "หนู" หรือ "ผม" ให้กาในช่อง "ทำได้")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	<b>คะแนนรวม</b>			_____
<b>ข้อมูลอื่น ๆ ที่เกี่ยวข้องกับพัฒนาการส่วนใหญ่ของลูก</b>				
ผู้ปกครอง หรือ ผู้ให้ข้อมูลสามารถชี้พื้นที่ว่างข้างล่าง เพิ่มเติมข้อมูล ข้อสงสัยและ คำ ๆ คำสั่งการ				
1. คุณคิดว่าลูกของคุณมีความสามารถในการฟังหรือไม่ ถ้าไม่ กรุณาอธิบาย	_____			
2. คุณคิดว่าลูกของคุณมีความสามารถในการใช้มือทั้งสองข้างหรือไม่ ถ้าไม่ กรุณาอธิบาย	_____			
3. เมื่อคุณช่วยลูกของคุณขึ้น เก้าอี้ของลูกคุณวาง เขาไปบนพื้นเกือบตลอดเวลาหรือไม่ ถ้าไม่ กรุณาอธิบาย	_____			
4. ครอบครัวของคุณ (ทั้งฝ่ายพ่อ และแม่เด็ก) มีประวัติเกี่ยวกับความบกพร่องทางหู หรือการรับฟังหรือไม่ ถ้ามี กรุณาอธิบาย	_____			

5. คุณเป็นกังวลเกี่ยวกับการมองเห็น หรือการใช้สายตาของคุณหรือไม่ ถ้ามี กรุณาอธิบาย

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6. ลูกของคุณมีปัญหาเกี่ยวกับการใช้ตาในช่วง 2-3 เดือนที่ผ่านมาหรือไม่ ถ้ามี กรุณาอธิบาย

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7. สิ่งต่าง ๆ ที่คุณมีความเป็นกังวลในดวงตาของคุณ ถ้ามี กรุณาอธิบาย

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แบบสอบถามคัดกรองพัฒนาการตามระดับอายุเด็กปฐมวัย-ระบบกรอกข้อมูลและติดตามประเมินผลเด็กโดยผู้ปกครอง  
ฉบับปรับปรุงครั้งที่ 2  
แปลและเรียบเรียงโดย ประสงค์ สายหงษ์ และคณะ

## แบบสอบถามสำหรับเด็กอายุ

# 30 เดือน



คำถามต่อไปนี้จะถามเกี่ยวกับกิจกรรมต่าง ๆ ที่เด็กทำ ๆ ไปทำได้ ลูกของคุณอาจทำ กิจกรรมบางอย่างได้แล้ว แต่ อาจจะมีกิจกรรมบางอย่างที่ลูกของคุณยังทำไม่ได้ ดังนั้นขอให้คุณกรอกกาเครื่องหมายลงในช่องสี่เหลี่ยม  ใน คำถามแต่ละข้อ เพื่อแสดงว่าลูกของคุณสามารถ  ทำได้,  บางครั้ง, หรือ,  ทำไม่ได้

### ข้อสำคัญที่ควรใส่ใจ

- ก่อนกาเครื่องหมายลงในช่องสี่เหลี่ยม ขอให้คุณแน่ใจว่า คุณได้ลองทำกิจกรรมต่าง ๆ กับลูกของคุณ
- พยายามหาการละเล่นที่สนุกสนาน สำหรับคุณและลูกของคุณระหว่างการทำแบบประเมินฯ
- ตรวจสอบให้แน่ใจว่าลูกของคุณได้พักผ่อนเพียงพอ กินอาหารเรียบร้อย และพร้อมที่จะทำกิจกรรมการต่าง ๆ ตามแบบประเมินฯ
- กรุณาส่งแบบประเมินฯ ภายในวันที่ \_\_\_\_\_
- ถ้าคุณมีข้อสงสัยหรือกังวลเกี่ยวกับการพัฒนาการของลูกคุณ หรือเกี่ยวกับแบบประเมินฯ กรุณาติดต่อที่ \_\_\_\_\_
- คุณมีความประสงค์จะทำแบบประเมินฯ อีกครั้งภายใน วันที่ \_\_\_\_\_ เดือน \_\_\_\_\_ พ.ศ. \_\_\_\_\_



แบบคัดกรองพัฒนาการตามระดับอายุของเด็กปฐมวัย-ระบบกรอกข้อมูลและติดตามประเมินผลเด็กโดยผู้ปกครอง  
ฉบับปรับปรุงครั้งที่ 2  
แปลและเรียบเรียงโดย ประสงค์ สายหงษ์ และคณะ

## แบบสอบถามสำหรับเด็กอายุ

# 30 เดือน

กรุณากรอกข้อมูลต่อไปนี้

ชื่อ (เด็ก) \_\_\_\_\_ นามสกุล (เด็ก) \_\_\_\_\_

วันเดือนปี เกิด (เด็ก) \_\_\_\_\_

กรุณาเติม จำนวนสัปดาห์ ในกรณีที่เด็กคลอดก่อนกำหนด \_\_\_\_\_

วันที่กรอกแบบประเมินฯ \_\_\_\_\_

ผู้กรอกแบบประเมินฯ \_\_\_\_\_

ความเกี่ยวข้องกับเด็ก \_\_\_\_\_

ที่อยู่ บ้านเลขที่ \_\_\_\_\_ ถนน \_\_\_\_\_ หมู่บ้าน \_\_\_\_\_ ตำบล \_\_\_\_\_

อำเภอ \_\_\_\_\_ จังหวัด \_\_\_\_\_ รหัสไปรษณีย์ \_\_\_\_\_







หมายเลขโทรศัพท์ที่สะดวกในการติดต่อ \_\_\_\_\_






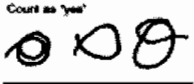
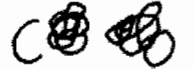


อีเมลล์ (Email) \_\_\_\_\_

กรุณากรอกชื่อของผู้ที่ช่วยเหลือและให้ความร่วมมือในการทำแบบประเมินฯ \_\_\_\_\_

หน่วยงาน หรือองค์กรที่รับผิดชอบ \_\_\_\_\_


	ทำได้	บางครั้ง	ทำไม่ได้	
<b>พัฒนาการด้านสื่อความหมาย</b> <i>กลุ่มเด็กของคุณกำลังศึกษาระดับชั้น ๑ ลงคะแนนต่อไปนี้</i>				
1. เมื่อคุณเข้าไปที่ภาพลูกบอล (หรือ ภาพอื่น ๆ เช่น ลูกแมว แก้วกาแฟ หมวก) และถามว่า "นี่คืออะไร" ลูกของคุณบอกชื่อภาพต่าง ๆ ได้ถูกต้องอย่างน้อยหนึ่งภาพหรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. ลูกของคุณสามารถปฏิบัติตามคำสั่งต่อไปนี้อย่างน้อยสามอย่างต่อไปนี้หรือไม่ โดยที่คุณไม่ได้บอกใช้ด้วยการชี้นิ้ว หรือใช้ท่าทาง				
ก. วางของเล่นบนโต๊ะ				
ข. "ปิดประตู"				
ค. "เอาผ้าเช็ดตัวมาให้หน่อย"				
ง. "หาเสื้อกันหนาวของหนูสิ"				
จ. "จับมือแม่/พ่อหน่อย"				
ฉ. "ไปเอาหนังสือมาสิ"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. เมื่อคุณบอกลูกให้แตะหรือจับ จมูก ตา ริมฝีปาก หู และส่วนต่าง ๆ ของร่างกาย ลูกของคุณทำตามที่คุณบอกหรือไม่ ถูกอย่างน้อย 7 จุด (ลูกของคุณอาจแตะหรือจับที่ร่างกายของตัวเอง หรือตุ๊กตาก็ได้)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. ลูกของคุณพูดเป็นประโยค ที่มีสามหรือสี่คำได้หรือไม่ ให้ยกตัวอย่างตามที่เด็กพูดมาหนึ่งตัวอย่าง	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. ลูกของคุณทำตามคำสั่งสองอย่างติดต่อกัน เช่น วางรองเท้าบนโต๊ะ และวางหนังสือได้โต๊ะ ได้ถูกต้องโดยไม่ต้องช่วยเหลือใดๆ ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. เวลาที่ลูกคุณดูหนังสือภาพ เขาสามารถบอก/เล่าได้หรือไม่ในภาพกำลังเกิดอะไรขึ้น (ตัวอย่างเช่น "หมากำลังเห่า" "คนกำลังวิ่ง" "นกกำลังกิน" และ "เด็กกำลังร้องไห้") คุณอาจถามว่า "หมา (หรือ เด็กผู้ชาย) กำลังทำอะไร"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	<b>คะแนนรวม</b>			_____

