RELATIONSHIP BETWEEN LIFE ASSETS AND EMOTIONAL QUOTIENT AND DEVELOPMENT AMONG PRESCHOOL CHILDREN : A CASE STUDY IN PRESCHOOL CHILDREN CENTER; LADKRABANG DISTRICT, BANGKOK

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ABSTRACT

This study research aims to investigate: 1) the relationship between life assets, development and emotional quotient of preschool children; 2) the relationship between development and the emotional quotient of preschool children; and 3) the correlation between each area of development of preschool children. The sample group included 378 children, ages 3-5 years studying at 5 Bangkok preschool children centers in the Lad Krabang District. The sample group was selected by the Multi-stage Sampling. The research instruments involved the Life Assets Survey Tool for Preschool Children, ages of 3-6 years, and Emotional Quotient Assessment Form for Preschool Children, ages of 3-5 years as reported by teachers/caregivers, and Preschool Children Development Inventory or Denver II. Descriptive statistics were used for data analysis to determine the relationship of data. In addition, a correlation analysis was also performed.

The data results showed that the preschool children were mostly delayed in the development of language, fine motor, and adaptability. The emotional quotient of most preschool children must be reinforced. Life assets, in terms of power of self and power of community, were positively correlated with the general development of preschool children at a statistically significance of 0.05. Interestingly, three types of empowerment of life assets were correlated with the emotional quotient in each area of development of preschool children. The preschool children's general development was positively correlated with their emotional quotient at a statistically significance of 0.01. Language development was positively correlated with the gross motor development, fine motor development, and adaptability at a statistically significance of 0.01. In addition, the language development was positively correlated with the social development and self-care at a statistically significance of 0.05.

The above results indicate that the main persons responsible for rearing preschool children assisting that should be engaged in knowledge and skill development, along with fostering and possessing good attitude in an affort to create constructive activities to reinforce those 3 empowerment factors involved in preschool children's life assets, so that children an able to achieve the appropriate physical, mental, emotional, social and cognitive development based on their specific age.

KEY WORDS: LIFE ASSETS / DEVELOPMENT / EMOTIONAL QUOTIENT / PRESCHOOL CHILDREN

177 pages

ความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย: กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง

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บทคัดย่อ

การศึกษาครั้งนี้เป็นการศึกษาวิจัยเชิงสำรวจ มีวัตถุประสงค์เพื่อ1)ศึกษาความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย 2)ศึกษาความสัมพันธ์ระหว่างพัฒนาการกับความฉลาดทางอารมณ์เด็กปฐมวัย และ3)ศึกษาความสัมพันธ์ระหว่างพัฒนาการแต่ละด้านของเด็กปฐมวัย ทำการศึกษาในเด็กอายุ 3 - 5 ปี จำนวน 378 คน ที่ศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง ทั้ง 5 แห่ง กลุ่มตัวอย่างได้จากการคัดเลือกแบบหลายขั้นตอน เครื่องมือที่ใช้ในการศึกษา ได้แก่ แบบสำรวจต้นทุนชีวิตเด็กปฐมวัยอายุ 3-6 ปี แบบประเมินความฉลาดทางอารมณ์เด็กปฐมวัยอายุ 3 - 5 ปีสำหรับครู/ผู้ดูแลเด็ก และแบบทดสอบพัฒนาการเด็กปฐมวัย Denver II วิเคราะห์ข้อมูลโดยใช้สถิติเชิงบรรยาย แสดงข้อมูลพื้นฐานและความสัมพันธ์อย่างง่ายของข้อมูลพื้นฐานบางตัว และวิเคราะห์ความสัมพันธ์โดยใช้สถิติ Correlation Analysis

ผลสำรวจพบเด็กปฐมวัยมีพัฒนาการด้านภาษาล่าช้ามากที่สุด รองลงมาคือด้านการใช้กล้ามเนื้อเล็กและการปรับตัว เด็กส่วนใหญ่มีความฉลาดทางอารมณ์อยู่ในระดับจำเป็นต้องส่งเสริมพัฒนา ผลการศึกษาพบความสัมพันธ์ระหว่างต้นทุนชีวิตด้านพลังตัวตนและพลังชุมชนมีความสัมพันธ์กับพัฒนาการ โดยรวมของเด็กปฐมวัยในทางบวกอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 และพบความสัมพันธ์ระหว่างต้นทุนชีวิตทั้ง 3 พลังกับความฉลาดทางอารมณ์และพัฒนาการรายด้านของเด็กปฐมวัยในหลายประเด็นที่น่าสนใจ ส่วนความสัมพันธ์ระหว่างพัฒนาการ โดยรวมกับความฉลาดทางอารมณ์มีความสัมพันธ์กันในทางบวกอย่างมีนัยสำคัญทางสถิติที่ระดับ.01 พัฒนาการด้านภาษากับพัฒนาการด้านกล้ามเนื้อมัดใหญ่ กล้ามเนื้อเล็กและการปรับตัว มีความสัมพันธ์กันในทางบวกอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 และพัฒนาการด้านภาษากับพัฒนาการด้านสังคมและการช่วยตนเอง มีความสัมพันธ์กันในทางบวกอย่างมีนัยสำคัญทางสถิติที่ระดับ .05

ข้อมูลข้างต้นแสดงให้เห็นว่าควรส่งเสริมให้ผู้ทำหน้าที่หลักในการเลี้ยงดูเด็กปฐมวัย และชุมชนมีความรู้ มีทักษะ และทัศนคติที่ดีต่อการสร้างกิจกรรมพลังเชิงบวกให้ต้นทุนชีวิตทั้ง 3 พลังเข้มแข็งมากขึ้น เพื่อช่วยให้เด็กปฐมวัยมีพัฒนาการด้านร่างกาย จิตใจ อารมณ์ สังคม และสติปัญญา พัฒนาได้อย่างเหมาะสมตามช่วงวัย

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CHAPTER 1
INTRODUCTION

1.1 Background and Rationale of the Research

Human development goals in the 21st century are the physical and mental development, control and emotional intelligence, awareness-wisdom-intellect, language, culture and communication skills, social-human relationship, and spiritual-moral-ethics. Individuals would be able to survive efficiently in the present complicated society if they have adaptation at all time to correspond to any changes in the society. An individual's adaptation must partly rely on his inner characters, e.g. intelligence quotient, habits, physical health and mental health while he must also learn or be inculcated by others until he engages some skills and experience. (1)

The National Child and Youth Development Plan, B.E. 2555 – 2559 (2012 – 2016) formulates the development of child and youth quality. To elaborate, every child and youth must be cared appropriately and thoroughly in each specific age by parents, caregivers, communities and society by multi-occupational knowledge. The care for children and youth also needs skills and attitude realizing the children and youth's value without any discrimination, but fairness and involvement. (2) The management system for child and youth protection and development must be improved in conjunction with the framework stated in the 11th National Economic and Social Development Plan, which offers guidelines of strengthening the roles of family, community and religion for good relationship. (3) It also states some measures to develop the quality of children and youth according to specific ages, and focuses on urgent matters to be cohesively undertaken appropriately based on the necessity and requirement of preschool children development in terms of intelligence, emotions, morality and ethics. These measures require the interdisciplinary approach and integration between all related agencies. The child development centers must be promoted and assessed regularly. (2)

Child and youth development is a necessary and important mission to make the global community and Asean Community strong in the future because any kinds of development, either politics or economic, social and cultural security, need people with quality, good qualifications, knowledge, intelligence, life skills, working skills, good mental health, good physical health, social skills to live with other people happily, and ethics in living. Every country believes that human development is a mission to be completely attained by everyone and every organization to minimize the gap of people quality, and, finally, every country hopes that children and youth become the core power to drive the society's prosperity. (6)

Human development to get the qualified people involves 2 important factors: internal factor or nature and external factor or nurture. The nature or genes determines the level of abilities or development tendency whereas the nurture causes the quick or delayed development. (4) "Early childhood" is the life span that is the most crucial foundation for individuals in terms of intelligence, abilities, emotional quotient, personalities and behavior. Many countries worldwide have accepted and greatly valued the foundation provided to children at this age because the preschool children had developmental changes in every area so quickly. Especially, the child brain development starts in the womb. On delivery, a child's amount of brain cells is almost equal to adults. The child's brain grows continuously and massively from birth to the age of 3 years. After this age, the brain cells no longer increase, but the nerve cells in the brain will develop. (5) Quick and obvious development in any area depends on the windows of opportunity. Early childhood is the critical period for several developmental areas, e.g. binocular vision, emotional control, habitual way of responding, language, peer social skills and cognition. Therefore, early childhood is so critical for human development.

"Life assets of Thai children and youth" – This is a viewpoint on the predisposing factor or good characters of children and youth, resulted by a long reinforcement from birth to adulthood. Life assets are influenced by internal and external factors, including family, school, peer or community. They cause children and youth to grow up with competency and to live in the society happily. Life assets consist of 5 main powers: power of self, power of family, power of intelligence, power of peer and creative activity, and power of community. According to a research in

America, if any youths or families passed more than 20 indicators, the youths tended to have fewer risky behaviors. If passing more than 30 indicators, it could be concluded that the families and youths were strong and the social problems would be decreasing at a level of significance. (9) It is widely known that, from infancy up to the age of 6 years, children must be cared by parents, family and preschool children center. Family is the core institute to reinforce the child's life assets. (6) The parents' rearing with love and understanding definitely reinforce the child's mental and physical quality. Good inculcation by society, culture, tradition and environment all reinforces both internal and external life assets in children. (8) The important life assets during early childhood are the power of family, power of self, and power of community. (7)

According to the 2010 Health and Development Survey in preschool children aged between 0-5 years by the Department of Health, Ministry of Public Health, 29.7% of Thai children had the delayed development while 70.3% of them had normal development or slightly increasing from Year 2007. However, according to the retroactive analysis on health and development surveys in preschool children aged between 0-5 years, the children's irregular development has been gradually increasing. In 1999, 2004 and 2007, children's normal development stayed at 71.7%, 72.0% and 67.70% respectively while the delayed development reached 28.3%, 28.0% and 32.3% respectively. (10) This is a problem of child health that must be mutually and seriously healed by all related organizations or agencies.

According to the Emotional Quotient Survey Project in Thai children aged between 3-5 years by the Department of Mental Health, Ministry of Public Health in 2007, most Thai children aged 3-5 years got the emotional quotient scores in the range of 125-198 while, in 2002, Thai children got the EQ scores in the range of 139-202 or the mean declined for 9.47. It was also found that the EQ and IQ scores were correlated in every area, especially in terms of enthusiasm, curiosity, assertiveness and self-satisfaction. (9) In school-age children aged between 6-11 years, their emotional quotient rate has been declined as well. In 2002, the emotional quotient stayed at 186.42, to 179.58 in 2007 and to 169.72 in 2011. (10) (11)

According to Thai children's intelligence survey from early childhood to school-age, the results showed that although Thai children's development and quotient

were at normal rate (IQ 90-109), but the means were lower than 100 for several years, especially in school-age children and teenagers. No surveys revealed that the mean of quotient scores was higher than 100. Interestingly, the surveys in preschool children indicated that their quotient scores were close to 100 or higher. (12) (13) There must be some additional studies about which main factors or joint factors affect the development, emotional quotient and intelligence quotient in preschool children in Thailand.

For the national development of preschool children, the quantitative records showed that the school enrollment of preschool children tended to be rising. In the educational year of 2010 – 2011, the school enrollment rates accounted for 76.03% and 76.80% of preschool population respectively. Grade 1 (Prathom) students passing the preparation of readiness in the educational year of 2010-2011 tended to be higher as well or it accounted for 89.85% and 92.48% of total Grade 1 students respectively. (14) UNICEF identified that around one sixths of 900,000 children at ages of 3-5 years had no chance to access to education. (15) Because their parents must work outside to earn for more family income, so they have no time for child rearing and their children must be cared by other persons, especially children center. An access to the services, quality and care of child development centers is an educational opportunity for young children. According to the records, the number of learning centers, nurseries and child development centers has been increasing constantly from 17,439 centers in 2006 to 18,795 centers in 2009. The children receiving the preparation for readiness have been increasing in every region, except Bangkok. (14)

From the certified civil registration database, Registration Administration Bureau, Department of Provincial Administration, Ministry of Interior, Bangkok contained 5,674,843 habitants (16), and it was the place that most children and youth live in the country. There were 176,184 children aged between 3-5 years in Bangkok from children totaling 2,361,448 in 2011. (17) Bangkok started the child development screening in 2009 and it continues up to now. The child development screening project was to screen children, from birth to the age of 5 years, who may have the developmental impairment. By this project, there were 360,044 impaired development children. Among these, 29,938 children were risky to the delayed development. About 9,571 children have already received the development reinforcement while 20,367

children were waiting to attend the systematic development promotion program. In 2013, Bangkok Metropolis initiated the physical development project for 311 child development centers, and the construction of 6 child development model centers in 6 zones; namely, South Krung Thong, North Krung Thon, Central Bangkok, South Bangkok, East Bangkok and North Bangkok. This allows young children to get the standard care and better quality of life, and this upgrades the preschool children centers to meet the national child development standard. In this regard, the preschool children's skills in every area are developed and the Bangkok children centers will be the second core institute after the family helping promote child skills and life skills. (18)

The Bangkok children centers, Lad Krabang District, were established in 2004 to provide places of rearing and caring for preschool children. The centers are located in communities. They are operated and controlled by the Preschool Children Community Committee. The Centers provide the care service to children aged between 2–6 years. The caregivers are volunteers working for the community development in the Bangkok children centers, and appointed by the District Director. The preschool children centers established in various communities are operated under several limitations, e.g. budget, small space, and volunteers caring for children had no knowledge or understanding about child rearing. Subject to Bangkok development policy to upgrade the preschool children centers to meet the standard criteria of national child development centers, the Bangkok children centers, Lad Krabang District, have the mission in standardizing its child development centers in terms of physical improvement and child development reinforcement so that the children engage necessary skills for their school-based education.

The data from the National Development and Emotional Quotient of Thai Children and child development screening in Bangkok showed that many Thai children and preschool children in Bangkok had the delayed development and declining emotional quotient. It is interesting to investigate which factors influence or relate to the development and emotional quotient of preschool children. According to the viewpoints regarding the predisposing factors or good characters of children and youth based on life assets in 3 life spans, there were some studies on life assets for youth at ages of 12-25 years and for school-age children. The field survey for life

assets of preschool children has never been done. Only life assets survey tool for preschool children was tested in the sample areas. In this research, the Researcher considered that life assets should be an important factor associated with the development and emotional quotient of preschool children. Therefore, the Researcher was interested in surveying the life assets of preschool children, and using the life assets survey tool for preschool children, which was revised and developed in 2013, in this research in order to learn strong and weak life assets of these children, situations of development and emotional quotient in the studied area, relationship between life assets and development and emotional quotient in preschool children, relationship between emotional quotient and development in preschool children, and correlation between each area of development in preschool children, e.g. social development and self-care, fine motor and adaptability development, language development, and gross motor development. At present, the child development center deems a core agency joining hands with the family in reinforcing the development and emotional quotient in children to be prepared for studying in Grade 1. The results of this research would be returned to various preschool child development center, community development agencies in the District Office, and hospitals or health service centers responsible for reinforcing the development and emotional quotient in preschool children. Then, such agencies can use these results to determine their working plan for reinforcing the development in preschool children, and for reinforcing any delayed development until all children have the appropriate physical, mental, emotional, social and cognitive development. The activities would be adjusted to reinforce children's life assets. In addition, the activities and good interactions between families, preschool child development centers, schools, hospitals and communities would be arranged further.

1.2 Research Questions

1. Do life assets of preschool children relate to the development of preschool children?

2. Do life assets of preschool children relate to the emotional quotient of preschool children?

3. Does the development of preschool children relate to the emotional quotient of preschool children?

4. Is each area of development in preschool children, e.g. social development and self-care, fine motor and adaptability development, language development, and gross motor development correlated with each other?

1.3 Objectives of the Research

1. To survey the development and emotional quotient in preschool children.

2. To survey life assets in preschool children.

3. To study the relationship between life assets in respect with power of family, power of self and power of community and the development in preschool children.

4. To study the relationship between life assets in respect with power of family, power of self and power of community and the emotional quotient in preschool children.

5. To study the relationship between development and emotional quotient in preschool children.

6. To study the correlation between each area of development in preschool children, e.g. social development and self-care, fine motor and adaptability development, language development, and gross motor development.

1.4 Research Hypothesis

1. Life assets of preschool children relate to the development of preschool children.

2. Life assets of preschool children relate to the emotional quotient of preschool children.

3. The development of preschool children relate to the emotional quotient of preschool children.

4. Each area of development in preschool children, e.g. social development and self-care, fine motor and adaptability development, language development, and gross motor development relates with each other.

1.5 Scope of the Study

1. The populations of this research were 6,395 preschool children aged between 3-5 years, 11 months, 29 days in Lad Krabang District, Bangkok.

2. The sample group included 378 preschool children aged between 3-5 years, 11 months, 29 days in the Bangkok preschool children centers, Lad Krabang District, in the educational year of 2013.

3. The studied variables involved the life assets of preschool children, social development and self-care, fine motor and adaptability development, language development, gross motor development and emotional quotient of preschool children.

1.6 Definitions

1. Life assets mean the predisposing factor or good characters in terms of mind, society and culture, which take effect to the cognitive process, decision-making and behaviors as reinforced since infancy to adulthood. Life assets reflect positive reactions and behaviors under 5 hidden powers; namely, power of family, power of self, power of community, power of intelligence, and power of peer and creative activity. Preschool children shall have 3 kinds of power; namely, power of family, power of self, and power of community. Power of family reflects interactions and behaviors conducted by parents, guardians or caregivers to children. Power of self reflects interactions and behaviors of children. Power of community reflects the circumstances in that community or area to children. (20)

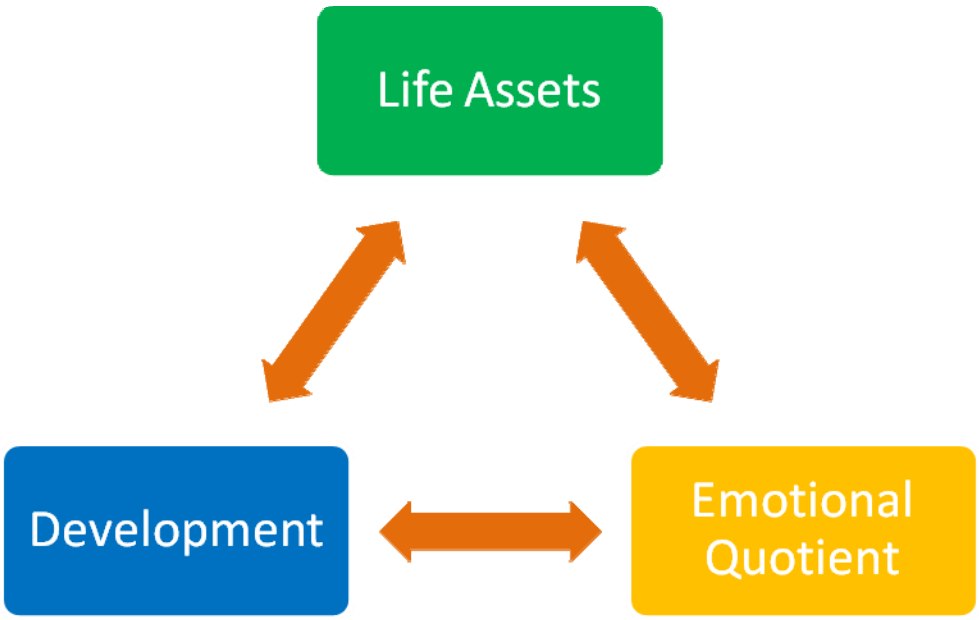
2. Preschool children mean children aged between 3-5 years, 11 months and 29 days who were studying in the Bangkok preschool children centers, Lad Krabang District, in the educational year of 2013.

3. Development means the changes of quality or efficiency so that the children are ready to show abilities to do new activities appropriate for their age. In

this research, the development was measured by the child development screening tool for preschool children or Denver II, which measured 4 areas of development: social development and self-care, fine motor and adaptability, language, and gross motor. (21)

4. Emotional quotient means an individual's abilities to recognize feelings, thought and emotions of himself or others, to control and handle his emotions and inspiration, to be patient to respond to his desire appropriate, and to tie good relationship with neighboring people efficiently. As a result, that person is able to live with others constructively and happily. The emotional quotient assessment also covers the emotional quotient for being good, smart and happy. (22)

1.7 Conceptual Framework



1.8 Expected Benefits

1. The results would provide the guideline for all related agencies working for child, family and community development in formulate their policies for child and family development.

2. The results make the concept about life assets reinforcement activities stronger, which enables the families, children and communities to do various activities together, and help reinforce the child development in terms of physical body, emotions, society and cognition appropriately based on their age.

3. Life assets survey tool becomes an innovation used to assess interactions between parents, children and community, which may be further developed.

CHAPTER 2
LITERATURE REVIEW

This research aims at investigating the relationship between life assets and emotional quotient and development among preschool children. The related documents and research were studied and presented as per the following topics:

2.1 Development of preschool children

2.1.1 Definitions and significance of preschool children

2.1.2 Developments of preschool children

2.1.3 Tendency of child development and situations of children and youth development

2.1.4 Development screening

2.2 Emotional quotient

2.2.1 Definitions and significance of emotional quotient

2.2.2 Components of emotional quotient

2.2.3 Situations relating to children and youth emotional quotient

2.2.4 Emotional quotient assessment

2.3 Life assets

2.3.1 Definitions and significance of life assets

2.3.2 Types of life assets

2.3.3 Life assets inventories

2.4 Research relating to life assets, development and emotional quotient of preschool children

2.1 Development of preschool children

2.1.1 Definitions and significance of preschool children

Definitions of preschool children

Sirima Pinyoanantapong (2001) defined preschool children as the children first born up to the age of 5 years, 11 months, 29 days. (23)

Sirima Pinyoanantapong (2001) said that childhood from birth up to the age of 8 years or early childhood is the most important stage for all development aspects, including physical, cognitive, emotional, mental, social, and personality development. If considering the nature, desire, growth and learning, preschool children may be divided into 4 periods as follows (23):

1) Baby – A child at birth up to the age of 2 years. The children aged 1 month are usually called “neonate”.

2) Infant or toddle means the children aged between 1-3 years.

3) Preschool children mean the children aged between 3-6 years when they like freedom for movements and associations. The children who are aged between 3-5 years and their parents take them to the kindergarten are called the preschoolers while the children aged between 5-6 years and preparing for studying in Grade 1 is called the kindergartens.

4) Late preschool children mean the children aged between 6-8 years and they may be studying in the kindergarten level or in Grade 1 or Grade 2.

Therefore, preschool children mean the children at birth up to the age of 5 years, 11 months and 29 days. (23)

Massoglia, 1977) (cited in 24) said that preschool children is used to call the children at birth up to the age of 6 years. It is the age when the quality of life in terms of physical body, emotion, society and intelligence begin completely.

Pacharee Suankaew (1993) (cited in 25) said that preschool children mean the children aged between 1.5 years or 2 years up to 6 years. The nature and characters are specific at each age.

Yaowapa Dejakup (1999) said that preschool children mean the children at birth up to 6 years in the educational system, and they engage the significant physical, emotional, social and cognitive development. (24)

The Ministry of Education (2004) stated that, in the philosophy of preschool education, the preschool education is to develop the children at birth up to the age of 5 years based on rearing and promoting the learning process responding to the nature and development depending on the potential each child and under the social and cultural contexts of that child. Sympathy and understanding everyone gives to a child will pave his quality of life, and develop him to be a perfect human, which causes values to himself and society. The Ministry of Education, therefore, provided the 2003 Preschool Curriculum. Under this, preschool children are divided into 2 phases: those younger than 3 years and those aged between 3-5 years (age of 5 years means 5 years, 11 months, 29 days). (26)

The developmental psychologists divided the general human development by age and maturity (Shaffer, 1985 cited in Jittnan Dejakup, 2004) as follows:

Childhood – it starts at the age of 3 years up to 12 years. At this life span, a child grows up from infancy. Most growth relates to bone, muscle and system coordination. The child can observe the gender differences and joins with other same-sex children. The child feels more interested in and understand his surroundings, and is able to do some activities by himself and to use the language in communicate some meanings better. Childhood may be divided into 3 sub-spans as follows (27):

- Early childhood: 2-5 years
- Middle childhood: 6-9 years
- Late childhood: 10-12 years

Sriruen Kaewkangwan (2006): Preschool children or early childhood means the children aged between 3-6 years. The main developments are: children associate with other children, have skills in using the gross motor and fine motor, have more energy, can do some more activities, know some playing as well as artistic playing like planting, and know how to use the imagination. However, their cognitive development is not so complete; they may have some illogical ideas and egocentric character, but they have some understanding about other people. (28)

Sriruen Kaewkangwan (2006): Early childhood or preschool age starts at the age of 2 years and a half up to 6 years. The outstanding characters of this life span are that the children want freedom and want to stand up for themselves, do something by themselves, like to deny, are stubborn and do not please anyone easily; so this

period may be called the negativistic period. These characters occur because they just pass the period of infancy, begin to know how to use the language, to understand their environment, and to use some physical abilities, e.g. fingers, limbs, etc., therefore, they want to show these abilities. Children at this age have more associations with family members and friends nearby, so they want to stand up for themselves more. They want to spoil themselves and please others simultaneously. (28)

As mentioned above, preschool children mean the children at birth up to the age of 6 years and they have the significant physical, emotional, social and cognitive development.

Significance of preschool children

Erikson (Erikson, 1993 cited in Samorn Thongdee, 1994: 11) (cited in 25) indicated that children aged 3-6 years develop their abilities along with creativity, and want to learn new things. If the children at this age are encouraged appropriately and accurately, they will grow up to be valuable resources of the society.

Havighurst (cited in Samorn Thongdee, 1994: 11-12) (cited in 25) stated that individuals at each age would pass the development phases, from childhood to aging. If the children have the adaptation, and meet the success of development from their childhood, they will meet further success in higher development.

Yaowapa Dejakup (1999: 1) explained the importance of preschool children that it is the most important time for human life development. The life experience during the first 5 years greatly results to the children's personalities. If the children's development is promoted efficiently, they will become the quality adults in the future. Several psychologists and educators had the consistent thought that early childhood is humans' starting age and it's one of the most important spans as it roots and prepares for human life. It's also the phase humans engage the most learning in life. (24)

The Department of Educational Techniques (2003: 5) explained that early childhood education is the child development at birth up to the age of 5 years based on rearing and promoting the learning process responding to the nature and development depending on the potential each child and under the social and cultural contexts of that child. Love, sympathy and understanding everyone gives to a child will pave his

quality of life, and develop him to be a perfect human, which causes values to himself and society. (29)

In conclusion, early childhood is an important age when the children achieve all areas of development rapidly. The children have the learning and physical, emotional, social and cognitive development. Therefore, all family, school and community must cooperate and build the good relationship with children to be the foundation of all their development areas and personalities as well as habits so that these children are the quality citizens in the future.

2.1.2 Developments of preschool children

Early childhood is the first pace of life development. children are developing their identities, and pay attention to their surroundings. Thus, the guardians and caregivers should understand and accept these specific characters accurately so that they will be able to support and care of children at this age appropriately.

Development has several meanings as described below:

Hurlock (Hurlock, 1984) talked about “development” and “growth” that “development” means the qualitative and hieratical change while “growth” means the quantitative change or the increase of size and structure. Such enlargement does not include the physical appearance, but the organ structure and brain. The result of brain growth causes the children to engage more learning abilities, e.g. more memories and reasons. It can be said that the children engage both physical and mental growth. (30)

Diane E. Paplia and all (2003) said that the development is the result of change and progress, and this change is both quantitative and qualitative. The quantitative change includes height, weight and vocabularies. The qualitative change includes the change of structure and working structure from embryo to infancy, and the change of personalities and behavior, etc. (31)

Nittaya Kochpakdee (2000) defined the development as the progress and change of functioning to be more appropriate (maturation), which are different in each individual. It is the abilities of organ functioning until individuals have skills and abilities from touching the new environment, family and society. (5)

In conclusion, development means various changes of humans systematically and hieratically. The development is the qualitative change or change of

function efficiency in terms of physical body, emotion and brain and this functioning declines as well so that the children are ready to show abilities and do new activities appropriate for their age.

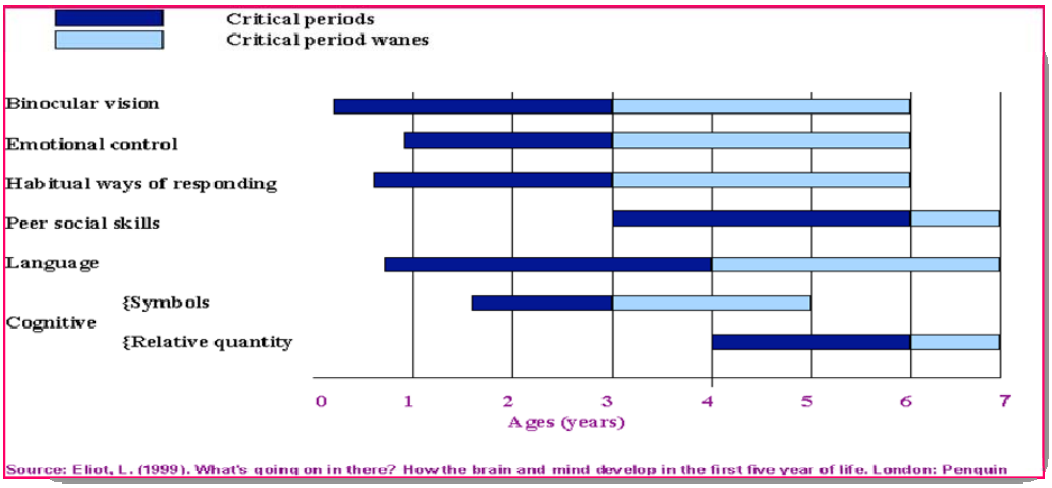


Figure 2.1 Critical periods for some aspects of brain development and function
Source: Eliot, L. (1999). What's going in there? How the brain and mind develop in the first five years of life. London: Penguin. (32)

From the above figure, the critical period of brain development falls in the range of birth to 5 years. This means that preschool children have the outstanding development in the area of cognition achieved through the nervous system from their sight. Emotional control, self-discipline, learning of social skills, language skills and primary cognitive process are explicit from the use of symbols. The second phase is the cognitive process deriving from interactions. If the childcare cannot respond to the children's development periods appropriately, their development will not be fully encouraged. After these critical periods, although the child caregiver wants to stimulate this development, it will be difficult or too late. (32)

Preschool children aged between 3-6 years are in the critical period of brain development, where they are capable of fully developing their physical, emotional, psychological and cognitive preparedness. Sigmund Freud said that "Humans' beginning age is the first 5 years. Any experience received during the early life span influences our life up to our death. It is believed that rearing during early

childhood takes great effects to children's personality development in the future". Joe L. Frost proposed that "children during the first 4-5 years of life engage the physical and mental prosperity that occurs most rapidly. In addition, they are sensitive to the influence of outer environment" If the children are not promoted or developed during this period, other areas of development will be clumsy and affect their future growth.

In general, early childhood involves both prettiness and unpleasantness. Preschool children like to flatter and help the adults, but they are sometimes stubborn. These children must be trained for social rules and regulations. They start learning how to live with other people at the same or different ages. They seriously learn behaviors based on their gender. They learn that they will be awarded if they obey the rules and they will be punished if they break those rules. They know how to lose and win and receive. The physical development in this period is quite slow, but their behaviors are so different from infancy. (28)

Physical development of preschool children

The overall physical development gradually grows. Preschool children's height and weight may not be so great and the growth rate may be quite slow if compared with infancy. The child's head becomes long and smaller, and proportionate to his body. The nature of infant face disappears. The milk teeth do not grow completely. The shoulder becomes wide. The limbs are longer. The body becomes longer and wider for 2 times from the new-born baby. Hands and feet are larger. Bone is stronger while the muscle and sensation can function well. Therefore, this period is the most proper to train the children to play any movement activities suitable for their energy. These activities will urge the children's learning, and develop their emotional, social and cognitive behavior. After this age, the children must engage the gross and fine motor control. Any development of physical fitness at this age is to prepare the children to do certain routine activities by themselves and to have other learning at their school age. If the parents and child caregivers do not encourage the children to do some daily activities by themselves, e.g. having food, wearing and taking off clothes, etc., the children will adjust to the outside world and other people outside the family difficultly because the children's world will more isolate from the family. (28)

Development of motor coordination of preschool children

Early childhood is time of motor coordination and development, which may be one outstanding physical development of children in this period. The large muscle, limbs and joints are gradually growing. This development results to the children's body balance and movements, walking and running. The children aged 5 years can climb and jump confidently, throw and pick up the ball, bicycle, swim and play simple gymnastics. The children can develop these abilities so quickly. However, the children at this age are unable to develop their fine motor completely like the gross motor. The children can write, draw, tie shoes and do some needlework. Handedness is to develop the fine motor to be more efficient. (28) Several studies showed that the more handedness the children have, the better and quicker they develop their intelligence (28).

Emotional development of preschool children

Carlson and Wang (2007) studied the emotional control skills in 53 children aged 4-6 years in the United States. They found that the children's emotional control skills are the development clearer seen in preschool children. These skills must be developed so long because the children have not yet been able to stop and control emotions methodically. The children's emotional development is correlated with their age and language development (33). Also, Garner and Power (1996) studied the relationship between temperament and emotional knowledge of preschool children and their receipt of despair and emotional control. The research included 82 preschool children in the United States. The result showed that when the children feel disappointed, they would be temperamental easily and present both negative and positive emotional reactions, which related to the control of temperament in children whose emotion is serious, and to children's no understanding of their own emotions. The children's emotional knowledge and joint of temperament could predict the limited emotional expression of preschool children. (34)

Therefore, preschool children may feel more frustrated than the infants may. They are usually stubborn, self-centered and ill-tempered. As they are in the negative phase, the children may have some emotions similar to the adults, e.g. anger, jealousy, sympathy, enthusiasm, gladness, aggression, and negativism. (28) (35)

Anger – Anger is the most common emotion of children at this age. Children's anger occurs easily because they want to stand up for themselves, and do not want to please anyone. Children present their anger in several ways, e.g. stamping down, screaming, wriggling on the floor, hurt themselves, jump, annoy and pretending to be painful, etc. (28) (35)

Negativism – Negativism occurs so frequently like anger. The children are negativistic because they want to do anything by themselves to practice new developed skills, e.g. muscle, limbs, etc. However, if the children are so stubborn; they may be too much forced until they do not stand on themselves so they have the strong resistance. Negativism may be expressed in several ways; for example, being silent and no response, pretending not to hear instructions, not caring for daily activities, pretending to do activities slowly, etc. Several studies showed that the authoritarian parenting style resulted to negativism in children. (28) (35)

Enthusiasm – Preschool children are in the questioning age because they know how to raise reasons and want to stand on themselves, so they are curious and raise many questions. The questioning age starts when the children are aged 2-3 years, and this is on peak at the age of 6 years. If the guardians respond to this emotion well, the children will achieve the quick development, and learn their self, society and surroundings. (28) (35)

Aggression – Aggression is resulted by tension and stress or the children learn this from any persons they meet. Children aged 4-5 years usually show the verbal aggression rather than fighting. Some children want to get attention by bullying their friends or attacking themselves. Sometimes, the children show the aggression to protect themselves. Children at this age should be advised how to show their aggression accepted by general people. Several studies were conducted to investigate the aggression in children. (28) (35)

Jealousy – This emotion occurs when one feels that he/she is going to lose his/her beloved things. The beloved things may be objects or intangible matters, e.g. love, attention. Some studies showed that the brothers/sisters having high jealousy were between girl and girl. The brothers/sisters at different ages are hardly jealous, but intimate (28).

