THE DEVELOPMENT OF MENTAL HEALTH SCREENING TEST FOR ABUSED CHILDREN

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THE DEVELOPMENT OF MENTAL HEALTH SCREENING TEST FOR ABUSED CHILDREN

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ABSTRACT

The purpose of this research is to develop the Mental Health Screening Test for abused children in order to discriminate for abused children who have mental health problems. The test was set up by using John Briere's classification of psychological symptoms related to trauma which has 6 categories : Anxiety, Depression, Anger and Aggression, Posttraumatic Stress, Dissociation and Sexual Problems. The content and construct validity of each item was approved by one psychiatrist and two psychologists with expertise in child psychiatry and psychology. A 85 items test was tried out with 60 7^{th}-9^{th} grade students for item analysis and 71 items were judge to have intra-test validity, consisting of 13 items of Anxiety scale, 14 items of Depression scale, 12 items of Anger and Aggression scale, 12 items of Posttraumatic Stress scale, 13 items of Dissociation scale and 8 items of Sexual Problems scale. The reliability of Anxiety, Depression, Anger and Aggression, Posttraumatic Stress, Dissociation and Sexual Problems scales were 0.75, 0.82, 0.77, 0.81, 0.82 and 0.80, respectively.

The concurrent validity of each scale was examined in 2 sample groups: a normal group, 410 normal or non-abused boys and girls students in 7^{th} – 9^{th} grades aged 12-16 years and gold standard group, 33 abused boys and girls aged 12-16 who were taken care of by the Care Network for Abused Children from June to August, 2004. Of the 6 scales, Depression, Posttraumatic Stress and Dissociation scale were found to be significant discriminate, at cut off points of 13, 12 and 8, respectively. However, the result should be considered along with the other relevant standard tests and doctor's diagnosis to make it more accurate and precise.

KEY WORDS : MENTAL HEALTH / SCREENING TEST / CHILD ABUSE

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การพัฒนาแบบประเมินสุขภาพจิตเด็กที่ถูกทารุณกรรม (THE DEVELOPMENT OF MENTAL HEALTH SCREENING TEST FOR ABUSED CHILDREN)

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อพัฒนาแบบประเมินสุขภาพจิตเด็กที่ถูกทารุณกรรม เพื่อใช้ในการคัดกรองเด็กที่ถูกทารุณกรรมที่มีปัญหาสุขภาพจิต ตามเกณฑ์การจำแนกกลุ่มอาการทางจิตเวช เนื่องจากภยันตรายตามแนวคิดของ John Briere ได้แก่ ความวิตกกังวล, ความซึมเศร้า, ความโกรธและก้าวร้าว, ความเครียดหลังภยันตราย, ภาวะ Dissociation และปัญหาทางเพศ โดยข้อคำถามในแต่ละมาตรวัดผ่านการประเมินความตรงตามเนื้อหาและความตรงตามโครงสร้างจากผู้เชี่ยวชาญได้แบบประเมินที่ประกอบด้วยข้อคำถาม 71 ข้อ ได้แก่ ด้านความวิตกกังวล 13 ข้อ, ด้านความซึมเศร้า 14 ข้อ, ด้านความโกรธและก้าวร้าว 12 ข้อ, ด้านความเครียดหลังภยันตราย 12 ข้อ, ด้านภาวะ Dissociation 13 ข้อ และด้านปัญหาทางเพศ 8 ข้อ นำไปทดลองเบื้องต้นกับเด็กนักเรียนชั้น ม.1-ม.3 จำนวน 60 คน ผลการวิเคราะห์คุณภาพของแบบประเมินจากการทดลองเบื้องต้นโดยการคัดเลือกเฉพาะข้อคำถามที่มีความตรงภายใน พบว่ามาตรวัดด้านความวิตกกังวล, ความซึมเศร้า, ความโกรธและก้าวร้าว, ความเครียดหลังภยันตราย, ภาวะ Dissociation และปัญหาทางเพศ มีความเชื่อมั่นรายด้านเท่ากับ 0.75, 0.82, 0.77, 0.81, 0.82 และ 0.80 ตามลำดับ