		ทำได้	บางครั้ง	ทำไม่ได้		
<b>พัฒนาการด้านกล้ามเนื้อใหญ่</b> กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามคำถามต่อไปนี้						
1.	ลูกของคุณวิ่งได้ก่อนข้างเท้า และหยุดด้วยตนเอง โดยไม่สะดุดกับสิ่งของ หรือหกล้มได้หรือไม่		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	ลูกของคุณเดินขึ้นหรือลงบันได อย่างน้อยสองก้าวด้วยตนเองได้หรือไม่ (คุณสามารถสังเกตได้ที่ร้านค้า สนามเด็กเล่น หรือที่บ้าน) (ให้กาลงในช่อง "ทำได้" ถึงแม้ว่าลูกของคุณจะจับราวบันได หรือผนัง)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	ลูกของคุณเตะลูกบอลด้วยการเตะขาไปข้างหน้า โดยมือไม่ได้เกาะกับสิ่งกับสิ่งใด ๆ ได้หรือไม่		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	ลูกของคุณกระโดด โดยเท้าทั้งสองข้างพ้นจากพื้นพร้อมกันได้หรือไม่		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5.	ลูกของคุณเดินขึ้นบันไดโดยเท้าแต่ละข้างสลับกันได้หรือไม่ (เท้าซ้ายต้องอยู่บนบันไดขั้นหนึ่ง และเท้าขวายอยู่บนบันไดอีกขั้นหนึ่ง) ลูกของคุณอาจจับราวบันได หรือผนัง (คุณสามารถสังเกตได้ที่ร้านค้า สนามเด็กเล่น หรือที่บ้าน)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	ลูกของคุณยืนกระต่ายขาเดียวมากกว่าหนึ่งวินาทีโดยไม่ได้จับอะไรไว้ได้หรือไม่		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
		<b>คะแนนรวม</b>			_____	
		ทำได้	บางครั้ง	ทำไม่ได้		
<b>พัฒนาการด้านกล้ามเนื้อเล็ก</b> กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามคำถามต่อไปนี้						
1.	ลูกของคุณหมุนขว้อมือขณะพยายามบิดลูกบิดประตู บิดของเล่น เปิดฝาขวดเกลียว หรือหมุนฝาขวดต่าง ๆ ได้หรือไม่		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

<p>2. หลังจากที่คุณใช้สีเทียน ปากกา หรือดินสอลากเส้น แนวตั้งจากบนลงล่างผ่านกระดาษให้ลูกดู สิ่งลูกของคุณให้ลากเส้นตามแนวตั้งจากบนลงล่างโดยทำตามแบบที่คุณทำให้ดู อย่าให้เขาลากเส้นทับเส้นของคุณ เขาทำได้หรือไม่</p>	<p>Court as "yes"</p> 	<p>Court as "not yet"</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<p>3. ลูกของคุณร้อยลูกปัดด้วยเชือก หรือร้อยเชือกรอบเท้าได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
<p>4. ใช้สีเทียน ปากกา หรือดินสอลากเส้นแนวนอนจากซ้ายไปขวาผ่านกระดาษให้ลูกดู ต่อมาบอกเขาให้ลากเส้นแนวนอนคล้ายกับเส้นของคุณ อย่าให้เขาลากเส้นทับเส้นของคุณ ลูกของคุณลากเส้นตามทาบเส้นของคุณ ลูกของคุณลากเส้นตามแนวนอนจากซ้ายไปขวาโดยทำตามแบบที่คุณทำให้ดูได้หรือไม่</p>	<p>Court as "yes"</p> 	<p>Court as "not yet"</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<p>5. ใช้สีเทียน ปากกา หรือดินสอวาดรูปวงกลมลงผ่านกระดาษให้ลูกดู ต่อมาบอกเขาให้วาดรูปวงกลมคล้ายกับวงกลมของคุณ อย่าให้เขาวาดทาบเส้นของคุณ ลูกของคุณวาดรูปวงกลมโดยทำตามแบบที่คุณทำให้ดูได้หรือไม่</p>	<p>Court as "yes"</p> 	<p>Court as "not yet"</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<p>6. ลูกของคุณเปิดหนังสือที่ละหน้าได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
<p>คะแนนรวม _____</p>							
				ทำได้	บางครั้ง	ทำไม่ได้	
<p><b>พัฒนาการด้านสติปัญญา</b> กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามที่ถามต่อไปนี้</p>							
<p>1. เมื่อลูกของคุณมองดูที่กระจก คุณถามลูกว่า "_____ ที่ไหน" (ใช้ชื่อลูกของคุณ) ลูกของคุณชี้มือไปที่เขาของตนเองในกระจกหรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
<p>2. ถ้าลูกของคุณหยิบของบางอย่างไม่ถึง เขาหาเก้าอี้หรือกล่องมาป็นชั้นเพื่อหยิบของนั้นหรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
<p>3. ในขณะที่ลูกดูการเอาวัตถุ 4 อย่าง เช่น ก้อนหรือรถ มาวางต่อเรียงกันเป็นแถว ลูกของคุณทำตามคุณโดยนำเอาวัตถุ 4 ชิ้นมาวางต่อกัน</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		

หรือไม (คุณอาจจะเรียกชื่อยกสอง หรือของเล่นเข้าด้วยกัน)

4. เมื่อคุณชี้ไปที่รูปภาพคน และถามลูกว่า "นี่คืออะไร" ลูกของคุณพูดเป็นคำที่มีความหมายว่าเป็นบุคคลหรือไม่ ลูกคุณอาจพูดว่า "หุ่นยนต์" "เด็กผู้ชาย" "ผู้ชาย" "ผู้หญิง" และ "พ่อ" กรุณาเขียนคำตอบของลูก



	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5. เมื่อคุณพูดว่า "พูดว่า เจ็ด สาม" (7, 3) ลูกของคุณพูดตามคุณอย่างถูกต้องตามลำดับหรือไม่ อย่าใช้ตัวเลขชุดเดิม ถ้าจำเป็น ให้ใช้ตัวเลขชุดใหม่ เช่น "พูดว่า แปด สอง" (8, 2) ลูกของคุณจะต้องพูดตามคุณตามตัวเลข หนึ่งในสองชุด คุณจึงสามารถบอกลูกว่า "ทำได้" ได้ในคำถามนี้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____				
6. หลังจากลูกของคุณวาดรูปหนึ่ง อาจจะไม่ค่อยเป็นรูปเป็นร่าง เขาบอกคุณหรือไม่ว่าเขาควรทำอะไร คุณอาจพูดว่า "บอกแม่สิลูกว่ารูปอะไร" หรือถามลูกว่า "นี่คืออะไร" เพื่อเป็นการกระตุ้นลูก	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____				
<b>คะแนนรวม</b>								
_____								
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; text-align: center;">ทำได้</td> <td style="width: 33%; text-align: center;">บางครั้ง</td> <td style="width: 33%; text-align: center;">ทำไม่ได้</td> <td></td> </tr> </table>					ทำได้	บางครั้ง	ทำไม่ได้	
ทำได้	บางครั้ง	ทำไม่ได้						
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
2. ลูกของคุณใช้ช้อนตักอาหารทานเองด้วยตนเอง แม้ว่าเขาจะทำอาหารหกบ้าง ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____				
3. ลูกของคุณผลักรถเข็น (หรือล้อลาก) ไปรอบ ๆ สิ่งของต่าง ๆ แล้วถอยหลังออกจากมุมเมื่อไม่สามารถกลับรถ ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____				
4. ลูกของคุณสวมเสื้อด้วยตนเองได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____				
5. หลังจากคุณสวมกางเกงให้ลูก คุณเอาเอากางเกงวางไว้หลวม ๆ อยู่ที่เขา ลูกของคุณดึงกางเกงขึ้นมาอยู่ที่เอวได้สำเร็จหรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____				
6. เมื่อลูกของคุณมองดูตนเองที่กระจก และคุณถามว่า "ใครอยู่ในกระจก" เขาตอบคุณว่า "หนูเอง" หรือตอบชื่อของตนเองหรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____				
<b>คะแนนรวม</b>								
_____								