Fear – At this phase, the children know what is fearful and what should be feared more than infancy because they know how to use reasons. Some stimulants cause the children to have more fear, either direct or indirect experience. The fearful behaviors may be shown in several ways, e.g. hiding, avoiding the fearful situation, running to the adult, etc. (28)

Gladness – The children having this emotion so much are those successful in standing on themselves. When the children engage the full efficiency in using muscle and sensation skills, they will feel glad. This emotion may occur if the children are able to tie the relationship with adults and other persons pleasantly. (28)

Social development of preschool children

Freud thought that what influences human development is sex. He divided human development into 5 stages: oral stage, anal stage, phallic stage, latency stage and genital stage. The psychosexual development stage of Sigmund Freud explained that children aged between 3-6 years are in the phallic stage when the sex organ is an area they seek for satisfaction as it is interesting and it is the erogenous zone. The children can observe the differences between male and female sex organs. Some children like to play their genitals. They are curious and want to see differences. In the phallic stage, it's time of the Oedipus complex, that is, a boy focuses upon his mother and feels jealous of his father who has close relationship with his mother. The Electra complex describes the girl's desire who focuses upon her father and feel jealous of her mother close to her father. When the children grow up and they can adjust their roles normally, they will understand that the father and mother have the couple relationship apart from the parental roles. Then, the children will turn to imitate the father or mother who is in the same sex with them (identification), so the children could develop their sex. However, if the children cannot remedy their feelings to the father or mother who are in the opposite sex, those children will have some problems about human relations, selection of spouse, and irregular sex roles in the future. (28)

The social development based on the concept of Erik Erikson (cited in 28) describes eight stages of psychosocial development. Preschool children are in the ages of 3-6 years or fall into Stage 3 of psychosocial development or the stage of initiative and guilt. As the children have more chance in survey their surroundings, they begin to

develop their specific abilities and stand on themselves. In the meantime, they are still unable to do everything they desire. Children begin to approach other persons because they want to stand on themselves, have language ability, abilities in using their muscle and sensation, and reasoning abilities. These children seek for friends at the same age. Most children at the kindergarten level may not have the smooth association with friends because they are quite self-centered. The association with friends is in the pre-gang age manner. Apart from actual friends, these children have some imaginative friends because, at this age, the children want to have friends, but they are still unable to tie good relationship with friends, so they imagine their own friends. The imaginative friends give both advantages and disadvantages, that is, the imaginative friends help reduce some tension in associating with friends. But, if the children are too pleasant with such imaginative friends, they will become fanciful. The period the children create the imaginative friends most is in the ages of 2.5 years up to 4.5 years. Children build the imaginative world and imaginative play. The imaginative play imitates the real life; for example, selling and buying something, playing the role of mother, imitating the soap opera from TV (28). Some studies showed that the children in rural areas and uncomplicated communities had cooperation more than competition while those in urban areas hardly learnt about the social cooperation and they preferred the competition. (36)

Garon N, Bryson SE, Smith IM. (2008) conducted a research in America, and they explained the emotional response that they was resulted by the executive function, which is the brain functioning process in controlling the cognition and expression. This executive function helps individuals control and plan for expressing problem-solving behaviors. This executive function also involves the cognitive activity, emotional response and overt behavior. These skills are essential in the daily life. In addition, the executive function is related to the learning skills, reading and writing skills, and emotional-social skills in preschool and school age children (37). For example, the research by Kolnik S. (2010) (38) and the research by Campbell SD, Shaw DS, Gilliom M. (2000) (39) conducted in the United States showed that the bad executive function caused bad social interactions with other people in school. Moilanen K, Shaw DS, Dishion TJ, Gardner F, Wilsion M. (2009) studied the factors

affecting children's executive function. The results showed that the factors affecting children's executive function were gender, ethnicity and family poverty. (40)

Language development of preschool children

Language development is so important because language communicates one's ideas, feelings and social relationship. Language development consists of 5 stages starting from infancy to early childhood:

Stage 1: reflexive vocalization – from birth to 1.5 months. Infants make noise automatically and meaninglessly.

Stage 2: babbling stage – from 1.5 months to 8 months. Infants produce meaningless sound, but it is important in their speaking development process. Children enjoy and are interesting in the vocal play.

Stage 3: Lalling stage – around 9 months. Children start speaking their native language.

Stage 4: echolalia – around 1 year. Children imitate sound from the environment, but do not know or understand the meaning of sound.

Stage 5: true speech – from the age of 1 year. Children understand the meanings of sound they produce from memorizing, use of reasons, and seeing the relationship of what they learn and develop.

Preschool children are at Stage 5 of language development. They understand and are able to use the language, speak in phases or sentences but they may be ungrammatical. They have not yet understood the abstract meaning clearly. (28)

Intellectual development of preschool children

Jean Piaget believed that children were not born together with knowledge and thought. They learn their surroundings and develop their thought step by step. The cognitive development goes on together with the physical development. (41)

Thought or intelligence means that an individual can adjust himself to the environment, adapt his thought and expression well, resulted by 2 processes: assimilation and accommodation. The cognitive development steps are as follows (41):

1. Sensorimotor period
2. Pre-operational period
3. Concrete operational period
4. Formal operational period

Piaget said that the children aged between 2-7 years are in the pre-operational stage. The development at this stage may be divided into 2 steps (42):

1. Preconceptual stage, 2-4 years: children have ego centrism and see anything under their views. They do not understand other people's different ideas. They engage more language abilities and symbols representing some objects.

2. Intuitive stage, 4-7 years: children can observe the differences, so their thought is developed to the stage that they can compare and classify objects, link many things they know, and counter the numbers. (28)

In conclusion, early childhood is the critical period of brain development. In this period, all areas of development are on peak, especially nervous system and brain. At this time, children engage most learning in life. Learning potential and various areas of development can be fully developed if their physical body, emotions, society and cognition are properly promoted. The experience these preschool children receive is the foundation for all development areas up to the adulthood. The good foundation prepared for preschool children is to prepare and build good and quality citizens for the country.

2.1.3 Tendency of child development and situations of children and youth development

According to the population data surveyed by the Bureau of Policy and Strategy, Office of the Permanent Secretary, Ministry of Public Health, in 2010, there were 25.47 million children and youths younger than 25 years or it accounted for 40% of total population. Among these populations, 12.39 million of them were female and 13.07 million of them were male. The number of populations seemed to be changing slowly. But, in part of population structure, the number of elderly (older than 65 years) has been increasing quickly while the increase of children has declined (Figure 2.2). (43)

This change of population structure significantly affects the children and youth development. To elaborate, the current proportion of work-force age to elderly is 6:1, but this proportion will be decreasing rapidly to be 3:1 in next 10 years. This means that the work-force people must be more responsible for the elderly. The work-force people in the future are children and youths today. If they must bear more burden, this means that they must be more qualified, either in education, health, emotions and social responsibility. (43)

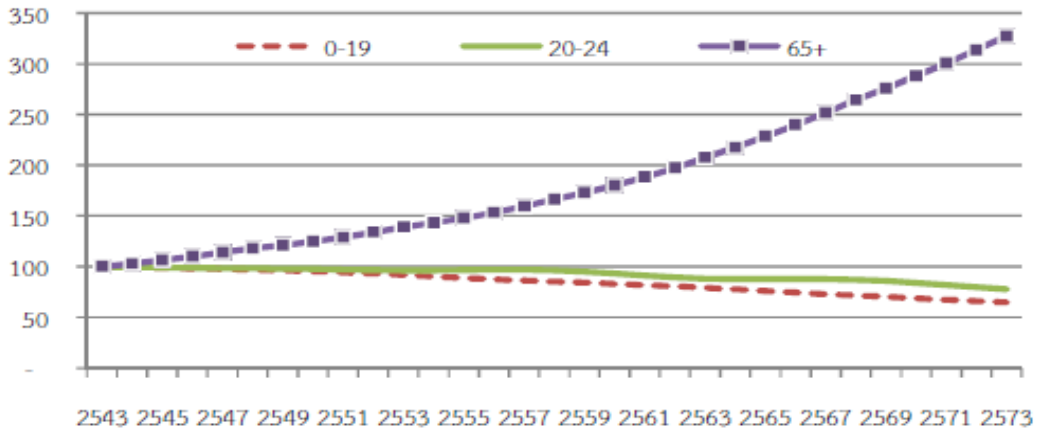


Figure 2.2: Growth Index for children and youth and aged people from Year 2000 – 2030

Source: Nationwide population projection classified by age and gender (medium fertility assumption), Office of Economic and Social Development Board)

Therefore, the children and youth, at present, confront several problems about secure living, bringing-up and imbalance of social and economic changes while the warm-hearted family index tends to be reducing. The proportion of children living with parents has been decreasing, partly, because of higher rate of divorce and higher rate of single parent. This problem is partially caused by the economic pressure. A number of parents must work in cities and leave their children to live with the grandparents. As a result, the communication gap between different ages occurs and the children may have improper nutrition. Finally, the children will be growing, but not be fully qualified. It is also likely that more Thai families become nucleus families, so Thai children do not learn about Thai culture and tradition, gratitude and care for

grandparents. When the Thai children have never absorbed these conducts, it is worrying that they may be unable to care for the aging society in the future. (43)

Physical health, mental health, medical advance and easier access to the universal medical treatment scheme help curb the mortality rate in children. The universal vaccination is quite successful; therefore, the risks to certain preventable diseases tend to decrease. But, Thai children still have other problems about over-nutrition or obesity and malnutrition, especially preschool children in the northeastern and northern regions. In addition, the children and youths like to have more crispy snacks, soft drink and fast food. (43)

The problems of young children care were mentioned in the Report on Preschool Children Health and Development Survey by the Department of Health, which showed that 30% of preschool children (0-5 years) had the delayed development (67) (Figure 2.3).

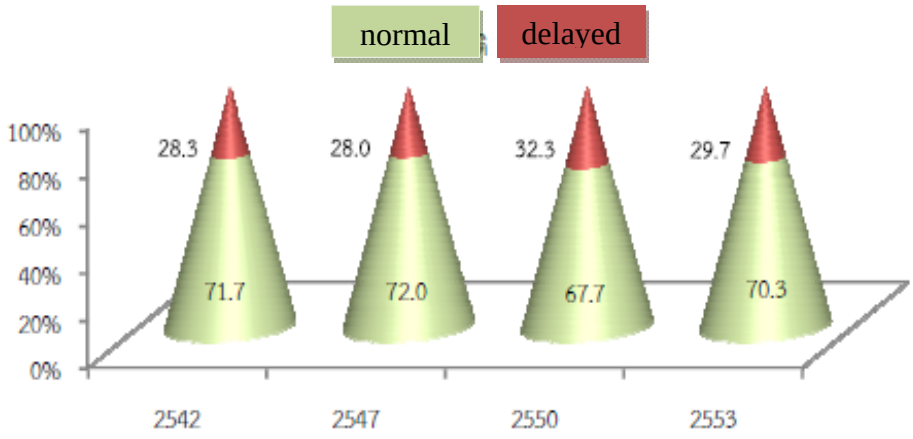


Figure 2.3: Development of preschool children (aged between 0-5 years)

Source: the Report on Preschool Children Health and Development Survey by the Department of Health (2010)

In addition, it was found that the rate of any school enrollments for preschool children (3-4 years) was higher, but there were some problems about the quality and quality of childcare centers. Thai children had the academic achievements at the low level if compared with the international standards. Thai children's assessment results were lower than neighboring countries (except Indonesia). The Thai

educational system fails to fulfill the gap between smart and weak students, which is reflected by different scores between types of school and regions. There is also the shortage of professional counselors to give some advice to children, youth and family regarding living apart from some advice on studying. (44)

The tendency of changes in population structure lets us know that the Thai society has changed significantly. The core institute to build life assets for children is no longer the family, but the educational institute or child development center. Therefore, it is important to promote the personnel in the child development center to obtain knowledge and skills in building life assets for preschool children in the Thai society.

2.1.4 Development screening

The principle of care child is to promote children to have good physical and psychological health, as well as to monitor and watching for the development and behavioral problems frequently found in children and teenagers. In the United States, 12-16% of children had the development or behavioral disorder (45):

Development screening and surveillance in children may be done in 3 types:

1. Developmental surveillance
2. Development screening
3. Development evaluation or assessment

Developmental surveillance means a process of monitoring and watching the development in the primary health care at every time each child is vaccinated or receives the preventive visit or any child with delayed development receives the medical treatment by health personnel, general practitioner or pediatrician. This process is flexible, and can be assessed and monitored continuously in the long term. The developmental surveillance is not only useful for discovering any irregularities for further transfers, it can be used as mediator to provide some advice, guide and educate the guardians. Family is the center of promoting, supporting and monitoring the child development. (46)

The developmental surveillance may be the structured surveillance or the process and decision-making on the developmental screening by evidence-based

measures, and the unstructured surveillance or decision-making based on personal feeling and observation or on the use of clinical conditions in monitoring the development. According to the systematic review, the pediatricians who used the unstructured surveillance if compared with the use of developmental screening test and evaluation for diagnosis had the good specificity, that is, it screened the children with no developmental or behavioral problems accurately for 69-100%. However, for its sensibility, the unstructured surveillance could screen the children with some behavioral or developmental problems accurately for 14-54% only. (47) Therefore, the developmental surveillance should contain some development details to be questioned or the questionnaire for each age as the guideline for guardians, physicians or health personnel to monitor the child development tangibly, conveniently and regularly. (45)

In Thailand, the developmental surveillance test or “Anamai 55” prepared by the Maternal and Child Health Group, Bureau of Health Promotion, Department of Health, Ministry of Public Health was developed from “Anamai 49”. It is the primary developmental surveillance for preschool children used by the primary health officers to monitor the child development at ages of 1, 2, 3, 4, 6, 12, 18 months, 2, 3, and 4 years regularly. Anamai 55 gives some advice to families to promote the appropriate child development. The objective of this test is to provide convenient and simple use, and it will be consistent with the mother and child health record. Most questions regarding 4 areas of development are extracted from DENVER II. Only queries most children can answer will be selected (percentile 75-90) in each range. If any child does not pass any queries in the first test, the inspector must provide some advice to the child’s guardians in order to promote such development. The second test will be held in next month. If that child cannot pass the test, he will be transferred to attend the development screening test, and his development will be stimulated. (48)

The developmental surveillance test “Anamai 55” is the child development assessment prepared by the Bureau of Health Promotion, Department of Health in collaboration with some experts from universities, Department of Mental Health, and Department of Health to be the primary screening measure for health officers, parents and related persons. It must be the development screening test that is simple and can be used conveniently, and the screening method can be studied by ourselves. The test

is divided into 15 sections for children at birth up to 72 months for 4 main areas of development. The test involves 48 questions in total.

1. Social development, comprising 9 items (representing 19% of total items), starting from staring face, smiling, expressing emotions, playing, showing wants as well as denying and waiting.

2. Language, comprising 23 items (representing 48% of total items), starting from body language responding the child's listening, producing meaningless words until saying several syllables with more meanings before developing language abilities to speak in sentence involving the subject, verb, adjective and preposition, knowing meanings of color, counting number of words, benefit of many objects and comparison, etc.

3. Fine motors, comprising 10 items (representing 21% of total items). Fine motor used after birth is the eye muscle. Later, the child uses his palm and fingers to grab tiny objects.

4. Gross motors, comprising 6 items (representing 13% of total items). All development of gross motors starts from neck flexor muscle, turning upside-down and turning face up, sit, stand, walk, run, jump and stand on one leg longer when the child is aged more months. According to Thai children survey, Thai children had few problems about the gross motors, but their most problems related to language, so some items regarding gross motors were cut off. (48)

In addition, the developmental surveillance may be done via the developmental milestones, which indicate a set of functional skills or age-specific tasks that 50 out of 100 children can do at a certain age range (the 50^{th} percentile for age) (49), that can be simply monitored throughout the childhood. The results of developmental milestones can be used to calculate the rate of development by using the developmental quotient (DQ). In calculating this, the developmental age (DA) is multiplied by 100 before being divided by the child's chronological age (CA) or DQ = DA/CA x 100. DQ 100 refers to the mean of normal development. If DQ is lower than 70 or 2 standard deviations are below mean, this shows that such child has the delayed development and must be additionally assessed. (50)

For the developmental red flag at specific ages as adapted from Gerber RJ (2010), Wilks T (2010) and Gerber RJ (2011), it is a table indicating specific ages the

children should achieve the particular development. If the children cannot do any activities as listed, it is likely that the children seem to have problems about such development. This developmental red flag is used for the child development at ages of 2, 4, 6, 9, 12, 15, 18, 24 and 36 months. (49) (50) (52)

Developmental Screening means the use of standardized developmental screening tool to screen any children who are risky or tend to have any developmental problems discovered from the developmental surveillance. The developmental screening is not the diagnosis tool or treatment planning (46), but to screen children with different development from other general children at the same range of age or age. (45)

The developmental screening test frequently used may be divided into the general or board-band screening test by which may be answered by guardians or done by medical personnel, the domain-specific screening, e.g. cognitive developmental screening test, language developmental screening test, nervous system and movements screening test, and disorder-specific screening: autism spectrum disorders screening. (46) Thailand also develops its own Attention Deficit Hyperactivity Disorders, learning disorders and autism screening tests. (53)

The factors to be concerned when selecting the developmental screening test for the primary child care are the simplicity, price, testing duration and scoring as well as test interpretation skills. Each tool and test has some differences, e.g. range of age for testing, testing duration, developmental qualifications or characters to be tested, and number of test items. (54)

This research aimed at assessing the general development in preschool children aged 3-5 years. All documents relating to general developmental tests in children were reviewed. The details of each tool are as follows:

Battelle Developmental Inventory Screening Tool, 2nd Edition (BDI-ST) – It is used to test the development in children aged 0-95 months. For the testing duration, it takes 10-15 minutes for children younger than 3 years, and 20-30 minutes for children older than 3 years. The test contains 96 items measuring 7 areas: society, self-care, adaptation, gross-motor skills, fine-motor skills, communication, and cognition. (54)

Bayley Infant Neurodevelopmental Screen (BINS) – It is used to test the development in children aged between 3-24 months. The test takes 15-20 minutes. The test involves 6 sets; each set contains 11-13 items. All items test 4 areas of development; namely, functioning of nervous system such as seeing, listening and touching, cognition, perception and language output, gross-motor and fine-motor skills. (54)

Brigance Screen-II – It is used to test the development of children aged 0-90 months. The test takes 10-15 minutes, and contains 8-10 items. This test screens the development of gross-motor and fine-motor skills, clear speaking, language perception and output, self-care skills, emotional and social development, reading and computation assessment in older children. For children aged 0-23 months, their guardians will answer the test. (54)

Early screening inventory – It is used to test the development in children aged between 48-72 months. The test takes 20 minutes, and comprises 3 sections for 30 items. This test assesses the language, cognition, adaptation skills and coordination of eyes and hands, gross motor and movements. (54)

First STEP – It is used to test the development in children aged 32-72 months. The test takes 15-20 minutes, and comprises 12 sets designed in the form of games. This test assesses the cognition, communications, body functioning, emotion and society. (54)

Denver Developmental Screening Test, 2nd Edition (DENVER II) – It is used to test the development in children aged 0-72 months. The test takes 20-30 minutes. This test was translated into Thai and has been widely used. (21) (45) The children are tested systematically based on their developmental behaviors at specific ages. This test is used to screen general children with no disorders, to confirm what the parents or medical personnel may doubt, and to monitor children risky to developmental problems; for example, children having the delivery background, having rearing problems, and inferior children. This test assesses 4 main areas of development, comprising 125 items in total:

1) Society and self-care, 25 items. This section includes the relationship and living with other people, self-care in daily activities.

2) Fine motor and adaptation, 29 items. This section includes the coordination between hand muscle and eye muscle, handling tiny objects.

3) Problem-solving and language, 39 items. This section includes hearing, language understanding and use of language.

4) Gross motor, 32 items. This section includes the body balance and movements, e.g. sitting, walking, jumping and all gross motor movements.

10 Question – It is used to test the development in children aged between 2-9 years. It takes 10 minutes for 10 questions to assess the critical developmental and cognitive problems. This test is used for a large group of people at the community level. (45)

Giffiths Mental Development Scale – It is used to test the development in children aged 2-8 years. It takes 50-60 minutes and assesses 6 areas of development; namely, body movements, society and self-care, language, coordination between eyes and hands, expression skills and reasoning skills. (45)

In Thailand, Denver Developmental Screening Test, 2nd Edition (DENVER II), Cognitive Adaptive Test (CAT)/ Clinical Linguistic and Auditory Milestone Scale (CLAMS) or Capute Scale, Parents' Evaluations of Developmental Status (PEDS), Ages and Stages Questionnaire-3 (ASQ-3), and Modified Checklist for Autism in Toddlers (M-CHAT) were translated into Thai. However, some items in these tests were adjusted to fit to the Thai contexts, but there has not yet been any studies on the normal reference criteria in Thai children. DENVER II has been widely used to monitor the development in the general practice while the capute scale is specifically used in the research. For PEDS, ASQ-3 and M-CHAT, they are used in a limited group of general practice and research. PEDS-DM is being studied and translated into Thai soon. (45)

Development evaluation or assessment – It means the assessment to diagnose the delayed development and each area of developmental problems as discovered from the developmental surveillance and screening. This is the comprehensive developmental evaluation by assessing several skills in children, e.g. cognitive skills, communication skills, movement skills, daily life skills, and social and behavioral skills. Although the sample group involves many children with different abilities, the developmental evaluation is capable of assessing the child

development accurately and relevantly to the evaluation objectives. Its reliability is checked by the cross-sectional study while it must contain the high quality of sensibility, specificity, validity, reliability and predictive values. The developmental evaluation must be done by professionals who are specifically trained to use that tool. The developmental evaluation includes the questions and testing items appropriate for children's specific ranges of age. (54)

In Thailand, the developmental tool for newborn baby – 5-year children was studied and developed by Samai Sirithongtavorn et al. It was adapted from the Child Developmental Skill Inventory (DSI) as developed by Rajanukul Mental Retardation Institute, Department of Mental Health, Ministry of Public Health in 1989. This inventory was improved for several times and widely used in the Department of Mental Health together with the Diagnostic Inventory for Screening Children (DISC). The Psychology Affairs of Rajanagarindra institute of Child Development previously developed DISC – Thai version and tested its tool reliability in 1999. DENVER II reviewed some additional related literature as well as experts' comments before constructing the child developmental evaluation inventory as the standard developmental tool. This inventory involves 654 items, divided into 6 ranges of age: birth – 6 months for 89 items; 6-12 months for 97 items; 1-2 years for 112 items; 2-3 years for 125 items; 3-4 years for 125 items; and 4-5 years for 106 items. The content validity index (CVI) is over 0.8 at every range of age. The inter rater reliability in the form of kappa inter observer agreement is high and so high. (55). In addition, the normal developmental criteria for newborn baby up to the age of 5 years is studied by the child development inventory (56), development of developmental screening and promotion manual for newborn baby up the age of 5 years, as developed by the Department of Mental Health. This inventory contains 70 items answered by guardians. (57)

In this research, Denver Developmental Screening Test, 2nd Edition (DENVER II) was selected to screen the development of preschool children by considering its simple use because this screening test was already translated into Thai, in an economic price, and needed the testing and scoring duration. The reliability of this screening test was .99 or in the range of .95-1.00 while the Standard Deviation was .016. When the reliability of this test was tested; its value was .90 or in the range

of .50-1.00 while the Standard Deviation was .12. This screening test has been widely used in monitoring the development in the general practice and research. The Researcher and research assistant also passed the training course to be the examiners for preschool children development under Denver Developmental Screening Test, 2nd Edition (DENVER II), Thai version, so it deemed that both Researcher and research assistant had knowledge and skills in using Denver II Developmental Screening Test.

2.2 Emotional quotient

2.2.1 Definitions and significance of emotional quotient

Definitions of emotional quotient

Emotional quotient may be called in several ways with similar meanings, e.g. emotional intelligence, emotional ability, interpersonal intelligence, etc. However, the most favorite word is "Emotional Quotient" or EQ. Several Thai and foreign scholars defined its meanings as follows:

Daniel Goleman (1995) defined EQ as "ability to perceive emotions of oneself and others in order to inspire oneself, to regular his emotions and emotions deriving from various relations" (58)

Bar-on (1997) defined the emotional quotient as components of personal ability in part of emotions and society that individuals adjust themselves to the environment successfully. (59)

Cooper & Sawaf (1997) defined the emotional quotient as an individual's ability to perceive, understand and know how to use his emotional power to build the relationship and inspire other people's mind. (60)

Goleman (1998) defined the emotional quotient as the ability to perceive emotions of oneself and others until one can regulate or manage his emotions as the inspiration to build relationship with others successfully. (61)

The Department of Mental Health (2003) defined the emotional quotient as the ability to perceive, understand and control one's emotions relevantly to his specific ages, to have proper conducts in living with other people happily. The emotional

quotient is a fundamental important characteristic leading to the thinking, emotional and behavioral maturity. (22)

Mayer and Salovey (1997) (cited in 62) said that the emotional quotient is a group of abilities indicating how an individual perceives emotions, and in what extent he understands those emotions accurately. To elaborate, the emotional quotient is like an individual's ability to perceive and express those emotions, to separate and compromise thought and emotions, and to show his emotions intelligently and wisely, as well as to control his emotions at any situations.

Terdsak Dejkong (2004: 39) defined the emotional quotient as an individual's ability leading him to be a good, valuable and happy man. (63)

Thanawat Tangsinsapsiri (2007: 94) said that the emotional quotient results to an individual's living in terms of people, living with others and life success. Emotional quotient is competency, ability and skills not related to intelligence, but it helps one overcome any tension or pressure in his environment. (64)

Pongpan Kerdpitak (2004: 56) defined the emotional quotient as an individual's ability to perceive the thought and emotions of himself and others, to control emotions and inner stimulus, wait and respond to his desire appropriately and timely, to encourage himself to confront any obstacle and conflicts willingly, to wipe out any stress blocking his valuable creativity, and guide the thought and actions in living with other people as leader or follower happily until he meets the study success, career success and life success. (65)

In conclusion, the emotional quotient means an individual's ability to perceive feelings, thought and emotions of himself and others, to control and handle his emotions and inner stimulus, wait and respond to his desire appropriately, and build the relationship with surrounding people efficiently until he can live with other people creatively and happily.

Significance of emotional quotient

"Emotional Quotient or EQ" is widely known at present when Daniel Goleman (1995) wrote an article in Reader's Digest entitled "What's Your Emotional IQ?. In 1996, he wrote another article regarding emotional intelligence in The Edmonton Sunday Journal. In 1997, several psychologists have studied the emotional

quotient, e.g. Gardner (1983), Salovey; & Mayer (1990), Cooper; & Sawaf (1997), Bar-on (1997), etc. These psychologists defined the emotional quotient differently, depending on their interest and working experience. But, in conclusion, they emphasized on the emotional quotient structure in 3 areas: (66) (67) (68) (69)

1. Interpersonal intelligence
2. intrapersonal intelligence
3. Adaptability

Academically, there are 3 outstanding EQ characters: smart, e.g. motivation, good decision-making and problem-solving, good relationship; good, e.g. self-control, sympathy, responsibility; and happy, e.g. self-pride, life satisfaction, mental happiness. (70). All 3 EQ characters directly relate to the EQ. If the IQ is not good, the EQ will drop as well. By this reason, the IQ and EQ development must go together. The difference is that a half of IQ in each child may be maximized up to his heredity and the other half of IQ comes from rearing. However, the EQ can be improved by environment and rearing. Therefore, the good IQ and EQ help shift other areas of quotient such as Creative Quotient (CQ) or intelligence in creativity and imagination or new ideas; Moral Quotient (MQ) or good conduct, responsibility and honest; Play Quotient (PQ) or intelligence resulted by playing that comes from a belief that playing helps develop children's abilities in terms of physical body, intelligence, creativity, emotions and society; Adversity Quotient (AQ) or intelligence in solving problems and flexibility in adapting to confronting problems; and Social Quotient (SQ) or social skills for living with other people.

The Department of Mental Health (2000: 75-77) explained in details about the emotional quotient development that, originally, it was believed that the individuals with high IQ would meet achievements, but, in fact, these successful people may not feel happy always. It is understood that, except the intelligence quotient making general people successful and happy, the emotional quotient can do. The emotional quotient may be developed. There are 5 ways in raising the emotional quotient as described below:

1. Self-awareness – The ability to recognize yourself or recognize an emotion as it happens, to understand emotions and thought resulted by feelings, and to heal those bad emotions so that you can work successfully.

2. Self-management – The ability to control your negative emotions appropriately so that they do not harm yourself and society, to control emotions consciously by considering what should or should not be done. This will lead to the willing working.

3. Self-motivation – The ability to handle your emotions so that you have motivation to overcome yourself, e.g. motivation from perseverance, diligence, patience, enthusiasm and effort.

4. Empathy – The ability to recognize how people feel accurately and comprehensively, and to understand the body language behind the emotions expressed by other people, and understand what you will be or feel if you were those people and how you will do.

5. Social skill – The ability and skills to build and sustain relationship with other people, to work in team, feel sympathetic and understand others' feelings, which cause you to receive the good cooperation from others.

2.2.2 Components of emotional quotient

From studying many documents, the concepts about the emotional quotient structure and components were proposed as follows:

Howard Gardner (1983) (cited in 52) classified the emotional quotient into 2 types:

1. Interpersonal intelligence – The ability to perceive and respond to emotions and requirements of other people appropriately.

2. Intrapersonal intelligence – The ability to perceive your emotions, discriminate and handle your emotions, which will lead to proper behaviors.

Salovey and Mayer (1990) (67) (cited in 72) proposed 5 components of emotional quotient as follows:

1. Knowing one's emotion or self-awareness, e.g. observing and perceiving one's emotion as it happens, being able to recognize one's emotional change at each time and situation, understanding one's feelings truly, understanding inner emotions expressed through the body or reactions expressed by the body when any stimulus attacks the emotion.

2. Managing emotion, e.g. handling one's emotions appropriately with situations, having abilities and techniques to release anxiety, leaving sorrow, anger and distress easily, controlling oneself not to express some emotions like irritation, ability to tune emotions to the normal condition quickly, and having consideration before any decision.

3. Motivating oneself, e.g. motivating oneself to have creative ideas in order to attain the determined goals, stimulating oneself to be enthusiastic, not to be discouraged, being able to wait for better outcome, feeling confident that one can do, having regular practice, and being optimistic.

4. Recognize emotion in others, e.g. having a sense of cooperation, feeling sympathetic, understanding others' feelings, caring for others' feelings, perceiving emotions and desire, and expressing emotions appropriately.

5. Handling relationships, e.g. ability to build and maintain the relationship with other people, either in the working and personal relationship, having good relationship, ability to settle interpersonal conflicts.

The Department of Mental Health (2011) developed the concept on emotional quotient by dividing it into 3 parts: (70)

1. Merit – This means the ability to control one's emotions and desire, feel sympathetic and be responsible for the public.

Ability to control one's emotions and desire

- Perceiving one's emotions and desire
- Controlling one's emotions and desire
- Expressing emotions and desire appropriately

Ability to sympathize with others

- Caring for others
- Understanding and accepting others
- Extending sympathy appropriately

Ability to be responsible

- Knowing how to give and take
- Knowing to plead guilty and to forgive
- Concerning about the public interest

2. Intelligence – This means the ability to know oneself, have motivation, solve problems, and show out efficiently, and have good relationship with others.

Ability to know oneself and build self-motivation

- Knowing one's potential
- Offering the morale and spirit for oneself
- Having strong intention to achieve the goals

Ability to make decision and solve problems

- Perceiving and understanding problems
- Setting up the steps of problem-solving appropriately
- Being flexible

Ability to have good relationship with others

- Knowing how to build good relationship with others
- Daring to show out appropriately
- Expressing contradictory opinions constructively

3. Happiness – This means the ability to live with happiness, self-pride, life satisfaction and mental calmness.

Self-pride

- Self-esteem
- Self-confidence

Life satisfaction

- Optimism
- Humor
- Sufficiency

Mental calmness

- Having activities supporting happiness
- Knowing how to relax
- Having mental calmness

At present, it is evident that only high intelligence or quotient is insufficient for life success. We see many cases that the high-IQ persons have some studying problems because they fail to exploit their intelligence, have problems in understanding and accepting their emotions, so they have the adaptation problems and are unable to tie the good relationship with friends or coworkers. The intelligence quotient is only one component. If an individual also has the emotional quotient, he will be successful in studying, working, family, personal life and living with others in the society. Many research results showed that the emotional quotient was so important for living.

2.2.3 Situations relating to children and youth emotional quotient

According to the National Survey on Emotional Quotient Situations and Normal Criteria in Thai Children aged 3-5 years by the Department of Mental Health in 2007, most Thai children aged between 3-5 years received the emotional quotient scores at the normal criteria in the range of 125-198 scores while the 2002 survey showed that the Thai children's emotional quotient scores were in the range of 139-202 or the mean decreased for 9.47. It was also found that the EQ and IQ scores were correlated in every area, especially in terms of enthusiasm, curiosity, assertiveness and self-satisfaction. (11)

According to the national emotional quotient survey in Thai children aged between 6-11 years in 2011, the sample group involved 5,325 children aged between 6-11 years selected from Bangkok and another 9 provinces in 4 regions, including Bangkok, Pathumthani, Rayong, Samut Sakhon, Uttaradit, Nakhon Sawan, Nakhon Ratchasima, Roi-et, Krabi and Pattani. These children's emotional quotient was measured by the emotional quotient inventory prepared by the Department of Mental Health, and assessed by teachers. A computation program was designed to interpret raw scores into the standard t-scores. The data was analyzed to get the mean and percentage. The data analysis consisted of 2 parts: analysis of data surveyed in 2011, and comparative analysis between emotional quotient results surveyed in 2002 and 2007. The analysis results showed that, for the emotional quotient in Thai children aged between 6-11 years, the mean = 45.12 (normal range: 50-100) (Standard Deviation = 7.87). (11)

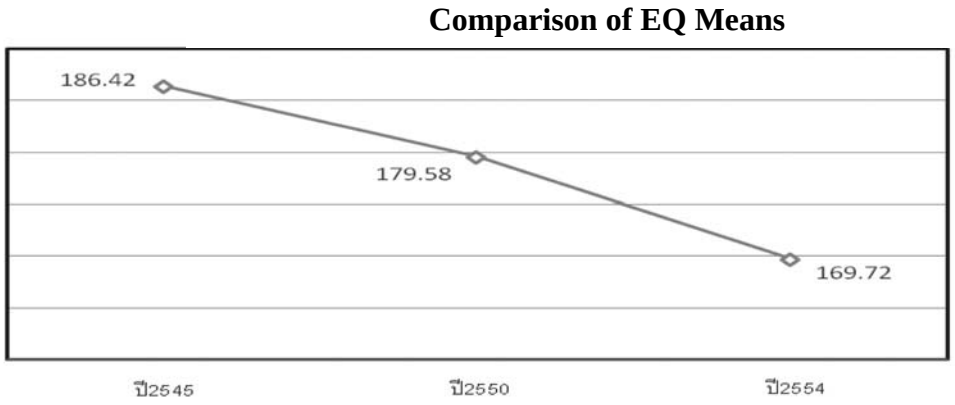


Figure 2.4: A 3-year comparison of total raw scores on emotional quotient (EQ) for children aged between 6-11 years

Source: National Emotional Quotient Survey in Thai children aged between 6-11 years in 2011 by the Department of Mental Health, Ministry of Public Health (11)

The total emotional quotient scores from both inventories with the same structure but different evaluators, that is, the surveys in 2002 and 2007 were done by parents and guardians while the survey in 2011 was done by teachers. But, the scores of all these surveys were shaped to be the same standards. It was found that the EQ score in 2011 was the lowest. For each area of EQ: good, smart, happy and every minor area in 2011, all were the lowest as well (Figure 3.5).

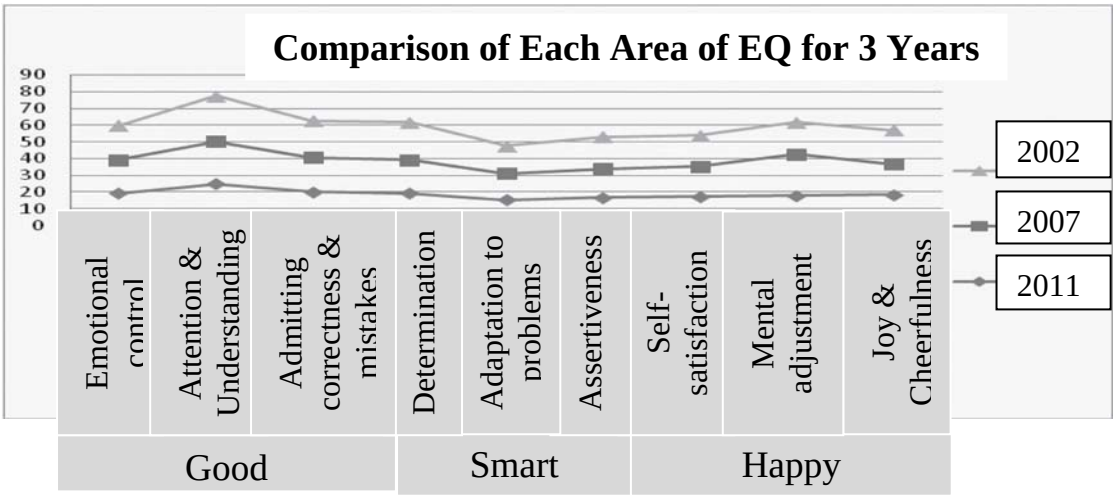


Figure 2.5: A 3-year comparison of T scores on each area of emotional quotient (EQ) for children aged between 6-11 years (assessed by teacher)

Source: The National Emotional Quotient Survey in Thai children aged between 6-11 years in 2011 by the Department of Mental Health, Ministry of Public Health (11)

Classified by region	Children aged 6-11 years						
	Good Emotional Quotient						
	Level	Emotional control		Attention and understanding others		Admitting correctness & Mistakes	
		Number	%	Number	%	Number	%
Nationwide	Normal	1812	34.03	1642	30.84	1983	37.24
	To be improved	3513	65.97	3683	69.16	3342	62.76
South	Normal	492	42.20	448	38.40	440	38.70
	To be improved	675	57.80	719	61.60	727	62.30
Bangkok	Normal	226	35.00	216	34.00	272	42.20
	To be improved	419	65.00	429	66.50	373	57.80
Northeast	Normal	373	33.00	314	27.80	374	33.10
	To be improved	756	67.00	815	72.20	755	66.90
Central	Normal	376	30.40	340	27.50	430	34.80
	To be improved	857	69.60	895	72.50	805	65.20
North	Normal	345	30.03	324	28.42	467	40.64
	To be improved	804	69.97	825	71.80	682	59.36

Figure 2.6: Percentage of emotional quotient at the normal level and to be improved in 4 regions around the country and Bangkok

Source: The National Emotional Quotient Survey in Thai children aged between 6-11 years in 2011 by the Department of Mental Health, Ministry of Public Health (11)

From Figure 2.6, the percentage of good emotional quotient to be improved in terms of emotional control, attention and understanding others and admitting to mistakes in children at ages of 6-11 years nationwide, at 4 regions and Bangkok was higher the percentage of normal emotional quotient.