ส่วนการศึกษาความตรงตามสภาพเพื่อพัฒนาแบบประเมินสุขภาพจิตเด็กที่ถูกทารุณกรรมที่สามารถคัดกรองเด็กที่ถูกทารุณกรรมที่มีปัญหาสุขภาพจิต ดำเนินการกับกลุ่มตัวอย่างซึ่งแบ่งเป็น 2 กลุ่ม คือ กลุ่มเด็กปกติ เป็นนักเรียนชายและหญิงอายุระหว่าง 12-16 ปี กำลังศึกษาในระดับมัธยมศึกษาปีที่1- 3 จำนวน 410ราย และกลุ่มเด็กที่ถูกทารุณกรรมอายุระหว่าง 12-16 ปีทั้งชายและหญิงที่ได้รับการดูแลในเครือข่ายการดูแลช่วยเหลือบำบัดฟื้นฟูจิตใจเด็กที่ถูกทารุณกรรม จ.นนทบุรี ในช่วงเดือนมิถุนายน 2547 ถึงเดือนสิงหาคม 2547 จำนวน 33 ราย ผลการศึกษาพบว่ามาตรวัดที่มีคุณสมบัติดังกล่าวคือ ด้านความซึมเศร้า ด้านความเครียดหลังภยันตราย และด้านภาวะ Dissociation โดยมีจุดคัดกรอง ในแต่ละด้านเท่ากับ13,12และ8คะแนน ตามลำดับ อย่างไรก็ตามผลที่ได้จากการคัดกรองนี้ควรพิจารณาร่วมกับแบบทดสอบมาตรฐานอื่นๆและการวินิจฉัยของแพทย์เพื่อให้การตรวจวินิจฉัยมีความถูกต้องสมบูรณ์มากขึ้น

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CHAPTER I
INTRODUCTION

Background

In the midst of technological advancement and economic and social growth, the problem of the child abuse that has secretly taken its stronghold in many societies, including Thailand where it has become a constant phenomenon that pervades media coverage. Child abuse literally refers to intentional or unintentional physical, emotional, sexual abuse or neglect of children by parents or others. According to World Health Organization (WHO), 40 million children in infancy up to 14 years suffered child abuse and neglect are in urgent need of help, in term of health care and social support.(WHO , 1999: 17).In the United State , 19-36 children aged between 3 and 11 from 1,000 suffer physical abuse and 100,000 to 500,000 are subject to sexual abuse every year.(Barker, 1995: 259)Moreover, the study in Great Britain showed one child from 1,000 suffered child abuse and 150-200 die each year as a result of abuse or neglect.(Blumenthal, 1994: 4)In Thailand, according to Department of Public Welfare, number of children was reported to have been physically or emotionally abused, neglected or sexually violated in fiscal year 1992-1993 are increasingly. (Ministry of Public Health, 2001:38)and, based on statistics of children helped by Center for the Protection of Child's Rights from 1981-2000, children who were sexually abused, physically abused, subject to child labor and child prostitution, and other forms of maltreatment were 1,131, 445, 423, 1,295 and 505 respectively. (Child's Right Protection Center, 2002)All these data points out that a great number of children are being traumatized and needing emergency help, including treatment and therapy, from all concerned agencies. Because abused child, who is leaved both of physical and mental trauma on children which persist into adulthood, maybe

become an adult with personality and emotional disorder. (Sriruen Kaewkangwan, 1997: 253)