**ข้อมูลอื่น ๆ ที่เกี่ยวข้องกับพัฒนาการส่วนใหญ่ของคุณ**

ผู้ปกครอง หรือ ผู้ให้ข้อมูลสามารถใช้พื้นที่ว่างข้างล่าง เพิ่มเติมข้อมูล ข้อเสนอแนะ ต่าง ๆ ตามต้องการ

1. คุณคิดว่าลูกของคุณมีความสามารถในการฟังดีหรือไม่ ถ้าไม่ กรุณาอธิบาย

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2. คุณคิดว่าลูกของคุณมีความสามารถในการใช้มือทั้งสองข้างดีหรือไม่ ถ้าไม่ กรุณาอธิบาย

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3. เมื่อคุณช่วยลูกของคุณเขียน หัวข้อลูกคุณวางร เรียบบนพื้นเกือบตลอดเวลาหรือไม่ ถ้าไม่ กรุณาอธิบาย

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4. ครอบครัวยังของคุณ (ทั้งฝ่ายพ่อ และแม่ติด) มีประวัติเกี่ยวกับความบกพร่องทางหู หรือการรับฟังหรือไม่ ถ้าไม่ กรุณาอธิบาย

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5. คุณเป็นกังวลเกี่ยวกับการมองเห็น หรือการใช้สายตาของลูกคุณหรือไม่ ถ้าไม่ กรุณาอธิบาย

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6. ลูกของคุณมีปัญหาเกี่ยวกับการใช้ขาในช่วง 2-3 เดือนที่ผ่านมาหรือไม่ ถ้าไม่ กรุณาอธิบาย

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7. สิ่งต่าง ๆ ที่คุณมีความเป็นกังวลในคำพูดของคุณ ถ้าไม่ กรุณาอธิบาย

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แบบประเมินพัฒนาการตามระดับอายุของเด็กปฐมวัย-ระบบกรอกข้อมูลและติดตามประเมินผลเด็กโดยผู้ปกครอง  
ฉบับปรับปรุงครั้งที่ 2  
แปลและเรียบเรียงโดย ประสงค์ สายหงษ์ และคณะ

## ◆ ระดับอายุ 36 เดือน/3 ปี ◆

### แบบประเมินพัฒนาการเด็กปฐมวัย



คำถามต่อไปนี้จะถามเกี่ยวกับกิจกรรมต่าง ๆ ที่เด็กทำ ๆ ไปทำได้ ลูกของคุณอาจทำกิจกรรมบางอย่างได้แล้ว แต่ อาจจะมีกิจกรรมบางอย่างที่ลูกของคุณยังทำไม่ได้ ดังนั้นขอให้คุณกรอกกาเครื่องหมายลงในช่องสี่เหลี่ยม  ใน ลำดามแต่ละข้อ เพื่อแสดงว่าลูกของคุณสามารถ  ทำได้,  บางครั้ง, หรือ,  ทำไม่ได้

#### ข้อสำคัญที่ควรรีใจ

- ก่อนการกรอกหมายลงในช่องสี่เหลี่ยม ขอให้คุณแน่ใจว่า คุณได้ลองทำกิจกรรมต่าง ๆ กับลูกของคุณ
- พยายามหาการเล่นที่สนุกสนาน สำหรับคุณและลูกของคุณระหว่างการทำแบบประเมินฯ
- สํารวจให้แน่ใจว่าลูกของคุณได้พักผ่อนเพียงพอ กินอาหารเรียบร้อย และพร้อมที่จะทำกิจกรรมการต่าง ๆ ตาม แบบประเมินฯ
- กรุณาส่งแบบประเมินฯ ภายในวันที่ \_\_\_\_\_
- ถ้าคุณมีข้อสงสัยหรือกังวลเกี่ยวกับการพัฒนาการของลูกคุณ หรือเกี่ยวกับแบบประเมินฯ กรุณาติดต่อที่ \_\_\_\_\_
- คุณมีความประสงค์จะทำแบบประเมินฯ อีกครั้งภายใน วันที่ \_\_\_\_\_ เดือน \_\_\_\_\_ พ.ศ. \_\_\_\_\_

แบบประเมินพัฒนาการตามระดับอายุของเด็กปฐมวัย-ระบบกรอกข้อมูลและติดตามประเมินผลเด็กโดยผู้ปกครอง  
 ฉบับปรับปรุงครั้งที่ 2  
 แปลและเรียบเรียงโดย ประสงค์ สายหงษ์ และคณะ

◆ ระดับอายุ 36เดือน/3ปี ◆

## แบบประเมินพัฒนาการเด็กปฐมวัย

กรุณากรอกข้อมูลต่อไปนี้

ชื่อ (เด็ก) \_\_\_\_\_ นามสกุล (เด็ก) \_\_\_\_\_

วัน/เดือน/ปี เกิด (เด็ก) \_\_\_\_\_

กรุณาเติม จำนวนสัปดาห์ ในกรณีที่เด็กคลอดก่อนกำหนด \_\_\_\_\_

วันที่กรอกแบบประเมินฯ \_\_\_\_\_

ผู้กรอกแบบประเมินฯ \_\_\_\_\_

ความเกี่ยวข้องกับเด็ก \_\_\_\_\_

ที่อยู่ บ้านเลขที่ \_\_\_\_\_ ถนน \_\_\_\_\_ หมู่บ้าน \_\_\_\_\_ ตำบล \_\_\_\_\_

อำเภอ \_\_\_\_\_ จังหวัด \_\_\_\_\_ รหัสไปรษณีย์ \_\_\_\_\_

หมายเลขโทรศัพท์ที่สะดวกในการติดต่อ \_\_\_\_\_

อีเมลล์ (Email) \_\_\_\_\_

กรุณากรอกชื่อของผู้ที่ช่วยเหลือและให้ความร่วมมือในการทำแบบประเมินฯ \_\_\_\_\_






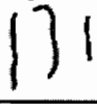


หน่วยงาน หรือองค์กรที่รับผิดชอบ \_\_\_\_\_

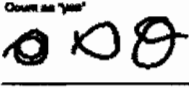
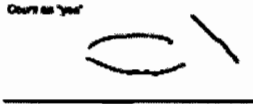




 ASQ™





	ทำได้	บางครั้ง	ทำไม่ได้	
<b>พัฒนาการด้านสื่อความหมาย</b> <i>กลุ่มเป้าหมายของชุดข้อคำถามนี้ใช้สำหรับเด็กอายุ 3-5 ปี</i>				
1. เมื่อคุณบอกลูกให้แตะหรือจับ จมูก ตา ผม เท้า หู และส่วนต่าง ๆ ของร่างกาย ลูกของคุณทำถูกต้องตามที่คุณบอกหรือไม่ ถูกอย่างน้อย 7 จุด (ลูกของคุณอาจแตะหรือจับที่ร่างกายของตัวเอง หรือตุ๊กตาก็ได้)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. ลูกของคุณพูดเป็นประโยคยาวๆที่มีสามหรือสี่คำได้หรือไม่ ให้ยกตัวอย่างตามที่เด็กพูดมาหนึ่งตัวอย่าง	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. ลูกของคุณทำตามคำสั่งสองอย่างติดต่อกัน เช่น วางรองเท้าบนโต๊ะ และวางหนังสือใต้โต๊ะ ได้ถูกต้องโดยไม่ต้องช่วยเหลือใดๆ ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. เวลาที่ลูกคุณดูหนังสือภาพ เด็กสามารถบอก/เล่าสิ่งที่เกิดขึ้นจากภาพที่เห็นได้หรือไม่ (ตัวอย่างเช่น "หมากำลังเห่า" "คนกำลังวิ่ง" "นกกำลังกิน" และ "เด็กกำลังร้องไห้") คุณอาจถามว่า "หมา (หรือ เด็กผู้ชาย) กำลังทำอะไร"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. สาธิตการรูตชิปที่ขูอยู่ในเลื้อย หรือกางเกง ขึ้น-ลงให้ลูกดู และบอกลูกว่า "เห็นไหม ชิปนี้ รูดขึ้น- รูดลงได้" ต่อมารูตชิปมาไว้ตรงกลาง และบอกให้ลูกรูตชิป "ลง" จากนั้นรูตชิปกลับมาไว้ตรงกลางอีก และ บอกให้ลูกรูตชิป "ขึ้น" โดยให้เขาได้ลองฝึกรูตด้วยสีก 2-3 ครั้ง แล้วรูตชิปมาไว้ตรงกลางก่อนที่จะถามลูกให้รูตชิปขึ้นหรือลง ลูกของคุณรูตชิปขึ้น เมื่อคุณบอกว่า "ขึ้น" และลง เมื่อคุณบอกว่า "ลง" หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. เมื่อคุณถามลูกว่า "หนูชื่ออะไร" เขาบอกทั้งชื่อจริงและนามสกุลหรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	คะแนนรวม			_____
	ทำได้	บางครั้ง	ทำไม่ได้	
<b>พัฒนาการด้านกัมธัมเมื่อมีคำใหญ่</b> <i>กลุ่มเป้าหมายของชุดข้อคำถามนี้ใช้สำหรับเด็กอายุ 3-5 ปี</i>				
1. ลูกของคุณจะถูกบอกด้วยการตะขาไปข้างหน้า โดยมือไม่ให้เกาะกับสิ่งกับสิ่งใด ๆ ได้หรือไม่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____