From the tendency of mental health in Thai children, it is evident that children's emotional quotient has been gradually declined. As the parents or guardians could not act as the prototype, lacked the appropriate child-rearing skills, and had too much expectation on children's education, so Thai children and youth feel stressed and unhappy with their studies. The children may have higher stress until they become sleepless and vomit. Although the number of children trying to commit suicide and committing suicide successfully has been reducing, the suicide rate remains high. (44). Therefore, the family institute is the core factor tendering the emotional quotient to children.

2.2.4 Emotional quotient assessment

From reviewing all documents relating to the emotional quotient measurement, the concept about the emotional quotient measurement was proposed as follows:

Weerawat Pannitamai (1999) proposed the concept about the emotional quotient measurement that it is the character of affective domain and the direct measurement seems difficult. Thus, he proposed the guideline of emotional quotient measurement as follows: (71)

1. Intra personal motivative – This is to assess the motivation urging individuals to show out their behaviors, and to have feelings or emotions. The motivative expression may be arouse by some stimulus, e.g. essay test writing, answering questions, diary writing, narrating an event one embeds or experiences by describing situations causing one to have 3 feelings: glad, relieved and sad. In this regard, the evaluator must be careful in setting up correct answers for various thinking and experience. This emotional quotient assessment needs certain highly-experienced evaluators specializing in behavioral science and emotional quotient.

2. Critical incident technique or incident case – This is the qualitative behavioral analysis. A narrator writes to narrate any incident indicating his thought, feelings and expression relating to various levels of emotional quotient before lining up the behaviors such narrator used to do or intends to do. Total scores will be processed to summarize his emotional quotient level. The construction of critical incident case inventory will represent one's daily events or incidents relating to his

work. After introducing the incident, the respondent will be questioned that, in such incident, what he will do. The alternative answer choices are the different levels of possibility (for example, setting any value from the range of 1-9 from each question). The advantage of this technique is that every respondent has the same answering framework. Sometimes, the respondents may be allowed to write the possible alternative answers, either few or many answers, without concerning whether they are correct or not. In each job, organization, individual or culture, the viewpoints may be different. This emotional quotient technique has other advantages; for example, it may be for different targets, either for selecting the personnel for jobs, teaching or human development. Also, the respondents who may have no direct experience or practice can answer this type of evaluation. However, the disadvantages of this technique are that the emotional quotient is self-evaluation, so it may be distorted. The respondents may build the fake image with no real daily situations. Sometimes, the designed incident may be based on bias due to specific cultural standard, service length, organization environment and scoring criteria. Each alternative answer provided may be unacceptable, which takes effect to the emotional quotient scores.

3. Simulation – This technique determines the incidents similar to the arousing incidents in order to urge individuals to show their behaviors indicating their feelings or emotions without any pretending acts. The simulation may set up the level of difficulty or roles for the respondents. The advantages of this simulation are to urge or draw the respondent's emotional behavior while it allows him to present this natural self-being. However, the disadvantage of this method are that it takes a long time of studying with high expenses, needs the simulation builder specializing in the behavioral measurement and evaluation, and in checking the reliability of answers. In addition, this technique can be tested in a small group of people, around 3-5 persons, or individually.

4. In-depth interview – The structured flexible interview allows each interviewee to start the conversation regarding any of his personal issues, either success and failure or sorrow. The in-depth interview aims at obtaining the interviewee's behavioral information in various incidents; for example, which behaviors, emotions and feelings he shows, what takes effect to his success and failure in studying, working and life, etc. The interview takes 1.5-2 hours, one-by-one

between the referee and applicant. The referee will encourage the interviewee to show his/her actual ideas according to facts. The referee will process the interviewed data and interpret it into the information or “picture” about that person. In selecting any persons for jobs, such information is able to discriminate which one is likely to work better.

5. Objective, self-report and subjective measures – This is the self-report EQ measures. Salovey et al., 1995 constructed the self-report EQ measures in the name of Traint Meta-Mood Scale. For these measures, each attendant must report at which level he/she agrees with a particular statement, starting from disagreeing absolutely (1) up to agreeing absolutely (2). Toronto Alexithymia Scale is the self-report to which each respondent must answer “yes” or “no”, which was constructed by Bagby, Taylor & Parker, 1994). The emotional empathy inventory constructed by Mchrabian Epstein (1970) had the same answering method. This emotional quotient measurement is so favorite as it is constructed easily, may be compared with the results previously conducted and used for a large group of respondents, and is easily conducted and interpreted. However, these measurements should be done carefully, either by users and respondents.

Luan Saiyos and Angkana Saiyos (2000) said that the emotional quotient is a character of attentive domain indicating individuals’ level of emotions, thought and changing feelings like the personality structure. Therefore, the construction of emotional quotient measures must be based on the same principle of constructing the personality measures. What to be measured must be defined carefully. Is the measurement method difficult? Thus, it must be careful to select the measurement methods that are suitable for what we define. (72)

The Department of Mental Health (2002) conducted a research on Development of Emotional Quotient Inventory in children at ages of 3-5 years and 6-11 years. The Department intended to construct and develop the emotional quotient inventory as a tool actually used by parents, guardians, teachers and caregivers to assess children at ages of 3-5 years and 6-11 years. The process of developing the emotional quotient inventory consisted of 3 phases:

Phase 1: To construct an inventory model based on the internationally-accepted emotional quotient theories together with opinions proposed by child mental

health specialists and practitioners relating to child development in Thailand. The prototype inventory consists of 4 sets, depending on ages of children and users. Each set contains 100 questions as listed below:

Set 1 used by parents/guardians to assess children at ages of 3-5 years

Set 2 used by teachers/ child caregivers to assess children at ages of 3-5 years

Set 3 used by parents/guardians to assess children at ages of 6-11 years

Set 4 used by teachers to assess children at ages of 6-11 years

Phase 2: To develop all 4 sets of inventory to attain the good quality so that they can be perfectly exploited. The quality of inventory was checked in respect with its objectivity by way of focus group, validity by way of known group technique, discrimination by trying it out in 400 samples, and reliability by testing it with 120 samples. The development result was the emotional quotient inventories for parents, guardians, teachers and child caregivers to assess children at ages of 3-5 years and 6-11 years. The inventories contained 55 questions and 60 questions respectively. All 4 sets of inventory contained the objectivity and validity at $P < 0.05 – P < 0.01$. The reliability of this inventory was high, that is, Alpha Coefficient of 4 sets of inventories assessed by parents/guardians and teachers/child caregivers for children at ages of 3-5 years and 6-11 years was 0.8943, 0.9134, 0.9497 and 0.9045 respectively.

Phase 3: To compute emotional quotient norms of Thai children at ages of 3-5 years and 6-11 years by testing the emotional quotient inventories, already checked for their quality, with parents, guardians, teachers and child caregivers to 5,200 children at ages of 3-5 years and 6-11 years. Among these, the emotional quotient inventories were tested with 2,600 children at ages of 3-5 years and with 2,600 children at ages of 6-11 years. The sample group was selected by the multi-stage random sampling from 24 provinces (12 educational regions) and Bangkok. The emotional quotient norms of children at ages of 3-5 years and 6-11 years involved both raw scores and normalized T-scores. For all 4 sets of inventories assessed by parents/guardians and teachers/child caregivers for children at ages of 3-5 years and 6-11 years, the related persons may use them to assess, monitor and formulate the guideline of developing the emotional quotient in children. (73)

As mentioned above, the emotional quotient may be measured by several ways. In selecting EQ measures, we must consider the appropriateness of what we want to measure. Such inventories must be able to induce the respondents to show their actual emotions, thought and feelings to enhance the accuracy, reliability and best benefits in using them. In this research, the emotional quotient inventory for children aged between 3-5 years assessed by teacher/child caregiver as developed by the Department of Mental Health, Ministry of Public Health, 2002 was selected to assess the sample group's emotional quotient because it is a tool developed by some experts with high reliability or Alpha Coefficient was at 0.9134. Therefore, it was a suitable tool relevant to the sample group's ages in this research.

2.3 Life assets

2.3.1 Definitions and significance of life assets

At present, in assessing how good or clever this child is, it not only involves the investment in education or his academic achievement, but also his thinking, cleverness in handling his emotions as well as opportunities in helping other people. These matters must be rooted by his family members, and they will be changed to be his "developmental assets" or they may be called "fundamental assets", resulting to his psychological, social and cognitive development until he is capable of living in the society strongly, which will cause all facets of quotient for that child. Therefore, building the developmental assets for preschool children is so essential, and it becomes a tool vaccinating preschool children, families, communities and society for our country's future. (7)

"Developmental Assets" for Thai children and youth, Dr. Suriyadeo Tripathi (2009) called "**life assets**", which mean the predisposing factors or good characters in respect with mind, society and culture that take effect to the cognitive process, decision-making and behaviours resulted by the reinforcements from birth to adulthood. The life assets reinforcement in children and youth is influenced by children's inner factors and outer factors, e.g. family, school, peer and community. If these factors are controlled and reinforced appropriately, the children and youth will

be able to develop their good life assets, have the quality growth, live in the society peacefully, and have the sustainable happiness. (7)

Dr. Suriyadeo Tripathi (2009) said that life assets are not new, but have existed so long. In the past, the families in the Thai society were the extended ones. The communities were strong, and lived with harmony, love, good relation, sharing, giving and doing activities together. These are good life assets Thai people have already held. When the Thai society has been changed by technological advances, and intruded by the urbanization, the beauty of traditional lifestyle is deteriorated. The families become weak. The communities lose their strength. The activities between peers reduce. Various forms of informal learning become less. As a result, at present, several areas of life assets of children and youth have declined, which cause many subsequent problems. (8)

Dekplus (2013) said that “life assets” or “life cost” is a predisposing factor, which involves life skills and consciousness of children and youth as well as the environment influencing their living, e.g. family, cognitive process, community and peer that are developed to be tangible indicators. Life assets can be used to guide the communities for their children and youth development under wisdom, network parties and community participation with energy, systematic working process to reinforce life assets, network-based working, and analysis and setting up the operating plans until the communities get their own children and youth development plan to become the strong and sustainable communities. (20)

Search Institute (2003) (cited in 7) has studied life assets since 1990 by surveying the U.S. youth, which was based on some previous studies relating to teenager development, flexibility and hindrance. Search Institute used life assets to assess positive factors of these U.S. teenagers, and they were developed to the 40 indicators. From several American studies, it was found that the youths or families passing over 20 indicators would have less risk behavior. Search Institute also studied 2.2 American teenagers and found that life assets definitely influenced these teenagers. The more life assets they engaged, the less they had risk behavior and they would have the prosperous growth. On average, the life assets in male teenagers were lower than those of female ones. If the teenagers pass over 30 indicators, it could be concluded

that the families and youth would be strong while the social problems would be reducing significantly.

Care and protection of children and youth's physical and mental health and society not only protect our present youths, but help build up adults who will have good life assets in the future. This extremely challenges any related persons working for children and youth in caring for their health to change any risk behaviors in these children and youths in the competitive globalization age. Apart from treatment, educating, skill building and analytical thinking and practice could prevent the youth from these risk factors. (7)

2.3.2 Types of life assets

Inner life assets

Power of Self

Power of self is one important power for people at all ages, especially teenagers because the power of self is embedded inside, e.g. self-esteem, trust, self-confidence, skills in living in the society peacefully, kindness to help others, clear life goals and standing points, love in justice, no discrimination, honest, responsibility, self-discipline and no involvement with risk behavior.

Outer life assets

Power of Family

This power is so influential to children, and supports the power of self. Power of family is like the vaccine. When a child has problems or is trapped by risk behaviors, his strong power of family can help him. The power of family is the power of love, care, discipline and good modeling, appropriate and positive monitoring and help, good talks in the family, warmth and safety.

Power of Intelligence

This power is so important for school-age children. It is the determination to increase the intelligence. The children are supported and promoted to enhance the curriculum and extra-curriculum learning process as well as local wisdom. Therefore, the parents and teachers take an important role in promote the power of intelligence in children. Power of intelligence partially makes the power of self.

Power of Peer and Creative Activity

This is so important for teenagers. Power of peer and creative activity is the power of doing activities with peers, and such activities benefit the society and community, and provoke the discipline among peers, e.g. art, music, exercises, sports, religion and extra-curriculum recreation, etc.

Power of Community

It is the power of people living together with sympathy, understanding, friendship, discipline and good modeling, good talks, public mind, warmth and safety, and doing public activities together. Public mind is greatly important for creating the power of self through the power of community. In this regard, the children learn how to be givers and live in the society happily. At present, the power of community in our country is quite weak because, according the most recent data from the life assets survey, the power of community was the most vulnerable. However, although the power of community is weak, other strong powers will help the children live in the society, but their living may not be perfect. (7).

Normally, the children and youth have 3 important turning points in life: (8)

1. Birth – 6 years – Early childhood is an age the children are cared by parents, family and child development center, so, at this age, the family is the main institute for building their life assets.

2. 6-12 years – At the school age, the children no longer live closely at all time with the family because they enter into the educational system. Children meet teachers and more friends. The educational institute and family are the main institutes for building their life assets.

3. 12-25 years – At adolescence, the teenagers are more isolated from the family and more attached to friends. Peers and community are the main institutes for building life assets among teenagers, but the family still takes the important role.

Good life assets in children and youth cause 5 advantages as listed below:

1. The more life assets, the less risk behavior.

2. The more life assets, the longer the risk behavior is prolonged.

3. Life assets relate to the emergence and cessation of risk behavior more than the family’s economic status and family conditions.

4. Life assets may be integrated with other good behaviors in youths.

5. Some items or groups of life assets are important to prevent risk behavior.

Subject to the information and research relating to life assets, it could be concluded that everyone holds one extent of life assets, either inner or outer assets, which can be shifted by the parental rearing, good environment, and close to nature. However, the present technological world arouses the materialism that separates us from nature. We compete for living, eating, studying and working, so we rear our children like an engine; we do not tender sympathy and understanding of development, but arouse too much expectation until we feel stressed. The children and youth must be so serious in studies. Human value is not measured like the past. Life assets that one holds and should hold have been deteriorated. Some children have low assets to fight against the danger and social harm. These children become more risky output than children and youth living in the warm family and surroundings that help reinforce their life assets. (8)

2.3.3 Life assets survey tools

The life assets survey tools for 3 life spans have been developed according to the methodological process. They are Life Assets Survey Tool for Preschool Childen (birth to 6 years), Life Assets Survey Tool for School-age Children (6-12 years), and Life Assets Survey Tool for Youth (12-25 years). The Life Assets Survey Tool for Youth has been magnified and used largely in many areas. Life Assets Survey Tool for School-age Children has been magnified in the targeted group. However, Life Assets Survey Tool for Preschool Children has been developed already, but it has not yet been used in any areas, but it will be magnified to use this tool most cost-effectively. (74)

Life Assets Survey Tool – Youth (74)

Life Assets Survey Tool for Youth (12-15 years) was developed by Dr. Suriyadeo Tripathi and his Dekplus team. The Tool has been gradually developed according to the methodological process. It was tested and improved for the tool completeness. After testing and collecting the data relating to the questions in the Tool, and compiling any comments from all related groups in the field after using this

45-indicator tool there, all advice and conclusions from several project areas developing the life assets work together were considered to revise the Tool until it becomes the 48-indicator questionnaire now. Each indicator was revised to be more relevant and comprehensible. Some questions about media were added, which is an important issue proposed by several forum. By analyzing all 48 questions in the questionnaire, its reliability coefficient or Cronbach's Alpha was 0.89.

Life Assets Survey Tool – School-age Children (74)

This tool was developed under collaboration, as network, of the Rajanukul Institute and the project was under responsibility of Dr. Panpimol Wipulakorn and her team. Life Assets Survey Tool - School-age Children has been developed for 2 years under the methodological process. The working team selected certain scholars with working experience in children and from various areas relating to the construction of research tools in order to interpret and adjust the Tool. The content validity or Index of Item Objective Congruence (IOC) was checked by some experts. Now, the Life Assets Survey Tool – School-age Children consists of 2 parts. One part is for Grade 1-3 students and these children are so young and unable to understand the language perfectly, the communications and survey responses are done via illustrations. For Grade 4-6 students, they are able to answer the questionnaire by themselves, but they may need the additional explanations or interview in case that the children cannot read. The user guide for this tool has not yet been produced like the Life Assets Survey Tool for Youth, but it has been used in the areas, and magnified for Dekplus's operation, but it has not been widely used in other agencies, organizations or networks.

Life Assets Survey Tool – Preschool Children (74)

The Life Assets Survey Tool for Preschool Children was under collaboration, as network, of the Thai Family Research and Development Center, College of Human Ecology. The development for the first version of tool was cooperated by Assoc. Prof. Dr. Jittinun Dejakup (Project Chief), Asst. Prof. Dr. Pacharee Polyothin, and Assoc. Prof. Dr. Arunee Horadal (Project Participant) and other working team, experts, specialists, scholars, personnel and every targeted area, who attended the activities previously held to develop the Life Assets Survey Tool for Preschool Children. During the development of first-version tool by Assoc. Prof. Dr. Jittinun Dejakup and his team, and the second-version tool by Dekplus, the content

validity of this tool was tested (IOC test) by certain specific experts through the focus group discussion. The experts in the area of children and practitioners in the area of preschool children, totaling 50 persons, were invited to give opinions and advice on improving the Life Assets Survey Tool for Preschool Children before collecting the data in the pilot areas. The draft Life Assets Survey Tool for Preschool Children was experimented (try out) in pilot areas located in Bangkok and vicinity. The targeted group involved the parents/ guardians/ teachers or child caregivers who had the variety of economic status. Such data was utilized to develop the indicators or topics regarding life assets of preschool children for all 3 life spans. The tool was tested and adjusted to be suitable for the sample group living in 4 regions of the country. The data collection method as well as any other tools and materials for data collection were developed to be the most efficient. This is so important to get the most valid and reliable data. When the constructed tool was actually used in the sample group, it was adjusted to be more appropriate. The tool consists of:

- Inventory for children aged between 0-1.5 years (data collected from guardians, teachers and child caregivers)
- Inventory for children aged between 1.5-3 years (data collected from guardians, teachers and child caregivers)
- Inventory for children aged between 3-6 years (data collected from guardians, teachers, child caregivers and children)

Life Assets Survey Tool for Preschool Children is a very important tool for children and youth development as it is a starting point or important foundation to develop a child to be a good adult in the future. This tool relates to the 5 powers in reinforcing life assets for children and youth. The reinforcement of life assets via 5 powers is hidden in each question while the reactions of children and parents, guardians or child caregivers would be observed in terms of physical, psychological, emotional and social domains, which would lead to the development process and activities in caring for children by positive and creative powers.

In Thailand, in the past, most IQ and EQ tools, Denver II, Anamai 49, Anamai 55 or other tools measured the child development or children. But, the Life Assets Survey Tool is different because it measures the reactions of children, parents and their interactions. The indicators contained in the Life Assets Survey Tool for

Preschool Children reflect the reactions and interactions of parents or guardians who care for children, how they do and how they feel about children, and how the children feel about the parents or guardians, and how they feel about their environment. Importantly, this tool causes the positive working concept, and creates the positive power in the family, community and society. Therefore, this tool may be the first innovation of Thailand to start a new working in the society. (20)

Strength of life assets survey tool (20)

1. The Tool uses the positive power to measure interactions based on related indicators. Such interactions may be divided into 3 main parts:

1) Interactions and behavioral expression by parents, guardians or child caregivers

2) Interactions and behavioral expression by children

3) Situations of community or area to children

2. The tool connects and is relevant to all 5 powers of life assets, including power of self, power of family, power of intelligence, power of peer and creative activity, and power of community.

3. Positive questions interpreted abstract matters to be tangible matters and the respondents feel willing to answer the questionnaire.

4. The tool measures the interactions between parents, children, guardians and child caregivers.

5. The tool reinforces interactions through appropriate techniques and activities.

6. The tool gives the precise direction for the community and persons working for children and family.

7. The same tool may be used in the macro or micro level.

This tool is suitable for collecting the data regarding parents, guardians or caregivers to preschool children from birth up to 6 years (use the questionnaire relevant to the life span of children being surveyed). The questionnaire may be answered by the parents, guardians or caregivers or the examiner explained the questionnaire to the respondents. It took 10-15 minutes in answering the questionnaire. (20)

Data interpretation and analysis

The data collected from Life Assets Survey Tool for Preschool Children may be analyzed individually or generally by processing the data in the computer program to get the scores or percentage of each item. The instruction must be read carefully before filling out the data. (20) Any researcher may divide the score level into the mean of each life asset power, and these means are further analyzed statistically.

In this research, the Researcher was interested in using the Life Assets Survey Tool for Preschool Children at ages of 3-6 years because, after reviewing all studies regarding life assets, no study used this Life Assets Survey Tool for Preschool Children most recently constructed and improved. This Life Assets Survey Tool for Preschool Children deems an innovation of developing the life assets survey tool for preschool children under the Thai context, which would be actually and completely used in the studied areas. It shall be deemed that this research is the first study in Thailand using the Life Assets Survey Tool for Preschool Children to investigate the relationship between life assets and development and emotional quotient of preschool children. The results would be analyzed to find out risk factors and predisposing factors in preschool children, which are important factors in formulating the strategy, and creating good activities in working to promote the development of preschool children, and to build good interactions in the family, school and community so that every preschool child has good health development, emotional quotient and better social skills.

2.4 Research relating to life assets, development and emotional quotient of preschool children

Lauren R Miller-Lewis, Amelia K Searle, Michael G Sawyer, Peter A Baghurs and Darren Hedley (2013) conducted a study on Resource Factors for Mental Health Resilience in Early Childhood: An Analysis with Multiple Methodologies. This longitudinal study aimed to identify preschool resource factors associated with young children’s mental health resilience to family adversity. A community sample of 474 young Australian children was assessed in preschool (mean age 4.59□years, 49%

male), and again two years later after their transition into formal schooling. At each assessment, standard questionnaires were used to obtain ratings from both parents and teachers about the quality of children's relationships with parents and teachers, children's self-concept and self-control, mental health and family adversities. According to overall factors in life, cumulative family adversities was associated with both greater teacher- and parent-reported child mental health difficulties two years later. Higher quality child–parent and child-teacher relationships, and greater child self-concept and self-control were associated with resilient mental health outcomes. With the exception of child-teacher relationships, these resources were also prospective antecedents of subsequent resilient mental health outcomes in children with no pre-existing mental health difficulties. Child–parent relationships and child self-concept generally had promotive effects, being equally beneficial for children facing both low- and high-adversity. Child self-control demonstrated a small protective effect on teacher-reported outcomes, with greater self-control conferring greater protection to children under conditions of high-adversity. This findings suggest that early intervention and prevention strategies that focus on fostering child-adult relationship quality, self-concept, and self-control in young children may help build children's mental health and their resilience to family adversities. (75)

Leslie Gunter, Paul Caldarella, Byran B. Korth K and Richard Young (2012) studied on Promoting Social and Emotional Learning in Preschool Students: A Study of Strong Start Pre-K. A sample involved 84 preschool children in Utah using quasi-experimental, non-equivalent control group design. The sample was divided into the experimental group comprising 52 students for SEL Strong Start Pre-K and the control group comprising 32 students. The teacher-student relationship in terms of emotions, overt behavior and interactions were studied. The research tools were Pre BERS used to assess students' emotions; PKBS-2 to assess the social behavior; and STRS to assess the perception to teacher-children interactions. The results showed that the students receiving SEL Strong Start Pre-K showed less overt behavior at the statistical significance while the students and teachers had more interactions at the statistical significance. It is suggested that SEL Strong Start Pre-K should be used to promote the social and emotional development in preschool children. (76)

Kessara Saenngarm, Jamjan Kulvijitr and Luckana Kongsaeng (2012) studied Health and Factors Associated with Health of Children Receiving Services at the Preschool Children Development Department. This study aims to study health and factors associated with health of children receiving services at the Preschool Children Development Department at Songkhla Province. The sample group included children at ages of 6 weeks – 3 years coupled with their fathers or mothers who received the services at the Preschool Children Development Department in the total of 122 pairs, and another 24 personnel in this Department responsible for this sample group. The results showed that, during the past 1 year, 45.1% of children receiving services at the Preschool Children Development Department had the respiratory infection for 8 times per person per year, and 36.0% of children had diarrhea for 1-3 times per person per year. The children's ages and duration of receiving services at the Preschool Children Development Department were correlated with their respiratory infection and diarrhea. In addition, the level of education attained by fathers was correlated with children's respiratory infection. The parents' child-care behavior at home was correlated with children's respiratory infection and diarrhea. Similarly, the child-care behavior of personnel at the Preschool Children Development Department were correlated with their respiratory infection and diarrhea as well. Therefore, to care for preschool children's health, the factors regarding preschool children, parents and personnel at the Preschool Children Development Department should be considered altogether. (77)

Nutta Prateepchaikoon (2012) studied The Personal Factors and Influence on Life's Assets on Visually Impaired Students' Mental Health. The sample group was the visually impaired students in the Foundation for the Blind in Thailand under Royal Patronage. The sample included the visually impaired students studying at the Bangkok School for the Blind, visually impaired students studying at the Bangkok School for the Blind with normal-vision students, visually impaired students at Sampran Rehabilitation & Training Center for Blind Women, and students at Pak Kret Skill Development Center for The Blind. The subjects included 100 students, 12-18 years, without multiple disabilities, and were pleased to participate in the research. The result showed that the individuals' inner life assets or power of self affected the mental health at the statistical significance of 0.001. In addition, outer life assets, e.g.

power of family, and power of peer and creative activities affected the mental health at the statistical significance of 0.05. (78)

Fatma Basak ALTAY and Aysen Gure (2012) studied the Relationship among the Parenting Styles and the Social Competence and Prosocial Behaviors of the Children Who are Attending to State and Private Preschools. The purpose of the study was to investigate the associations of social competence and prosocial behaviors of the boys and girls who are attending to private or state preschools with the parenting styles of mothers' perception. Participants of the research were 344 children's ranging from 35 and 75 months of age), teachers and mothers. These children were attending to preschools located in Ankara, Turkey. In the research, Parenting Styles and Dimension Scales and Prosocial Behavior Scale were applied to the mothers, Teacher Rating Scales for Social Competence and Prosocial Behavior Scale were applied to the teachers. Findings revealed that the girls have positive interactions with their peers and teachers more than the boys do and the boys have negative interactions with their peers more than the girls do. Furthermore, the scores of negative interactions with peers of the children who had authoritative parents (M = 3.84) were higher than those of the children who have permissive parents (M = 3.71). In addition, the scores of negative interactions with peers and non-interaction behaviors of the children attending to a private preschool were higher than that of the children attending to a state preschool. Moreover, in terms of both mother and teacher ratings of prosocial behaviors, girls tend to show more prosocial behaviors than boys. The children whose mothers showing authoritative parenting style demonstrate more prosocial behaviors as rated by mothers than the children whose parents showing permissive parenting styles. (79)

Pichada Sutthipan (2012) studied the 101s Positive Discipline Training Resulting to the Use of Positive Discipline by Teachers and to Higher Cognitive Thinking Process in Preschool Children. The research was to investigate the relationship between the use of positive discipline by teachers and higher cognitive process in preschool children. The sample was selected from kindergartens in Samut Prakarn. The experimental group involved 4 teachers and 31 students at ages of 4-6 years while the control group involved 3 teachers and 29 students at ages of 4-6 years. The results showed that the group of students whose teachers were trained got some

scores from the Behavior Rating Inventory of Executive Function Preschool Vision (BRIEF-P) while the students got fewer scores in impaired skills regarding inhibitions, emotional controls, working memory and planning/organization at the statistical significance ($F = 5.087, 7.873, 7.230$, and 5.568 respectively) ($p<0.5$) if compared with the control group. (80)

Piyada Pichitgusalachai (2012) studied about the building of positive discipline in children in the topic on “The 101s Positive Discipline Training Resulting to the Use of Positive Discipline by Teachers and to self-control in Preschool Children. The research involved 45 children aged between 3-5 years: 25 for the control group and 20 for the experimental group. The research also involved 11 teachers: 5 for the control group and 6 for the experimental group. The research was conducted at a kindergarten at Nakhon Pathom. The results showed that, after being training about the principles of positive discipline, the teachers had positive interactions in handling child behaviors if compared with those in the control group. It was also found that the students cared by teachers trained for positive discipline got higher self-control in terms of inhibitions and emotional controls. The research suggested that the training on the positive discipline principles resulted to teachers’ teaching approaches and self-control in preschool children. (81)

Orawan Kamsat (2012) studied Results of Language Readiness Development in Kindergarten 2 Children Based on Brain Base Learning Activities (BBL). The research compared the children’s language readiness before and after BBL activities, as well as emotional quotient in children receiving the BBL learning experience. The research involved 26 students at Kindergarten 2 at Ban Trom Prai School, Amphoe Si Khoraphum, Surin Primary Educational Service Area Office 1. The results showed that the children receiving the BBL learning experience got higher language readiness ($\mu = 25.23$) after such learning experience ($\mu = 14.19$), representing 84.10%. It was found that the children receiving the BBL learning experience got higher emotional quotient after such learning experience for 88.29%. In conclusion, Kindergarten 2 children receiving the BBL learning experience got higher language readiness and emotional quotient after such learning experience. It was suggested that the related persons might implement these results for children’s higher efficiency. (82)

The National Statistical Office (2011) conducted a study regarding Thai People's Mental Health Survey from 2008-2010. The objective was to collect the data on self-assessment for mental health of Thai people older than 15 years. The survey was done in every individual's household in every province nationwide, either in municipalities or not (except in ambassadors' households, foreign representatives and temporary residents). Every member in each household older than 15 years were interviewed. The sample group was persons answering the questionnaire (approximately) in 2008-2010 totaling 28,000, 81,000 and 87,000 persons respectively. The results were presented as follows:

1. Thai people's mental health in a period of 3 years (208 - 2010) tended to be better.

2. People in the southern region had better mental health than other regions.

3. Men had better mental health than women.

4. People aged between 40-59 years had the best mental health.

5. People with marital status had better mental health than people with other status.

6. Level of education and mental health were correlated in the same direction.

7. Highly pious people tended to have better mental health.

8. Families whose members contributed time to each other sufficiently had better mental health than families whose members contributed time to each other insufficiently.

9. People in households with good economic status tended to have better mental health.

10. Households whose members worked in the professional, academic and management occupations had better mental health than those working in other occupations.

11. People in households bearing little burden (number of workers is higher than the number of unemployed persons) had better mental health than those in households bearing much burden.

12. When separating the mental health into 4 parts: mental condition, mental fitness, mental quality and supporting factor, it was found that the supporting factor was the strongest component, which is consistent with the Thai society where people have high mental attachment, resulted by family, community and religion. In contrast, the weakest component was the mental fitness. This component related to the relationship building with others and problem handling. This means that Thai people would have better mental health if the mental fitness is improved. (83)

Orathai Puangpee (2011) studied the relationship between life assets and self-identity and coping ability of vocational students. The sample involved 100 vocational students who were studying at Saowabha Vocational College at the vocational certificate level, second semester, educational year of 2011. The result showed that the vocational students with different life assets had the different self-identity at the statistical significance of 0.05. The vocational students with high life assets would have higher self-identity than those with low life assets. (84)

Benjarat Nuchnart (2011) studied Influence of Life Assets to Self-care Ability of Prathom 5 and 6 Students in Schools under the Supervision of Bangkok Metropolis, Lad Krabang District. The sample group involved 424 late childhood students studying at Prathom 5 and 6 in schools under the Supervision of Bangkok Metropolitan Authority, Lad Krabang District. The result showed that life assets were so important for self-care ability of Prathom 5 and 6 students, especially power of intelligence. (85)

Aimee Hilado, Leanne Kallemeyn, Christine Leow, Marta Lundy and Marla Israel (2011) studied the relationship between social resources and levels of parent involvement in state-funded preschool programs in Illinois. Using survey data from the Illinois Birth to Five Evaluation (n = 843) and interviews with ten preschool administrators who completed the survey, the study found the number of social resources provided by a program was positively associated with levels of parent involvement. The high numbers of social resources were associated with higher levels of parent involvement in programs. Administrator interviews confirmed survey findings and suggested additional influences on parent involvement levels and use of social resources in programs. Implications for supporting child welfare and policy recommendations for early childhood programs are provided. (86)

Jin-Young Chae and Kang Yi Lee (2011) studied the impacts of Korean fathers' attachment and parenting behavior on their children's social competence. The research aims at studying the impacts of fathers' childhood attachment representations and their parenting behavior on 5-year-old children's social competence in South Korea. One hundred and sixty Korean fathers cohabiting with their children (85 boys and 75 girls) answered questionnaires. The questionnaires related to the attachment representations of their parents based on their retrospective childhood memories and their own parenting behavior as the fathers of preschoolers. In addition, the children's preschool teachers rated their levels of social competence. Structural equation modeling indicated that the fathers' childhood attachment representations had significant indirect impacts on boys' social competence because of their own parenting behavior. There was no impact of fathers' childhood attachment representations, but fathers' parenting behavior had a significant direct impact on their daughters' social competence. (87)

Neriman Aral, Gulen Baran, Figen Gursoy, Aysel Koksal Akyol, Aynur Butun Ayhan, Mudriye Yildiz Bicakci and Serap Erdogan (2011) studied the Effects of Parent Education Programs on the Development of Children Aged between 60-72 Months. Participants were children attending 9 kindergartens located in central Ankara, Turkey and their parents (experimental group: 68 children, 68 parents, control group: 68 children, 68 parents). Data were gathered by using Brigance Early Development Inventory II (Brigance, 2004), that was adapted for use in Turkey by Aral et al. in 2008. There was a significant difference between the scores on the subtests of the Brigance Early Development Inventory II and the total pretest and corrected posttest scores independent of group, but no significant difference was found between the scores of the groups on the Brigance Early Development Inventory II or the total pretest and corrected posttest scores. The results also revealed that the parent education program had a minimal effect on children's daily life and social emotional skills. (88)

Duchanee Mungdee (2011) studied Outcome of Fine Motor Activities on Fine Motor Skills and Cognitive Function in Preschool Children. The sample group covered 43 students at Kindergarten 1 studying in schools under the supervision of Nakhon Pathom Educational Service Area Office. Among these students, 21 out of

them were in the experimental group, who received SUKI program to encourage the use of fine motor for 45 minutes per time in the total of 4-5 times in 8 weeks. The results showed that the experimental group and the control group achieved different hand skills in terms of accuracy and controlling ability significantly at $P<0.01$. However, the processing skills in using fine motor and hand coordination and dexterity skills in both groups were not different significantly. Regarding the cognitive function, it was found that the experimental group and the control group got the different concentration scores significantly at the statistical level of $p <0.05$ while their memory scores were not different significantly. (89)

Trina R., Williams Shanks, Youngmi Kim, Vermon Loke and Mesmin Destin (2010) studied Assets and Child-Being in Developed Countries. This research introduces a framework for an age-based conceptual model that describes how such accounts might influence indicators of child well-being. With a focus on optimal age-appropriate development beginning at birth and ranging through young adulthood, this conceptual and empirical backdrop provides a starting point from which to critique key dimensions of CDA policy and consider potential implications of such an approach. The results showed that:

1. Economic resources put both direct and indirect influence on child's well-being or good health. For direct impacts, children with low economic resources could not live under the environment supporting child development. But, children in families with high economic resources, they had chance to receive environmental factors essential for living, e.g. food, shelter, clothing, health care, which were important for child development.

2. Indirect impacts from economic resources were resulted by family rearing and home environment, family stress and neighbors' influence.

3. Critical milestones affected child development and were associated with children's education. The social-economic assets were statistically significant to children's educational achievements.

4. Child's assets and well-being were reflected in the empirical evidence as follows: children's academic achievements were positively correlated with the educational policy. Children's mental health and behavioral problems were in line with social-economic factors at home and neighbors.

In conclusion, child development needs cooperation from parents, family, school, development promotion curriculum at home and school, good neighbors and environment, and policy to promote children according to the critical milestones appropriately. (90)

Dr. Suriyadeo Tripathi (2009) examined students studying in the general education and vocational education programs in Bangkok, Chonburi, Chiangmai, Nakhon Ratchasima and Songkhla by using the developmental assets indicators for youth. The results showed that Thai youth had no public mind while the communities became weak, neglected others and had no joint activities. Thai youth also ignored the religion and were dishonest. This indicated that Thai children, at present, have no mental resort, morality and ethics. (7)

Drug Demand Reduction Bureau (2009) (cited in 7) conducted the research project for the development of life assets survey tool in Thai youth with an aim at protecting the youth from narcotics (2009) The survey project involved 2,249 youths to compare life assets between general youths in educational institutes and risk youths. The result showed that the general youths engaged higher life assets (passing the criteria) than risk youths. Moreover, both groups had weak life assets in terms of power of community. Power of intelligence between general youths and risk youths was significantly different at the statistical level.