For children, abuse is emotional traumatize. Their emotional, perceptual and behavioral developments are tremendous affected by such trauma. Children who are physical and emotional abused are absorb in sense of inferiority, meaningless, poor self-image and self-esteem. Some are passive, inactivity or hyperactivity, fear, panic, withdrawal, loss of basic trust, include depression and suicide ideation.(Wanphen Boonprakorb, 1999: 102)Sexual abused children sometimes indulged in inadequacy-immaturity sexual behaviors.(Department of Mental Health, 2000: 48) Child abuse is therefore painful trauma for children and its ensuing symptoms are psychotic disorders that can do so serious harm to mental life and well-being of victims such as anxiety and depression(Barker, 1995: 262-264; Freeman et al.,1993: 419-423), anger and aggression, posttraumatic stress disorder (PTSD)(Somphob Ruerngtrakul, 1999: 366), dissociation(Green et al.,1991: 94-95),and especially in sexual abuse victims are sexual symptoms and age-inappropriate sexual behavior(Barker, 1995: 263). Early diagnosis and treatment of these disorders by helping teams can prevent them from mental illnesses which may induce tragic events such as suicide or emotional and adjustment problem in adulthood. Hence, physical and emotional help is essential for abused children and must be given first priority by all concerned parties.

Care and support agencies, governmental and private, have sought to provide help and therapy for these children through by focuses on children, as well as parents, family and their network system. Multidisciplinary teams consisting of physicians, nurses, psychologist and social workers have collaborated to increase efficiency of caring, treatment and therapeutic practices. The core of these efforts are finding the correct identification of effects of trauma on their physical and mental health, personality, behavior and major developments.(Child's Right Protection Process, 2001)And this means psychologist as part of the multidisciplinary teams have an important role to play, namely, conducting psychological assessment and administering therapeutic treatment based on psychological techniques.

For assessing mental health and characteristic of abused children, psychologist's tools are tests and checklists that appropriate to their age and nature of problem. Generally, clinical psychologist employ specific tests for specific functioning of the children they want to assess which may be cognitive functioning, affective functioning, adaptive functioning and pathological functioning. (Newberger, 1982: 247) Result of the tests provide useful information for the helping team regarding inadequacy, deviancy or disorders of children and their intensity for planning treatment. In western countries, several psychological tests for assess psychological symptoms related with child abuse have been developed, for example, Child Sexual Behavior Inventory, Child Posttraumatic Stress Reaction Index and Child Dissociative Checklist. Most of these tests focus on a specific area of dysfunction related to trauma. Later John Briere(1996) developed Trauma Symptoms Checklist for Children(TSCC) to address the relative dearth of general trauma i.e. war, natural disaster and muder that children have experienced. TSCC is multiscale test which uses simple rating and interpretative methods and which differentiate 6 psychological symptoms namely anxiety, depression, anger, posttraumatic stress, dissociation and sexual problem, thus is more inclusive and informative.

In Thailand, objective and easy to interpret psychological tests which assessing psychological symptoms related to child abuse are few and most originate in western countries where cultural and life style markedly differ from Thailand so some item useful for children in western countries and may not be as much appropriate for Thai children. Thus, the researcher is interested in developing an alternative psychological test for abused children that draws on John Briere's classification of psychological symptoms related to trauma (1996) and which can measure multiple types of trauma symptoms. The test is constructed out of questions carefully chosen and improved upon from psychological tests now in widespread use for assessment of mental health and behavior problem in children, ones that are appropriate for abused children and cultural context of Thailand. It will facilitate assessment of mental health of abused children as it no longer needs to be administered by specialized personnel-just personnel with prerequisite knowledge of mental health will do and uses few

tools, thus has high mobility and minimal cost. With such qualities, the test will contribute significantly to greater efficiency and effectiveness of treatment planning for abused children.

Objective of the Study

To develop the Mental Health Screening Test for abused children in order to discriminate for abused children who have mental health problem.

Scope of the Study

1. To evaluate the mental health of abused children based on John Briere's classification of psychological symptoms related to trauma (1996) consist of 6 clinical symptoms as follows;

1.1 Anxiety
1.2 Depression
1.3 Anger and aggression
1.4 Posttraumatic stress
1.5 Dissociation
1.6 Sexual problem

2. Psychometric qualities of the test that examined in this research were content and concurrent validity, reliability, specificity and sensitivity and determined the appropriate cut off point from such qualities.

Condition of the Study

The study of abused children in this research have no limitation of abuse type, duration and frequency.

Expected Outcome

1. To obtain an inclusive tool for assessing mental health of abused children which concomitantly measures multiple types of psychological symptoms related to trauma.