<p>2. ลูกของคุณกระโดดโดยเท้าทั้งสองข้างหันจากพื้นพร้อมกันได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3. ลูกของคุณเดินขึ้นบันไดโดยเท้าแต่ละข้างสลับกันได้หรือไม่ (เท้าซ้ายต้องอยู่บนบันไดขั้นหนึ่ง และเท้าขวาอยู่บนบันไดอีกขั้นหนึ่ง) ลูกของคุณอาจจับราวบันได หรือผนัง (คุณสามารถสังเกตได้ที่ร้านค้า สนามเด็กเล่น หรือที่บ้าน)</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>4. ลูกของคุณยืนกระต่ายขาเดียวมากกว่าหนึ่งวินาทีโดยไม่ได้จับอะไรไว้ได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>5. ขณะยืนตัวตรง ลูกของคุณโยนลูกบอลด้วยการยกแขนและไหล่ขึ้นสูงแล้วโยนลูกบอลไปข้างหน้า ได้หรือไม่ (ไม่นับการที่ลูกของคุณทำลูกบอลหล่น หรือโยนลูกบอลแบบปล่อยแขนลงต่ำ)</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>6. ลูกของคุณกระโดดไปข้างหน้าอย่างน้อย 6 นิ้วโดยเท้าทั้งสองข้างหันจากพื้นพร้อมกันได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>คะแนนรวม</p>					
<p>ทำได้    บางครั้ง    ทำไม่ได้</p>					
<p><b>พัฒนาการด้านกล้ามเนื้อมัดเล็ก</b> <i>กรุณาให้ลูกของคุณทำกิจกรรมต่างๆ ตามคำขอต่อไปนี้</i></p>					
<p>1. หลังจากที่คุณใช้สีเทียน ปากกา หรือดินสอลากเส้นแนวตั้งจากบนลงล่างแล้ว กระดาษให้ลูกดู สิ่งลูกของคุณให้ลากเส้นตามแนวตั้งจากบนลงล่างโดยทำตามแบบที่คุณทำให้ดู อย่าให้เขาลากเส้นทับเส้นของคุณ เขาทำได้หรือไม่</p>	<p>Count as "yes"</p>  <p>Count as "not yet"</p> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>2. ลูกของคุณร้อยลูกปัดด้วยเชือก หรือร้อยเชือกทรงเท้าได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<p>3. ใช้สีเทียน ปากกา หรือดินวาตรูปวงกลมลงแผ่นกระดาษให้ลูกดู ต่อมาบอกเขาให้วาดรูปวงกลมคล้ายกับวงกลมของคุณ อย่าให้เขาวาดทับเส้นของคุณ ลูกของคุณวาดรูปวงกลมโดยทำตามแบบที่คุณทำให้ดูได้หรือไม่</p>	<p>Count as 'yes'</p> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<p>4. ใช้สีเทียน ปากกา หรือดินลากเส้นแนวนอนจากซ้ายไปขวาแผ่นกระดาษให้ลูกดู ต่อมาบอกเขาให้ลากเส้นแนวนอนคล้ายกับเส้นของคุณ อย่าให้เขาลากเส้นทับเส้นของคุณ ลูกของคุณลากเส้นตามแนวนอนจากซ้ายไปขวาโดยทำตามแบบที่คุณทำให้ดูได้หรือไม่</p>	<p>Count as 'yes'</p>  <p>Count as 'not yet'</p> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<p>5. ลูกของคุณพยายามใช้กรรไกรสำหรับเด็กตัดกระดาษได้หรือไม่ เขาไม่จำเป็นต้องตัดกระดาษให้ขาดจริง ๆ แต่เขาต้องสามารถใช้มีดที่บังคับกรรไกรอยู่ตัดกระดาษที่ถือไว้ อีกมือหนึ่ง (คุณอาจแสดงการใช้กรรไกรให้เขาดูระมัดระวังการใช้กรรไกรของเขาเพื่อความปลอดภัย)</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<p>6. ขณะวาดรูป ลูกของคุณจับดินสอ สีเทียน หรือปากกาโดยใช้นิ้วโป้ง และนิ้วอื่น ๆ เหมือนการจับได้ปากกาของผู้ใหญ่ได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
คะแนนรวม _____					
ทำได้ดี    บางครั้ง    ทำไม่ได้					
<p><b>พัฒนาการด้านสติปัญญา</b> <i>กรุณาให้ลูกของคุณทำกิจกรรมต่าง ๆ ตามที่กำหนดไว้</i></p>					
<p>1. ในขณะที่ลูกดูการเอาวัตถุ 4 อย่าง เช่น ก้อนหรือรถ มาวางต่อเรียงกันเป็นแถว ลูกของคุณทำตามคุณโดยนำเอาวัตถุ 4 ชิ้นมาวางต่อกันหรือไม่ (คุณอาจเอาเชือกหรือยกกล่อง หรือของเล่นเข้าด้วยกัน)</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<p>2. ถ้าลูกของคุณหยิบของบางอย่างไม่ถึง เขาหาเก้าอี้หรือกล่องมาเป็นชั้นเพื่อหยิบของนั้นหรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	