The Queen Sirikit National Institute of Child Health and Ramajitti Institute investigated life assets in Thai Children (Dekplus, 2009) (cited in 7) by collecting data from Thai youths aged between 12-25 years studying in various educational institutes. The subjects were selected by sampling from many provinces nationwide. The data collection from the sample in each region showed that the first five matters of life assets in low scores were similar. The first matter answered the same in each region was that the children and youth viewed or thought that they participated in community activities every week at the lowest level. This indicate that the children and youth had no participation in their communities.

Paiyada Wirutsamee (2009) investigated the parent relationship and family factors affecting the development and emotional quotient in preschool children. The research aimed at investigating the parental relationship and family factors affecting the development and emotional quotient in 229 preschool children aged between 4-5

years and 229 mothers at Warin Chamrap District, Ubon Ratchathani Province. The sample group was selected by the Multi-stage Random Sampling. The research instruments consisted of the parent relationship questionnaire, DENVER II Assessment, and Emotional Quotient Assessment Test. The results showed that the most common development delays in these children fell under language development. The second most common development delays were the fine motor skill and adaptability and the 55.0% of preschool children had regular development while 45.0% had suspected delays. Regarding the emotional quotient in preschool children, the emotional quotient of 38.4% should be encouraged while 34.1% must be encouraged. 27.5% of sample had a good emotional quotient. The parent relationship and family factors could jointly predict the emotional quotient in preschool children with the prediction value at 5.9% (R Square = 0.059). According to the correlation between parent relationship and family factors affecting preschool children, the family income was the single factor significantly correlated to the development of preschool children at a statistically significance of 0.05. Regarding the correlation between parent relationship and family factors affecting the emotional quotient in preschool children, the parent relationship in terms of family cohesion and parent communications were the variables positively and significantly affecting the emotional quotient of preschool children at a statistically significance of 0.05. In respect with family factors, the family income was a factor negatively and significantly affecting the emotional quotient of preschool children at a statistically significance of 0.05. (35)

Pattariya Junpen (2009) conducted A Comparative Study of Child Rearing Styles and Inculcation of a Way of Life Based on the Philosophy of Sufficiency Economy in Early Childhood Children: A Case Study of Plengprasiddhi Srinakarin Kindergarten. The results showed that the parents with different supportive and reasoning child rearing types had the different inculcation of a way of life based on the Philosophy of Sufficiency Economy in early childhood children at a statistically significance of .01. The control child rearing type gave no different inculcation of a way of life based on the Philosophy of Sufficiency Economy, except conditions in inculcating morality with the statistically significance of .05. Regarding factors affecting the inculcation of a way of life based on the Philosophy of Sufficiency

Economy, the reasoning child rearing type was the first important variable predicting the inculcation of a way of life based on the Philosophy of Sufficiency Economy. (91)

Marasri Phupolpisarn (2009) studied the Emotional Quotient Development by way of Group Activity and Cooperation of Parents of M.3 Students at Nakhon Ratchasima. This quasi-experimental research aimed at analyzing interactions and comparing the group activities between parents participating and not participating in such activities that affected the students' emotional quotient in general and in each area. The emotional quotient scores before and after activity participation, scores in the monitoring period for group activity participation and in receiving the parents' cooperation. The students with low emotional quotient scores in 3 areas were selected (good, smart, happy). The results showed that the students participating the group activities under the parents' cooperation had higher emotional quotient scores than those not participating the group activities without the parents' cooperation at a statistically significance of 0.05 in general and in each area. These students achieved the different emotional quotient scores before and after the group activities and in the monitoring period at a statistically significance of 0.05. According to the paired comparison, the emotional quotient scores after the group activities and in the monitoring period were higher than the scores before the group activities at a statistically significance of 0.05. (92)

Saithip Bambudpai (2009) studied Effect of Bedtime Storytelling by Parents on Moral Behaviors in Preschool Children. The research was based on quasi-experimental design and aimed to examine the results of bedtime storytelling by parents on moral behavior in preschool children. The research subjects were divided into 2 groups: each comprised 30 preschool girls and boys aged 5-6 years and a control group comprised 30 preschool girls and boys studying at another school. These subjects were selected by purposive sampling. The experimental group received bedtime storytelling by parents. The bedtime tales consisted of 6 tales promoting ethics in term of discipline and generosity. The data was collected from the preschool children, parents, and teachers before and after the experiment. The data analysis was done by using frequency distribution, percentage, mean, Standard Deviation, Chi-Square, Independent sample t-test, and Paired sample t-test. The results showed that the experimental group's ethical scores after the experiment were higher than the pre-

experiment scores in terms of discipline and generosity at a statistical test level (p-value<0.001). These results indicated that bedtime storytelling by parents could make preschool children improve in the area of ethical behavior. (93)

The Nature Council for Child and Youth Development under the Royal Patronage of HRH Princess Mahachakri Sirindhorn (2009) conducted a research project regarding Life Assets Research Tools for Underprivileged Children. It aimed to investigate life assets in underprivileged children. The sample included children and youth aged between 12-25 years in 7 groups: ignorant children, violated-rights children, children with legal problems, handicapped children, poor children, children affected by AIDs, and children in critical situations. The results showed that:

1. The strongest life asset in these underprivileged children was power of self.

2. The weakest life assets in these underprivileged children were power of peer and creative acidity and power of community.

3. The weakest life asset in these underprivileged children was power of community; for example, I have done the community activities every weekend (38.2%), I have participated in community activities every week (43.2%), and I have participated in religious activities every week (42.4%).

4. The weakest life asset in the handicapped children was power of intelligence. The career-oriented projects for these youths should be promoted.

5. Some handicapped youths were unable to study their homework or lessons every day, and they did not pay attention into it, were unable to play sports or do any activities in clubs in which they felt interested in the educational institutes every week. (94)

Maneenuch Wannarat and Buathong Sawangsophakul (2009) studied Social Support, Self Esteem and Loneliness of Visual Impaired Students in School for the Blind. The purposes of the research were to 1) study the level of social support, self-esteem and loneliness of the students; 2) compare the loneliness of the students by personal factors; 3) study the relationship between social support and loneliness of the students; and 4) study the relationship between self esteem and loneliness of the students. The samples were 142 visual impaired students in The Bangkok School for the Blind. The results showed that:

1) Students got the social support at the high level, self-esteem at the moderate level and loneliness at the low level;

2) Students with different level of education and kinds of visual impairment loneliness had different loneliness;

3) There was a negative correlation between social support and self-esteem.

Pradthana Thiensuwan (2009) conducted a study on The Relationship between Physical, Family and Classroom Readiness Factors and Basic Reading Skills in Early Childhood Children. The sample included 359 preschool children at Kindergarten 2 in schools under the supervision of Nakhon Pathom Educational Service Area Office 2 and another 19 class teachers to those preschool children. The results showed that the language development in preschool children was correlated with their basic reading skills at a statistically significance of 0.05. The reading promotion behaviors of child caregivers in terms of knowledge offering and prototype were correlated with basic reading skills in preschool children at a statistically significance of 0.05. It suggested that the child caregivers should regularly read tales to the children, and show them the accurate reading to prepare reading readiness, and to promote basic reading skills in preschool children. (96)

Wichitra Meesuk (2008) conducted a study on Multiple Intelligence Abilities of Preschool Children Using the Integrated Instructional Multiple Intelligence Model. The target group consisted of 20 kindergarten-II children. The Instruments used in the study included 15-lesson plans and the Multiple intelligences observing form. The finding showed that the students receiving the integrated instruction multiple intelligences model had developed 8 areas of multiple intelligences abilities of children higher significantly, which included language ability, logic/math ability, spatial ability, physical and movement ability, music/rhythm ability, human relation ability, self-actualization ability, and natural and environment ability. (97)

Sirisara Lipipun (2008) studied Child Development in Children Aged 0-5 Years and Characteristics of Care-givers at Babies' Home, Affiliated with Ministry of Social Development and Human Security in Central Region of Thailand. The purposes of the research were to examine the prevalence of development delay in babies aged 0-

5 years and the characteristics of care-givers and related factors at babies' homes, affiliated with Ministry of Social Development and Human Security, in central region of Thailand. The findings were that 57.1% of children had the normal development while the prevalence rate of developmental delay in children aged 0-5 years at the babies' homes was 42.9 percent. The factors related to such delay with statistical significance at $P<0.05$ was the experiencing parental visit. The factor related to the child development at the statistical significance at $P<0.01$ were age. (98)

Natsajee Song-in (2008) conducted a research on Parents' Behavior on Child Raising in Early Childhood First Model Center, Anuban Suphanburi School. The objectives of the research were to study the demographic characteristics and parents' characteristics of children at Kindergarten 2 at the Early Childhood First Model Center, Anuban Suphanburi School; to compare the parents' behaviors in 4 types (democratic, reasonably conditional, cherishingly loving and strict child raising); and to verify the parents' behaviors on child raising. The sample included the children's parents who were divided into 2 groups: Group 1 (T score 40-49) involved 67 parents; and Group 2 (T score > 50) involved 63 parents. The methodology was based on both qualitative and quantitative approaches. The group discussion among the parents supported the four type of child raising in the qualitative data. The result indicated that the most important factors taking direct effect to children's EQ were parents' love and understanding. (99)

C. Van Aken, M. Junger, M. Verhoeven, M.A.G. Van Aken, M. Dekovic (2008) conducted a study on The Longitudinal Relations between Parenting and Toddlers' Attention Problems and Aggressive Behaviors. The research involved 108 boys from 17 months of age to 35 months of age and they were monitored again when they were at age of 4. The research was conducted at 3 child clinics in Netherland. The research instruments were Toddlers' Attention Problems and Aggressive Behaviors Assessment Survey Tools, and questionnaire to assess each type of child raising. The results showed a significant linear decrease in attention problems and a significant linear increase in aggressive behaviors. In addition, there were some relations between child-raising types, e.g. parental support, positive discipline, psychological control, physical punishment and lack of stricter and the development of contemporary and over-time behaviors in children. These results indicated that the promotion for the

parental support style and reduction of physical punishment could help decrease attention problems in children. (100)

Margaret (2008) studied the social-emotional screening status in early childhood children. The research was to examine whether children who screen positive for social-emotional/behavioral problems at 12 to 36 months of age are at elevated risk for social-emotional/behavioral problems in early elementary school. The sample involved 1,004 students aged between 12-36 months, so the parents completed “The Brief Infant-Toddler Social and Emotional Assessment” for questions concerning their level of worry about their child’s behavior, emotions, and social development. Later, when children were in early elementary school, the parents completed “The Child Behavior Checklist” and teachers completed “The Teacher Report Form regarding Behavioral Problem”. In a subsample, 389 parents reported child psychiatric status. Brief Infant-Toddler Social and Emotional Assessment screen status and parental worry were associated significantly with school-age symptoms and psychiatric disorders. Low competence scores predicted later teacher-reported subclinical/clinical problems and parent-reported disorders. Worry predicted parent-reported subclinical/clinical problems. Screening with a standardized tool in early childhood has the potential to identify the majority of children who exhibit significant emotional/behavioral problems in early elementary school. (101)

Jan P. Piek, Greer S. Bradbury, Sharon C. Elsley and Lucinda Tate (2008) conducted a study on Motor Coordination and Social-Emotional Behavior in Preschool-aged Children. The research involved 41 kindergarten children, 22 boys and 19 girls, aged between 3.9 years and 5.4 years (M = 4 years, 4 months) at a kindergarten in Western Australia. These children were assessed by the McCarron Assessment of Neuromuscular Development, the Emotional Recognition Scales, the Wechsler Preschool and Primary Scale of Intelligence, and the Child Behavior Checklist. The result showed that the motor ability was positively related to a child's emotion comprehension. However, once age, sex, Performance IQ and Verbal IQ were controlled for the longitudinal prediction. However, the expected correlation between motor ability and anxiety/depression was significant with a moderate effect size. (102)

Ilkay Ulutas, and Esra Omeroglu (2007) conducted a study on The Effects of An emotional Intelligence Education Program on the Emotional Intelligence of

Children. The research was conducted in Ankara, Turkey. The sample group were 120 6-year old children. A subgroup of 40 students attended a 12-week emotional intelligence program. The emotional intelligence instrument was the Sullivan Emotional Intelligence Scale. The results showed that an emotional intelligence education program contributed significantly to children's emotional intelligence levels. (103)

Paweena Menegool (2007) studied the IQ and EQ Development Project for Preschool Children. The research aimed at educating the parents, guardians and caregivers about the promotion of skills and development. The sample group involved the parents, guardians and caregivers of child development centers in Region 2, which covered 5 provinces, e.g. Sukhothai, Phitsanulok, Phetchabun, Uttaradit and Tak; 2 centers for each province and 20 families for each center. The sample group in each center have been educated for 10 times every month. The educating activities were various such as lecture, demonstration and practice, and child development checking after training. The results showed that 82.30% of children in every province in Region 2 had normal development while 17.70% had the suspected delays. For each development area, 15.10% of suspected delays fell in the language development while 6.0% of suspected delays fell in the fine motor and adaptability development. The above data indicated that it was necessary to develop the parents to have knowledge and skills in the promotion of child development. Not only parents, the aged people, guardians and caregivers in child development centers should develop their knowledge and skills as well to help children engage their appropriate development. The research was to encourage the significance of promoting child development correctly. (104)

Sutham Nanthamongkolchai (2007) conducted a study on Influence of Child Rearing by Grandparent on the Development of Children Aged Six to Twelve Years in Prae. The finding revealed that two-thirds or 63.4% of children reared by grandparents had a normal development while 36.6% had delayed development. It was found that the child caregivers had significant influence on child development. The children reared by grandparents had 2.0 times higher chance of delayed development than those who were reared by their parent. However, the children who grew up with a grandparent received the physical growth promotion and good nutrition, but may lack learning skill promotion and activity that leads to intellectual development.

Furthermore, the family income and child rearing had an influence on child development ($p < 0.05$). The children in insufficient income family had 2.1 times higher chance of delayed development than those with sufficient income. The child with inappropriate child rearing had 8.8 times higher chance of delayed development than those with appropriate child rearing. (105)

Piyasuda Nettayarak (2005) studied Mental Health of Senior High School Students in High Schools Located at Dusit District under the Supervision of the Department of General Education, Bangkok. The research aimed at comparing the mental health and correlation between the mental health of senior high-school students in high schools located at Dusit District under the Supervision of the Department of General Education, Bangkok with other variables, e.g. gender, income, academic achievements, rearing, self-efficacy, future-oriented characteristic, and self-control. The sample involved 355 senior high-school students in high schools located at Dusit District under the Supervision of the Department of General Education, Bangkok in the educational year of 2004. Among these, they were 163 male students and 192 female students. The results showed that:

1. Students' mental health was at the good level.

2. Students with different gender, income and academic achievements had no different mental health.

3. Students receiving different rearing had the different mental health at a statistically significance of .05.

4. Self-efficacy, future-oriented characteristic and self-control were correlated with students' mental health. (106)

Panthip Chantarachote (2004) studied Psychological Self-care, Social Support and Mental Health Status of High School Students, Bangkok Metropolis. The purpose of the research was to investigate psychological self-care, social support, and mental health status of high school students. The sample 608 Grade 10-12 students in the educational year of 2003 in schools under the supervision of the Department of General Education. The results showed that:

1. Most of subjects (80.1%) were normal and 19.9% had mental health problems.

2. Anxiety and insomnia was the most common mental health problem, followed by somatic symptoms.

3. Severe depression was the least common mental health problem.

4. The family's financial status was significantly associated with mental health status. (p-value = 0.001).

5. Subjects with good mental health status had better psychological self-care than those of mental health problem group.

6. Students with normal mental health were more supported by parents, friends and teachers than those with mental health problems. (107)

Kef, S. and Dekovic, M. (2004) studied The Role of Parental and Peer Support in Adolescents Well-being: A Comparison of Adolescents with and without a Visual Impairment. The study examined the importance of parental and peer support for well-being of adolescents with and without a visual impairment. The sample included 178 adolescents who were blind or visually impaired and 338 adolescents without visual impairments. The results showed that:

1. Peer and parental support proved to be important for well-being of both adolescents with a visual impairment and sighted adolescents.

2. Whereas in the group of adolescents with a visual impairment, a positive linear relationship exists between peer support and well-being. (108)

Scales and Roehlkepartain (2003) (cited in 109) studied The Role of Developmental Assets in Predicting Academic Achievement: A Longitudinal Study. The results showed that the developmental assets put were significant for children's academic achievements as Figure below.

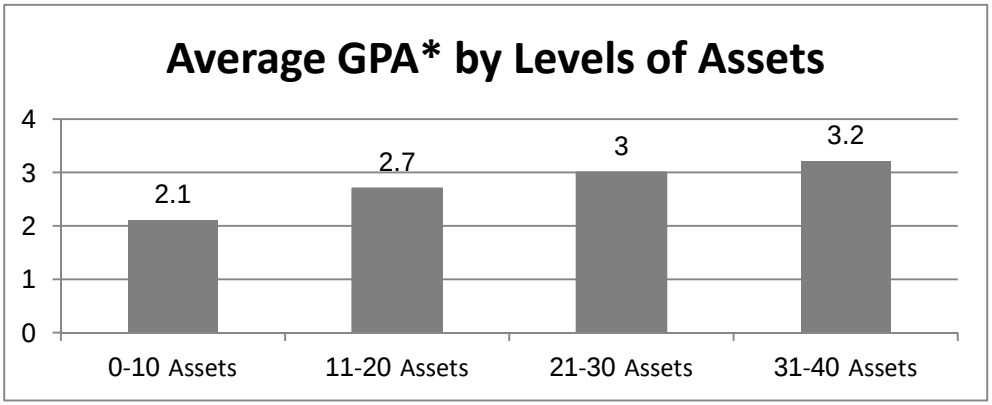


Figure 2.7: Relationship between academic achievements and life assets in children

Source: Scales and Roehlkepartain, 2003 (cited in 85)

1) The more developmental assets children had, the higher academic achievements they had.

2) The level of developmental assets in children was so important and it could predict their academic achievements.

3) Children's constant or increasing level of developmental assets was statistically significant for their higher academic achievements.

4) Children with a high level of developmental assets, though in different race, were likely to be successful in studying at school.

5) Children from low-economic status families but high level of developmental assets might be successful in studying at school like those from high-economic status families.

According to Oyserman (2003) regarding Roles and Duties of Grandparents to Development of Two-Generation People in the United States, It was found that the grandchildren brought up by the paternal or maternal grandfathers since childhood engaged more positive physical growth than the grandchildren brought up by the paternal or maternal grandmothers due to the activities jointly done by paternal or maternal grandfathers and grandchildren while the paternal or maternal grandmothers might support the daily rearing. The result also showed that the interactions between people at different ages or between grandparents and grandchildren were beneficial to

child development, and to grandparents' health. Social activities between aged people and children helped heal the aged people's physical and mental health, and promote the children's knowledge. (110)

CHAPTER 3
RESEARCH METHODOLOGY

This research was to investigate the Relationship between Life Assets and Emotional Quotient and Development among Preschool Children: A Case Study in Preschool Children Centers, Lad Krabang District, Bangkok. The research methodology was described below.

3.1 Methodology

This research was the survey research. The sample group was selected by the Multi-stage Sampling from 6,395 children aged between 3-5 years, 11 months and 29 days in Lad Krabang District, Bangkok. After such sampling, the sample group included 378 children aged between 3-5 years, 11 months and 29 days.

The research has been conducted from May 2013 to March 2014. The questionnaire regarding life assets in preschool children was completed by guardians or caregivers who were intimate with children not less than 6 months. The questionnaire regarding emotional quotient in preschool children was completed by teachers. Child development was assessed by the child development screening test for preschool children or Denver II. The Researcher and child development screening team also passed the training course to be the preschool children development examiners by using Denver II - Thai version.

3.2 Data sources

The data in relation to child development was collected from the preschool children aged between 3-5 years, 11 months and 29 days in Lad Krabang District, Bangkok. All other related data was collected from the guardians and caregivers intimate with children not less than 6 months.

3.3 Populations

Populations

The populations involved 6,395 children aged between 3-5 years, 11 months and 29 days in Lad Krabang District, Bangkok.

Sample Group

The sample group included 378 children aged between 3-5 years, 11 months and 29 days studying in the Bangkok preschool children centers, Lad Krabang District, in the educational year of 2013, and the sample group also included 378 guardians and caregivers intimate with children not less than 6 months. The sample group was selected by the Multi-stage Sampling. The sample size was calculated by Yamane formula (Yamane, 1973) (11) at the .05 level of significance and the acceptable error not more than 0.05%. The data was collected from 415 research participants to avoid a 10% deviation caused by the immediate cessation of cooperation after calculating the sample size.

$$n = \frac{N}{1+Ne^2}$$

n = Sample size required.

N = Population size

e = Acceptable error of sampling

The selection of the sample group was under the following process:

1. Select the province to be studied. This province was the place where most preschool children lived; it was Bangkok.

2. Carry out the multi-stage sampling to get the representatives of preschool children aged 3-5 years in Bangkok. The sampling steps were as follows:

2.1 Carry out the simple random sampling – As the administration of Bangkok Metropolis was divided into 6 zones, including South Krung Thong, North Krung Thon, Central Bangkok, South Bangkok, East Bangkok and North Bangkok. Draw lots to select only one zone; East Bangkok zone was randomly selected.

2.2 Carry out the simple random sampling to select one district from the selected zone in Step 2.1. Lad Krabang District was randomly selected.

2.3 In Lad Krabang District, there were total 13 Bangkok preschool children centers. After the simple random sampling, 5 preschool children centers were selected for this research.

3. Select the sample group, which involved normal children without impairment and/or children not being diagnosed as special children.

3.4 Data collection methods

Regarding the data on life assets and emotional quotient, the guardians or caregivers intimate with children completed the life assets questionnaire for preschool children aged between 3-6 years. The questionnaire about emotional quotient in preschool children aged between 3-5 years was completed by teachers. Child development from the sample group totaling 378 children was assessed in January 2014 by the child development screening test for preschool children or Denver II. Such screening was done by the professional nurse and the master-degree student in the human development program, Mahidol University, who passed the training course to be the preschool children development examiners by using Denver II - Thai version.

3.5 Research instruments

This research involved 3 research instruments, e.g. questionnaire for life assets of preschool children aged between 3-6 years, emotional quotient assessment in preschool children aged between 3-5 years, and the child development screening test for preschool children or Denver II. The details of each instrument are as follows:

Questionnaire for life assets of preschool children aged between 3-6 years – This tool was developed and improved by Dekplus in collaboration with Thai Family Research and Development Center, School of Human Ecology, Sukhothai Thammathirat University under the positive working concept and building of positive power in families, communities and society. The Life Assets Survey Tool for

Preschool Children is Thailand's innovation that helps create new jobs in the society. The Life Assets Survey Tool for Preschool Children aged between 3-6 years contains certain questions or indicators reflecting the reactions of children, parents, guardians or caregivers, and their interactions in terms of physical, psychological, emotional and social domains. This leads to the process and activities to be developed as constructive child care methods with positive power whereas:

1) Reflecting reactions and behaviors of parents, guardians or caregivers to children

- Questions in Part 3: Information about life assets of preschool children in 12 questions, from Question 1-12.

2) Reflecting reactions and behaviors of children

- Questions in Part 3: Information about life assets of preschool children in 21 questions, from Question 13-43.

3) Reflecting the community and area circumstances to children

- Questions in Part 3: Information about life assets of preschool children in 5 questions, from Question 44-48.

This tool was used to collect the data of each child. The informants should be the child's caregiver or person intimate with that child not less than 6 months and know his information best. (74)

This tool helps reflect the weak and strong life assets in caring for preschool children, and they may be developed to be constructive and tangible activities, which cause the protection process for preschool children.

Each survey set consisted of questions, which were divided into 4 parts as follows:

Part 1: General information that was necessary and related to children – 5 questions.

Part 2: Basic family information – 6 questions about the family in which the child lives regularly.

Part 3: Information about life assets of preschool children aged between 3-6 years 48 questions with alternative answer choices. The questions involved the child rearing and children's environment. The respondents read each question carefully

before choosing an answer most relevant to the child by marking in the provided space.

Part 4: Additional information about the development of life assets in preschool children (3-6 years). This part was based on the interview approach to get more useful information for the development of life assets. The following were some questions in this part:

1. The child's father takes part in rearing the child.

1) Never 2) Sometimes 3) Regularly

If the father takes parts in rearing the child, please specify "how does he take part in it? ……

2. You and your family members have the discussion until you get the good conclusion on child rearing.

1) Never 2) Sometimes 3) Regularly

If you and your family members do so, please specify how do you make such? ……

3. You can control your emotion when the child acts madly or cries.

1) I cannot control my emotion. 2) I can control my emotion sometimes.

3) I can control my emotion at all time.

If you can control your emotion, please specify how can you do that? ……..

4. You can control the situation/child's emotion when he/she cries or acts madly.

1) I cannot control it. 2) I can control it sometimes. 3) I can control it at all time.

If you can control it, please specify how can you do that?

However, in this research, only the first 3 parts of the Life Assets Survey Tool for Preschool Children aged between 3-6 years were used. Part 4 was the additional information from the interviews for further qualitative data analysis, which was not included in this research because the objective of this research was to explain the quantitative data on life assets among preschool children only.

The questionnaire contained the 3-rating scale questions for 3 levels of answer: regularly, sometimes, and never. The scoring for all 48 questions was as follows:

Regularly – 3 scores

Sometimes – 2 scores

Never – 1 score

To interpret the data on life assets, the data of each question was interpreted into the rating scale. Then, divide life assets into 3 levels: strong, fair and weak. To explain which level of life assets the children had, calculate the mean of each question before comparing it with the mean of scoring criteria. The mean of scoring criteria was calculated by: highest scores – lowest scores/number of range as follows:

1.00 – 1.60 = weak level

1.61 – 2.30 = fair level

2.31 – 3.00 = strong level

Emotional Quotient Assessment in preschool children aged between 3-5 years – This assessment was provided by the Department of Mental Health, Ministry of Public Health. The Emotional Quotient Assessment in preschool children aged between 3-5 years consists of the Emotional Quotient Assessment in preschool children aged between 3-5 years reported by teachers/caregivers, and the Emotional Quotient Assessment in preschool children aged between 3-5 years reported by parents/guardians. Both assessment forms passed the reliability criteria evaluated by the Department of Mental Health, Ministry of Public Health. The reliability of the Emotional Quotient Assessment in preschool children aged between 3-5 years reported by teachers/caregivers was 0.9134 while the reliability of the Emotional Quotient Assessment in preschool children aged between 3-5 years reported by parents/guardians was 0.8943. Because the teachers/caregivers were so close to children and they were capable of comparing and judge the children's emotional quotient (73), which could be used to assess the emotional quotient in children efficiently in terms of goodness, smartness and happiness. The Emotional Quotient Assessment in preschool children aged between 3-5 years reported by teachers/caregivers was selected for this research because this tool was developed by

some experts with a high level of reliability or Alpha-Coefficient was at 0.9134, and it was suitable and relevant to ages of the sample in this research. The Assessment involved 55 questions, divided into 2 groups as follows:

Group 1: scoring value for each answer

Never show such behavior – 1 score

Sometimes show such behavior – 2 scores

Frequently show such behavior – 3 scores

Regularly show such behavior – 4 scores

Group 1 included Question 1-5, 10-15, 17-23, 25-30, 32-34, 37-54

Group 2: scoring value for each answer

Never show such behavior – 4 scores

Sometimes show such behavior – 3 scores

Frequently show such behavior – 2 scores

Regularly show such behavior – 1 score

Group 2 included Question 6-9, 16-24, 31, 35, 36, 55 (reverse scoring value)

These raw scores were interpreted into T-scores according to the table comparing these scores with the emotional quotient scoring criteria. All 9 areas of emotional quotient were included together before dividing them by T-score norms of each emotional quotient area. Finally, the emotional quotient was assessed in 3 levels:

T-scores higher than 50 – Normal: This indicates that children have good emotional quotient, which should be reinforced and sustained.

T-scores in the range of 40-49 – should be encouraged: This indicates that children's emotional quotient in that particular area should be developed. The child caregivers should reinforce that emotional quotient area consistently.

T-scores lower than 40 scores – must be encouraged: This indicates that children's emotional quotient in that particular area must be encouraged. The child caregivers must pay attention to develop that emotional quotient area seriously and consistently.

Child development screening test for preschool children or Denver II – This test was developed from The Denver Developmental Screening Test (DDST), first published in 1967 by W.K. Frankenburg et al. They constructed this child

screening test with an aim to help the medical personnel screen preschool children who suffered or might have some developmental problems. This test has been used for more than 50 million children worldwide. (21) Later, this test was improved to be DDST-R and Denver II. In Thailand, Denver II was used and translated into Thai by Assoc. Prof. Dr. Nittaya Kochpakdee. Denver II contains 125 questions regarding 4 main developments: social development and self-care, fine motor and adaptability, language, and gross motor. The reliability of Denver II was 0.99, in the range of 0.95-1.00 with Standard Deviation at 0.016. The reliability from retesting was 0.90, in the range of 0.50-1.00 and Standard Deviation at 0.12. In the first interpretation, each item was interpreted and the general interpretation was done later. (21)

Item interpretation in 5 levels: advanced item; normal item; caution item; delayed item; no opportunity item.

General interpretation in 3 levels: normal, suspect and untestable.

3.6 Instrument quality testing

The reliability of the Life Assets Survey Tool for Preschool Children aged between 3-6 years was tested in a group of 40 preschool children whose qualifications were similar to the sample. The Cronbach's Coefficient Alpha of this tool was 0.78.

3.7 Data analysis

In part of quantitative data, the descriptive statistics were used to analyze the frequency, percentage, mean and Standard Deviation of general information regarding development, emotional quotient and life assets of preschool children.

Correlation analysis was used to analyze the correlation between life assets and development and emotional quotient in preschool children, the correlation between emotional quotient and development, and the correlation between each area of development. In addition, the descriptive statistics were used to show some basic data and simple relationship of some data for certain important issues.

CHAPTER 4
RESULTS

This research was conducted to investigate the Relationship between Life Assets and Development and Emotional Quotient in Preschool Children: A Case Study of Preschool Children Centers, Lad Krabang District, Bangkok. The sample included 378 preschool children aged between 3-5 years studying at 5 Bangkok preschool children centers at Lad Krabang District. They were the representatives selected by the Multi-stage Random Sampling. The data was collected from guardians or caregivers who were intimate with children not less than 6 months and they completed the questionnaire regarding life assets of preschool children. The emotional quotient questionnaire for preschool children was completed by teachers. The child development was assessed by the Preschool Children Development Screening Test or Denver II. The research was conducted from 14-25 January 2014. The results of this research were as follows:

Part 1: General information about preschool children and main caregivers and basic information about children's families

Descriptive statistics were used to compute the frequency, percentage, mean and Standard Deviation. The important issues were presented below.

Part 1.1: General information about preschool children and main caregivers

Part 1.2: Basic information about children's families

Part 2: Information about life assets, development and emotional quotient in preschool children

Part 2.1: Life assets of preschool children consisted of 3 powers: power of family, power of self, and power of community. The overall life

assets for these 3 areas in preschool children were presented. The 5 strongest life assets and 5 weakest life assets were presented as well.

Part 2.2: Development of preschool children was divided into 4 areas: social development and self-care, fine motor and adaptability, language, and gross motor. The development assessment results in preschool children in general and in each area were presented.

Part 2.3: Emotional quotient of preschool children was presented in 3 levels: must be encouraged, should be encouraged, and normal.

Part 3: Relationship between life assets and development and emotional quotient in preschool children

Correlation analysis was used to analyze the correlation between life assets and general development in preschool children, the correlation between emotional quotient in preschool children and all 4 areas of development, and the correlation between each area of development. The results of correlation analysis were presented in Part 3.1.

In addition, the descriptive statistics were used to present the basic information and simple relationship of some basic data. The important issues were presented in Part 3.1.1, 3.1.2, 3.1.3 and Part 3.2.

Part 3.1 Relationship between life assets and development of preschool children in 4 areas

Part 3.1.1: Life assets in term of power of family and each area of development

Part 3.1.2: Life assets in term of power of self and each area of development

Part 3.1.3: Life assets in term of power of community and each area of development

Part 3.2: Relationship between life assets in terms of power of family, power of self and power of community and the emotional quotient in preschool children

Part 4: Relationship between general development and emotional quotient in preschool children

Part 4.1 – General development and emotional quotient in preschool children. Correlation Analysis was used to find out the correlations between emotional quotient in preschool children and their development in 4 areas

Part 4.2 – Each area of development and emotional quotient in preschool children. Descriptive statistics were used in this part.

Part 5: Correlations between each area of development in preschool children – The Correlation Analysis was used in this part.

Part 1: General information about preschool children and main caregivers and basic information about children's families, e.g. gender, age, relationship with children, level of education and occupation

Part 1.1: General information about preschool children and main caregivers – From studying the general information about preschool children, the results showed that 57.10% of the sample group were girls and 42.90% were boys. The average age was 3.74 years. About 80.40% of main caregivers were female with the average age at 33.85 years. About 66.10% of main caregivers were children's mothers, 17.20% were children's fathers, 12.70% were grandparents, 2.60% were relatives, 0.50% was babysitters, and 0.80% was children's guardians who were not the parents, grandparents or relatives. About 48.90% of guardians completed the high school level, 20.40% completed the diploma/vocational/higher vocational level, and 19.80% completed the primary school level respectively. There were 4 main caregivers who were uneducated or it accounted for 1.10%. Most guardians to preschool children (34.70%) were officers in private companies, 20.90% were merchants/ business owners, and 18.80% were general labors respectively. The details were presented in Table 4.1.

Table 4.1: Number and percentage of general information about preschool children and main caregivers

Information	Number (N = 378)	Percentage
Children		
Gender		
Girls	216	57.10
Boys	162	42.90
Age (Mean = 3.74, Standard Deviation = 0.71, lowest value = 3.00, highest value = 5.11)		
3 years – 3 years 11 months	172	45.50
4 years – 4 years 11 months	149	39.42
5 years – 5 years 11 months	57	15.08
Main caregivers		
Gender		
Female	304	80.40
Male	74	19.60
Age (Mean = 33.85, Standard Deviation = 8.58, lowest value = 17, highest value = 70)		
15-20	13	3.44
21-30	142	37.57
31-40	156	41.27
41 years up	67	17.72
Relationship with children		
Mother	250	66.10
Father	65	17.20
Grandparents	48	12.70
Relative	10	2.60
Babysitter	2	0.50
Guardians who were not parents, grandparents, relatives	3	0.80
Level of Education		
Primary school	75	19.80
Secondary school	185	48.90
Diploma/ vocational / higher vocational	77	20.40
Bachelor degree	35	9.30
Master degree	2	0.50
Uneducated	4	1.10

Part 1.2: Basic information about children's families

From surveying the family characteristics, most families of preschool children were the nucleus families (63.20%), followed by expanded families (36.80%). According to the parents' marital status, 77.50% of parents lived together while 9.00% were separated and 11.60% were divorced. Regarding the family income per month, most families (132 families) earned income in the range of Baht 12,001-20,000 per month, representing 34.90% while 119 families or 31.50% earned income in the range of Baht 6,001-12,000. The persons rearing children regularly and most intimate with them during daytime were the grandparents in 129 families, representing 34.10%, mothers in 113 families, representing 29.90%, and both fathers and mothers in 71

families, representing 18.80% respectively. The persons rearing children regularly and most intimate with them during nighttime were the parents in 162 families, representing 42.90%, mothers in 117 families, representing 31.00%, and grandparents in 75 families, representing 19.80% respectively. Most guardians (56.10%) have never received any knowledge about the child development reinforcement and emotional quotient reinforcement by public health agencies. The details were in Table 4.2.

Table 4.2: Number and percentage of basic information about children's families

Information	Number (N = 378)	Percentage
Family types		
Nucleus family	239	63.30
Expanded family	139	36.80
Parents' marital status		
Living together	293	77.50
Separated	34	9.00
Divorced	44	11.60
Father was dead	7	1.90
Family income per month		
Less than 6,000 Baht	16	4.20
6,001-12,000 Baht	119	31.50
12,001-20,000 Baht	132	34.90
20,001-30,000 Baht	63	16.70
30,001-50,000 Baht	43	11.40
More than 50,000 Baht	5	1.30

Table 4.2: Number and percentage of basic information about children's families (cont.)

Information	Number (N = 378)	Percentage
Persons rearing children regularly and most intimate with them (daytime)		
Father	13	3.40
Mother	113	29.90
Parents	71	18.80
Grandparents	129	34.10
Relative	14	3.70
Thai babysitter	22	5.80
Guardians who were not parents, grandparents, relatives	16	4.20
Persons rearing children regularly and most intimate with them (nighttime)		
Father	15	4.00
Mother	117	31.00
Parents	162	42.90
Grandparents	75	19.80
Relative	4	1.10
Thai babysitter	1	0.30
Guardians who were not parents, grandparents, relatives	4	1.10
Guardians received some knowledge about the child development reinforcement and emotional quotient reinforcement by public health agencies.		
Yes	166	43.90
No	212	56.10

Part 2: Information about life assets, development and emotional quotient in preschool children

Part 2.1: Life assets of preschool children consisted of 3 powers:

2.1.1 Power of family – It covers power of love, attention, discipline and prototype, positive and appropriate monitoring and help, good speech in house, warmth and safety.