2. The test can be applied conveniently and in time-saving by medical doctors to obtain data for planning appropriate intervention and treatment for abused children.

3. The test paves the way for development of other psychological tests that can be used as part of the therapeutic and rehabilitation program for abused children.

Definitions of Terms

Abused children refers to children aged between 12-16 years who are physical, emotional and/or sexual abused including to neglected or subject to child labor by their own parents, guardians or others and are caused to suffer physical and mental pain, disrupted normal and interpersonal relationship. Now these children are taken care of by Care Network for Abused Children.

Mental Health Screening Test for Abused Child refers to an assessment test developed by the researcher using in discriminating abused children with psychologically traumatize. Consisting of 6 psychological symptoms related to trauma namely Anxiety, Depression, Anger and aggression, Posttraumatic stress, Dissociation and Sexual problem.

Anxiety refers to generalized anxiety, hyperarousal, and worry, specific fears (eg. of men, woman, the dark, of being killed), episode of free-floating anxiety and sense of impending danger.

Depression refers to sadness, unhappiness and loneliness, episode of tearfulness, depressive cognitions such as guilt and self-injuriousness and suicidality.

Anger and aggression refers to angry thoughts, feelings, and behavior, including feel mad, feeling mean, and hating others, having difficulty de-escalating anger, wanting to yell at or hurt people, and arguing and fighting.

Posttraumatic stress refers to posttraumatic symptoms, including intrusive thoughts, sensation and memories of painful past events, nightmares, fears and cognitive avoidance of painful feelings.

Dissociation refers to dissociative symptomatology, including derealization, one's mind going blank, emotion numbing, pretend to be someone else or somewhere else, day dreaming, memory problems, and dissociation avoidance.

Sexual problem refers to sexual thoughts or feelings that are atypical when they occur earlier than expected or with greater than normal frequency, sexual conflict, and fear of being sexually exploited.

CHAPTER II
LITERATURE REVIEW

This research is on purpose to develop an alternative psychological test for discriminating abused children with mental health problems. Related literature and research are presented as following order;

1. Perspectives and Theories of Child Abuse
2. Related literature and research on mental health of abused children.
3. Psychological testing for abused children.
4. Development of Psychological Test for Abused Children.

Perspectives and Theories of Child Abuse

Abused children have been part of many societies for more than centuries. Their presence, however, had escaped public attention until Caffey, an American radiologist, noticed a group of children with broken bones and brain tissue bleeding, the symptoms whose causes were unknown, and dubbed them “Un-recognized trauma”. Initially few people adopted this coinage and called the symptoms in aggregate as “Caffey’s disease”. During 1940-1950 studies and reports on child abuse wee emergent but they still received little public recognition. In 1962, Kempe and his colleagues (Kempe et al., 1962 : 17-24) conducted a research to investigate the cause of this “Un-recognized trauma” and concluded that it was a result of cruelty committed against defenceless children by parents or guardians. This he dubbed “Battered Child Syndrome” which for him encompassed a wider range of symptoms, including minor or deadly bruises. He also published an article in Journal of American Medical Association which became highly influential and brought the problem of child abuse to the foreground.

In 1963, after Griffith & Moynihan, English orthopedics, had published in British Medical Journal a report titled “Battered Baby Syndrome” that successfully raised awareness of the problem within the educated public and prompted further researches. (Barker, 1995: 257-258; Blumenthal, 1994 : 1-2]. In 1968, Joan Court, a social worker, founded National Society for the Prevention of Cruelty to Children (NSPCC), Battered Child Research Unit, to supply the wider public with numerous articles on child abuse. By that time, public and academic interest in the problem has been to some degree established. But in mid-1970, when tragic death of Mary Collwell as a result of brutal abuses was reported, and teams of multidisciplinary professionals decided to meet to discuss the issue - media interest in this meeting was enormous – the problem of child abuse has become a national agenda. In following decades, physicians and multidisciplinary teams working with abused children launched a formal research using statistic approach to obtain scientifically reliable data for use in planning the prevention, care and treatment for these children in a continued and efficient manner. (Blumenthal, 1994: 2)

As child abuse has long been a subject of many studies and has been approached from many disciplinary perspectives, for example, psychiatry, laws and social sciences, its concept and definition evolved and varied significantly. Below is a brief summary of different definitions of the problem ever proposed by diverse disciplines.