<p>3. เมื่อคุณชี้ไปที่รูปภาพคน และถามลูกว่า "นี่คืออะไร" ลูกของคุณพูดเป็นคำที่มีความหมายว่าเป็นบุคคลหรือไม่ ลูกคุณอาจพูดว่า "หุ่นยนต์" "เด็กผู้ชาย" "ผู้ชาย" "ผู้หญิง" และ "พ่อ" กรุณาเขียนคำตอบของลูก</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____						
<p>4. เมื่อคุณพูดว่า "พูดว่า เจ็ด สาม" (7, 3) ลูกของคุณพูดตามคุณอย่างถูกต้องตามลำดับหรือไม่ อย่าใช้ตัวเลขชุดเดิม ถ้าจำเป็น ให้ใช้ตัวเลขชุดใหม่ เช่น "พูดว่า แปด สอง" (8, 2) ลูกของคุณจะต้องพูดตามคุณตามตัวเลข หนึ่งในสองชุด คุณจึงสามารถบอกลูกว่า "ทำได้" ได้ในคำถามนี้</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
<p>5. แสดงให้ลูกดูในวิธีการทำสะพานโดยใช้ไม้สี่เหลี่ยมกล้อง หรือกระป๋อง ดังตัวอย่าง เราทำอย่างคุณได้หรือไม่</p>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____						
<p>6. เมื่อคุณพูดว่า "พูดว่า ห้า แปด สาม" (5, 8, 3) ลูกของคุณพูดตามคุณอย่างถูกต้องตามลำดับหรือไม่ อย่าใช้ตัวเลขชุดเดิม ถ้าจำเป็น ให้ใช้ตัวเลขชุดใหม่ เช่น "พูดว่า หก เก้า สอง" (6, 9, 2) ลูกของคุณจะต้องพูดตัวเลขทั้งสามตัวตามลำดับให้ถูกต้อง คุณจึงสามารถบอกลูกว่า "ทำได้" ได้ในคำถามนี้</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
คะแนนรวม _____											
<table border="0"> <tr> <td>ทำได้</td> <td>บางครั้ง</td> <td>ทำไม่ได้</td> <td colspan="3"></td> </tr> </table>						ทำได้	บางครั้ง	ทำไม่ได้			
ทำได้	บางครั้ง	ทำไม่ได้									
<p><b>พัฒนาการด้านอารมณ์และสังคม</b> <i>กรุณาให้ลูกของคุณทำกิจกรรมดัง ๆ ตามคำแนะนำต่อไปนี้</i></p>											
<p>1. ลูกของคุณใช้ช้อนตักอาหารทานเองด้วยตนเอง แม้ว่าเขาจะทำอาหารหกบ้าง ได้หรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
<p>2. ลูกของคุณผลัดกรรเข็น (หรือล้อลาก) ไปรอบ ๆ สิ่งของต่าง ๆ แล้วถอยหลังออกจากมุมเมื่อไม่สามารถกลับรถ ได้หรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
<p>3. เมื่อลูกของคุณมองดูตนเองที่กระจก และคุณถามว่า "ใครอยู่ในกระจก" เขาตอบคุณว่า "หนูเอง" หรือตอบชื่อของตนเองหรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
<p>4. ลูกของคุณสวมเสื้อด้วยตนเองได้หรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
<p>5. ตามลูกว่า "ลูกเป็นผู้หญิง หรือ ผู้ชาย" ลูกของคุณตอบคำถามได้ถูกต้องหรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
<p>6. เมื่อลูกของคุณอยากเล่นของเล่นที่มีเด็กอีกคนกำลังเล่นอยู่ ลูกของคุณรอให้เด็กคนนั้นเล่นของเล่นเสร็จก่อน หรือไม่</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____							
คะแนนรวม _____											

หัวข้ออื่น ๆ ผู้ปกครอง หรือ ผู้ให้ข้อมูลสามารถใช้พื้นที่ว่างข้างล่าง เพิ่มเติมข้อมูล ข้อเสนอแนะ ต่าง ๆ ตามต้องการ

1. คุณคิดว่าลูกของคุณมีความสามารถในการฟังหรือไม่ ถ้าไม่ กรุณาอธิบาย

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2. คุณคิดว่าลูกของคุณมีความสามารถในการใช้มือทั้งสองข้างหรือไม่ ถ้าไม่ กรุณาอธิบาย

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3. เมื่อคุณช่วยลูกของคุณกิน แก้วของคุณควรวางรวมไปบนพื้นเกือบตลอดเวลาหรือไม่ ถ้าไม่ กรุณาอธิบาย

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4. ควบคุมกริ้วของคุณ (เช่น ฝ่ามือ และแก้มเด็ก) มีประวัติเกี่ยวกับความผิดปกติทางหู หรือการรับฟังหรือไม่ ถ้าไม่ กรุณาอธิบาย

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5. คุณเป็นกังวลเกี่ยวกับการมองเห็น หรือการใช้สายตาของลูกหรือไม่ ถ้าไม่ กรุณาอธิบาย

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6. ลูกของคุณมีปัญหาเกี่ยวกับการใช้ขาในช่วง 2-3 เดือนที่ผ่านมหรือไม่ ถ้าไม่ กรุณาอธิบาย

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7. สิ่งต่าง ๆ ที่คุณมีความเป็นกังวลในตัวลูกของคุณ ถ้าไม่ กรุณาอธิบาย

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APPENDIX E

THE ASQ: THAI, ENGLISH BACK-TRANSLATION

Example of the ASQ: Thai, English Back-Translation

U.S. version	Thai version
<b>Instruction</b>	
On the following pages are questions about activities children do. Your child may have already done some of the activities described here, and there may be some your child has not begun doing yet. For each item, please check the box that tells whether your child is doing the activity regularly, sometimes.	The following questions are about activities children do. Your child may have already been able to do some of the activities, and may not be able to begin doing some yet. For each question, please check the box that tells whether your child can do the activity regularly, sometimes, or not yet.
<p>Important Points to Remember:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Be sure to try each activity with your child before checking a box.</li> <li><input type="checkbox"/> Try to make completing this questionnaire a game that is fun for you and your child.</li> <li><input type="checkbox"/> Make sure your child is rested, fed, and ready to play.</li> <li><input type="checkbox"/> Please return this questionnaire by</li> <li><input type="checkbox"/> If you have any questions or concerns about your child or about this questionnaire, please call:</li> <li><input type="checkbox"/> Look forward to filling out another.</li> </ul>	<p>Important Points to Pay Attention to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Before checking the box, please make sure that you try each activity with your child</li> <li><input type="checkbox"/> Try to find ways to make the filling in of this questionnaire a fun game for you and your child.</li> <li><input type="checkbox"/> You have to check the see whether your child is well rested, sufficiently eaten, and ready to play.</li> <li><input type="checkbox"/> Please send back this questionnaire by...</li> <li><input type="checkbox"/> If you have questions or concerns about your child's development and about the this evaluation form, please contact the researcher at the following phone number..</li> <li><input type="checkbox"/> There will be another questionnaire; please specify the date that you wish to forward to fill out another questionnaire. Date.....Month.....Year</li> </ul>
24 month COMMUNICATION	COMMUNICATION DEVELOPMENT
Be sure to try each activity with your child.	Please have your child try the activities according to the following questions.
1. Without showing her first, does your child point to the correct picture when you say, "Show me the kitty" or ask, "Where is the dog?" (She needs to	1. Can your child point to the correct picture, without your hint, when

- identify only one picture correctly.)
2. Does your child imitate a two-word sentence? For example, when you say a two-word phrase, such as “Mama eat,” “Daddy play,” “Go home,” or “What’s this?” does your child say both words back to you? (Check “yes” even if his words are difficult to understand.)
  3. Without giving her clues by pointing or using gestures, can your child carry out at least three of these kinds of directions?
    - a. “Put the toy on the table.”
    - b. “Close the door.”
    - c. “Bring me a towel.”
    - d. “Find your coat.”
    - e. “Take my hand.”
    - f. “Get your book.”
  4. If you point to a picture of a ball (kitty, cup, hat, etc.) and ask your child, “What is this?” does your child correctly name at least one picture?
  5. Does your child say two or three words that represent different ideas together, such as “See dog,” “Mommy come home,” or “Kitty gone”? (Don’t count word combinations that express one idea, such as “Bye-bye,” “All gone,” “All right,” and “What’s that?”) Please give an example of your child’s word combinations:
  6. Does your child correctly use at least two words like “me,” “I,” “mine,” and “you”?
 

you say, “Where is the dog?” or “Which is the picture of a kitten?”
2. Can your child repeat a two-word sentence? For example, “Eat rice,” “take trip,” “Go home,” or “What’s this?” Can your child repeat both words?
  3. Can your child follow three of the following directions without your hints neither by pointing or gesturing?
    - a. “Put the toy on the table.”
    - b. “Close the door.”
    - c. “Please bring me a towel.”
    - d. “Show me your blouse (shirt)?.”
    - e. “Hold Mama’s and Papa’s hands.”
    - f. “Go bring your book here.”
  4. When you point to a picture of a ball (a kitty, a cup, a hat, etc.) and ask your child, “What is this?” can your child tell the name of at least one picture correctly?
  5. Can your child say combinations of two or three words of different meanings together, such as “See dog,” “Mama comes home,” or “Kitty gone”? (The combinations of two words with the same meanings do not count, such as “Bye-bye,” “All gone,” “All right,” and “What’s that?”) Please give an example of words combinations spoken by your child.
  6. Can your child use at least two pronouns and possessive pronouns correctly? For example, “me,” “I,” “mine,” and “you.”