2.1.2 Power of self – It is the inner power, e.g. self-esteem and self-confidence, honesty, responsibility, self-discipline, social skills and kindness.

2.1.3 Power of community – It is the power of people living with sympathy, understanding, friendship, discipline and prototype, good speech, public mind, warmth and safety in communities, and joint activities.

The results from surveying life assets of preschool children, the preschool children from Bangkok preschool children centers, Lad Krabang District, had the life assets as illustrated in Table 4.3:

Table 4.3: Number and percentage of life assets in preschool children in all 5 centers

Life Assets	Assessment Results	
	Number (N = 378)	Percentage
Power of Family		
Strong	365	96.60
Fair	13	3.40
Weak	0	0
Power of Self		
Strong	325	86.00
Fair	53	14.00
Weak	0	0
Power of Community		
Strong	183	48.40
Fair	192	50.80
Weak	3	0.80

Table 4.3 showed that 96.60% of preschool children had the strong power of family while only 3.40% of children held the power of family at the fair level. About 86.00% of preschool children had the strong power of self while only 14.00% of children held the power of self at the fair level. About 48.40% of preschool children had the strong power of community while 50.80% and 0.80% of children held the power of community at the fair level and weak level respectively.

From analyzing the first 5 strongest life assets in preschool children, the first 3 strongest life assets fell in the power of family from the following questions: “You praise when your child performs well” (Mean = 2.92), “You warn for what your child performs inappropriately” (Mean = 2.91), and “You hold and hug to show your love to your child” (Mean = 2.87). The last 2 strongest life assets fell in the power of self from the following questions: “Your child likes to raise questions about his/her surroundings” (Mean = 2.86), and “Your child is bright and cheerful” (Mean = 2.85). The details were presented in Table 4.4.

Table 4.4: Ranks of the strongest life assets in preschool children as classified by questions, power, level of strength and mean

Rank	Question	Life Assets	Power	Level	Mean
1	9	You praise when your child performs well.	Family	Strong	2.92
2	10	You warn for what your child performs inappropriately.	Family	Strong	2.91
3	1	You hold and hug to show your love to your child.	Family	Strong	2.87
4	25	Your child likes to raise questions about his/her surroundings.	Self	Strong	2.86
5	13	Your child is bright and cheerful.	Self	Strong	2.85

From analyzing the first 5 weakest life assets in preschool children, the first weakest life assets fell in the power of community from the following questions: “The community has some learning sources/activity areas to be involved by families” (Mean = 1.94), and “The community arranges religious/cultural and traditional activities that allow the children to participate in” (Mean = 2.10). The weakest life assets for the power of family came from the following questions: “You tell fairy stories to your child” (Mean = 1.97). The questions showing the weakest power of self were: “Your child has discipline in playing; for example, keep toys in place after playing” (Mean = 2.11), and “Your child knows how to control his/her emotions when he/she is displeased (e.g. running amok or fussing)” (Mean = 2.15). The details were presented in Table 4.5.

Table 4.5: Ranks of the weakest life assets in preschool children as classified by questions, power, level of strength and mean

Rank	Question	Life Assets	Power	Level	Mean
1	46	The community has some learning sources/activity areas to be involved by families.	Community	Fair	1.94
2	6	The community arranges religious/cultural and traditional activities that allow the children to participate in.	Family	Fair	1.97
3	48	You tell fairy stories_to your child.	Community	Fair	2.10
4	20	Your child has discipline in playing; for example, keep toys in place after playing.	Self	Fair	2.11
5	17	Your child knows how to control his/her emotions when he/she is displeased (e.g. running amok or fussing).	Self	Fair	2.15

Part 2.2: Development of preschool children was divided into 4 areas: social development and self-care, fine motor and adaptability, language, and gross motor

Based on the Preschool Children Development Screening by Denver II, the general interpretation results showed that most children (227 children), representing 60.10%, had normal development while 151 children or 39.90% had the suspect delays.

From interpreting each item, the results showed that 304 children (80.40%) had normal social development and self-care while 46 children (12.20%) had caution development, and 28 children (7.40%) had the delayed development.

Regarding the fine motor development and adaptability, one child had early mature development than general children which accounted for 0.30% while 280 children (74.10%) had normal development, 64 children (16.90%) had caution development, and 33 children (8.70%) had delayed development.

For language development, 187 children (49.50%) had normal development while 136 children (36.00%) had caution development and 55 children (14.60%) had delayed development.

For gross motor development, nine children had early mature development than average children which accounted for 2.40% while 310 children (82.00%) had normal development, 38 children (10.10%) had caution development and 21 children (5.60%) had delayed development. The details were presented in Table 4.6.

Table 4.6: Number and percentage of preschool children development in general and in each area

DENVER II	Development Assessment Results		
		Number (N = 378)	Percentage
1. General Development	Caution	151	39.90
	Normal	227	60.10
2. Each area of development			
- Gross motor development	Early mature	9	2.40
	Normal	310	82.00
	Caution	38	10.10
	Delayed	21	5.60
- Fine motor development and adaptability	Early mature	1	0.30
	Normal	280	74.10
	Caution	64	16.90
	Delayed	33	8.70
- Language	Early mature	0	0
	Normal	187	49.50
	Caution	136	36.00
	Delayed	55	14.60
- Social development and self-care	Early mature	0	0
	Normal	304	80.40
	Caution	46	12.20
	Delayed	28	7.40

Part 2.3: Emotional quotient of preschool children

The emotional quotient of preschool children was studied by the Emotional Quotient Assessment for Preschool Children aged between 3-5 years assessed by teachers/caregivers as provided by the Department of Mental Health, Ministry of Public Health. For the sample group totaling 378 children, the results showed that the emotional quotient of 276 children (73.00%) must be encouraged while the emotional quotient of 102 children (27.00%) should be encouraged.

Obviously, no children in the sample group had the normal emotional quotient. The details were in Table 4.7.

Table 4.7: Number and percentage of emotional quotient in preschool children

Information	Number (N = 378)	Percentage
Must be encouraged	276	73.00
Should be encouraged	102	27.00
Normal	0	0

Part 3: Relationship between life assets and development and emotional quotient in preschool children

Part 3.1 Relationship between life assets and development of preschool children

From studying the relationship between life assets and development in preschool children in 4 areas, the results showed that the life assets in terms of the power of self and power of community and general development in all 4 areas were positively correlated with the preschool children's development. This meant that when the life assets in terms of power of self and power of community were higher, it was likely that the preschool children's development would be normal or better. The details were presented in Table 4.8.

Table 4.8: Relationship between life assets and development of preschool children

	Development
Life Assets	
Power of Family	.052
Power of Self	.089*
Power of Community	.098*

*=$p<0.05$

Part 3.1.1: Life assets in term of power of family and each area of development

The results gave an interesting perspective that the preschool children whose power of family was strong would have the normal development of gross motor, fine motor and adaptability, and language development more than preschool children whose power of family was fair. For preschool children whose life assets in term of power of family was fair, their development of gross motor, fine motor and adaptability as well as language development were more delayed than those with the strong power of family. The result also showed that the children whose power of family was fair, they had more caution and delayed fine motor and adaptability development than preschool children whose power of family was strong.

Social development and self-care were important issues in the development of preschool children. If the preschool children's power of family was strong, their social development and self-care would be normal more than other preschool children whose power of family was fair. In addition, the preschool children with strong power of family would engage less delayed social development and self-care than the preschool children whose power of family was fair. The details were presented in Table 4.9.

Table 4.9: Life assets in terms of power of family and social development and self-care

			SOCIAL			
			Normal Item	Caution Item	Delayed Item	Total
LEVELFAM	Moderate	Count	7	3	3	13
		% within LEVELFAM	53.8%	23.1%	23.1%	100.0%
		% within SOCIAL	2.3%	6.5%	10.7%	3.4%
	Strong	Count	297	43	25	365
		% within LEVELFAM	81.4%	11.8%	6.8%	100.0%
		% within SOCIAL	97.7%	93.5%	89.3%	96.6%
Total		Count	304	46	28	378
		% within LEVELFAM	80.4%	12.2%	7.4%	100.0%
		% within SOCIAL	100.0%	100.0%	100.0%	100.0%

Part 3.1.2: Life assets in term of power of self and each area of development

From investigating life assets regarding power of self and development in preschool children, there were some interesting issues that the preschool children with strong life assets in term of power of self had normal fine motor development and adaptability, and they had quicker development than those having life assets in term of power of self at the fair level. This indicated the importance of reinforcing the power of self in preschool children for their find motor development and adaptability, which deems an important development step in preschool children, resulting to their learning and activities to live by themselves. The details were presented in Table 4.10.

In addition, there were other interesting issues regarding preschool children's language development as well as social development and self-care that were important for their communications as they began to interact with other people, and these developments were basic skills for doing daily activities along with the fine motor coordination. The results showed that the preschool children with strong power of self engaged the normal language development and social development and self-care more than preschool children having the power of self at the fair level. Furthermore, the preschool children having the power of self at the strong level had caution language development and social development and self-care less than preschool children with the power of self at the fair level. These issues regarding language development and social development and self-care proved the importance of reinforcing the power of self in these preschool children so that more children engage the normal development. The details were presented in Table 4.11 and 4.12.

In respect with the gross motor, the preschool children having the power of self at the strong level and fair level had no different gross motor development.

Table 4.10: Life assets in terms of power of self and fine motor development and adaptability

			FINEMOTO				Total
			Advanced Item	Normal Item	Caution Item	Delayed Item	
LEVELSEL	Moderate	Count	0	37	12	4	53
		% within LEVELSEL	.0%	69.8%	22.6%	7.5%	100.0%
		% within FINEMOTO	.0%	13.2%	18.8%	12.1%	14.0%
	Strong	Count	1	243	52	29	325
		% within LEVELSEL	.3%	74.8%	16.0%	8.9%	100.0%
		% within FINEMOTO	100.0%	86.8%	81.3%	87.9%	86.0%
Total		Count	1	280	64	33	378
		% within LEVELSEL	.3%	74.1%	16.9%	8.7%	100.0%
		% within FINEMOTO	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.11: Life assets in terms of power of self and language development

			LANGUAGE			Total
			Normal Item	Caution Item	Delayed Item	
LEVELSEL	Moderate	Count	23	20	10	53
		% within LEVELSEL	43.4%	37.7%	18.9%	100.0%
		% within LANGUAGE	12.3%	14.7%	18.2%	14.0%
	Strong	Count	164	116	45	325
		% within LEVELSEL	50.5%	35.7%	13.8%	100.0%
		% within LANGUAGE	87.7%	85.3%	81.8%	86.0%
Total		Count	187	136	55	378
		% within LEVELSEL	49.5%	36.0%	14.6%	100.0%
		% within LANGUAGE	100.0%	100.0%	100.0%	100.0%

Table 4.12: Life assets in terms of power of self and social development and self-care

			SOCIAL			
			Normal Item	Caution Item	Delayed Item	Total
LEVELSEL	Moderate	Count	39	7	7	53
		% within LEVELSEL	73.6%	13.2%	13.2%	100.0%
		% within SOCIAL	12.8%	15.2%	25.0%	14.0%
	Strong	Count	265	39	21	325
		% within LEVELSEL	81.5%	12.0%	6.5%	100.0%
		% within SOCIAL	87.2%	84.8%	75.0%	86.0%
Total		Count	304	46	28	378
		% within LEVELSEL	80.4%	12.2%	7.4%	100.0%
		% within SOCIAL	100.0%	100.0%	100.0%	100.0%

Part 3.1.3: Life assets in term of power of community and each area of development

The results showed an interesting issue that the preschool children with the power of community at the strong level acquired early mature and normal gross motor development, fine motor development and adaptability, and language development more than other children whose power of community was at the fair level and weak level. It was also found that the preschool children with power of community at the strong level had less caution and delayed gross motor, fine motor and adaptability, and language development than the preschool children whose power of community was at the fair level and weak level.

There was another interesting issue regarding social development and self-care of preschool children and their life assets. It was found that the preschool children whose power of community was at the strong level and fair level had the normal social development and self-care more than the preschool children whose power of community was at the weak level. The preschool children whose power of community was at the weak level also had more delayed social development and self-care than the preschool children whose power of community was at the strong level and fair level. From surveying the preschool children's life

assets, the power of community was the second weakest power among 5 weakest powers in preschool children. This issue indicated that the strong power of community helped more preschool children engage the normal development, especially social development and self-care, which are the skills these children can learn, both directly and indirectly, from their surroundings. The details were presented in Table 4.13.

Table 4.13: Life assets in terms of power of community and social development and self-care

			SOCIAL			Total
			Normal Item	Caution Item	Delayed Item	
LEVELSOC	Weak	Count	1	0	2	3
		% within LEVELSOC	33.3%	.0%	66.7%	100.0%
		% within SOCIAL	.3%	.0%	7.1%	.8%
	Moderate	Count	149	25	18	192
		% within LEVELSOC	77.6%	13.0%	9.4%	100.0%
		% within SOCIAL	49.0%	54.3%	64.3%	50.8%
	Strong	Count	154	21	8	183
		% within LEVELSOC	84.2%	11.5%	4.4%	100.0%
		% within SOCIAL	50.7%	45.7%	28.6%	48.4%
Total		Count	304	46	28	378
		% within LEVELSOC	80.4%	12.2%	7.4%	100.0%
		% within SOCIAL	100.0%	100.0%	100.0%	100.0%

Part 3.2: Relationship between life assets in terms of power of family, power of self and power of community and the emotional quotient in preschool children

The preschool children whose power of family, power of self and power of community were at the strong level and fair level had no different emotional quotient that must be encouraged and should be encouraged. Obviously, the preschool children whose power of community was at the weak level had the emotional quotient that

must be encouraged more than the preschool children whose power of community was at the strong level and fair level. The details were presented in Table 4.14.

In this research, the descriptive statistics were used to show the simple relationship of some basic data and the emotional quotient of preschool children cared by the different main caregivers during daytime and nighttime, the result showed that the preschool children had no different emotional quotient, which must be encouraged and should be encouraged.

In respect with some basic information about the receipt of knowledge relating to the reinforcement of development and emotional quotient, family income and level of education attained by main caregivers and the emotional quotient of preschool children, it was found that the children cared by main caregivers who got and did not get any knowledge about the reinforcement of development and emotional quotient provided by health service agencies had no different emotional quotient that must be encouraged and should be encouraged. The preschool children in families earning the low income (less than 6,000 Baht/month) and medium income (30,001-50,000 Baht/month) had no different emotional quotient that must be encouraged and should be encouraged. It was obvious that the children in families earning the high amount of income (more than 50,000 Baht/month) were more likely to have the emotional quotient that must be encouraged than the children in families with low-medium income. In addition, the preschool children whose main caregivers completed the primary school level, high school level, diploma and vocational level had no different emotional quotient that must be encouraged and should be encouraged. There was another interesting issue that the preschool children whose main caregivers completed the bachelor degree and master degree had less emotional quotient that must be encouraged and should be encouraged than the preschool children whose main caregivers completed the primary school level, high school level and diploma.

These interesting issues indicated that, at present, the communities or society take more roles or are more correlated with the preschool children's emotional quotient. Some partial data of this research indicated that the preschool children were cared in the daytime and nighttime by different main caregivers, not only their parents or grandparents. In addition, the preschool children were submitted to the educational system quicker because most parents were unable to care for children by themselves.

Therefore, encouraging various communities to take part in reinforcing the preschool children's emotional quotient is an interesting issue to be investigated further.

Table 4.14: Life assets in terms of power of community and emotional quotient

			EQ		
			Must be encouraged	Should be encouraged	Total
LEVELSOC	Weak	Count	3	0	3
		% within LEVELSOC	100.0%	.0%	100.0%
		% within EQ	1.1%	.0%	.8%
	Moderate	Count	139	53	192
		% within LEVELSOC	72.4%	27.6%	100.0%
		% within EQ	50.4%	52.0%	50.8%
	Strong	Count	134	49	183
		% within LEVELSOC	73.2%	26.8%	100.0%
		% within EQ	48.6%	48.0%	48.4%
Total		Count	276	102	378
		% within LEVELSOC	73.0%	27.0%	100.0%
		% within EQ	100.0%	100.0%	100.0%

Part 4: Relationship between general development and emotional quotient in preschool children

Part 4.1 – General development and emotional quotient in preschool children

According to correlation analysis, the emotional quotient in preschool children and their development in 4 areas were correlated at the 0.01 level of significance. It was found that the preschool children's general development was positively correlated with their emotional quotient. This meant that the more the preschool children engaged the general development at the normal level, the better they would have the emotional quotient. The details were presented in Table 4.15.

Table 4.15: Relationship between all 4 areas of development and emotional quotient

Variables	4 Areas of Development	EQ
4 Areas of Development	1	0.155**
EQ		1

**=p<0.01

Part 4.2 – Each area of development and emotional quotient in preschool children

The preschool children with different gross motor development had no different emotional quotient that must be encouraged and should be encouraged. The preschool children with normal fine motor development and adaptability, language development, social development and self-care would have the emotional quotient that must be encouraged less than the preschool children whose fine motor development and adaptability, language development and social development and self-care were at the caution and delayed levels as detailed in Table 4.16.

Table 4.16: Relationship between social development and self-care and emotional quotient in preschool children

			EQ		Total
			Must be encouraged	Should be encouraged	
SOCIAL	Normal Item	Count	215	89	304
		% within SOCIAL	70.7%	29.3%	100.0%
		% within EQ	77.9%	87.3%	80.4%
	Caution Item	Count	35	11	46
		% within SOCIAL	76.1%	23.9%	100.0%
		% within EQ	12.7%	10.8%	12.2%
	Delayed Item	Count	26	2	28
		% within SOCIAL	92.9%	7.1%	100.0%
		% within EQ	9.4%	2.0%	7.4%
Total		Count	276	102	378
		% within SOCIAL	73.0%	27.0%	100.0%
		% within EQ	100.0%	100.0%	100.0%

Part 5: Correlations between each area of development in preschool children

From analyzing correlations between each area of development, the language development was correlated with the gross motor development, fine motor development and adaptability at the 0.001 level of significance, and language development was correlated with the social development and self-care at the 0.05 level of significance. It was found that all 4 areas of development; namely, language development, gross motor development, fine motor development and adaptability, and social development and self-care, were correlated positively. This indicated that if any area of development was normal or improved, it was like that other 3 areas of development would be better. The details were presented in Table 4.17.

The correlations between each area of development in preschool children found in this research may be linked to the relationship between each area of development and emotional quotient in preschool children. The findings indicated that the preschool children with normal fine motor development and adaptability, language development, social development and self-care had less emotional quotient that must be encouraged than the preschool children whose fine motor development and adaptability, language development, social development and self-care were at the caution level. Therefore, the preschool children's all areas of development must be encouraged subject to their ages, and all physical, mental, emotional, social and cognitive development must be encouraged simultaneously so that their emotional quotient remains normal or becomes better.

Table 4.17: Correlations between each area of development in preschool children

Variables	Gross Motor	Fine Motor and Adaptability	Language	Social and Self-care
Gross Motor	1	0.073	0.163***	0.039
Fine Motor and Adaptability		1	0.324***	0.270***
Language			1	0.091*
Social and Self-care				1

***=p<0.001

*=p<0.05

CHAPTER 5
DISCUSSION

From investigating the Relationship between Life Assets and Development and Emotional Quotient in Preschool Children: A Case Study of Preschool Children Centers, Lad Krabang District, Bangkok, the findings were discussed as follows:

5.1 General information about preschool children, main caregivers, and basic information about children's families

5.2 Development and emotional quotient of preschool children

5.2.1 Development of preschool children

5.2.2 Emotional quotient of preschool children

5.3 Life assets of preschool children

5.4 Relationship between life assets in terms of power of family, power of self, and power of community, and development in 4 areas, development in each area, and emotional quotient of preschool children

5.5 Relationship between development and emotional quotient of preschool children

5.6 Correlations between each area of development in preschool children

5.1 General information about preschool children, main caregivers, and basic information about children's families

From studying the general information about preschool children, the results showed that 57.10% of the sample group were girls and 42.90% were boys. The average age was 3.74 years. About 80.40% of main caregivers were female with the average age at 33.85 years. About 66.10% of main caregivers were children's mothers, 17.20% were children's fathers, 12.70% were grandparents, 2.60% were relatives, 0.50% was babysitters, and 0.80% was children's guardians who were not the parents, grandparents or relatives. About 48.90% of guardians completed the high

school level, 20.40% completed the diploma/vocational/higher vocational level, and 19.80% completed the primary school level respectively. There were some main caregivers who were uneducated or it accounted for 1.10%. Most guardians to preschool children (34.70%) were officers in private companies, 20.90% were merchants/ business owners, and 18.80% were general labors respectively. About 11.60% of guardians who had no occupations. Most families of preschool children were the nucleus families (63.20%), followed by expanded families (36.80%). According to the parents' marital status, 77.50% of parents lived together while 9.00% were separated and 11.60% were divorced. Regarding the family income per month, most families earned income in the range of Baht 12,001-20,000 per month, representing 34.90% while 31.50% of families earned income in the range of Baht 6,001-12,000. The persons rearing children regularly and most intimate with them during daytime were the grandparents (34.10%), mothers (29.90%), and both fathers and mothers (18.80%) respectively. The persons rearing children regularly and most intimate with them during nighttime were the parents (42.90%), mothers (31.00%), and grandparents (19.80%) respectively. Obviously, most guardians (56.10%) have never received any knowledge about the child development reinforcement and emotional quotient reinforcement by public health agencies.

The survey results regarding general information about preschool children, main caregivers and basic information about preschool children's families in the research were consistent with the projection of population figures from Year 2000 - 2030 by the Office of Economic and Social Development Board that, based on the data on population figures recorded by the Bureau of Policy and Strategy, Office of the Permanent Secretary, Ministry of Public Health in 2010, the children and youth younger than 25 years in Thailand amounted to 25.47 million or it accounted for 40% of total population. Among these, the female populations totaled 12.39 million persons and the male populations totaled 13.07 million persons. It seems that the population figures have been changing slowly. But, if considering the population structure, the number of aged people (older than 65 years) has been increasing rapidly whereas the number of young population (0-24 years) has been reducing. This change of population structure takes the significant effect to the children and youth development. At present, the children and youth suffer the life security problem caused by the

parental rearing styles and imbalanced social and economic changes; these are reflected in the declining family warmth index. The rates of any school enrolment of preschool children (aged 3-4 years) have been rising. The proportion of children living with parents tended to be decreasing, partially caused by higher rate of divorce that made the single-parent phenomenon increase, and partially by the economic pressure forcing many parents to work outside and leave their children to stay with the grandparents. This may lead to the communication problem between people at different ages, so the children's growth is not good. Moreover, more Thai families become the nucleus families. This family type blocked children to learn Thai custom and culture in terms of gratitude and care for grandparents. When the children have never seen this traditional conduct, it is worrying that, in the future, Thai children would be incapable of caring for the aging society. (43) From analyzing the basic information about children's families, most preschool children (34.10%) lived with their grandparents during the daytime. This result was consistent with the research by Oyserman (2003) regarding Roles and Duties of Grandparents to Development of Two-Generation People in the United States. It was found that the grandchildren brought up by the paternal or maternal grandfathers since childhood engaged more positive physical growth than the grandchildren brought up by the paternal or maternal grandmothers due to the activities jointly done by paternal or maternal grandfathers and grandchildren while the paternal or maternal grandmothers might support the daily rearing. The result also showed that the interactions between people at different ages or between grandparents and grandchildren were beneficial to child development, and to grandparents' health. Social activities between aged people and children helped heal the aged people's physical and mental health, and promote the children's knowledge. (110) This research also supported the study conducted by Sutham Nanthamongkolchai (2007) on Influence of Child Rearing by Grandparents on the Development of Children Aged Six to Twelve Years in Prae. The finding revealed that two-thirds or 63.4% of children reared by grandparents had a normal development while 36.6% had delayed development. It was found that the child caregivers had significant influence on child development. The children reared by grandparents had 2.0 times higher chance of delayed development than those who were reared by their parent. However, the children who grew up with a grandparent received the physical

growth promotion and good nutrition, but may lack learning skill promotion and activity that leads to intellectual development. Furthermore, the family income and child rearing had an influence on child development ($p < 0.05$). The children in insufficient income family had 2.1 times higher chance of delayed development than those with sufficient income. The child with inappropriate child rearing had 8.8 times higher chance of delayed development than those with appropriate child rearing. (105)

From the data analysis of this research, most caregivers have never received any knowledge about the reinforcement of child development and emotional quotient by any health agencies. This result was consistent with a suggestion given by Paweena Menegool (2007) that the health agencies or related agencies' working for child development was not efficient to reinforce the development and emotional quotient in Thai children, and their working was passive, not proactive. As a result, it was likely that the preschool children might have the improper development and had no chance to stimulate the proper development at each life span. This led to some health problems and delayed development although their emotional quotient may be encouraged. (104) This result was also consistent with a suggestion by Kessara Saenngarm, Jamjan Kulvijitr and Luckana Kongsaeng (2012) in their study on Health and Factors Associated with Health of Children Receiving Services at the Preschool Children Development Department, Songkhla. It was suggested that, in caring for preschool children's health, the factors regarding preschool children, parents and personnel at the Preschool Children Development Department should be considered altogether. (78)

The result of this research indicated that the main caregivers to preschool children were not the parents or either of them, but the grandparents, relatives, babysitters and other non-relatives might take care of children during daytime and nighttime. This result was consistent with the demographic changes in the Thai society now. Therefore, the perception about child development reinforcement, attitude or expectation of caregivers to children was so different. Other factors in relation to family income, occupations, family types, marital status, level of education attained by caregivers as well as ages of main caregivers are the interesting issues for further qualitative studies how they are correlated with the development and emotional quotient in preschool children.

5.2 Development and emotional quotient of preschool children

5.2.1 Development of preschool children

The result from analyzing the preschool children in this research showed that most children (60.10%) had normal development while 39.90% of them had the suspect delays. This result was consistent with the data revealed by the Department of Health, Ministry of Public Health (2012) that about 70.3% of Thai children had the proper development while 29.70% of them had the suspected delays. (44) This result was consistent with Sirisara Lipipun (2008) who studied Child Development in Children Aged 0-5 Years and Characteristics of Care-givers at Babies' Home, Affiliated with Ministry of Social Development and Human Security in Central Region of Thailand. The findings were that 57.1% of children had the normal development while the prevalence rate of developmental delay in children aged 0-5 years at the babies' homes was 42.9 percent. (98) This result was also consistent with Paiyada Wirutsamee (2009) who investigated the parent relationship and family factors affecting the development and emotional quotient in preschool children. The research investigated preschool children aged between 4-5 years at Warin Chamrap District, Ubon Ratchathani Province. The results showed that 55.0% of preschool children had regular development while 45.0% had suspected delays. (35) This was consistent with Paweena Menegool (2007) who studied the Project for Development of Mother and Child Service Quality, Region 2, Fiscal Year of 2007. Various educating activities were held such as lecture, demonstration and practice, and child development checking after training to parents and caregivers in Region 2, which included 5 provinces, e.g. Sukhothai, Phitsanulok, Phetchabun, Uttaradit and Tak; 2 centers for each province and 20 families for each center. The results showed that 82.30% of children had normal development while 17.70% had the suspected delays. As the result of this research showed that the preschool children at Lad Krabang District, Bangkok, had the suspected delays; this was consistent with other studies on preschool children's development conducted in Thailand and other regions.

After analyzing the preschool children's development screening results, most children in the sample group had the suspected delays in language, followed by fine motor development and adaptability. This result was consistent with several

studies in Thailand on preschool children development; for example, Nittaya Kochpakdee and Niracha Rangdaraganon (1998) for their research on Child Health & Development: Perspective from National Health Examination Survey 1996-1997 (112), Chanpen Chuprapawan et al. (1998) in their research report on Revision of Knowledge Base about Thai Children, Youth and Families and Policy and Research Suggestions, The Thailand Research Fund (TRF) (113), Sookjing Vongdejakul (1997) in the report on The 1997 Preschool Development Survey by Bureau of Health Promotion (114), Paweena Menegool (2007) for the Project for Development of Mother and Child Service Quality, Region 2, Fiscal Year of 2007 by checking the child development in Region 2, which included 5 provinces, e.g. Sukhothai, Phitsanulok, Phetchabun, Uttaradit and Tak; 2 centers for each province and 20 families for each center, and Paiyada Wirutsamee (2009) who investigated the parent relationship and family factors affecting the development and emotional quotient in preschool children at Ubon Ratchathani, which involved 229 children. (35) The results regarding child development over 10 years as stated above showed consistently that Thai children's most delayed development areas fell in language, and fine motor development and adaptability, e.g. drawing geometric shapes. This meant that Thai children lacked the appropriate basic learning skills.

Therefore, the result of this research indicates that the preschool children are risky to some learning impairment as their suspected delays fell in language development, and fine motor development and adaptability. For example, the language development that most children could not achieve at their specific ages were the specification of colors, understanding of prepositions, verbs, adjectives, and counting of numbers. Regarding the fine motor development and adaptability, most children failed to draw the geometric shapes. Both skills are important as they are the window of opportunity for preschool children. They are so essential for communications. They are the solid basis for more learning about reading, writing, spelling, intelligence development for problem-solving, association and living with other people so that they are ready for their school-age.

During the preschool development assessment, the Researcher got some more information from these preschool children and class teachers that most children had rare chance to play with friends or other people because they took time to play

games on mobile phone or tablet. This takes effect to the fine motor development and adaptability because the preschool children are in the time of practicing the drawing skills. For language development of preschool children, their development was at the caution and delayed levels because, partially, the children did not understand the vocabularies, verbs or prepositions. The main caregivers and class teachers must encourage the preschool children to understand more vocabularies, verbs or prepositions. In playing, the children know how to wait or understand the rules. But, most children hardly had the playing because they played games on mobile phone or tablet when they stayed at home. These children played with friends when they stayed at the preschool children center only. Therefore, playing as an activity reinforcing children's brain development and other developments thoroughly is different from the traditional playing in the Thai society. Playing affects the language development, social development and self-care, fine motor development and adaptability, and gross motor development. The children necessarily achieve these developments via playing. Therefore, there should be further studies on playing styles or playing development of Thai children affecting the development and emotional quotient in preschool children.

5.2.2 Emotional quotient of preschool children

From examining the emotional quotient of 378 preschool children, the emotional quotient of 276 children (73.00%) must be encouraged while the EQ of 102 children (27.00%) should be encouraged. The result of this research showed that no preschool children in the sample group had the normal emotional quotient. This result was consistent with Paiyada Wirutsamee (2009) who investigated the emotional quotient in preschool children. She found that the emotional quotient of 38.4% of children should be encouraged while the EQ of 34.1% of children must be encouraged. About 27.5% (35) of sample had a good emotional quotient. However, this result was contrary to the result of emotional quotient survey in Thai children aged between 3-5 years by the Department of Mental Health, Ministry of Public Health in 2007, which indicated that most Thai children aged between 3-5 years had normal emotional quotient. (9) But, the result of investigating the preschool children's emotional quotient in this research showed that no children in the sample group had normal emotional quotient. This result supported Carlson and Wang (2007) who studied the

emotional control skills in 53 children aged 4-6 years in the United States. They found that the children's emotional control skills are the development clearer seen in preschool children. These skills must be encouraged so long because the children have not yet been able to stop and control emotions methodically. The children's emotional development was correlated with their age and language development (33). Also, Garner and Power (1996) studied the relationship between temperament and emotional knowledge of preschool children and their receipt of despair and emotional control. The research included 82 preschool children in the United States. The result showed that when the children feel disappointed, they would be temperamental easily and present both negative and positive emotional reactions, which related to the control of temperament in children whose emotion is serious, and to children's no understanding of their own emotions. The children's emotional knowledge and joint of temperament could predict the limited emotional expression of preschool children. (34) In addition, Garon N, Bryson SE, Smith IM. (2008) conducted a research in America, and they explained the emotional response that they were resulted by the executive function, which is the brain functioning process in controlling the cognition and expression. This executive function helps individuals control and plan for expressing problem-solving behaviors. This executive function also involves the cognitive activity, emotional response and overt behavior. These skills are essential in the daily life. In addition, the executive function is related to the learning skills, reading and writing skills, and emotional-social skills in preschool and school age children. For example, the research by Kolnik S. (2010) (38) and the research by Campbell SD, Shaw DS, Gilliom M. (2000) (39) conducted in the United States showed that the bad executive function caused bad social interactions with other people in school. Moilanen K, Shaw DS, Dishion TJ, Gardner F, Wilsion M. (2009) studied the factors affecting children's executive function. The results showed that the factors affecting children's executive function were gender, ethnicity and family poverty. (40)

According to the results and discussion on the emotional quotient in preschool children, we learnt that the preschool children have unstable emotions, and are unable to control emotions against any impact. For example, when a child feels disappointed, he may show either positive or negative emotion due to several factors, e.g. age-based development caused by brain development in part of advanced

cognitive process, gender causing boys to show more overt behaviors than girls, race and inefficient rearing, which all are factors affecting the children's emotional quotient. The relationship between caregivers in the daytime and nighttime also affected the children's emotional quotient. The in-depth information on these matters must be examined further.

5.3 Life assets of preschool children

After surveying preschool children's life assets in 3 types of power, e.g. power of family, power of self and power of community, the strongest power of the sample group in Bangkok preschool children centers, Lad Krabang District fell in the power of family (mean = 3.00), followed by the power of self (mean = 2.00) and power of community (mean = 2.00) respectively. When considering the lowest life assets scores, it came from the questions in relation to the power of community (mean for the question with the lowest scores = 1.94, at the fair level), to the power of self (mean for the question with the lowest scores = 2.10, at the fair level). The first 5 strongest life assets came from the power of family and power of self. The first 3 strongest life assets fell in the power of family subject o the following questions: "You praise when your child performs well", "You warn for what your child performs inappropriately", and "You hold and hug to show your love to your child". The last 2 strongest life assets fell in the power of self from the following questions: "Your child likes to raise questions about his/her surroundings", and "Your child is bright and cheerful".

The above results led to a conclusion that the strongest life assets in preschool children fell in the power of family and power of self. This was consistent with the research conducted by The Nature Council for Child and Youth Development under the Royal Patronage of HRH Princess Mahachakri Sirindhorn (2009) regarding Life Assets Research Tools for Underprivileged Children. The results showed that the strongest life asset in these underprivileged children was power of self. (94) This result also supported the research conducted by Kef, S. and Dekovic, M. (2004) who studied The Role of Parental and Peer Support in Adolescents Well-being: A Comparison of Adolescents with and without a Visual Impairment. The study examined the

importance of parental and peer support for well-being of adolescents with and without a visual impairment. The sample included 178 adolescents who were blind or visually impaired and 338 adolescents without visual impairments in Netherland. The results showed that the peer and parental support proved to be important for well-being of both adolescents with a visual impairment and sighted adolescents. (108) The result also supported C. Van Aken, M. Junger, M. Verhoeven, M.A.G. Van Aken, M. Dekovic (2008) who conducted a study on The Longitudinal Relations between Parenting and Toddlers' Attention Problems and Aggressive Behaviors. The research involved 108 boys from 17 months of age to 35 months of age and they were monitored again when they were at age of 4. The research was conducted at 3 child clinics in Netherland. These results indicated that the promotion for the parental support style and reduction of physical punishment could help decrease attention problems in children. (100) This result also supported Pichada Sutthipan (2012) who studied the 101s Positive Discipline Training Resulting to the Use of Positive Discipline by Teachers and to Higher Cognitive Thinking Process in Preschool Children. The sample was selected from kindergartens in Samut Prakarn. The experimental group involved 4 teachers and 31 students at ages of 4-6 years while the control group involved 3 teachers and 29 students at ages of 4-6 years. The results showed that the group of students whose teachers were trained got some scores from the Behavior Rating Inventory of Executive Function Preschool Vision (BRIEF-P) while the students got fewer scores in impaired skills regarding inhibitions, emotional controls, working memory and planning/organization at the level of significance ($F = 5.087, 7.873, 7.230$, and 5.568 respectively) ($p<0.5$) if compared with the control group. (80)

It may be said that the children's life assets in terms of power of family, power of self and power of community should be reinforced positively. For example, in respect with the power of family, the parents or teachers should be encouraged to use the supportive child raising style, reduce the physical or verbal punishment, praise when the children perform well or talk nicely to warm the children for their improper acts, and embrace the children to show your love, etc. To reinforce the power of self, the positive discipline should be built in children. For example, the children are trained to wait in playing, return toys to their places, do daily activities by themselves,

encourage children to survey or question anything around them, and create the climate to keep children joyful at all time. To reinforce the power of community, the cultural and traditional activities should be held and involved by children. These will help reinforce the strong life assets for Thai children and youth.