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### **24 Month: Gross Motor**

### Gross Motor

- 
1. Does your child walk down stairs if you
  1. Can your child walk down stairs when
-



- |   |   |
|---|---|
| <p>hold onto one of his hands? (You can look for this at a store, on a playground, or at home.)</p> <ol style="list-style-type: none"> <li>2. When you show her how to kick a large ball, does your child try to kick the ball by moving her leg forward or by walking into it? (If your child already kicks a ball, check “yes” for this item.)</li> <li>3. Does your child walk either up or down at least two steps by himself? You can look for this at a store, on a playground, or at home. (Check “yes” even if he holds onto the wall or railing.)</li> <li>4. Does your child run fairly well, stopping herself without bumping into things or falling?</li> <li>5. Does your child jump with both feet leaving the floor at the same time?</li> <li>6. Without holding onto anything for support, does your child kick a ball by swinging his leg forward?</li> </ol> | <p>you hold one of his hands? (You can observe this at a store, on a playground, or at home.)</p> <ol style="list-style-type: none"> <li>2. When you kick a ball to show your child how to kick a ball, can your child kick the ball by kicking her leg forward or by walking toward the ball? (If your child is able to kick a ball, check “yes” for this question.)</li> <li>3. Can your child walk either up or down at least two steps by him/her self? You can observe this at a store, on a playground, or at home. (Check “yes” even if s/he holds onto the rail or the wall.)</li> <li>4. Can your child run quite well, and can s/he stop without bumping into things or falling?</li> <li>5. Can your child jump with both feet off the floor at the same time? (Look at the picture.)</li> <li>6. Can your child kick a ball by kicking his or her leg forward without holding on anything?</li> </ol> |
|---|---|

### 30 Month: Fine Motor

### Fine Motor

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Does your child use a turning motion with her hand while trying to turn doorknobs, wind toys, twist tops, or screw lids on and off jars?</li> <li>2. After he watches you draw a line from the top of the paper to the bottom with a pencil, crayon, or pen, asks your child to make a line like yours. Do not let your child trace your line. Does your child copy you by drawing a single line in a vertical direction?</li> <li>3. Does your child thread a shoelace through either a bead or eyelet of a shoe?</li> <li>4. After she watches you draw a line from one side of the paper to the other side, asks your child to make a line like</li> </ol> | <ol style="list-style-type: none"> <li>1. Can your child turn his or her wrist when trying to turn doorknobs, wind toys, twist tops, or screw lids on and off bottles?</li> <li>2. After your child watches you draw a line from the top to the bottom of the paper with a pencil, crayon, or pen, asks your child to draw a line like yours. Do not let your child trace your line. Can your child do it?</li> <li>3. Can your child thread beads with a string or tie a shoelace?</li> <li>4. After your child watches you draw a line from one left to right on a piece of paper, asks your child to draw a line like yours. Do not let your child trace your line. Can your child draw a line</li> </ol> |
|---|--|

- 
- yours. Do not let your child trace your line. Does your child copy you by drawing a single line in a horizontal direction?
5. After he watches you draw a single circle, asks your child to make a circle like yours. Do not let him trace your circle. Does your child copy you by drawing a circle?
  6. Does your child turn pages in a book, one page at a time?
- 

### 30 Month: Problem Solving

1. When looking in the mirror, ask, "Where is \_\_\_\_\_?" (Use your child's name.) Does your child point to her image in the mirror?
2. If your child wants something he cannot reach, does he find a chair or box to stand on to reach it?
3. While your child watches, line up four objects like blocks or cars in a row. Does your child copy or imitate you and line up four objects in a row? (You can also use spools of thread, small boxes, or other toys.)
4. When you point to the figure and ask your child, "What is this?" does your child say a word that means a person? Responses like "snowman," "boy," "man," "girl," and "Daddy" are correct. Please write your child's response here:
5. When you say, "Say seven three," does your child repeat just the two numbers in the correct order? Do not repeat the numbers. If necessary, try another pair of numbers and say, "Say eight two." Your child must repeat just one series of two numbers for you to answer "yes" to this question.
6. After she draws a "picture," even a simple scribble, does your child tell you what she drew? You may say, "Tell me about your picture," or ask, "What is

### Intellectual Development

- from left to right horizontally?
5. After your child watches you draw one circle, asks your child to draw a circle like yours. Do not let him trace your circle. Can your child draw a circle like what you have shown your child?
  6. Can your child open a book page by page?
- 
1. When looking in the mirror, ask, "Where is \_\_\_\_\_?" (Use your child's name.) Can your child point to her picture in the mirror?
  2. When your child wants something s/he cannot reach, does s/he find a chair or box to stand on to reach it?
  3. While your child watches, line up four objects such as blocks or cars in a row. Can your child imitate you in lining up four objects in a row? (You can also use thread spools, small boxes, or other toys for this activity.)
  4. When you point to the figure and ask your child, "What is this?" can your child say a word meaning a person? The correct answers may be "robot," "boy," "man," "girl," and "Daddy." Please write your child's answer here:
  5. When you say, "Say seven three," can your child repeat the two numbers in the same order? Do not use the same set of numbers. If necessary, you may use another pair of numbers and say, "Say eight two." When your child can repeat one of the series of two numbers, you can answer "yes" for this question.
  6. After your child draws a "picture," even if you cannot tell what it is, does your child tell you what s/he draws?
-

this?" to prompt her.	To encourage your child, you may say, "Tell me about your picture," or ask, "What is this?"
<b>36 Month: Personal Social</b> <ol style="list-style-type: none"> <li>1. Does your child use a spoon to feed herself with little spilling?</li> <li>2. Does your child push a little shopping cart, stroller, or wagon, steering it around objects and backing out of corners if he cannot turn?</li> <li>3. When she is looking in a mirror and you ask, "Who is in the mirror?" does your child say either "Me" or her own name?</li> <li>4. Can your child put on a coat, jacket, or shirt by himself?</li> <li>5. Using these exact words, ask your child, "Are you a girl or a boy?" Does your child answer correctly?</li> <li>6. Does your child take turns by waiting while another child or adult takes a turn?</li> </ol>	<b>Personal and Social Development</b> <ol style="list-style-type: none"> <li>1. Can your child use a spoon to eat even when s/he spills some food?</li> <li>2. Can your child push a little cart (something with wheels) around something and then back out from a corner when s/he cannot turn?</li> <li>3. When your child is looking in a mirror and you ask, "Who is in the mirror?" can your child say either "Me" or her own name?</li> <li>4. Can your child put on a clothing by him or herself?</li> <li>5. When you ask your child, "Are you a girl or a boy?" Can your child answer correctly?</li> <li>6. Does your child take turns in playing with toys when someone else is playing?</li> </ol>
<b>Overall section</b> <ol style="list-style-type: none"> <li>1. Do you think your child hears well? If no, explain:</li> <li>2. Do you think your child talks like other toddlers her age? If no, explain:</li> <li>3. Can you understand most of what your child says? If no, explain:</li> <li>4. Do you think your child walks, runs, and climbs like other toddlers his age? If no, explain:</li> <li>5. Does either parent have a family history of childhood deafness or hearing impairment? If yes, explain:</li> <li>6. Do you have any concerns about your child's vision? If yes, explain:</li> <li>7. Has your child had any medical problems in the last several months? If yes, explain:</li> <li>8. Does anything about your child worry you? If yes, explain:</li> </ol>	<b>Other information</b> <ol style="list-style-type: none"> <li>1. Do you think your child can hear well? If no, explain:</li> <li>2. Do you think your child talks like other toddlers her age? If no, explain:</li> <li>3. Do you think your child can use both hands well? If no, explain:</li> <li>4. When you help your child to stand, are his/her feet fully placed on the floor the entire time? If no, explain:</li> <li>5. Does either parent have a family history of deafness or hearing problems as a child? If no, explain: \</li> <li>6. Do you have concerns about your child's eyesight? If yes, explain:</li> <li>7. Has your child had any medical problems in the last two months? If yes, explain:</li> <li>8. Do you have any concerns about your child? YES <input type="checkbox"/> NO <input type="checkbox"/> If yes, explain:</li> </ol>

APPENDIX F  
SURVEYS

## การวิจัยระดับบัณฑิตศึกษา

## ASQ: Thai

## ข้อมูลทั่วไปเกี่ยวกับครอบครัวเด็ก

คำชี้แจง: กรุณากรอกแบบสำรวจต่อไปนี้ หลังจากที่ท่านได้กรอกแบบสอบถามระดับพัฒนาการ ฯ (ASQ: Thai) กับลูกของท่าน

## ข้อมูลเกี่ยวกับลูกของท่าน

1. เพศ ..... ชาย ..... หญิง
2. วันเดือนปีเกิด .....
3. ลูกของท่านรับบริการเกี่ยวกับเด็กปฐมวัยที่ไหนบ้าง
4. คุณมีความกังวลเกี่ยวกับปัญหาพฤติกรรมหรือพัฒนาการบ้างหรือไม่ ..... มี ..... ไม่มี
5. ความเกี่ยวข้องกับเด็ก .....
6. มีใครบ้างที่อยู่ในครัวเรือนของท่าน .....