Regarding the first 5 weakest life assets, they were reported by the caregivers intimate with preschool children for not less than 6 months that they have never done or sometimes done these activities. They were the power of community, power of family, and power of self from the following questions: “The community has some learning sources/activity areas to be involved by families”, “You tell fairy stories to your child”, “The community arranges religious/cultural and traditional activities that allow the children to participate in”, “Your child has discipline in playing; for example, keep toys in place after playing” and “Your child knows how to control his/her emotions when he/she is displeased (e.g. running amok or fussing)”. This result was consistent with the research by the Office of the Basic Education Commission of Thailand, as supported by Dekplus, The National Institute for Child and Family Development, Mahidol University (cited in Suriyadeo Tripathi, 2011) regarding Project for Examination of Life Assets in Thai Children and Youth in Educational Institutes. The result revealed that Thai children and youth’s weakest life assets fell in the power of community (cited in 7). Moreover, the research by The Nature Council for Child and Youth Development under the Royal Patronage of HRH Princess Mahachakri Sirindhorn (2009) regarding Life Assets Research Tools for Underprivileged Children. The results showed that the weakest life asset in these underprivileged children was power of community (cited in 7). This result was also consistent with Nutta Prateepchaikoon (2012) who studied The Personal Factors and Influence on Life’s Assets on Visually Impaired Students’ Mental Health. The sample group was the visually impaired students in the Foundation for the Blind in Thailand under Royal Patronage. The sample included the visually impaired students studying at the Bangkok School for the Blind, visually impaired students studying at the Bangkok School for the Blind with normal-vision students, visually impaired students at Sampran Rehabilitation & Training Center for Blind Women, and students at Pak Kret Skill Development Center for The Blind. The subjects included 100 students, 12-18 years, without multiple disabilities. The result showed that the power of family was

the strongest power while the power of community was the weakest power. (78) This result was also consistent with Suriyadeo Tripathi (2009) who examined students studying in the general education and vocational education programs in Bangkok, Chonburi, Chiangmai, Nakhon Ratchasima and Songkhla by using the developmental assets indicators for youth. The results showed that Thai youth had no public mind while the communities became weak, neglected others and had no joint activities. Thai youth also ignored the religion and were dishonest. (7) The result was also consistent with the Drug Demand Reduction Bureau (2009) in the research project for the development of life assets survey tool in Thai youth with an aim at protecting the youth from narcotics. The result showed that the general youths engaged higher life assets (passing the criteria) than risk youths. Moreover, the weak life assets in both groups fell in the power of community (cited in 7).

From analyzing the 5 weakest life assets, it was found that the power of family as surveyed in the question that “You tell fairy stories to your child”, and the power of self as surveyed in the questions that “Your child has discipline in playing; for example, keep toys in place after playing”, and “Your child knows how to control his/her emotions when he/she is displeased (e.g. running amok or fussing)” were at the fair level. This result supported the study by Saithip Bambudpai (2009) who studied Effect of Bedtime Storytelling by Parents on Moral Behaviors in Preschool Children. The research subjects were divided into 2 groups: each comprised 30 preschool girls and boys aged 5-6 years. The experimental group included the 30 children from Ban Na Kindergarten School (Wat Chang), Ban Na District, Nakhon Nayok and the control group comprising 30 preschool girls and boys studying at Ongkarak Kindergarten School (Padung Pracharak) School, Ongkarak District, Nakhon Nayok. The results showed that the experimental group’s ethical scores after the experiment were higher than the pre-experiment scores in terms of discipline and generosity at a statistical test level ($p\text{-value}<0.001$). (93) The result of this research also supported Piyada Pichitgusalachai (2012) who studied about the building of positive discipline in children in the topic on “The 101s Positive Discipline Training Resulting to the Use of Positive Discipline by Teachers and to Self-control in Preschool Children”. The research involved 45 children aged between 3-5 years: 25 for the control group and 20 for the experimental group. The research also involved 11 teachers: 5 for the control

group and 6 for the experimental group. The research was conducted at a kindergarten at Nakhon Pathom. The results showed that, after being training about the principles of positive discipline, the teachers had positive interactions in handling child behaviors if compared with those in the control group. It was also found that the students cared by teachers trained for positive discipline got higher self-control in terms of inhibitions and emotional controls. The research suggested that the training on the positive discipline principles resulted to teachers' teaching approaches and self-control in preschool children. (81)

The above result of this research indicated that the strength of life assets in preschool children in respect with the power of family was the main caregivers who gave praise or warning to children, and showed their love by hugging them. However, the weak power of family was reflected by the result that the main caregivers hardly told fairy stories to children. It is apparent that to make life assets strong, the power of family must be strengthened and the caregivers must be encouraged to tell fairy stories to children in order to root morality and ethics in them. The children's weak power of self must be reinforced as well by creating positive activities in the family and school such as child raising by positive discipline, training children for waiting, handling or controlling emotions when they are dissatisfied by presenting more positive expression. The communities should be encouraged to provide some learning sources to allow children to join the general activities or religious or cultural ones. These would make these weak life assets stronger.

5.4 Relationship between life assets in terms of power of family, power of self, and power of community, and development in 4 areas, development in each area, and emotional quotient of preschool children

Hypothesis 1: Life assets of preschool children relate to the development of preschool children.

From testing the relationship between life assets in terms of power of family, power of self and power of community and development of preschool children, the preschool children's life assets in terms of power of self and power of community were positively related to the development of preschool children at the 0.05 level of significance.

From studying the relationship between life assets in terms of power of family, power of self and power of community and all 4 areas of development in preschool children, it was found that:

Preschool children whose life assets in part of the power of family were strong acquired the normal gross motor development, fine motor development and adaptability as well as language development more than the preschool children whose life assets in part of the power of family were at the fair level. Besides, the children whose life assets in term of the power of family was at the fair level had the delayed development in areas of gross motor, fine motor and adaptability and language more than the preschool children whose life assets in term of the power of family was at the strong level. It was also found that the children whose life assets in term of the power of family was at the fair level had the caution and delayed development for the use of fine motor and adaptability more than the preschool children with strong power of family.

Regarding the social development and self-care, the preschool children whose life assets in term of the power of family was at the strong level acquired the normal social development and self-care more than the preschool children whose life assets in term of the power of family was at the fair level. Moreover, the preschool children whose life assets in term of the power of family was at the strong level had the delayed social development and self-care less than the preschool children whose life assets in term of the power of family was at the fair level.

According to the results from examining life assets in terms or the power of self and development of preschool children, there was an interesting issue that the preschool children with strong power of self acquired the normal and faster development in areas of fine motor and adaptability than the preschool children whose life assets in term of the power of self was at the fair level. This issue insists the importance of reinforcing the power of self in preschool children and their fine motor

development and adaptability, which cause their learning and activities in life. There was another interesting issue regarding language development and social development and self-care that the preschool children whose life assets in term of the power of self was at the strong level acquired the normal social development and self-care more than the preschool children whose life assets in term of the power of family were at the fair level. Moreover, the preschool children whose life assets in term of the power of self were at the strong level had the caution language development as well as social development and self-care less than the preschool children whose life assets in term of the power of family were at the fair level. For the gross motor development, the preschool children whose life assets in term of the power of self were at the strong level and fair level had no different gross motor development.

Besides, there was an interesting issue that the preschool children with strong power of community acquired the normal and faster development in areas of gross motor, fine motor and adaptability and language than the preschool children whose life assets in term of the power of community was at the fair level and weak level. Moreover, the preschool children whose life assets in term of the power of community was at the strong level had the gross motor, fine motor and adaptability and language development at the caution and delayed levels less than the preschool children whose life assets in term of the power of community was at the fair level and weak level.

There was another interesting issue regarding social development and self-care that the preschool children whose life assets in term of the power of community were at the strong level and fair level acquired the normal social development and self-care more than the preschool children whose life assets in term of the power of community were at the weak level. Moreover, the preschool children whose life assets in term of the power of community was at the weak level had the delayed social development and self-care more than the preschool children whose life assets in term of the power of community were at the strong level and fair level.

The above result was consistent with the study on Life Assets in part of the power of family conducted by Paweena Menegool (2007) who studied the Project for Development of Mother and Child Service Quality, Region 2, Fiscal Year of 2007. Various educating activities were held such as lecture, demonstration and practice, and

child development checking after training to parents and caregivers in Region 2, which included 5 provinces, e.g. Sukhothai, Phitsanulok, Phetchabun, Uttaradit and Tak; 2 centers for each province and 20 families for each center. It was suggested in her research that the child development was related to the life assets development in part of the family as well as caregivers in child development centers, who should receive knowledge and skills to encourage the child development so that the children's physical, mental, emotional, social and cognitive development were thoroughly reinforced. (104) This result was also consistent with Pattariya Junpen (2009) who conducted A Comparative Study of Child Rearing Styles and Inculcation of a Way of Life Based on the Philosophy of Sufficiency Economy in Early Childhood Children: A Case Study of Plengprasiddhi Srinakarin Kindergarten. The results showed that the parents with different supportive and reasoning child rearing types had the different inculcation of a way of life based on the Philosophy of Sufficiency Economy in early childhood children at the .01 level of significance. The reasoning child rearing type was the first important variable predicting the inculcation of a way of life based on the Philosophy of Sufficiency Economy. (91) This result was also consistent with the power of family examined by Neriman Aral, Gulen Baran, Figen Gursoy, Aysel Koksal Akyol, Aynur Butun Ayhan, Mudriye Yildiz Bicakci and Serap Erdogan (2011) on the Effects of Parent Education Programs on the Development of Children Aged between 60-72 Months. Participants were children attending 9 kindergartens located in central Ankara, Turkey and their parents (experimental group: 68 children, 68 parents, control group: 68 children, 68 parents). Data were gathered by using Brigance Early Development Inventory II (Brigance, 2004), that was adapted for use in Turkey by Aral et al. in 2008. There was a significant difference between the scores on the subtests of the Brigance Early Development Inventory II and the total pretest and corrected posttest scores independent of group, but no significant difference was found between the scores of the groups on the Brigance Early Development Inventory II or the total pretest and corrected posttest scores. The results also revealed that the parent education program had a minimal effect on children's daily life and social emotional skills. (88) The result was also consistent with Jin-Young Chae and Kang Yi Lee (2011) who studied the impacts of Korean fathers' attachment and parenting behavior on their children's social competence in South Korea. Structural equation

modeling indicated that the fathers' childhood attachment representations had significant indirect impacts on boys' social competence because of their own parenting behavior. There was no impact of fathers' childhood attachment representations, but fathers' parenting behavior had a significant direct impact on their daughters' social competence. (87) The result of this research also supported Fatma Basak ALTAY and Aysen Gure (2012) who studied the Relationship among the Parenting Styles and the Social Competence and Prosocial Behaviors of the Children Who are Attending to State and Private Preschools. The purpose of the study was to investigate the associations of social competence and prosocial behaviors of the boys and girls who are attending to private or state preschools with the parenting styles of mothers' perception. Participants of the research were 344 children's ranging from 35 and 75 months of age), teachers and mothers. Findings revealed that the girls have positive interactions with their peers and teachers more than the boys do and the boys have negative interactions with their peers more than the girls do. Furthermore, the scores of negative interactions with peers of the children who had authoritative parents (M = 3.84) were higher than those of the children who have permissive parents (M = 3.71). In addition, the scores of negative interactions with peers and non-interaction behaviors of the children attending to a private preschool were higher than that of the children attending to a state preschool. Moreover, in terms of both mother and teacher ratings of prosocial behaviors, girls tend to show more prosocial behaviors than boys. The children whose mothers showing authoritative parenting style demonstrate more prosocial behaviors as rated by mothers than the children whose parents showing permissive parenting styles. (79) The result of this research was similar to Aimee Hilado, Leanne Kallemeyn, Christine Leow, Marta Lundy and Marla Israel (2011) who studied the relationship between social resources and levels of parent involvement in state-funded preschool programs in Illinois. Using survey data from the Illinois Birth to Five Evaluation and interviews with ten preschool administrators who completed the survey, the study found the number of social resources provided by a program was positively associated with levels of parent involvement. The high numbers of social resources were associated with higher levels of parent involvement in programs. Administrator interviews confirmed survey findings and suggested additional influences on parent involvement levels and use of social resources in

programs. Implications for supporting child welfare and policy recommendations for early childhood programs are provided. (86) This result was also consistent with Sirisara Lipipun (2008) who studied Child Development in Children Aged 0-5 Years and Characteristics of Care-givers at Babies' Home, Affiliated with Ministry of Social Development and Human Security in Central Region of Thailand. The factors related to such delay with $P<0.05$ was the experiencing parental visit. The factor related to the child development at $P<0.01$ were age. (98)

The result of this research was also consistent with life assets in term of the power of self according to Trina R., Williams Shanks, Youngmi Kim, Vermon Loke and Mesmin Destin (2010) who studied Assets and Child-Being in Developed Countries in the United States. This research introduces a framework for an age-based conceptual model that describes how such accounts might influence indicators of child well-being. With a focus on optimal age-appropriate development beginning at birth and ranging through young adulthood, this conceptual and empirical backdrop provides a starting point from which to critique key dimensions of CDA policy and consider potential implications of such an approach. The results showed that the critical milestones affected child development. Child development needs cooperation from parents, family, school, development reinforcement curriculum at home and school, good neighbors and environment, and policy to promote children according to the critical milestones appropriately. (90) This research also supported Benjarat Nuchnart (2011) who studied Influence of Life Assets to Self-care Ability of Prathom 5 and 6 Students in Schools under the Supervision of Bangkok Metropolis, Lad Krabang District. The sample group involved 424 late childhood students studying at Prathom 5 and 6 in schools under the Supervision of Bangkok Metropolitan Authority, Lad Krabang District. The result showed that life assets were so important for self-care ability of Prathom 5 and 6 students. (85)

The result of this research also supported Scales and Roehlkepartain (2003) who studied The Role of Developmental Assets in Predicting Academic Achievement: A Longitudinal Study. The results showed that the developmental assets put were significant for children's academic achievements. The more developmental assets children had, the higher academic achievements they had. The level of developmental assets in children was so important and it could predict their academic

achievements. Children's constant or increasing level of developmental assets was statistically significant for their higher academic achievements. Children with a high level of developmental assets, though in different race, were likely to be successful in studying at school. Children from low-economic status families but high level of developmental assets might be successful in studying at school like those from high-economic status families. (cited in 109)

It may be said that the result of this research supported the concept about life assets proposed by Suriyadeo Tripathi (2009) that life assets were resulted by the reinforcements from birth to adulthood, especially the power of family that puts great influence on children because it encourages the power of self in children. The power of community is another important power encouraging the children's power of self through various community activities. (7) Every agency working for human development should urgently disseminate and provoke more positive life assets in the Thai society so that Thai populations have the appropriate development at their specific ages. Positive life assets also help the families, communities and child development centers, which now take the role of second parents, build the power of family so that the children have the strong protection, and acquire the physical, mental, emotional, social and cognitive readiness to be the qualified populations for the national development in the future.

Hypothesis 2: Life assets of preschool children relate to the emotional quotient of preschool children.

After testing the relationship between life assets in terms of power of family, power of self and power of community and emotional quotient in preschool children, the preschool children whose life assets in terms of power of family, power of self and power of community were at the strong level and fair level had no different emotional quotient that must be encouraged and should be encourage. However, the children whose life assets in term of the power of community were at the weak level had the emotional quotient that must be encouraged more than the preschool children whose life assets in term of the power of community were at the strong level and fair level.

The result also showed that although the preschool children cared by different persons during daytime and nighttime, these preschool children had no different emotional quotient that must be encouraged and should be encouraged. For other basic information about the receipt of knowledge concerning the reinforcement of child development and emotional quotient, family income and level of education attained by main caregivers and the emotional quotient of preschool children, the children cared by main caregivers receiving or not receiving knowledge concerning the reinforcement of child development and emotional quotient from any health service agencies had no different emotional quotient that must be encouraged and should be encouraged. The preschool children in low-income families (less than 6,000 Baht/month) or middle-income families (30,001-50,000 Baht/month) had no different emotional quotient that must be encouraged and should be encouraged. It was obvious that the children in high-income families (more than 50,000 Baht/month) were more likely to have the emotional quotient that must be encouraged than those in low-income and middle-income families. Furthermore, the preschool children whose main caregivers completed the primary school, high school and diploma had no different emotional quotient that must be encouraged and should be encouraged. There was an interesting issue that the preschool children whose main caregivers completed the bachelor degree and master degree had the emotional quotient that must be encouraged and should be encouraged less than the preschool children whose main caregivers completed the primary school, high school and diploma.

The above result was consistent with Paiyada Wirutsamee (2009) who investigated the parent relationship and family factors affecting the development and emotional quotient in preschool children at Ubon Ratchathani. The results showed that the parent relationship in terms of family cohesion and parent communications were the variables positively and significantly affecting the emotional quotient of preschool children at the 0.05 level of significance (b = 0.593, 2.129 respectively). In respect with family factors, the family income was a factor negatively and significantly affecting the emotional quotient of preschool children at the 0.05 level of significance (b = -1.245). The parent relationship and family factors could jointly predict the emotional quotient in preschool children with the prediction value at 5.9% (R Square = 0.059). (35) This result was also consistent with Orathai Puangpee (2011) who studied

the relationship between life assets and self-identity and coping ability of vocational students. The sample involved 100 vocational students who were studying at

Kindergarten 2 at the Early Childhood First Model Center, Anuban Suphanburi School; to compare the parents' behaviors in 4 types (democratic, reasonably conditional, cherishingly loving and strict child raising); and to verify the parents' behaviors on child raising. The result indicated that the most important factors taking direct effect to children's EQ were parents' love and understanding. (99) The result of this research was also consistent with Piyasuda Nettayarak (2005) who studied Mental Health of Senior High School Students in High Schools Located at Dusit District under the Supervision of the Department of General Education, Bangkok. The sample group involved 335 students: 163 male students and 192 female students with some variables, e.g. gender, income, academic achievements, rearing, self-efficacy, future-oriented Saowabha Vocational College at the vocational certificate level, second semester, educational year of 2011. The result showed that the vocational students with different life assets had the different self-identity at the 0.05 level of significance. The vocational students with high life assets would have higher self-identity than those with low life assets. (84) The result was consistent with Marasri Phupolpisarn (2009) who studied the Emotional Quotient Development by way of Group Activity and Cooperation of Parents of M.3 Students at Nakhon Ratchasima. The students with low emotional quotient scores in 3 areas were selected (good, smart, happy). The results showed that the students participating in the group activities under the parents' cooperation had higher emotional quotient scores than those not participating in the group activities without the parents' cooperation at the 0.05 level of significance in general and in each area. (92) The result of this research was also consistent with Lauren R Miller-Lewis, Amelia K Searle, Michael G Sawyer, Peter A Baghurs and Darren Hedley (2013) who conducted a study on Resource Factors for Mental Health Resilience in Early Childhood: An Analysis with Multiple Methodologies. This longitudinal study aimed to identify preschool resource factors associated with young children's mental health resilience to family adversity. A community sample of 474 young Australian children was assessed in preschool (mean age 4.59□years, 49% male), and again two years later after their transition into formal schooling. At each assessment, standard questionnaires were used to obtain ratings

from both parents and teachers about the quality of children's relationships with parents and teachers, children's self-concept and self-control, mental health and family adversities. Higher quality child–parent and child-teacher relationships, and greater child self-concept and self-control were associated with resilient mental health outcomes. Child self-control demonstrated a small protective effect on teacher-reported outcomes, with greater self-control conferring greater protection to children under conditions of high-adversity. This findings suggest that early intervention and prevention strategies that focus on fostering child-adult relationship quality, self-concept, and self-control in young children may help build children's mental health and their resilience to family adversities. (75)

The result of this research was also consistent with the survey by the National Statistical Office (2011) regarding Thai People's Mental Health Survey from 2008-2010. The results showed that the families whose members contributed time to each other sufficiently had better mental health than families whose members contributed time to each other insufficiently. People in households with good economic status tended to have better mental health. It was found that the supporting factor was the strongest component, which is consistent with the Thai society where people have high mental attachment, resulted by family, community and religion. In contrast, the weakest component was the mental fitness. This component related to the relationship building with others and problem handling. (83) The result was also consistent with C. Van Aken, M. Junger, M. Verhoeven, M.A.G. Van Aken, M. Dekovic (2008) who conducted a study on The Longitudinal Relations between Parenting and Toddlers' Attention Problems and Aggressive Behaviors. The research involved 108 boys from 17 months of age to 35 months of age and they were monitored again when they were at age of 4. The research was conducted at 3 child clinics in Netherlands. The results showed a significant linear decrease in attention problems and a significant linear increase in aggressive behaviors. In addition, there were some relations between child-raising types. (100) This result was also consistent with Natsajee Song-in (2008) who conducted a research on Parents' Behavior on Child Raising in Early Childhood First Model Center, Anuban Suphanburi School. The objectives of the research were to study the demographic characteristics and parents' characteristics of children at characteristic, and self-control. The results showed that

the students with different gender, income and academic achievements had no different mental health. Students receiving different rearing had the different mental health at the .05 level of significance. Self-efficacy, future-oriented characteristic and self-control were correlated with students' mental health. (106)

Regarding the receipt of knowledge about child development and emotional quotient reinforcement, it was found that the children cared by main caregivers who received or did not receive knowledge about child development and emotional quotient reinforcement from health service agencies had no different emotional quotient that must be encouraged or should be encouraged. This result was against Ilkay Ulutas, and Esra Omeroglu (2007) who conducted a study on The Effects of An emotional Intelligence Education Program on the Emotional Intelligence of Children. The research was conducted in Ankara, Turkey. The sample group were 120 6-year old children. A subgroup of 40 students attended a 12-week emotional intelligence program. The emotional intelligence instrument was the Sullivan Emotional Intelligence Scale. The results showed that an emotional intelligence education program contributed significantly to children's emotional intelligence levels. (103) The result of this research was also against Paweena Menegool (2007) who studied the IQ and EQ Development Project for Preschool Children in 5 provinces, e.g. Sukhothai, Phitsanulok, Phetchabun, Uttaradit and Takwith various activities such as lecture, demonstration and practice, and child development checking after training. It was suggested that the families and caregivers in child development centers should develop their knowledge and skills as well to help children engage their appropriate physical, mental, emotional, social and cognitive development. (104)

The results from the analysis of life assets in terms of the power of family, power of self and power of community and the emotional quotient in the sample group were consistent with most previous studies. The preschool children's emotional quotient may be assessed by their normal overt behaviors, which is deemed the power of self embedded. According to the literature review regarding preschool children's normal development via overt behaviors, their overt behaviors tended to be unstable. Aggression increased highly during ages of 2-3 years, and such behavior will gradually decrease at the age of three (Tremblay et al., 2005). Boys usually show more overt behaviors than girls (Alink et al., 2006) (116) (Webster-Stratton, 1996) (117).

The increase of such behaviors can explain self-concept or self-awareness and goal-oriented behaviors to the dependent desire in children (Keenan & Wakschlag, 2001) (118). At the school-age and adolescence, some problematic behaviors such as hyper activity, conduct problem will be gradually decreasing (Nagin & Tremblay, 2000) (119). Therefore, the children's emotional and social development must be reinforced by families and communities.

The divergence between the results of this research regarding the relationship between life assets and emotional quotient in preschool children and previous local and foreign studies may derive from the different emotional quotient assessment tools and emotional quotient reinforcement programs used for preschool children. In Thailand, the "Parental School" project is the main project to reinforce the development and emotional quotient in Thai children. Nevertheless, each agency failed to use this instrument efficiently and proficiently because it could not be transferred to the communities or other agencies relating to child development. Additionally, the implementation process, cooperation from caregivers and communities, skills of caregivers, and skills of health personnel are not diverse or there are not any networks ready to carry out the proactive reinforcement of emotional quotient in children. In addition, this indicates the difference between caregivers' awareness of life assets in preschool children and class teachers' awareness in preschool children centers of emotional quotient in preschool children.

Therefore, in examining the relationship between life assets and emotional quotient in preschool children, the age-based development, age, gender, knowledge and understanding, awareness of child caregivers or child EQ examiners for child emotional development, expectation, and perception or attitude of caregivers to the reinforcement of emotional development must be additionally considered so that these children will be capable of handling their emotions appropriately and positively, and socially and culturally accepted.

5.5 Relationship between development and emotional quotient of preschool children

Hypothesis 3: The development of preschool children relate to the emotional quotient of preschool children.

From examining the relationship between the emotional quotient and development of preschool children (Correlation Analysis) by SPSS Version 16.0, the general development in all 4 areas was correlated at the 0.01 level of significance. The result showed that the general development of preschool children was positively correlated with their emotional quotient. This indicates that if the preschool children's general development is normal more, it is more likely that their emotional quotient will be improved.

The preschool children with different gross motor development had no different emotional quotient that must be encouraged and should be encouraged. However, the preschool children whose fine motor development and adaptability, language development, and social development and self-care were normal would have the emotional quotient that must be encouraged less than the preschool children whose fine motor development and adaptability, language development, and social development and self-care were at the caution and delay levels.

The above result was consistent with Leslie Gunter, Paul Caldarella, Byran B. Korth K and Richard Young (2012) who studied on Promoting Social and Emotional Learning in Preschool Students: A Study of Strong Start Pre-K. A sample involved 84 preschool children in Utah using quasi-experimental, non-equivalent control group design. The sample was divided into the experimental group comprising 52 students for SEL Strong Start Pre-K and the control group comprising 32 students. The teacher-student relationship in terms of emotions, overt behavior and interactions were studied. The research tools were Pre BERS used to assess students' emotions; PKBS-2 to assess the social behavior; and STRS to assess the perception to teacher-children interactions. The results showed that the students receiving SEL Strong Start Pre-K showed less overt behavior at the level of significance while the students and teachers had more interactions at the level of significance. It is suggested that SEL

Strong Start Pre-K should be used to promote the social and emotional development in preschool children. (76)

The result of this research was also consistent with Margaret (2008) who studied the social-emotional screening status in early childhood children. The research was to examine whether children who screen positive for social-emotional/behavioral problems at 12 to 36 months of age are at elevated risk for social-emotional/behavioral problems in early elementary school. The sample involved 1,004 students aged between 12-36 months, so the parents completed “The Brief Infant-Toddler Social and Emotional Assessment” for questions concerning their level of worry about their child’s behavior, emotions, and social development. Later, when children were in early elementary school, the parents completed “The Child Behavior Checklist” and teachers completed “The Teacher Report Form regarding Behavioral Problem”. In a subsample, 389 parents reported child psychiatric status. Brief Infant-Toddler Social and Emotional Assessment screen status and parental worry were associated significantly with school-age symptoms and psychiatric disorders. Low competence scores predicted later teacher-reported subclinical/clinical problems and parent-reported disorders. Worry predicted parent-reported subclinical/clinical problems. Screening with a standardized tool in early childhood has the potential to identify the majority of children who exhibit significant emotional/behavioral problems in early elementary school. (101)

The result of this research was also consistent with Orawan Kamsat (2012) who studied Results of Language Readiness Development in Kindergarten 2 Children Based on Brain Base Learning Activities (BBL). The research compared the children’s language readiness before and after BBL activities, as well as emotional quotient in children receiving the BBL learning experience. The research involved 26 students at Kindergarten 2 at Ban Trom Prai School, Amphoe Si Khoraphum, Surin Primary Educational Service Area Office 1. The results showed that the children receiving the BBL learning experience got higher language readiness ($\mu = 25.23$) after such learning experience ($\mu = 14.19$), representing 84.10%. It was found that the children receiving the BBL learning experience got higher emotional quotient after such learning experience for 88.29%. In conclusion, Kindergarten 2 children receiving the BBL learning experience got higher language readiness and emotional quotient after such

learning experience. It was suggested that the related persons might implement these results for children's higher efficiency. (82)

The result showed that the relationship between emotional quotient and child development at the 0.01 level of significance, that is the emotional quotient was positively correlated with the preschool children's at the 0.01 level of significance. From the discussion on results, most previous studies indicated that the emotional quotient was correlated with children's social development and language development. The finding of this research again confirms the importance of fully reinforcing the children's physical, mental, emotional, social and cognitive development before their school-age because the preschool children have chance for various learning when they grow up. The good basic development in 4 areas and normal emotional quotient definitely take good effect to their future development.

5.6 Correlations between each area of development in preschool children

Hypothesis 4: Each area of development in preschool children, e.g. social development and self-care, fine motor and adaptability development, language development, and gross motor development relates with each other.

Subject to the correlation analysis for each area of development, the language development was correlated with the gross motor development, and fine motor development and adaptability at the 0.001 level of significance. Language development was also correlated with the social development and self-care at the 0.05 level of significance. All 4 areas of development, e.g. language development, gross motor development, fine motor development and adaptability, and social development and self-care, correlated positively. This means that if either of these development areas is improved, other 3 development areas will be better.

The above result was consistent with Pradthana Thiensuwan (2009) who conducted a study on The Relationship between Physical, Family and Classroom Readiness Factors and Basic Reading Skills in Early Childhood Children. The sample

included 359 preschool children at Kindergarten 2 in schools under the supervision of Nakhon Pathom Educational Service Area Office 2 and another 19 class teachers to those preschool children. The results showed that the language development in preschool children was correlated with their basic reading skills at the 0.05 level of significance. The reading promotion behaviors of child caregivers in terms of knowledge offering and prototype were correlated with basic reading skills in preschool children at the 0.05 level of significance. It suggested that the child caregivers should regularly read tales to the children, and show them the accurate reading to prepare reading readiness, and to promote basic reading skills in preschool children. (96)

This result also supported Duchanee Mungdee (2011) who studied Outcome of Fine Motor Activities on Fine Motor Skills and Cognitive Function in Preschool Children. The sample group covered 43 students at Kindergarten 1 studying in schools under the supervision of Nakhon Pathom Educational Service Area Office. Among these students, 21 out of them were in the experimental group, who received SUKI program to encourage the use of fine motor for 45 minutes per time in the total of 4-5 times in 8 weeks. The results showed that the experimental group and the control group acquired different hand skills in terms of accuracy and controlling ability significantly at $P<0.01$. However, the processing skills in using fine motor and hand coordination and dexterity skills in both groups were not different significantly. Regarding the cognitive function, it was found that the experimental group and the control group got the different concentration scores significantly at the statistical level of $p <0.05$ while their memory scores were not different significantly. (89)

The result of this research was also consistent with Jan P. Piek, Greer S. Bradbury, Sharon C. Elsley and Lucinda Tate (2008) who conducted a study on Motor Coordination and Social-Emotional Behavior in Preschool-aged Children. The research involved 41 kindergarten children, 22 boys and 19 girls, aged between 3.9 years and 5.4 years (M = 4 years, 4 months) at a kindergarten in Western Australia. These children were assessed by the McCarron Assessment of Neuromuscular Development, the Emotional Recognition Scales, the Wechsler Preschool and Primary Scale of Intelligence, and the Child Behavior Checklist. The result showed that the motor ability was positively related to a child's emotion comprehension. However,

once age, sex, Performance IQ and Verbal IQ were controlled for the longitudinal prediction. However, the expected correlation between motor ability and anxiety/depression was significant with a moderate effect size. (102) it was also consistent with Wichitra Meesuk (2008) who conducted a study on Multiple Intelligence Abilities of Preschool Children Using the Integrated Instructional Multiple Intelligence Model. The target group consisted of 20 kindergarten-II children. The Instruments used in the study included 15-lesson plans and the Multiple intelligences observing form. The finding showed that the students receiving the integrated instruction multiple intelligences model had developed 8 areas of multiple intelligences abilities of children higher significantly, which included language ability, logic/math ability, spatial ability, physical and movement ability, music/rhythm ability, human relation ability, self-actualization ability, and natural and environment ability. (97)

In conclusion, each area of development in preschool children, e.g. social development and self-care, fine motor development and adaptability, language development and gross motor development correlated positively. All areas of development in preschool children must be reinforced simultaneously to enable them to have the appropriate physical, mental, emotional, social and cognitive development.

CHAPTER 6
CONCLUSION AND RECOMMENDATION

This research was to investigate the Relationship between Life Assets and Emotional Quotient and Development among Preschool Children: A Case Study in Preschool Children Centers, Lad Krabang District, Bangkok. The sample group included 378 children aged between 3-5 years, who were studying in 5 Bangkok preschool children centers, Lad Krabang District and they were selected by the Multi-stage Sampling.

The questionnaire regarding life assets in preschool children was completed by guardians or caregivers who were intimate with children not less than 6 months. The questionnaire regarding emotional quotient in preschool children was completed by class teachers. Child development was assessed by the child development screening test for preschool children or Denver II. In part of the quantitative data analysis, the descriptive statistics were used to analyze the frequency, percentage, mean and Standard Deviation of information regarding general development, emotional quotient and life assets of preschool children. Correlation analysis was used to analyze the correlation between life assets and development and emotional quotient in preschool children, the correlation between emotional quotient and development, and the correlation between each area of development. In addition, the descriptive statistics were used to show some basic data and simple relationship of some data for certain important issues under the following topics:

6.1 Conclusion

6.2 Limitations of the Research

6.3 Recommendations

6.3.1 Policy suggestion

6.3.2 Recommendations for further study

6.1 Conclusion

6.1.1 Life assets in preschool children consist of power of family, power of self and power of community

From examining life assets in preschool children, 96.60% of preschool children had the strong power of family while only 3.40% of children held power of family at the fair level. About 86.00% of preschool children had the strong power of self while only 14.00% of children held power of self at the fair level. About 48.40% of preschool children had the strong power of community while 50.80% and 0.80% of children held power of community at the fair level and weak level respectively.

The first 5 strongest life assets in preschool children

1. Question 9: You praise when your child performs well. (Power of Family)

2. Question 10: You warn for what your child performs inappropriately. (Power of Family)

3. Question 1: You hold and hug to show your love to your child. (Power of Family)

4. Question 25: Your child likes to raise questions about his/her surroundings. (Power of Self)

5. Question 13: Your child is bright and cheerful. (Power of Self)

The first 5 weakest life assets in preschool children

1. Question 46: The community has some learning sources/activity areas to be involved by families. (Power of Community)

2. Question 6: The community arranges religious/cultural and traditional activities that allow the children to participate in. (Power of Family)

3. Question 48: You tell fairy stories to your child. (Power of Community)

4. Question 20: Your child has discipline in playing; for example, keep toys in place after playing. (Power of Self)

5. Question 17: Your child knows how to control his/her emotions when he/she is displeased (e.g. running amok or fussing). (Power of Self)

6.1.2 Development of preschool children in 4 areas: social development and self-care, fine motor development and adaptability, language development, and gross motor development

Based on the Preschool Children Development Screening by Denver II, the general interpretation results showed that most children (227 children), representing 60.10%, had normal development while 151 children or 39.90% had the suspect delays.

From interpreting each item, the results showed that 80.40% of children had normal social development and self-care while 12.20% of children had caution development, and 7.40% of them had the delayed development.

Regarding the fine motor development and adaptability, 0.30% of children had early mature development than general children while 74.10% of children had normal development, 16.90% of them had caution development, and 8.70% of them had delayed development.

For language development, 49.50% of children had normal development while 36.00% of them had caution development and 14.60% of them had delayed development.

For gross motor development, 2.40% of children had early mature development than average children while 82.00% of them had normal development, 10.10% of them had caution development and 5.60% of them had delayed development.

6.1.3 Emotional quotient of preschool children

From studying the emotional quotient of preschool children, the results showed that the emotional quotient of 276 children (73.00%) must be encouraged while the emotional quotient of 102 children (27.00%) should be encouraged. Obviously, no children in the sample group had the normal emotional quotient.

6.1.4 Relationship between life assets and development and emotional quotient in preschool children

Part 3.1 Relationship between life assets and development of preschool children

From studying the relationship between life assets and development in preschool children, the results showed that the life assets in terms of power of self and power of community the sample group were positively correlated with the preschool children's general development at the 0.05 level of significance. This meant that when the life assets in terms of power of self and power of community were higher, it was likely that the preschool children's development would be normal or better. This result was consistent with the preset hypothesis that the preschool children's life assets were correlated with their development.

The results gave an interesting perspective that the preschool children whose power of family was strong would have the normal development of gross motor, fine motor and adaptability, and language development more than preschool children whose power of family was at the fair level. For preschool children whose life assets in term of power of family was at the fair level, their development of gross motor, fine motor and adaptability as well as language development were more delayed than those with the strong power of family. The result also showed that the children whose power of family was at the fair level, they had more caution and delayed fine motor and adaptability development than preschool children whose power of family was strong. Social development and self-care were important issues in the development of preschool children. If the preschool children's power of family was at the strong level, their social development and self-care would be normal more than other preschool children whose power of family was at the fair level. In addition, the preschool children with strong power of family would engage less delayed social development and self-care than the preschool children whose power of family was at the fair level.

From investigating life assets regarding power of self and each area of development in preschool children, there were some interesting issues that the preschool children with strong life assets in term of power of self had normal fine motor development and adaptability, and they had quicker development than those having life assets in term of power of self at the fair level. This indicated the importance of reinforcing power of self in preschool children for their find motor development and adaptability, which deems an important development step in

preschool children, resulting to their learning and activities to live by themselves. There were other interesting issues regarding preschool children's language development as well as social development and self-care that the preschool children with strong power of self engaged the normal language development and social development and self-care more than preschool children having power of self at the fair level. Furthermore, the preschool children having power of self at the strong level had caution language development and social development and self-care less than the preschool children with power of self at the fair level. In respect with the gross motor, the preschool children having power of self at the strong level and fair level had no different gross motor development.

From examining life assets in term of power of community and each area of development, there was an interesting issue that the preschool children with power of community at the strong level acquired early mature and normal gross motor development, fine motor development and adaptability, and language development more than other children whose power of community was at the fair level and weak level. The preschool children with power of community at the strong level had less caution and delayed gross motor, fine motor and adaptability, and language development than the preschool children whose power of community was at the fair level and weak level.

There was another interesting issue regarding social development and self-care of preschool children and their life assets. It was found that the preschool children whose power of community was at the strong level and fair level had the normal social development and self-care more than the preschool children whose power of community was at the weak level. The preschool children whose power of community was at the weak level also had more delayed social development and self-care than the preschool children whose power of community was at the strong level and fair level.

6.1.5 Relationship between life assets and emotional quotient in preschool children

The preschool children whose power of family, power of self and power of community were at the strong level and fair level had no different emotional quotient

that must be encouraged and should be encouraged. Obviously, the preschool children whose power of community was at the weak level had the emotional quotient that must be encouraged more than the preschool children whose power of community was at the strong level and fair level. This result was consistent with the hypothesis of this research that the preschool children's life assets were correlated with their emotional quotient It was an interesting issue that power of community at the weak level was correlated with their emotional quotient that must be encouraged more.

Some basic information indicated the emotional quotient of preschool children cared by the different main caregivers during daytime and nighttime, the result showed that the preschool children had no different emotional quotient, which must be encouraged and should be encouraged. It was found that the children cared by main caregivers who got and did not get any knowledge about the reinforcement of development and emotional quotient provided by health service agencies had no different emotional quotient that must be encouraged and should be encouraged. The preschool children in families earning the low income (less than 6,000 Baht/month) and medium income (30,001-50,000 Baht/month) had no different emotional quotient that must be encouraged and should be encouraged. It was obvious that the children in families earning the high amount of income (more than 50,000 Baht/month) were more likely to have the emotional quotient that must be encouraged than the children in families with low-medium income. In addition, the preschool children whose main caregivers completed the primary school level, high school level, diploma and vocational level had no different emotional quotient that must be encouraged and should be encouraged. There was another interesting issue that the preschool children whose main caregivers completed the bachelor degree and master degree had less emotional quotient that must be encouraged and should be encouraged than the preschool children whose main caregivers completed the primary school level, high school level and diploma.

6.1.6 Relationship between general development and emotional quotient in preschool children and correlations of each development area

The emotional quotient of preschool children was correlated with their general development at the 0.01 level of significance. It was found that the emotional

quotient was positively correlated with the preschool children's development. This meant that the higher emotional quotient the preschool children had, the better or more normal development they would have. It was found that the language development was correlated with the gross motor development, and fine motor development and adaptability at the 0.01 level of significance. Language development was correlated with the social development and self-care at the 0.01 level of significance. Language development was correlated with the gross motor development, fine motor development and adaptability, and social development and self-care in preschool children positively. This meant that the higher language development the preschool children had, the better or more normal gross motor development, fine motor development and adaptability, and social development and self-care they would have. This result correlated with the hypothesis that the preschool children's development was correlated with their emotional quotient, and each area of development related to each other.

Conclusion of findings

1. Life assets were factors associated with the general development in preschool children. The life assets in part of power of family were the basic assets building the life assets in terms of power of self and power of community in preschool children.

2. Preschool children's life assets in terms of power of self and power of community were positively correlated with their development. Power of self in preschool children, e.g. physical, mental and emotional development, would be greatly developed in each life span. If their life assets were encouraged by power of community, the preschool children's power of self would help improve their social development.

3. Life assets in part of power of family were the strongest life assets, followed by power of self. But, power of community was the weakest life assets. Therefore, power of family should be encouraged in guardians and child caregivers so that they regularly create positive behaviors and activities for children. The communities should be encouraged to set up some activities to be involved by children

in order to reinforce power of community in these children, and to shift their development and emotional quotient.

4. Preschool children's development and emotional quotient were positively correlated at the level of significance. Therefore, the child development and emotional quotient should be reinforced simultaneously.

5. From the preschool children development assessment, their most suspected delays fell in language development and fine motor development and adaptability. According to the correlation analysis, the language development correlated with the gross motor development and fine motor development and adaptability at the 0.01 level of significance. The language development correlated with the social development and self-care at the 0.05 level of significance. The language development correlated with the gross motor development, fine motor development and adaptability, and social development and self-care positively. Therefore, all areas of development in preschool children in respect with physical, mental, emotional, social and cognitive development should be reinforced simultaneously, not only one of them.

6. Child development and emotional quotient should be constantly supported by strong life assets.

7. Strong life assets deriving from power of family, power of self and power of community provoked the positive and sustainable behaviors and participatory activities, which help reinforce the development and emotional quotient in preschool children.

6.2 Limitations of the Research

6.2.1 The information regarding preschool children's life assets came from the questionnaires completed by main caregivers. The information about preschool children's emotional quotient was assessed by class teachers. Finally, the information about preschool children's development was assessed by the Researcher and her team for the preschool children screening development. Such information may come from the main caregivers' different perception of preschool children, class teachers'

different perception of preschool children, and different development screening result in the same child.

6.2.2 The results of this research came from the quantitative data analysis; there were no in-depth qualitative analysis results.

6.2.3 This research involved the case study of Bangkok preschool children centers, Lad Krabang District only. The results may not be compared with other areas.

6.2.4 Life Assets Survey Tool for Preschool Children is the innovation to assess interactions in families, children and communities in the Thai context. It is a new instrument first developed by Thailand. Therefore, it must be tested in many sample groups to make this instrument stable, more reliable and valid.

6.3 Recommendations

6.3.1 Policy suggestion

1) The results showed that 39.90% of preschool children had the suspected development; 73.00% of preschool children had the emotional quotient that must be encouraged while 27.00% of them had the emotional quotient that should be encouraged. The result also showed that no preschool children in the sample group had the normal emotional quotient. This deems the critical problem that must be healed urgently by reinforcing their emotional quotient together with other physical, social and cognitive development.

2) About 56.10% of guardians or main caregivers did not receive any knowledge about child development or emotional quotient reinforcement as provided by the public health service. This indicates that the health promotion service has not yet been provided to all people universally and proactively. At the policy level, the proactive service regarding “Parents’ School” project should be promoted to prepare all families, communities, parents, grandparents, babysitters and teachers in preschool children centers to have knowledge and understanding as well as skills in reinforcing the development and emotional quotient in preschool children.

3) The results showed that the preschool children's life assets in terms of the power of self and power of community were correlated with their development at the 0.05 level of significance. It was found that both powers were positively correlated with the preschool children's development. Any agencies related to the policy setting should encourage the child caregivers and communities to create positive activities to be more involved by the preschool children.

4) Subject to the language development assessment in preschool children, 36.00% of them had the language development at the caution level while 14.60% had the language development delay. It is widely known that the language development is the ability of joint functions in brain. This development is so crucial in communities and it is the important skill in children because it is the basis for additional learning about reading, spelling, intelligence development, problem-solving, associations and living in the society when the children grow up. In addition, the language development in preschool children is exclusively important because their brain is growing up so quickly. The nerve fiber and joints between nerve cells are most created at this age or this period is called "window of opportunity". Therefore, the related agencies responsible for the care and reinforcement of development in preschool children should place the policies or measures to monitor and encourage children's language development in families, communities, preschool children centers, kindergartens, nursing homes and hospitals by the interdisciplinary team. The transfer process should be set up as well to reinforce or treat the children risky to the delayed language development.

6.3.2 Recommendations for further study

1) Any studies on life assets in preschool children have never been conducted. The activities arranged by indicators of life assets inventories to reinforce each power should be studied further.

2) Further studies should include other variables, e.g. children's gender, family's economic status, and parents' education, etc.

3) This research involved the preschool children in a district in Bangkok. Further study may be a comparative research on preschool children's life assets in each district of Bangkok, or in each province or each region of Thailand in order to

compile the data on preschool children's life assets, and to have the basic information guiding the preschool children's development at the national policy.

4) To make this research more complete, the in-depth qualitative research should be conducted to investigate other profound causes or parents' behaviors, which may support or hinder the child development.

5) Thailand's latest emotional quotient survey in preschool children was done in 2007, if the preschool children's emotional quotient is investigated now, we may find out some differences because, currently, the preschool children change their playing styles and they prefer playing games on mobile or tablet more.

6) Further study should include some more data from class teachers because there may be some differences or interesting issues reported by teachers or caregivers in preschool children centers, who care for preschool children in the daytime.

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APPENDIX

COA.No.	2014/008.1301

Documentary Proof of The Committee for Research Ethics (Social Sciences)

Title of Project:	Relationship between Life Assets and Emotional Quotient and Development among Preschool Children: A Case Study in Preschool Children Center; Ladkrabang District, Bangkok
Principal Investigator:	Miss Kanya Panurak
Name of Institution:	National Institute for Child and Family Development, Mahidol University
Approval includes:	1) MU-SSIRB Submission form version received date 8 January 2014 2) Participant Information sheet for Parents version date 8 January 2014 3) Participant Information sheet for Teacher version date 8 January 2014 4) Informed Consent form for Parents version date 8 January 2014 5) Informed Consent form version date 8 January 2014 6) Questionnaire received date 27 November 2013

The Committee for Research Ethics (Social Sciences) is in full compliance with International Guidelines of Human Research Protection such as Declaration of Helsinki, The Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

Date of Approval:	13 January 2014
Date of Expiration:	12 January 2015

Signature of Chairman:.....
(Emeritus Professor Santhat Sermsri)

Signature of Head of the Institute:.....
(Assoc.Prof.Dr.Wariya Chinwanno)
Dean of Faculty of Social Sciences and Humanities

Office of The Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University
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เอกสารชี้แจงผู้เข้าร่วมการวิจัย (สำหรับครูประจำชั้น)

(Participant Information Sheet)

ในเอกสารนี้อาจมีข้อความที่ท่านอ่านแล้วยังไม่เข้าใจ โปรดสอบถามหัวหน้าโครงการวิจัย หรือผู้แทนให้ช่วยอธิบายจนกว่าจะเข้าใจดี ท่านจะได้รับเอกสารนี้ 1 ฉบับ นำกลับไปอ่านที่บ้านเพื่อปรึกษาหารือกับญาติพี่น้อง เพื่อนสนิท แพทย์ประจำตัวของท่าน แพทย์ท่านอื่น หรือผู้ที่ท่านต้องการปรึกษา เพื่อช่วยในการตัดสินใจเข้าร่วมการวิจัย

ชื่อโครงการ ความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย : กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง

ชื่อผู้วิจัย นางสาวกรรญา ภานุรักษ์ นักศึกษาปริญญาโท หลักสูตรวิทยาศาสตรมหาบัณฑิต สาขาวิชาพัฒนาการมนุษย์ สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว หมายเลขโทรศัพท์ 089-0373706

สถานที่ที่สามารถติดต่อได้ 324 หมู่ 5 ตำบลบ้านเกาะ อำเภอเมืองนครราชสีมา จังหวัดนครราชสีมา เบอร์โทรศัพท์ 089-0373706

อาจารย์ที่ปรึกษาโครงการ ผศ.ดร.วิมลทิพย์ มุสิกพันธ์

โครงการวิจัยนี้ทำขึ้นเพื่อศึกษาความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย ในศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง เป็นการวิจัยเชิงสำรวจต้นทุนชีวิต ซึ่งเป็นปัจจัยสร้างคุณลักษณะที่ดีของเด็กและเยาวชน เป็นผลมาจากการได้รับการเสริมสร้างให้เกิดขึ้นตั้งแต่แรกเกิดจนเติบโตเป็นผู้ใหญ่ ซึ่งได้รับอิทธิพลจากทั้งปัจจัยภายในตนเอง และปัจจัยสิ่งแวดล้อมรอบข้าง โดยจะส่งผลให้เด็กและเยาวชนเติบโตอย่างมีคุณภาพ สามารถดำรงชีวิตอยู่ในสังคมได้อย่างมีความสุข ในเด็กปฐมวัยมีต้นทุนชีวิตที่สำคัญ 3 ด้าน ประกอบด้วย ด้านพลังครอบครัว พลังตัวตน และพลังชุมชน ในการศึกษาครั้งนี้จึงมีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างต้นทุนชีวิตเด็กปฐมวัยกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย ซึ่งประโยชน์ที่คาดว่าจะได้รับคือ ได้รับทราบสถานการณ์เกี่ยวกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย ทราบข้อเด่น ข้อด้อยของต้นทุนชีวิตเด็กปฐมวัย ทราบความสัมพันธ์ของต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย และนำเสนอผลการวิจัยที่ได้แก่หน่วยงานที่เกี่ยวข้องในการพัฒนาเด็กและครอบครัวเพื่อเป็นแนวทางในการส่งเสริมต้นทุนชีวิตให้เข้มแข็ง ส่งเสริมพัฒนาการ และความฉลาดทางอารมณ์เด็กปฐมวัยได้อย่างเหมาะสมตามช่วงวัยต่อไป

เด็กในปกครองของท่านได้รับเชิญให้เข้าร่วมการวิจัยนี้เพราะ เด็กของท่านมีอายุ 3-5 ปี และกำลังศึกษาอยู่ในศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง ซึ่งเป็นศูนย์พัฒนาเด็กก่อนวัยเรียนที่ได้รับคัดเลือกเป็นสถานที่เก็บข้อมูลในการศึกษาครั้งนี้

หากท่านตัดสินใจให้เด็กในปกครองของท่านเข้าร่วมการวิจัย จะมีขั้นตอนการวิจัยดังต่อไปนี้คือ

1.ให้ผู้ปกครองของเด็กตอบแบบสำรวจต้นต้นชีวิตเด็กปฐมวัย 3 ปี ถึง 6 ปี แบบสำรวจแต่ละชุดประกอบด้วยข้อคำถาม แบ่งเป็น 3 ส่วน ดังนี้

2014/002.1301

ส่วนที่ 1: ข้อมูลทั่วไปของผู้ตอบเป็นข้อคำถามเกี่ยวกับข้อมูลที่มีความจำเป็น และเกี่ยวข้องกับเด็ก จำนวน 5 ข้อ ใช้เวลาทำประมาณ 2 นาที

ส่วนที่ 2: ข้อมูลพื้นฐานของครอบครัว เป็นข้อคำถามเกี่ยวกับ ข้อมูลของครอบครัวที่เด็กอาศัยอยู่ด้วยเป็นประจำ จำนวน 6 ข้อ ใช้เวลาทำประมาณ 2 นาที

ส่วนที่ 3: ข้อมูลเกี่ยวกับต้นทุนชีวิตเด็กปฐมวัยอายุ 3 ปี ถึง 6 ปีเป็นข้อคำถามชนิดปรนัยเลือกตอบ จำนวน 48 ข้อ เป็นการถามถึงการอบรมเลี้ยงดูและสิ่งแวดล้อมรอบตัวเด็ก โดยผู้ตอบอ่านข้อความให้เข้าใจ จากนั้นเลือกคำตอบที่ตรงกับเด็กมากที่สุด แล้วจึงทำเครื่องหมายลงในช่องที่กำหนด ใช้เวลาทำประมาณ 16 นาที รวมใช้เวลาตอบแบบสำรวจต้นต้นชีวิตเด็กปฐมวัย ประมาณ 20 นาที

2. การทดสอบและประเมินพัฒนาการเด็กในปกครองของท่านโดยใช้แบบทดสอบและแบบประเมิน 2 ชุด ดังนี้

ชุดที่ 1 แบบทดสอบพัฒนาการเด็กปฐมวัย ใช้แบบทดสอบ DENVER II ฉบับภาษาไทย ซึ่งสามารถทดสอบผลสรุปรวมของพัฒนาการอย่างรอบด้านแบ่งเป็น 4 ด้าน ได้แก่ ด้านสังคมและการช่วยเหลือตนเอง ด้านการใช้กล้ามเนื้อเล็กและการปรับตัว ด้านภาษา และด้านการใช้กล้ามเนื้อใหญ่ แบบทดสอบพัฒนาการชุดนี้ผู้วิจัยและผู้ช่วยเก็บข้อมูลจะทำการทดสอบพัฒนาการเด็กในปกครองของท่าน โดยมีอุปกรณ์ที่ใช้ในการทดสอบพัฒนาการดังนี้ คือ แบบทดสอบพัฒนาการ Denver II ฉบับภาษาไทย ดินสอ กระดาษ ลูกเทนนิส และลูกบาศก์ไม้หลากสีขนาด 1x1 นิ้วจำนวน 10 ก้อน ซึ่งผู้วิจัยและผู้ช่วยเก็บข้อมูลจะใช้เวลาในการทดสอบพัฒนาการประมาณ 15 - 20 นาที

ชุดที่ 2 แบบประเมินความฉลาดทางอารมณ์ ใช้แบบประเมินความฉลาดทางอารมณ์ของเด็กอายุ 3 - 5 ปี ของกรมสุขภาพจิต มีจำนวน 55 ข้อ ซึ่งผู้วิจัยได้ขอความร่วมมือจากท่านซึ่งเป็นคุณครูประจำชั้นของเด็กทำการประเมินความฉลาดทางอารมณ์ของเด็ก โดยใช้เวลาประมาณ 30 นาที

ความเสี่ยงที่อาจจะเกิดขึ้นเมื่อเข้าร่วมการวิจัย คือ ขณะตอบแบบสอบถามท่านอาจรู้สึกอึดอัดกับบางคำถาม ท่านมีสิทธิ์ที่จะไม่ตอบคำถามเหล่านั้นได้

หากท่านไม่อนุญาตให้เด็กในปกครองของท่านเข้าร่วมในโครงการวิจัยนี้ ก็จะไม่มีผลต่อท่านหรือผลการเรียนของเด็กในปกครองของท่านทั้งปัจจุบันและอนาคต การเข้าร่วมโครงการนี้จะไม่ได้รับค่าตอบแทนใดๆ และการเข้าร่วมโครงนี้ ไม่มีค่าใช้จ่ายใด ๆ ที่ท่านต้องรับผิดชอบ

หากท่านมีข้อสงสัยที่จะสอบถามเกี่ยวกับการวิจัย หรือเกิดเหตุการณ์ไม่พึงประสงค์จากการวิจัยขึ้นกับเด็กในปกครองของท่าน ท่านสามารถติดต่อ นางสาวกรรญา ภานุรักษ์ หมายเลขโทรศัพท์ 089-0373706

หากมีข้อมูลเพิ่มเติมทั้งด้านประโยชน์และโทษที่เกี่ยวข้องกับการวิจัยนี้ ผู้วิจัยจะแจ้งให้ทราบโดยรวดเร็วไม่ปิดบัง

ข้อมูลส่วนตัวของเด็กในปกครองของท่านจะถูกเก็บรักษาไว้ ไม่เปิดเผยต่อสาธารณะเป็นรายบุคคล แต่จะรายงานผลการวิจัยเป็นข้อมูลส่วนรวม ข้อมูลของผู้เข้าร่วมการวิจัยเป็นรายบุคคลอาจมีคณะบุคคลบางกลุ่มเข้ามาตรวจสอบได้ เช่น ผู้ให้ทุนวิจัย, สถาบัน หรือองค์กรของรัฐที่มีหน้าที่ตรวจสอบ, คณะกรรมการจริยธรรมฯ เป็นต้น

2014/008.1301

ท่านมีสิทธิ์ถอนตัวเด็กในปกครองของท่านออกจากโครงการวิจัยเมื่อใดก็ได้ โดยไม่ต้องแจ้งให้ทราบล่วงหน้า และการไม่เข้าร่วมการวิจัยหรือถอนตัวออกจากโครงการวิจัยนี้ จะไม่มีผลกระทบใด ๆ ต่อคะแนนการเรียน การสอน และการบริการฯ ที่เด็กในปกครองของท่านสมควรจะได้รับแต่ประการใด

โครงการวิจัยนี้ได้รับการพิจารณารับรองจากคณะกรรมการจริยธรรมการวิจัยในคนสาขาสังคมศาสตร์ ซึ่งมีสำนักงานอยู่ที่คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล ถนนพุทธมณฑล สาย 4 ตำบลศาลายา อำเภอพุทธมณฑล จังหวัดนครปฐม 73170 หมายเลขโทรศัพท์ 0 2441 9180 โทรสาร 0 2441 9181 หากท่านได้รับการปฏิบัติไม่ตรงตามที่ระบุไว้ ท่านสามารถติดต่อกับประธานคณะกรรมการจริยธรรมฯ หรือผู้แทนได้ตามสถานที่และหมายเลขโทรศัพท์ข้างต้น

ข้าพเจ้าได้อ่านรายละเอียดในเอกสารนี้ครบถ้วนแล้ว

ลงชื่อ.....ครูประจำชั้น

(.....)

วันที่.....

2014/003.1301

หนังสือแสดงเจตนายินยอมเข้าร่วมการวิจัยโดยได้รับการบอกกล่าวและเต็มใจ

วันที่..... เดือน..... พ.ศ.....

ข้าพเจ้า.....อายุ.....ปี อาศัยอยู่บ้านเลขที่.....

ถนน.....ตำบล.....อำเภอ.....

จังหวัด.....รหัสไปรษณีย์.....โทรศัพท์ .....

ขอแสดงเจตนายินยอมให้เด็กในปกครองของข้าพเจ้าเข้าร่วมโครงการวิจัยเรื่อง ความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย : กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียน กรุงเทพมหานคร เขตลาดกระบัง

โดยข้าพเจ้าได้รับทราบรายละเอียดเกี่ยวกับที่มาและจุดมุ่งหมายในการทำวิจัยรายละเอียดขั้นตอนต่างๆ ที่เด็กในปกครองของข้าพเจ้าจะต้องปฏิบัติหรือได้รับการปฏิบัติ ประโยชน์ที่คาดว่าจะได้รับของการวิจัย ความเสี่ยงที่อาจจะเกิดขึ้นจากการเข้าร่วมการวิจัย รวมทั้งแนวทางป้องกันและแก้ไขหากเกิดอันตรายขึ้น โดยได้อ่านข้อความที่มีรายละเอียดอยู่ในเอกสารชี้แจงผู้เข้าร่วมการวิจัยโดยตลอด อีกทั้งยังได้รับคำอธิบายและตอบข้อสงสัยจากหัวหน้าโครงการวิจัยเป็นที่เรียบร้อยแล้ว โดยไม่มีสิ่งใดปิดบังซ่อนเร้น

ข้าพเจ้าจึงสมัครใจให้เด็กในปกครองของข้าพเจ้าเข้าร่วมในโครงการวิจัยนี้ :

ข้าพเจ้าได้ทราบถึงสิทธิ์ที่ข้าพเจ้าจะได้รับข้อมูลเพิ่มเติม ทั้งทางด้านประโยชน์และโทษจากการเข้าร่วมการวิจัย และสามารถถอนตัวเด็กในปกครองของข้าพเจ้าหรืองดเข้าร่วมการวิจัยได้ทุกเมื่อ โดยจะไม่มีผลกระทบใดๆ ต่อการเรียนของเด็กในปกครองของข้าพเจ้าจะได้รับต่อไปในอนาคต และยินยอมให้ผู้วิจัยใช้ข้อมูลส่วน ตัวของเด็กในปกครองของข้าพเจ้าที่ได้รับจากการวิจัย แต่จะไม่เผยแพร่ต่อสาธารณะเป็นรายบุคคล โดยจะนำเสนอเป็นข้อมูลโดยรวมจากการวิจัยเท่านั้น

หากข้าพเจ้ามีข้อข้องใจเกี่ยวกับขั้นตอนของการวิจัย หรือหากเกิดผลข้างเคียงที่ไม่พึงประสงค์จากการวิจัยขึ้นกับเด็กในปกครองของข้าพเจ้า ข้าพเจ้าจะสามารถติดต่อกับ นางสาวกรรญา ภานุรักษ์ ได้ที่หมายเลขโทรศัพท์ 089-0373706 ได้ตลอดเวลา

โครงการวิจัยนี้ได้รับการพิจารณารับรองจากคณะกรรมการจริยธรรมการวิจัยในคน สาขาสังคมศาสตร์ ซึ่งมีสำนักงานอยู่ที่คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล ถนนพุทธมณฑล สาย 4 ตำบลศาลายา อำเภอพุทธมณฑล จังหวัดนครปฐม 73170 หมายเลขโทรศัพท์ 0 2441 9180 โทรสาร 0 2441 9181 หากข้าพเจ้าได้รับการปฏิบัติไม่ตรงตามที่ระบุไว้ ข้าพเจ้าสามารถติดต่อกับประธานคณะกรรมการจริยธรรมฯ หรือผู้แทน ได้ตามสถานที่และหมายเลขโทรศัพท์ข้างต้น

ข้าพเจ้าเข้าใจข้อความในเอกสารชี้แจงผู้เข้าร่วมการวิจัย และหนังสือแสดงเจตนายินยอมนี้โดยตลอดแล้ว จึงลงลายมือชื่อไว้

ลงชื่อ.....ครูประจำชั้น ลงชื่อ.....ผู้ให้ข้อมูลและขอความยินยอม

(.....) (.....)

วันที่..... วันที่.....

เอกสารชี้แจงผู้เข้าร่วมการวิจัย (สำหรับผู้ปกครอง)

(Participant Information Sheet)

ในเอกสารนี้อาจมีข้อความที่ท่านอ่านแล้วยังไม่เข้าใจ โปรดสอบถามหัวหน้าโครงการวิจัย หรือผู้แทนให้ช่วยอธิบายจนกว่าจะเข้าใจดี ท่านจะได้รับเอกสารนี้ 1 ฉบับ นำกลับไปอ่านที่บ้านเพื่อปรึกษาหารือกับญาติพี่น้อง เพื่อนสนิท แพทย์ประจำตัวของท่าน แพทย์ท่านอื่น หรือผู้ที่ท่านต้องการปรึกษา เพื่อช่วยในการตัดสินใจเข้าร่วมการวิจัย

ชื่อโครงการ ความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย : กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง

ชื่อผู้วิจัย นางสาวกรรญา ภานุรักษ์ นักศึกษาปริญญาโท หลักสูตรวิทยาศาสตรมหาบัณฑิต สาขาวิชาพัฒนาการมนุษย์ สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว หมายเลขโทรศัพท์ 089-0373706

สถานที่ที่สามารถติดต่อได้ 324 หมู่ 5 ตำบลบ้านเกาะ อำเภอเมืองนครราชสีมา จังหวัดนครราชสีมา เบอร์โทรศัพท์ 089-0373706

อาจารย์ที่ปรึกษาโครงการ ผศ.ดร.วิมลทิพย์ มุสิกพันธ์

โครงการวิจัยนี้ทำขึ้นเพื่อศึกษาความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย ในศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง เป็นการวิจัยเชิงสำรวจต้นทุนชีวิต ซึ่งเป็นปัจจัยสร้างคุณลักษณะที่ดีของเด็กและเยาวชน เป็นผลมาจากการได้รับการเสริมสร้างให้เกิดขึ้นตั้งแต่แรกเกิดจนเติบโตเป็นผู้ใหญ่ ซึ่งได้รับอิทธิพลจากทั้งปัจจัยภายในตนเอง และปัจจัยสิ่งแวดล้อมรอบข้าง โดยจะส่งผลให้เด็กและเยาวชนเติบโตอย่างมีคุณภาพ สามารถดำรงชีวิตอยู่ในสังคมได้อย่างมีความสุข ในเด็กปฐมวัยมีต้นทุนชีวิตที่สำคัญ 3 ด้าน ประกอบด้วย ด้านพลังครอบครัว พลังตัวตน และพลังชุมชน ในการศึกษาครั้งนี้จึงมีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างต้นทุนชีวิตเด็กปฐมวัยกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย ซึ่งประโยชน์ที่คาดว่าจะได้รับคือ ได้รับทราบสถานการณ์เกี่ยวกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย ทราบข้อเด่น ข้อด้อยของต้นทุนชีวิตเด็กปฐมวัย ทราบความสัมพันธ์ของต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย และนำเสนอผลการวิจัยที่ได้แก่หน่วยงานที่เกี่ยวข้องในการพัฒนาเด็กและครอบครัวเพื่อเป็นแนวทางในการส่งเสริมต้นทุนชีวิตให้เข้มแข็ง ส่งเสริมพัฒนาการ และความฉลาดทางอารมณ์เด็กปฐมวัยได้อย่างเหมาะสมตามช่วงวัยต่อไป

เด็กในปกครองของท่านได้รับเชิญให้เข้าร่วมการวิจัยนี้เพราะ เด็กของท่านมีอายุ 3-5 ปี และกำลังศึกษาอยู่ในศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง ซึ่งเป็นศูนย์พัฒนาเด็กก่อนวัยเรียนที่ได้รับคัดเลือกเป็นสถานที่เก็บข้อมูลในการศึกษาครั้งนี้

หากท่านตัดสินใจให้เด็กในปกครองของท่านเข้าร่วมการวิจัย จะมีขั้นตอนการวิจัยดังต่อไปนี้คือ

1.ขอให้ท่านตอบแบบสำรวจต้นต้นชีวิตเด็กปฐมวัย 3 ปี ถึง 6 ปี แบบสำรวจแต่ละชุดประกอบด้วยข้อคำถาม แบ่งเป็น 3 ส่วน ดังนี้

ส่วนที่ 1: ข้อมูลทั่วไปของผู้ตอบเป็นข้อคำถามเกี่ยวกับข้อมูลที่มีความจำเป็น และเกี่ยวข้องกับเด็ก จำนวน 5 ข้อ ใช้เวลาทำประมาณ 2 นาที

ส่วนที่ 2: ข้อมูลพื้นฐานของครอบครัว เป็นข้อคำถามเกี่ยวกับ ข้อมูลของครอบครัวที่เด็กอาศัยอยู่ด้วยเป็นประจำ จำนวน 6 ข้อ ใช้เวลาทำประมาณ 2 นาที

ส่วนที่ 3: ข้อมูลเกี่ยวกับต้นทุนชีวิตเด็กปฐมวัยเด็ก 3 ปี ถึง 6 ปีเป็นข้อคำถามชนิดปรนัยเลือกตอบ จำนวน 48 ข้อ เป็นการถามถึงการอบรมเลี้ยงดูและสิ่งแวดล้อมรอบตัวเด็ก โดยผู้ตอบอ่านข้อความให้เข้าใจ จากนั้นเลือกคำตอบที่ตรงกับเด็กมากที่สุด แล้วจึงทำเครื่องหมายลงในช่องที่กำหนด ใช้เวลาทำประมาณ 16 นาที รวมใช้เวลาตอบแบบสำรวจต้นต้นชีวิตเด็กปฐมวัย 20 นาที

2. การทดสอบและประเมินพัฒนาการบุตรหลานของท่านโดยใช้แบบทดสอบและแบบประเมิน 2 ชุด ดังนี้

ชุดที่ 1 แบบทดสอบพัฒนาการเด็กปฐมวัย ใช้แบบทดสอบ DENVER II ฉบับภาษาไทย ซึ่งสามารถทดสอบผลสรุปรวมของพัฒนาการอย่างรอบด้านแบ่งเป็น 4 ด้าน ได้แก่ ด้านสังคมและการช่วยเหลือตนเอง ด้านการใช้กล้ามเนื้อเล็กและการปรับตัว ด้านภาษา และด้านการใช้กล้ามเนื้อใหญ่ แบบทดสอบพัฒนาการชุดนี้ผู้วิจัยและผู้ช่วยเก็บข้อมูลจะทำการทดสอบพัฒนาการเด็กในปกครองของท่าน โดยมีอุปกรณ์ที่ใช้ในการทดสอบพัฒนาการดังนี้ คือ แบบทดสอบพัฒนาการ Denver II ฉบับภาษาไทย ดินสอ กระดาษ ลูกเทนนิส และลูกบาศก์ไม้หลากสีขนาด 1x1 นิ้วจำนวน 10 ก้อน ซึ่งผู้วิจัยและผู้ช่วยเก็บข้อมูลจะใช้เวลาในการทดสอบพัฒนาการประมาณ 15- 20 นาที

ชุดที่ 2 แบบประเมินความฉลาดทางอารมณ์ ใช้แบบประเมินความฉลาดทางอารมณ์ของเด็กอายุ 3- 5 ปี ของกรมสุขภาพจิต มีจำนวน 55 ข้อ ซึ่งผู้วิจัยได้ขอความร่วมมือจากคุณครูประจำชั้นของเด็กในปกครองของท่านทำการประเมิน โดยใช้เวลาประมาณ 30 นาที

ความเสี่ยงที่อาจจะเกิดขึ้นเมื่อเข้าร่วมการวิจัย คือ ขณะตอบแบบสอบถามท่านอาจรู้สึกอึดอัดกับบางคำถาม ท่านมีสิทธิ์ที่จะไม่ตอบคำถามเหล่านั้นได้

หากท่านไม่อนุญาตให้เด็กในปกครองของท่านเข้าร่วมในโครงการวิจัยนี้ ก็จะไม่มีผลต่อท่านหรือผลการเรียนของเด็กในปกครองของท่านทั้งปัจจุบันและอนาคต การเข้าร่วมโครงการนี้จะไม่ได้รับค่าตอบแทนใด ๆ และการเข้าร่วมโครงนี้ ไม่มีค่าใช้จ่ายใด ๆ ที่ท่านต้องรับผิดชอบ

หากท่านมีข้อสงสัยที่จะสอบถามเกี่ยวกับการวิจัย หรือเกิดเหตุการณ์ไม่พึงประสงค์จากการวิจัยขึ้นกับเด็กในปกครองของท่าน ท่านสามารถติดต่อ นางสาวกรรญา ภานุรักษ์ หมายเลขโทรศัพท์ 089-0373706

หากมีข้อมูลเพิ่มเติมทั้งด้านประโยชน์และโทษที่เกี่ยวข้องกับการวิจัยนี้ ผู้วิจัยจะแจ้งให้ทราบโดยรวดเร็วไม่ปิดบัง

ข้อมูลส่วนตัวของเด็กในปกครองของท่านจะถูกเก็บรักษาไว้ ไม่เปิดเผยต่อสาธารณะเป็นรายบุคคล แต่จะรายงานผลการวิจัยเป็นข้อมูลส่วนรวม ข้อมูลของผู้เข้าร่วมการวิจัยเป็นรายบุคคลอาจมีคณะบุคคลบางกลุ่มเข้ามาตรวจสอบได้ เช่น ผู้ให้ทุนวิจัย, สถาบัน หรือองค์กรของรัฐที่มีหน้าที่ตรวจสอบ, คณะกรรมการจริยธรรมฯ เป็นต้น

2014/008.1301

ท่านมีสิทธิ์ถอนตัวเด็กในปกครองของท่านออกจากโครงการวิจัยเมื่อใดก็ได้ โดยไม่ต้องแจ้งให้ทราบล่วงหน้า และการไม่เข้าร่วมการวิจัยหรือถอนตัวออกจากโครงการวิจัยนี้ จะไม่มีผลกระทบใด ๆ ต่อคะแนนการเรียน การสอน และการบริการฯ ที่เด็กในปกครองของท่านสมควรจะได้รับแต่ประการใด

โครงการวิจัยนี้ได้รับการพิจารณารับรองจากคณะกรรมการจริยธรรมการวิจัยในคน สาขาสังคมศาสตร์ ซึ่งมีสำนักงานอยู่ที่คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล ถนนพุทธมณฑล สาย 4 ตำบลศาลายา อำเภอพุทธมณฑล จังหวัดนครปฐม 73170 หมายเลขโทรศัพท์ 0 2441 9180 โทรสาร 0 2441 9181หากท่านได้รับการปฏิบัติไม่ตรงตามที่ระบุไว้ ท่านสามารถติดต่อกับประธานคณะกรรมการฯ หรือผู้แทนได้ตามสถานที่และหมายเลขโทรศัพท์ข้างต้น

ข้าพเจ้าได้อ่านรายละเอียดในเอกสารนี้ครบถ้วนแล้ว

ลงชื่อ.....ผู้ปกครอง

(.....)

วันที่.....

2014/008.1301

หนังสือแสดงเจตนายินยอมเข้าร่วมการวิจัยโดยได้รับการบอกกล่าวและเต็มใจ

วันที่..... เดือน..... พ.ศ.....

ข้าพเจ้า..... อายุ.....ปี อาศัยอยู่บ้านเลขที่.....

ถนน..... ตำบล.....อำเภอ.....

จังหวัด.....รหัสไปรษณีย์.....โทรศัพท์ .....