## ข้อมูลทั่วไปเกี่ยวกับผู้ปกครอง หรือผู้ดูแลเด็ก

1. ภาษาที่พูด
  - ไทย
  - ลาว
  - เขมร
  - จีน
  - เวียดนาม
  - อื่น ๆ .....
2. เชื้อชาติ
  - ไทย
  - ลาว
  - เขมร
  - จีน
  - เวียดนาม
  - อื่น ๆ .....
3. การศึกษา
  - ระดับบัณฑิตศึกษา
  - ปริญญาตรี
  - ประกาศนียบัตร
  - มัธยม 6
  - มัธยม 3
  - ประถม 6
  - อื่น ๆ .....
4. อายุ:
  - น้อยกว่า 25 ปี

- 25-30 ปี
- 31-35 ปี
- 36-40 ปี
- 41-45 ปี
- 46-50 ปี
- 51-55 ปี
- สูงกว่า 55 ปี

5. รายได้ครอบครัว ต่อเดือน:

- น้อยกว่า 1,000 บาท
- 1,000-3,000 บาท
- 3,000-6,000 บาท
- 6,000-10,000 บาท
- 10,000-15,000 บาท
- 15,000-20,000 บาท
- 20,000-25,000 บาท
- 25,000-30,000 บาท
- มากกว่า 30,000 บาท
- อื่น ๆ .....

6. ที่มาของรายได้:

- ขายสินค้าทางการเกษตร
- ค่าขาย
- เงินเดือนประจำ ระบุอาชีพ .....

อื่น .....

Graduate Research Study  
The ASQ: Thai: Parent Information Survey

**Instructions:** Please complete this survey after filling out a questionnaire on your child.

Child's information

1. Child's sex: M / F
2. Child's date of birth: \_\_\_\_\_
3. Where do you take your child to receive early childhood services?  
\_\_\_\_\_
4. Does anything about your child's behavior or development worry you?  
\_\_\_\_\_
5. Your relationship to your child: \_\_\_\_\_
6. Who do live in your family? \_\_\_\_\_

Parents' information

1. Language:
  - Thai
  - Lao
  - Khmer
  - Chinese
  - Vietnamese
  - Other .....
2. Ethnic:
  - Thai
  - Lao
  - Khmer
  - Chinese
  - Vietnamese
  - Other .....
3. Education level:
  - Graduate degree
  - Degree
  - Diploma
  - High school—Mathayom 6
  - Secondary school—Mathayom 3
  - Primary school—Pratom 6
  - Other .....
4. Age:
  - >25

- 25-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- Above 55

5. Family monthly income:

- >1,000 baht
- 1,000-3000 baht
- 3,000-6,000 baht
- 6,000-10,000 baht
- 10,000-15,000 baht
- 15,000-20,000 baht
- 20,000-25,000 baht
- 25,000-30,000 baht
- Above 30,000 baht
- Other .....

6. Income source:

- Selling agricultural products
- Trading
- Monthly earning
- Other .....



## การวิจัยระดับบัณฑิตศึกษา

ASQ: Thai

ข้อมูลทั่วไปเกี่ยวกับเจ้าหน้าที่และครูสอนเด็กปฐมวัย

คำชี้แจง: กรุณากรอกแบบสำรวจต่อไปนี้

ข้อมูลทั่วไปเกี่ยวกับเจ้าหน้าที่และครูสอนเด็กปฐมวัย

1. ภาษาที่พูด
  - ไทย
  - ลาว
  - เขมร
  - จีน
  - เวียดนาม
  - อื่น ๆ .....
2. เชื้อชาติ
  - ไทย
  - ลาว
  - เขมร
  - จีน
  - เวียดนาม
  - อื่น ๆ .....
3. การศึกษา
  - ระดับบัณฑิตศึกษา
  - ปริญญาตรี
  - ประกาศนียบัตร
  - มัธยม 6
  - มัธยม 3
  - ประถม 6
  - อื่น ๆ .....
4. ปริญญาทางการศึกษาปฐมวัย หรือเกี่ยวกับการบริการเด็กปฐมวัย .....มี .....ไม่มี
5. ประกาศนียบัตร หรือใบประกาศต่าง ๆ (กรุณาระบุ) .....
6. อายุ:
  - น้อยกว่า 25 ปี
  - 25-30 ปี
  - 31-35 ปี
  - 36-40 ปี
  - 41-45 ปี
  - 46-50 ปี

- 51-55 ปี
  - สูงกว่า 55 ปี
7. รายได้ครอบครัว ต่อเดือน:
- น้อยกว่า 1,000 บาท
  - 1,000-3000 บาท
  - 3,000-6,000 บาท
  - 6,000-10,000 บาท
  - 10,000-15,000 บาท
  - 15,000-20,000 บาท
  - 20,000-25,000 บาท
  - 25,000-30,000 บาท
  - มากกว่า 30,000 บาท
  - อื่น ๆ .....
8. ท่านทำงานบริการเด็กปฐมวัยมานานเท่าไร:
- น้อยกว่า 1 ปี
  - 1-2 ปี
  - 2-3 ปี
  - 3-4 ปี
  - มากกว่า 4 ปี

**Graduate Research Study**  
**The ASQ: Thai**  
**Early Childcare Staff Information Survey**

**Instructions:** Please complete this survey.

**Early Childcare Staff information**

1. Language:

- Thai
- Lao
- Khmer
- Chinese
- Vietnamese
- Other .....

2. Ethic:

- Thai
- Lao
- Khmer
- Chinese
- Vietnamese
- Other .....

3. Education level:

- Graduate degree
- Degree
- Diploma
- High school—Mathayom 6
- Secondary school—Mathayom 3

4. Degree in early childhood: Yes \_\_\_\_\_ No \_\_\_\_\_

5. Degree/Diploma/Certificate: \_\_\_\_\_

6. Age:

- >25
- 25-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- Above 55

7. Monthly income:

- >1,000 baht
- 1,000-3000 baht
- 3,000-6,000 baht
- 6,000-10,000 baht
- 10,000-15,000 baht
- 15,000-20,000 baht
- 20,000-25,000 baht
- 25,000-30,000 baht
- Above 30,000 baht
- Other .....

8. How long have you been working for early childhood services?

- > 1 year
- 1-2 years
- 2-3 years
- 3-4 years
- Above 4 years

## การวิจัยระดับบัณฑิตศึกษา

## The ASQ: Thai

## แบบสำรวจความพึงพอใจสำหรับผู้ปกครอง

คำชี้แจง: กรุณากรอกแบบสำรวจต่อไปนี้ หลังจากที่ท่านได้กรอกแบบสอบถามระดับพัฒนาการ ฯ (ASQ: Thai) กับลูกของท่าน

1. คุณใช้เวลาในการทำแบบสอบถามฯ ประมาณเท่าไร
  - น้อยกว่า 10 นาที
  - 10-20 นาที
  - 20-30 นาที
  - มากกว่า 30 นาที
2. คุณต้องการความช่วยเหลือในการทำแบบสอบถามนี้หรือไม่
  - ใช่ บ้างครั้งต้องการความช่วยเหลือสำหรับคำถามบางข้อ
  - ใช่ ต้องการความช่วยเหลือตลอดการทำแบบสอบถาม
  - ไม่ต้องการความช่วยเหลือเลย คำถามชัดเจนทุกข้อ
3. คำถามทุกข้อง่ายต่อความเข้าใจหรือไม่
  - ใช่ เข้าใจทุกข้อ
  - เข้าใจบ้าง แต่ไม่ทั้งหมด
  - ไม่เข้าใจเลย
4. คำถามข้อต่าง ๆ เหมาะสมต่อระดับพัฒนาการในช่วงอายุของเด็กหรือไม่
  - เหมาะสมมาก
  - ค่อนข้างเหมาะสม
  - ไม่เหมาะสม
5. แบบสอบถามนี้ ..... (กรุณาเลือกข้อที่เหมาะสมที่สุด)
  - น่าสนใจดี
  - สามารถช่วยให้ข้าพเจ้าคิดเกี่ยวกับพัฒนาการลูกของข้าพเจ้า
  - แบบสอบถามนี้ยาวไป
  - เสียเวลาในการทำ
  - บอกระไรได้ไม่มาก
6. ท่านมีข้อเสนอแนะอะไรที่จะช่วยในการพัฒนาแบบสอบถามนี้ กรุณาระบุ

.....