ขอแสดงเจตนายินยอมให้เด็กในปกครองของข้าพเจ้าเข้าร่วมโครงการวิจัยเรื่อง ความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย : กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียน กรุงเทพมหานคร เขตลาดกระบัง

โดยข้าพเจ้าได้รับทราบรายละเอียดเกี่ยวกับที่มาและจุดมุ่งหมายในการทำวิจัยรายละเอียดขั้นตอนต่างๆ ที่เด็กในปกครองของข้าพเจ้าจะต้องปฏิบัติหรือได้รับการปฏิบัติ ประโยชน์ที่คาดว่าจะได้รับของการวิจัย ความเสี่ยงที่อาจจะเกิดขึ้นจากการเข้าร่วมการวิจัย รวมทั้งแนวทางป้องกันและแก้ไขหากเกิดอันตรายขึ้น โดยได้อ่านข้อความที่มีรายละเอียดอยู่ในเอกสารชี้แจงผู้เข้าร่วมการวิจัยโดยตลอด อีกทั้งยังได้รับคำอธิบายและตอบข้อสงสัยจากหัวหน้าโครงการวิจัยเป็นที่เรียบร้อยแล้ว โดยไม่มีสิ่งใดปิดบังซ่อนเร้น

ข้าพเจ้าจึงสมัครใจให้เด็กในปกครองของข้าพเจ้าเข้าร่วมในโครงการวิจัยนี้ :

ข้าพเจ้าได้ทราบถึงสิทธิ์ที่ข้าพเจ้าจะได้รับข้อมูลเพิ่มเติม ทั้งทางด้านประโยชน์และโทษจากการเข้าร่วมการวิจัย และสามารถถอนตัวเด็กในปกครองของข้าพเจ้าหรือองค์เข้าร่วมการวิจัยได้ทุกเมื่อ โดยจะไม่มีผลกระทบใดๆ ต่อการเรียนของเด็กในปกครองของข้าพเจ้าจะได้รับต่อไปในอนาคต และยินยอมให้ผู้วิจัยใช้ข้อมูลส่วน ตัวของเด็กในปกครองของข้าพเจ้าที่ได้รับจากการวิจัย แต่จะไม่เผยแพร่ต่อสาธารณะเป็นรายบุคคล โดยจะนำเสนอเป็นข้อมูลโดยรวมจากการวิจัยเท่านั้น

หากข้าพเจ้ามีข้อข้องใจเกี่ยวกับขั้นตอนของการวิจัย หรือหากเกิดผลข้างเคียงที่ไม่พึงประสงค์จากการวิจัยขึ้นกับเด็กในปกครองของข้าพเจ้า ข้าพเจ้าจะสามารถติดต่อกับ นางสาวกรรญา ภานุรักษ์ ได้ที่หมายเลขโทรศัพท์ 089-0373706 ได้ตลอดเวลา

โครงการวิจัยนี้ได้รับการพิจารณารับรองจากคณะกรรมการจริยธรรมการวิจัยในคน สาขาสังคมศาสตร์ ซึ่งมีสำนักงานอยู่ที่คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล ถนนพุทธมณฑล สาย 4 ตำบลศาลายา อำเภอพุทธมณฑล จังหวัดนครปฐม 73170 หมายเลขโทรศัพท์ 0 2441 9180 โทรสาร 0 2441 9181 หากข้าพเจ้าได้รับการปฏิบัติไม่ตรงตามที่ระบุไว้ ข้าพเจ้าสามารถติดต่อกับประธานคณะกรรมการจริยธรรมฯ หรือผู้แทน ได้ตามสถานที่และหมายเลขโทรศัพท์ข้างต้น

ข้าพเจ้าเข้าใจข้อความในเอกสารชี้แจงผู้เข้าร่วมการวิจัย และหนังสือแสดงเจตนายินยอมนี้โดยตลอดแล้ว จึงลงลายมือชื่อไว้

ลงชื่อ.....ผู้ปกครอง ลงชื่อ.....ผู้ให้ข้อมูลและขอความยินยอม

(.....) (.....)

วันที่..... วันที่.....

2014/008.1901

แบบสอบถามเพื่อการวิจัย

เรื่อง

ความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย :

กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง

……

แบบประเมินความฉลาดทางอารมณ์เด็ก อายุ 3 -5 ปี สำหรับครู/ผู้ดูแลเด็ก

คำชี้แจง

1. แบบสอบถามนี้เป็นแบบสอบถามเพื่อการวิจัยเรื่องความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย: กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง

2. แบบสอบถามนี้เป็นแบบประเมินความฉลาดทางอารมณ์เด็ก อายุ 3 - 5 ปี สำหรับครู/ผู้ดูแลเด็ก จำนวน 55 ข้อ ใช้เวลาในการทำประมาณ 30 นาที

3. ในการตอบแบบสอบถามนี้ขอความร่วมมือให้ท่านตอบคำถามทุกข้อ คำตอบของท่านจะนำไปใช้ประโยชน์ในการเป็นแนวทางในการส่งเสริมให้เกิดความฉลาดทางอารมณ์ของเด็กปฐมวัยต่อไป และข้อมูลนี้จะถูกเก็บเป็นความลับ

ขอขอบคุณที่ให้ความร่วมมือในการตอบแบบสอบถามครั้งนี้

นางสาวกรรญา ภานุรักษ์

นักศึกษาปริญญาโท หลักสูตรวิทยาศาสตรมหาบัณฑิต

สาขาวิชาพัฒนาการมนุษย์

สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว

มหาวิทยาลัยมหิดล

คำแนะนำ

ข้อความต่อไปนี้เป็นการอธิบายถึงอารมณ์ ความรู้สึกและพฤติกรรมของเด็กในช่วง 4 เดือนที่ผ่านมา โปรดเลือกคำตอบที่ท่านคิดว่าตรงกับตัวเด็กมากที่สุด เพียงข้อเดียว โดยทำเครื่องหมาย / ในช่อง-คำตอบแต่ละข้อ

ข้อที่/ข้อคำถาม	ไม่เป็นเลย	เป็นบางครั้ง	เป็นบ่อยครั้ง	เป็นประจำ
1. บอกความรู้สึกของตนเองได้เมื่อถูกถาม เช่น รู้สึกดีใจ เสียใจ โกรธ ไม่ชอบไม่พอใจ				
2. มักโอบกอดหรือคลอเคลียคนที่ตนรัก				
3. ยิ้มแย้มเมื่อเล่นกับเพื่อน				
4. แสดงความเห็นใจเมื่อเห็นเพื่อนหรือผู้อื่นทุกข์ร้อน เช่น บอกว่าสงสาร เข้าไปปลอบ หรือเข้าไปช่วย				
5. หยุดการกระทำที่ไม่ดีเมื่อเห็นสีหน้าไม่พอใจของผู้ใหญ่				
6. ร้องไห้งอแงเวลาไปโรงเรียนหรือสถานที่ที่ไม่อยากไป				
7. กลัวสิ่งที่อยู่ในจินตนาการ เช่น ผี สัตว์ประหลาด				
8. เอาแต่ใจตนเอง				
9. กลัวคนแปลกหน้า				
10. เต็มใจแบ่งปันสิ่งของให้คนอื่น ๆ เช่น ขนม ของเล่น				
11. ชวนคนอื่นให้เล่นด้วยกัน				
12. สงสาร ไม่ทำร้ายสัตว์				
13. บอกผู้ใหญ่เมื่อเพื่อนหรือคนในครอบครัวไม่สบาย				
14. ใจดีกับเด็กที่เล็กกว่า				
15. อาสาช่วยผู้อื่น เช่น งานบ้าน เก็บของที่เกะกะ				
16. ไม่ช่วยเหลือเมื่อได้รับการขอร้อง				

ข้อที่/ข้อคำถาม	ไม่เป็นเลย	เป็นบางครั้ง	เป็นบ่อยครั้ง	เป็นประจำ
17. เชื่อฟังและทำตามที่ผู้ใหญ่ต้องการ				
18. บอกขอโทษหรือเข้ามาประจบเมื่อทำผิด				
19. ไม่เล่นของที่เป็นอันตราย เช่น ไม้ขีดไฟ ปลั๊กไฟ มีด หลังจากได้รับ การห้ามปรามจากผู้ใหญ่				
20. ไหว้ขอบคุณเมื่อผู้อื่นให้ของโดยผู้ใหญ่ไม่ต้องบอก				
21. ไหว้หรือสวัสดีเมื่อพบผู้ใหญ่				
22. บอกให้คอยก็ไม่งอแง				
23. อดทนได้ รอคอยได้ ไม่ลงมือลงเท้า				
24. เรียกร้องเอาแต่ใจตนเอง				
25. ช่างสังเกตและตั้งคำถามผู้ใหญ่ถึงสิ่งต่าง ๆ ที่ได้พบเห็น				
26. มักอยากรู้อยากเห็นกับของเล่นหรือสิ่งแปลกใหม่				
27. กล้าซักถามหรือแสดงท่าทีสนใจเมื่อมีข้อสงสัย				
28. สนใจ รู้สึกสนุกกับงานหรือกิจกรรมการเรียนรู้ใหม่ ๆ				
29. ชอบเดินสำรวจเมื่ออยู่ในสถานที่ใหม่ ๆ				
30. ตั้งใจฟังเมื่อผู้ใหญ่ตอบเรื่องที่อยากรู้				
31. ร้องไห้เมื่อไปโรงเรียน				
32. เมื่อไม่ได้ของเล่นที่อยากได้ก็สามารถเล่นของเล่นอื่นแทน				
33. ยอมรับคำอธิบายเมื่อไม่ได้สิ่งที่ต้องการ				
34. เข้ากับเด็กคนอื่น ๆ ได้ง่ายเมื่อเริ่มรู้จักกัน				
35. หงุดหงิดเมื่อต้องเปลี่ยนแปลงจากสิ่งที่คุ้นเคย				
36. ไม่ชอบไปในสถานที่ไม่คุ้นเคยเช่น บ้านญาติ บ้านเพื่อนของพ่อแม่				
37. กล้าบอกเรื่องที่ตนเองทำผิดพลาดให้ผู้ใหญ่ฟัง				

ข้อที่/ข้อคำถาม	ไม่เป็นเลย	เป็นบางครั้ง	เป็นบ่อยครั้ง	เป็นประจำ
38. บอกผู้ใหญ่เมื่อทำของเสียหาย				
39. กล้าปฏิเสธเมื่อผู้ใหญ่จะช่วยเหลือเพราะเด็กอยากทำด้วยตนเอง				
40. บอกความต้องการของตนเองให้ผู้อื่นรู้				
41. บอกปฏิเสธเมื่อมีผู้ชวนเล่นสิ่งที่ไม่ชอบ				
42. กล้าพูด กล้าคุย ทักทายตอบกลับผู้อื่น				
43. เมื่อได้รับคำชมเชย มักบอกเล่าให้คนอื่นรู้				
44. ช่วยเหลือตนเองมากขึ้นเมื่อได้รับคำชม				
45. ชอบเอาผลงานที่ทำเสร็จมาให้ผู้ใหญ่ดู				
46. พอใจที่ผู้ใหญ่ชมว่าเป็นเด็กดี				
47. ช่วยเหลือตัวเองได้ดีเมื่อผู้ใหญ่ให้กำลังใจ				
48. ไม่หวาดกลัวเมื่อต้องอยู่กับคนที่ไม่คุ้นเคย				
49. รู้จักเผื่อแผ่ความรักให้คนอื่นเช่นกอดปลอบน้องหรือเด็กที่เล็กกว่า				
50. ร่วมเล่นสนุกสนานกับคนอื่น ๆ ได้				
51. รู้จักค้นหาของมาเล่นเพื่อสร้างความสนุกสนานเพลิดเพลิน				
52. ถึงแม้ไม่ได้เล่นก็สนุกกับการดูคนอื่นเล่นได้				
53. เมื่อเห็นคนอื่นเล่นสนุกก็อยากเข้าไปเล่นสนุกด้วย				
54. แสดงอารมณ์สนุกร่วมตามไปกับสิ่งที่เห็น เช่น ร้องเพลง กระโดดโลดเต้น หัวเราะเฮฮา				
55. เก็บตัว ไม่เล่นสนุกสนานกับเด็กคนอื่น ๆ				

ขอขอบคุณทุกท่านมากค่ะที่ให้ความร่วมมือในการตอบแบบสอบถามทุกข้อ

แบบสอบถามเพื่อการวิจัย

เรื่อง

ความสัมพันธ์ระหว่างต้นทุนชีวิตกับพัฒนาการและความฉลาดทางอารมณ์เด็กปฐมวัย :
กรณีศึกษาศูนย์พัฒนาเด็กก่อนวัยเรียนกรุงเทพมหานคร เขตลาดกระบัง

.....

แบบสอบถามต้นทุนชีวิตเด็กปฐมวัย (อายุ 3 - 6 ปี)

<u>คำชี้แจง</u>

แบบสำรวจต้นทุนชีวิตเด็กปฐมวัย 3 ปี ถึง 6 ปี นี้เป็นการเก็บข้อมูลของเด็กเฉพาะรายบุคคล ผู้ให้ข้อมูลควรเป็นผู้เลี้ยงดู หรือผู้ที่อยู่ใกล้ชิดและทราบข้อมูลเกี่ยวกับตัวเด็กมากที่สุด แบบสำรวจแต่ละชุดประกอบด้วยข้อคำถาม แบ่งเป็น 3 ส่วน ดังนี้

ส่วนที่ 1 : ข้อมูลทั่วไปของผู้ตอบเป็นข้อคำถามเกี่ยวกับข้อมูลที่มีความจำเป็น และเกี่ยวข้องกับเด็ก จำนวน 5 ข้อ

ส่วนที่ 2 : ข้อมูลพื้นฐานของครอบครัว เป็นข้อคำถามเกี่ยวกับ ข้อมูลของครอบครัวที่เด็กอาศัยอยู่ด้วยเป็นประจำ จำนวน 6 ข้อ

ส่วนที่ 3 : ข้อมูลเกี่ยวกับต้นทุนชีวิตเด็กปฐมวัยเด็ก 3 ปี ถึง 6 ปี เป็นข้อคำถามชนิดปรนัยเลือกตอบ จำนวน 48 ข้อ เป็นการถามถึงการอบรมเลี้ยงดูและสิ่งแวดล้อมรอบตัวเด็ก โดยผู้ตอบอ่านข้อความให้เข้าใจ

จากนั้นเลือกคำตอบที่ตรงกับเด็กมากที่สุด แล้วจึงทำเครื่องหมายลงในช่องที่กำหนด

ขอขอบคุณที่ให้ความร่วมมือในการตอบแบบสอบถามครั้งนี้

นางสาวกรรญา ภานุรักษ์
นักศึกษาปริญญาโท หลักสูตรวิทยาศาสตรมหาบัณฑิต
สาขาวิชาพัฒนาการมนุษย์
สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว
มหาวิทยาลัยมหิดล

<u>คำชี้แจง</u>

แบบสอบถามนี้เป็นการเก็บข้อมูลของเด็กเฉพาะรายบุคคล ผู้ให้ข้อมูลควรเป็นผู้ที่ใกล้ชิดเด็กไม่น้อยกว่า 6 เดือนและทราบข้อมูลเกี่ยวกับตัวเด็กมากที่สุด

โปรดกาเครื่องหมาย ✓ ในช่อง ☐ และเขียนข้อความเพิ่มเติมในช่องอื่น ๆ (ระบุ.....)

ส่วนที่ 1 ข้อมูลของผู้ตอบ

1. เพศ และอายุของผู้ตอบแบบสอบถาม	☐ (1) หญิง อายุ.....ปี ☐ (2) ชาย อายุ.....ปี
2. เพศ และอายุของเด็ก	☐ (1) หญิง อายุ.....ปี.....เดือน ☐ (2) ชาย อายุ.....ปี.....เดือน
3.ท่านเกี่ยวข้องกับเด็กคนนี้อย่างไร	☐ (1) เป็นพ่อ ☐ (2) เป็นแม่ ☐ (3) เป็นปู่ย่าตายาย ☐ (4) เป็นญาติพี่น้อง ☐ (5) เป็นพี่เลี้ยงเด็ก ☐ (6) ผู้ปกครองที่ไม่ใช่พ่อแม่/ปู่ย่าตายาย/ญาติพี่น้อง (โปรดระบุ).....
4. ระดับการศึกษาสูงสุด	☐ (1) ประถมศึกษา ☐ (2) มัธยมศึกษา ☐ (3) อนุปริญญา/ปวช./ปวส. ☐ (4) ปริญญาตรี ☐ (5) ปริญญาโท ☐ (6) อื่นๆ(ระบุ).....
5.อาชีพปัจจุบัน	☐ (1) รับราชการ/รัฐวิสาหกิจ ☐ (2) ค้าขาย/ธุรกิจส่วนตัว ☐ (3) รับจ้างทั่วไป ☐ (4) เกษตรกร ☐ (5) พนักงานบริษัท ☐ (6) ไม่ได้ประกอบอาชีพ ☐ (7) อื่น ๆ ระบุ).....

ส่วนที่ 2 ข้อมูลพื้นฐานของครอบครัว

6. บุคคลที่เลี้ยงดูเด็กอย่างสม่ำเสมอ และใกล้ชิดที่สุด (ช่วงเวลากลางวัน)	☐ (1) พ่อ ☐ (2) แม่ ☐ (3) พ่อและแม่ ☐ (4) ปู่ย่าตายาย ☐ (5) ญาติพี่น้อง ☐ (6) พี่เลี้ยงเด็ก(คนไทย) ☐ (7) พี่เลี้ยงเด็ก(คนต่างชาติ) ☐ (8) ผู้ปกครองที่ไม่ใช่พ่อแม่/ปู่ย่าตายาย/ญาติพี่น้อง (โปรดระบุ).....

7. บุคคลที่เลี้ยงดูเด็กอย่างสม่ำเสมอ และใกล้ชิดที่สุด (ช่วงเวลากลางคืน)	☐ (1) พ่อ ☐ (2) แม่ ☐ (3) พ่อและแม่ ☐ (4) ปู่ย่าตายาย ☐ (5) ญาติพี่น้อง ☐ (6) พี่เลี้ยงเด็ก(คนไทย) ☐ (7) พี่เลี้ยงเด็ก(คนต่างชาติ) ☐ (8) ผู้ปกครองที่ไม่ใช่พ่อแม่/ปู่ย่าตายาย/ญาติพี่น้อง (โปรดระบุ).....
8.ลักษณะของครอบครัวของเด็ก	☐ (1) ครอบครัวเดี่ยว ☐ (2) ครอบครัวขยาย
9. สถานภาพสมรสของพ่อแม่เด็ก	☐ (1) อยู่ด้วยกัน ☐ (2) แยกกันอยู่ ☐ (3) หย่าร้าง/เลิกกัน ☐ (4) บิดาเสียชีวิต ☐ (5) มารดาเสียชีวิต ☐ (6) ทั้งบิดาและมารดาเสียชีวิต ☐ (7) อื่น ๆ ระบุ).....
10.รายได้ของครอบครัวต่อเดือน (โดยประมาณ)	☐ (1) ต่ำกว่า 6,000 บาท ☐ (2) 6,001 – 12,000 บาท ☐ (3) 12,001 – 20,000 บาท ☐ (4) 20,001 – 30,000 บาท ☐ (5) 30,001 – 50,000 บาท ☐ (6) มากกว่า 50,000 บาท
11. ท่านได้รับความรู้เกี่ยวกับการส่งเสริมพัฒนาการ/ความฉลาดทางอารมณ์เด็ก และได้เข้าร่วมกิจกรรมโรงเรียนพ่อแม่ที่หน่วยงานสาธารณสุขจัดให้	☐ 1) ได้รับ ☐ 2) ไม่ได้รับ

ส่วนที่ 3 ประเด็นความคิดเห็นเพื่อสำรวจต้นทุนชีวิตเด็กปฐมวัย (อายุ 3 ปี – 6 ปี)

ข้อคำถามต่อไปนี้ เป็นการถามถึงการอบรมเลี้ยงดูและสิ่งแวดล้อมรอบตัวเด็ก

โปรดพิจารณาแล้วกรุณาทำเครื่องหมาย ✓ในช่องที่กำหนดไว้ ที่คิดว่าตรงกับเด็กมากที่สุด

ข้อที่ /ข้อคำถาม	ไม่เคย	บางครั้ง	เป็นประจำ
1. ท่าน โอบกอดแสดงความรักกับเด็ก			
2. ท่าน ดูแลให้เด็กได้รับสิ่งที่ต้องการอย่างเหมาะสม			
3. ท่าน ฝึกให้เด็กช่วยเหลือตนเองในชีวิตประจำวัน			
4. ท่าน ให้เวลาในการเล่นกับเด็ก			
5. ท่าน สอนเด็กให้รู้จักสิ่งต่าง ๆ รอบตัว			
6. ท่าน เล่านิทานให้เด็กฟัง			
7. ท่านใส่ใจตอบสนองอารมณ์หรือความรู้สึกของเด็กอย่างเหมาะสม			
8. ท่าน ปลูกฝังเด็กให้มีระเบียบวินัย			
9. ท่าน ชื่นชมเมื่อเด็กทำสิ่งที่ดี			
10. ท่าน ตักเตือนเมื่อเด็กทำสิ่งที่ไม่เหมาะสม			
11. ท่าน เป็นแบบอย่างที่ดีให้กับเด็ก			
12. ท่าน เลือกรายการโทรทัศน์ที่เหมาะสมให้กับเด็ก			
13. เด็ก มีอารมณ์ร่าเริงแจ่มใส			
14. เด็ก บอกอารมณ์ความรู้สึกของตนเอง เมื่อรู้สึกเสียใจ ดีใจ หรือโกรธ			
15. เด็ก บอกหรือแสดงท่าทางเห็นอกเห็นใจผู้อื่น			
16. เด็ก แสดงความรักบุคคลใกล้ชิด			
17. เด็ก รู้จักในการควบคุมอารมณ์เมื่อโดนขัดใจ (เช่น เอะอะอาละวาด หรือโวยวาย เมื่อโดนขัดใจ)			
18. เด็ก ช่วยเหลือตนเองในกิจวัตรประจำวัน			
19. เด็ก แบ่งปันสิ่งของหรือของเล่นให้ผู้อื่น			
20. เด็ก มีวินัยในการเล่น เช่น เก็บของเข้าที่เมื่อเล่นเสร็จ			

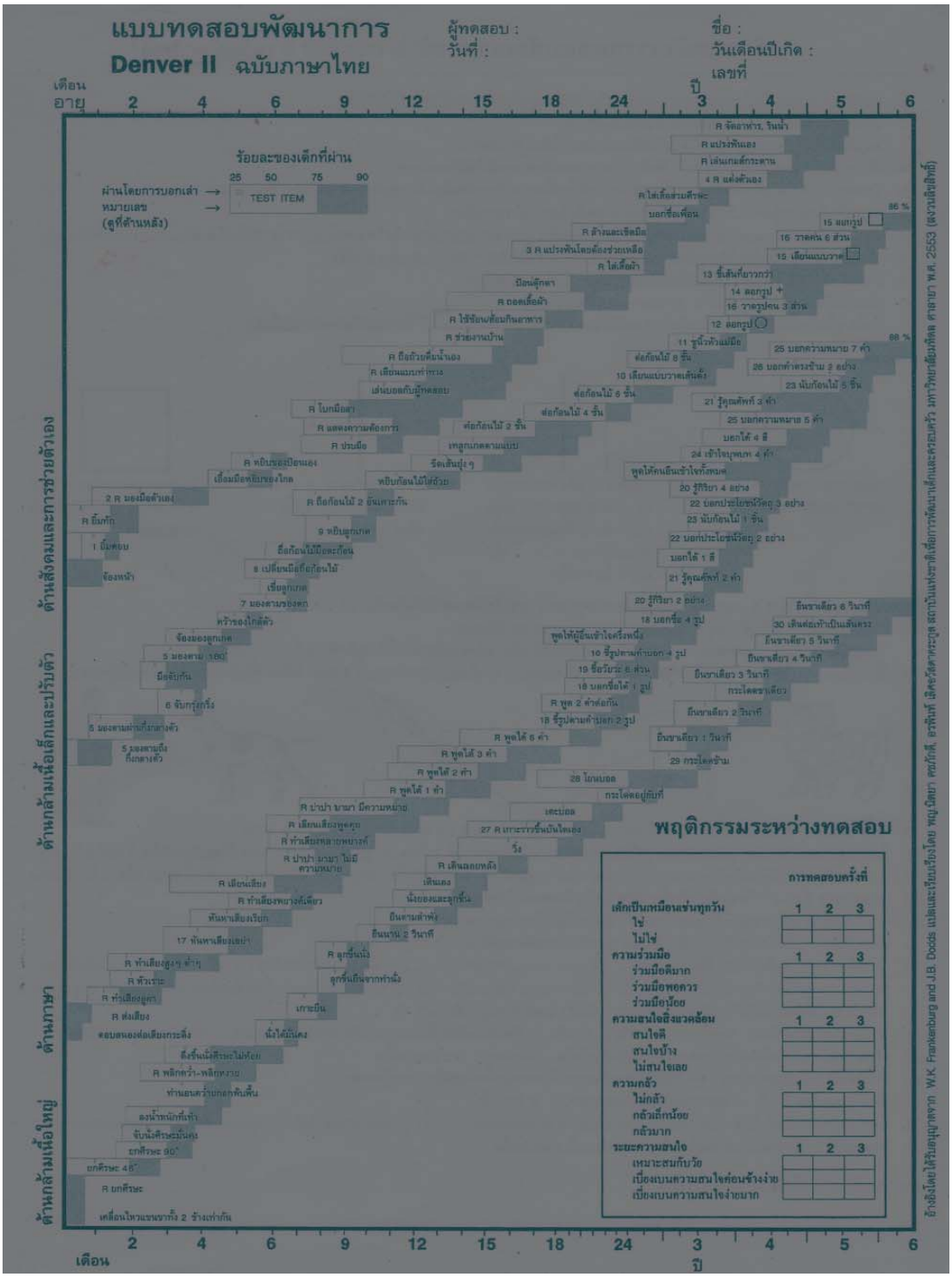
ข้อที่ /ข้อคำถาม	ไม่เคย	บางครั้ง	เป็นประจำ
21. เด็ก ตั้งใจทำสิ่งต่างๆจนสำเร็จด้วยตนเอง			
22. เด็ก ทำตามข้อตกลงหรือกติกาง่าย ๆ			
23. เด็ก เลือกรับประทานอาหารที่มีประโยชน์			
24. เด็ก ชอบเล่นหรือสำรวจสิ่งรอบตัว			
25. เด็ก ซักถามสิ่งต่าง ๆ ที่อยู่รอบตัว			
26. เด็ก แสดงความคิดเห็นและรับฟังผู้อื่น			
27. เด็ก สนใจจดจ่อในสิ่งที่ทำหรือเล่น			
28. เด็ก ชอบฟังนิทานหรือเรื่องเล่า			
29. เด็ก ชอบฟังเพลงหรือเสียงดนตรี			
30. เด็ก คิดแก้ปัญหาในการเล่นหรือทำกิจกรรมต่างๆ ได้เป็นอย่างดี			
31. เด็ก คิดสร้างสรรค์/จินตนาการในการเล่นหรือทำกิจกรรมต่างๆ			
32. เด็ก พูดบอกความต้องการ ให้ผู้อื่นเข้าใจ			
33. เด็ก คิดริเริ่มทำหรือเล่นสิ่งต่าง ๆด้วยตนเอง			
34. เด็ก ได้เล่นกับเด็กด้วยกัน			
35. เด็ก ได้เลือกเล่นในสิ่งที่ชอบหรืออยากเล่น			
36. เด็ก ได้เล่นออกกำลังตามความเหมาะสมกับวัย			
37. เด็ก เล่นโดยไม่ใช้ความรุนแรง			
38. เด็ก ได้ทำกิจกรรมศิลปะ			
39. เด็ก ได้ทำกิจกรรมเคลื่อนไหวตามจังหวะและดนตรี			
40. เด็ก ได้เล่นตามจินตนาการ หรือบทบาทสมมติ			
41. เด็ก ได้เปิดพลิกหนังสือดูภาพ หรืออ่านนิทาน			
42. เด็ก ได้เล่นของเล่นที่หลากหลายเหมาะสมกับวัย			
43. เด็ก เล่นกับเพื่อนโดยไม่เอาเปรียบเพื่อน			
44. คนในชุมชน ทักทายหรือหยอกล้อกับเด็ก			
45. คนในชุมชน เป็นแบบอย่างที่ดีให้กับเด็ก			
46. ชุมชน มีแหล่งเรียนรู้ให้เด็กร่วมทำกิจกรรม			

ข้อที่ /ข้อคำถาม	ไม่เคย	บางครั้ง	เป็นประจำ
47. ชุมชน ที่เด็กอาศัยอยู่ไม่เป็นอันตรายต่อเด็ก			
48. ชุมชนจัดกิจกรรมทางศาสนาหรือวัฒนธรรมประเพณี ที่เด็กเข้าร่วมได้			

ติดต่อข้อมูลเพิ่มเติมเกี่ยวกับแบบสอบถามต้นทุนชีวิตเด็กปฐมวัย (3-6 ปี)ได้ที่

พัฒนาและปรับเครื่องมือโดย ทีมเด็กพลัส ร่วมกับ ศูนย์วิจัยและพัฒนาครอบครัวไทย สาขาวิชามนุษยนิเวศศาสตร์ มหาวิทยาลัยสุโขทัยธรรมาธิราช

สนับสนุนโดย ทีมเด็กพลัส สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว ชั้น 5 ห้อง 1502 999 มหาวิทยาลัยมหิดล ต. ศาลายา อ. พุทธมณฑล จ. นครปฐม 73170 โทร. 02-4410053, 02-4410602-8



อ้างอิงโดยได้รับอนุญาตจาก W.K. Frankenburg and J.B. Dodds แปลและเรียบเรียง โดย พญ.นิตยา คชภักดี, อรพินท์ เลิศอวัสดาตระกูล สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว มหาวิทยาลัยมหิดล ศาลายา พ.ศ. 2553 (สงวนลิขสิทธิ์)
สามารถติดต่อได้ที่ 02-4410602-8 ต่อ 1416

คำแนะนำการทดสอบพัฒนาการด้วย DENVER II (ฉบับภาษาไทย)

1. พยายามทำให้เด็กยิ้มโดยยิ้มกับเด็ก พูดคุยหรือโบกมือเล่นกับเด็ก แต่ห้ามสัมผัสตัวเด็ก
2. เด็กต้องจ้องมองที่มือของตัวเองนานประมาณ 3-4 วินาที
3. พ่อแม่ผู้เลี้ยงดูอาจช่วยแนะนำวิธีแปรงฟัน และใส่ยาสีฟันให้บนแปรง
4. เด็กไม่จำเป็นต้องผูกเชือกรองเท้า คิดซิปหรือกระดุมเสื้อด้านหลังได้ด้วยตนเอง
5. ผู้ทดสอบจับไหมพรมแดงเคลื่อนจากด้านหนึ่งไปอีกด้านหนึ่งอย่างช้าๆ เป็นเส้นโค้งระยะห่างจากหน้าเด็กประมาณ 8 นิ้ว
6. ผ่าน ถ้าเด็กจับกรุ๋งกริ๋งเมื่อนำกรุ๋งกริ๋งไปสัมผัสหลังมือหรือนิ้วของเด็ก
7. ผ่าน ถ้าเด็กพยายามมองหากลุ่มไหมพรมที่ตกลงบนพื้น ผู้ทดสอบควรปล่อยกลุ่มไหมพรมอย่างรวดเร็วโดยไม่ขยับแขนในขณะที่เด็กมอง
8. เด็กต้องเปลี่ยนมือถือก้อนไม้จากมือข้างหนึ่งไปอีกข้างหนึ่งโดยไม่ใช้ปาก ร่างกายส่วนอื่น หรือโต๊ะ
9. ผ่าน ถ้าเด็กสามารถใช้นิ้วหัวแม่มือส่วนใดก็ได้และนิ้วอื่นหยิบลูกเกด
10. เส้นตรงที่วาดต้องทำมุมไม่เกิน 30 องศา จากเส้นตัวอย่าง
11. กำมือ ชูนิ้วหัวแม่มือขึ้นพร้อมกับขยับนิ้วหัวแม่มือขึ้นลง ผ่าน ถ้าเด็กเลียนแบบขยับนิ้วหัวแม่มือโดยไม่ขยับนิ้วอื่น

12. ผ่าน ถ้าวาดเส้นวงกลมชนกัน ไม่ผ่านถ้าวาดเส้นวนเลยไป

13. ถามเด็กว่า เส้นไหนยาวกว่ากัน (ไม่ใช่ใหญ่กว่า) หมุนกระดาษกลับหัวแล้วถามซ้ำ (ผ่านถ้าทำถูก 3 ใน 3 ครั้ง หรือ 5 ใน 6 ครั้ง)

14. ผ่าน ถ้าเส้นตรง 2 เส้นตัดกันบริเวณตรงกลางหรือใกล้เคียง

15. ให้เด็กลอกแบบก่อน ถ้าเด็กทำไม่ได้ วาดรูปให้เด็กเลียนแบบวาดตาม

ข้อทดสอบย่อยที่ 12, 14 และ 15 ไม่ต้องบอกชื่อรูปทรง และไม่ต้องทำให้ดูในข้อ 12 และ 14

16. การให้คะแนน อวัยวะที่เป็นคู่ให้นับเป็น 1 ส่วน เช่น แขน ขา เป็นต้น
17. ใส่ก้อนไม้ 1 ชิ้นในถ้วย เขย่าเบาๆ ใกล้หูเด็กโดยไม่ให้เด็กเห็น ทำเช่นเดียวกันนี้กับหูอีกข้างหนึ่ง
18. ชี้รูปภาพแล้วให้เด็กบอกชื่อ (ไม่ให้คะแนนถ้าเด็กทำแต่เสียง) ถ้าเด็กตอบถูกน้อยกว่า 4 ภาพ ให้เด็กชี้รูปภาพตามคำสั่งของผู้ทดสอบ

19. ใช้ตุ๊กตาเป็นอุปกรณ์ แล้วบอกให้เด็กชี้ จมูก ตา หู ปาก มือ เท้า ท้อง ผม ผ่าน ถ้าตอบถูก 6 ใน 8 อย่าง
20. ให้เด็กดูภาพ แล้วถามว่า รูปไหนบินได้ รูปไหนร้องเหมียว รูปไหนพูดคุยได้ รูปไหนเห่า รูปไหนวิ่งก๊อบๆ ผ่าน ถ้าตอบถูก 2 ใน 5 หรือ 4 ใน 5 รูป
21. ถามเด็กว่า จะทำอย่างไรถ้าหนูหนาว จะทำอย่างไรถ้าหนูเหนื่อย จะทำอย่างไรถ้าหนูหิว ผ่านถ้าตอบถูก 2 ใน 3 อย่าง หรือ 3 ใน 3 อย่าง
22. ถามเด็กว่า ถ้วยเอาไว้ทำอะไร เก้าอี้เอาไว้ทำอะไร ดินสอเอาไว้ทำอะไร
23. ผ่าน ถ้าเด็กวางจำนวนถูกต้องและบอกได้ว่ามีก้อนไม้กี่ก้อนบนกระดาษ (1, 5)
24. บอกให้เด็ก วางก้อนไม้บนโต๊ะ, ใต้โต๊ะ, ข้างหน้าของฉัน, ข้างหลังของฉัน ผ่านถ้าทำถูก 4 ใน 4 อย่าง
25. ถามเด็กว่า ลูกบอลคืออะไร? โต๊ะ.....บ้าน.....กล้วย.....รั้ว.....ทะเล/คลอง.....ม่าน/มุ้ง.....เพดาน/หลังคา ผ่านถ้าเด็กให้ความหมายในลักษณะการใช้งาน รูปร่าง ทำมาจากอะไร หรือบอกประเภท (เช่น กล้วยเป็นผลไม้ ไม่ใช่สีเหลือง) โดยคำที่ให้เลือกให้ถามคำแรกก่อน ถ้าตอบถูกให้ผ่านโดยไม่ต้องถามอีกคำ ถ้าตอบไม่ได้ให้ถามอีกคำ และถ้าตอบถูกให้ผ่าน 1 คำ
26. ถามเด็กว่าถ้าม้าตัวใหญ่ หนูตัว..... ถ้าไฟร้อน น้ำแข็ง.....ถ้าดวงอาทิตย์ขึ้นเวลากลางวัน ดวงจันทร์ขึ้นเวลา..... ผ่านถ้าตอบถูก 2 ใน 3
27. เด็กอาจจะเกาะราวหรือเกาะกำแพงเพื่อช่วยเดินขึ้นบันได ไม่ใช่คนจูง และไม่คลานขึ้น
28. เด็กต้องขว้างบอลออกไปไกล 3 ฟุต ให้ลูกบอลลอยอยู่ในระยะที่ผู้ทดสอบเอื้อมแขนถึง (มองผู้ทดสอบ)
29. เด็กต้องกระโดด 2 เท้า ข้ามกระดาษที่มีขนาดความกว้าง 8 1/2 นิ้ว
30. บอกให้เด็กเดินต่อเท้าไปข้างหน้าโดยให้นิ้วเท้าและส้นเท้าห่างกันประมาณ 1 นิ้ว ผู้ทดสอบอาจสาธิตให้เด็กดูก่อน (เด็กต้องเดินติดต่อกัน 4 ก้าว)
31. ในขวบปีที่ 2 เด็กปกติประมาณครึ่งหนึ่งอาจมีลักษณะไม่ค่อยร่วมมือ

ผลการสังเกตพฤติกรรมของเด็ก

อ้างอิงโดยได้รับอนุญาตจาก W.K. Frankenburg and J.B. Dodds แปลและเรียบเรียง
โดย พญ.นิตยา คชภักดี, อรพินท์ เลิศอวัสดาตระกูล สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว มหาวิทยาลัยมหิดล ศาลายา พ.ศ. 2553 (สงวนลิขสิทธิ์)
สามารถติดต่อได้ที่ 02-4410602-8 ต่อ 1416

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