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**Graduate Research Study**  
**The ASQ: Thai**  
**Family Utility Survey**

**Instructions:** Please complete this survey after filling out a questionnaire on your child.

1. How long did it take you to complete the ASQ: Thai questionnaire?
  - Less than 10 minutes
  - 10-20 minutes
  - 20-30 minutes
  - More than 30 minutes
2. Did you need help in completing the questionnaire?
  - Yes, I asked a few questions to clarify some points
  - Yes, I needed help all throughout the process
  - No, the questionnaire is very clear
3. It was easy to understand the questions:
  - Yes
  - Sometimes
  - No
4. The questions were appropriate for my child's age:
  - Yes
  - Sometimes
  - No
5. The questionnaire ..... (please check all that apply):
  - Was interesting
  - Helped me think about my child's development
  - Tool too long
  - Was a waste of time
  - Didn't tell me much
6. How would you change this questionnaire to make it better?

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## การวิจัยระดับบัณฑิตศึกษา

## The ASQ: Thai

## แบบสำรวจความพึงพอใจสำหรับเจ้าหน้าที่และครูสอนเด็กปฐมวัย

คำชี้แจง: กรุณากรอกแบบสำรวจต่อไปนี้ หลังจากที่ท่านได้เก็บข้อมูลทุกอย่างแล้ว

1. หน้าที่ของคุณ
  - ครูปฐมวัย
  - เจ้าหน้าที่ให้บริการเด็กปฐมวัย
  - พยาบาล
  - เจ้าหน้าที่อนามัยตำบล
  - หมอ
  - อื่น ๆ .....
2. คุณเคยได้ยินเกี่ยวกับแบบสอบถามฯ นี้ มาก่อนการวิจัยนี้หรือไม่
  - ได้ยินมาก่อน
  - ได้ยินบางครั้ง
  - ไม่เคยได้ยินเลย
3. แบบสอบถามนี้ใช้ง่ายหรือไม่
  - ใช้ง่าย
  - ค่อนข้างง่าย
  - ไม่ง่ายเลย
4. การใช้แบบสอบถามนี้เสียเวลามากหรือไม่
  - ใช่ เสียเวลามาก
  - ค่อนข้างเสียเวลา
  - ไม่เสียเวลาเลย
5. ท่านหรือเจ้าหน้าที่ในหน่วยงานของท่านได้ช่วยผู้ปกครองเด็กในการกรอกแบบสอบถามนี้หรือไม่
  - ไม่ได้ช่วยเหลือ ผู้ปกครองส่วนใหญ่กรอกแบบสอบถามด้วยตนเอง
  - ช่วย ข้าพเจ้า หรือเจ้าหน้าที่ ขอให้ช่วยตอบคำถามบางคำถาม
  - ช่วย ข้าพเจ้า หรือเจ้าหน้าที่อำนวยความสะดวกทุกอย่างตลอดการทำแบบสอบถาม
6. ท่านมั่นใจในผลของแบบสอบถามนี้อย่างไร
  - มั่นใจมาก
  - มั่นใจบ้าง
  - ไม่มั่นใจเลย
7. คำถามข้อต่าง ๆ เหมาะสมต่อระดับพัฒนาการในช่วงอายุของเด็กหรือไม่
  - เหมาะสมมาก
  - ค่อนข้างเหมาะสม
  - ไม่เหมาะสม
8. ภาษาที่ใช้ชัดเจน ตรงจุด และง่ายต่อความเข้าใจหรือไม่

- ใช่  
 บางครั้ง  
 ไม่เลย
9. คำถามต่าง ๆ ที่ใช้สอดคลองเข้ากับวัฒนธรรมหรือไม่
- ใช่  
 บางครั้ง  
 ไม่เลย
10. มีข้อใดบ้าง ที่ท่านคิดว่าไม่สอดคลองกับวัฒนธรรมการเลี้ยงดูเด็ก กรุณาให้รายละเอียด ต่อไปนี้
- ด้าน ..... ระดับอายุ ..... เดือน คำถามข้อ .....  
 ข้อเสนอแนะ .....  
 ด้าน ..... ระดับอายุ ..... เดือน คำถามข้อ .....  
 ข้อเสนอแนะ .....  
 ด้าน ..... ระดับอายุ ..... เดือน คำถามข้อ .....  
 ข้อเสนอแนะ .....  
 ด้าน ..... ระดับอายุ ..... เดือน คำถามข้อ .....  
 ข้อเสนอแนะ .....
11. ท่านคิดว่าแบบสอบถามมีส่วนช่วยในการคัดกรองเด็กหรือไม่
- ใช่  
 บางครั้ง  
 ไม่เลย
12. ท่านคิดว่าท่านได้เรียนรู้เกี่ยวกับพัฒนาการของเด็กจากการทำแบบสอบถามหรือไม่
- ใช่  
 บางครั้ง  
 ไม่เลย
13. ท่านคิดว่าท่านจะใช้แบบสอบถามนี้ในอนาคตหรือไม่
- ใช่  
 บางครั้ง  
 ไม่เลย
14. ท่านมีข้อเสนอแนะอะไรที่จะช่วยในการพัฒนาแบบสอบถามนี้ กรุณาระบุ
- .....
- .....
- .....
- .....
- .....



**Graduate Research Study**  
**The ASQ: Thai**  
**Early Childcare Staff Utility Survey**

**Instructions:** Please complete this survey after you complete the data collection.

1. Are you a:
  - teacher
  - Early childcare staff
  - Nurse
  - Sub-district public health center staff
  - Doctor
  - Other .....
2. Do you hear about any screening tools before this research?
  - Yes
  - Sometimes
  - No
3. Was the tool easy to implement?
  - Yes
  - Sometimes
  - No
4. The implementation of the tool is time consuming:
  - Yes
  - Sometimes
  - No
5. Did your personnel need to assist parents in completing the questionnaire?
  - No, most parents could complete the questionnaire by themselves
  - Yes, a personnel was needed to answer a few questions
  - Yes, a personnel needed to provide assistance all throughout the process
6. How confident are you with the results of the screening tool?
  - Very confident
  - Somewhat confident
  - Not confident at all
7. The questions were appropriate for the children's age:
  - Yes
  - Sometimes
  - No
8. The language was clear and easy to understand:
  - Yes

- Sometimes
- No

9. The questions were culturally appropriate:

- Yes
- Sometimes
- No

10. If applicable, please write the number of questions that you think are not culturally appropriate and give a brief explanation:

Domain: \_\_\_\_\_ Age interval: \_\_\_\_ Months Question number:

Comment: \_\_\_\_\_

Domain: \_\_\_\_\_ Age interval: \_\_\_\_ Months Question number:

Comment: \_\_\_\_\_

Domain: \_\_\_\_\_ Age interval: \_\_\_\_ Months Question number:

Comment: \_\_\_\_\_

Domain: \_\_\_\_\_ Age interval: \_\_\_\_ Months Question number:

Comment: \_\_\_\_\_

Domain: \_\_\_\_\_ Age interval: \_\_\_\_ Months Question number:

Comment: \_\_\_\_\_

11. Do you think that this questionnaire is helpful for screening?

- Yes
- Sometimes
- No

12. Did you learn anything about child by completing the ASQ: Thai?

- Yes
- Sometimes
- No

13. Would you consider using this questionnaire in the future?

- Yes
- Sometimes

No

14. How would you change this questionnaire to make it better?

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