Definitions of Abused Children

Kempe (Kempe, 1962) initially used the term “child abuse” to refer to violent treatment, namely, battering of children, but later extended it to cover all forms of “maltreatment and mishandled child-rearing”, including neglect, attention deprivation, emotional violence and sexual violation that harmed children’s physical and/or emotional well-being, and their major developments. Fontana (Fontana, 1962) defined “child abuse” more broadly as maltreatment or mishandled child caretaking which included rejection, abandonment and malnutrition, as well as violent actions – acts that

subject children to severe physical and emotional harm. Gil (Gil, 1974) defines "child abuse" as any act that affect physical ability or psychic wellbeing of children.

The Federal Government of the United States (1974, cited in Willis et al., 1992) defined "child abuse" more specifically, for preventive and prescriptive purpose, as "physical or emotional abuse, sexual abuse, neglect or mishandled child-rearing forced upon children aged under 18 by those responsible for their wellbeing. World Health Organization (WHO) (World Health Organization, 1999 : 15-16) defines "child abuse" as maltreatment child-rearing or violent treatment of children, including all types of physical and/or emotional abuse, sexual violation, neglect or child labor, that do harm to their good health, survival, major development or human dignity.

In Thailand, Department of Mental Health (2001) defines "child abuse" as any adult-committed act against children, including physical and emotional abuse, abandonment, neglect, sexual violation and different forms of child exploitation such as luring, prostitution and labor. Wacharin Pajjekwinyusakul (1990) defines child abuse as whatever actions done by parents, guardians or caretakers, with and without bodily contact, such as whipping and feeding, and neglect that produce far greater physical or emotional harms on children than imaginable by decent people, which are not characteristic of usual child upbringing. Benjaporn Panyayong (2000) defines "child abuse" as the situation in which children are physically hurt which is not a result of accident while "child neglect" is the situation in which children are being mistreated, abandoned and deprived of basic necessities such as nourishment, cloth, shelter and health care, that can seriously harm them physically and/or emotionally and temper with their proper growth and development.

"Abused children" defined by this research is "children subject by parents, guardians or others to physical, emotional abuse and/or sexual violation, neglect or forms of exploitation such as child labor that cause harm to their physical and mental health and disrupt their normal functioning and affective relationship.

Types of Child Abuse

Studies about occurrence and frequency of child abuse vary significantly from country to country for there are complex set of factors contributing to the problem. For example, the effect of definition on finding the incident, the effect of methodology on occurrence rate, economic conditions and an interface of different types of abuse (i.e. close alignment and overlap of physical and sexual abuse (Suwapak Wetwibul, 1996) and, in reality, different types of abuse are not clearly and distinctly separated. Attempts at classifying different types of child abuse have been made, and outcomes varied upon individuals or agencies involved.

A classification proposed herein is a synthesis derived from National Society for the Prevention of Cruelty in Children (NSPCC) (Sari Jittinand, trans., 2001) and Center for the Treatment and Recovery of Children and Family (Department of Mental Health, 2001). There are 4 types of child abuse and neglect as follow;

1. Physical abuse is a deliberate act that causes physical harm, presumably as a result of excessive corporal punishment or intentional poisoning of children, or any act of deliberate harmful intent or failure to prevent despite prior knowledge such as battering that causes bruises, body scratching with fingernails, bone breaking and severe head injury with brain tissue breeding and so forth.

2. Emotional abuse is a deliberate act by adults that hurts children emotionally or systematically damages their sense of dignity or an act that maltreatment or show intense and continued disgust towards children. Such act, which includes deprivation of love and care, show of disinterestedness or hatred, strict control or disciplining, have disastrous effects on long-term behaviors and emotional development of children. Actually, all types of abuse have disastrous effects on children, but emotional abuse is characterized by predominantly emotional effects.

3. Sexual abuse is the situation in which children and the young, underdeveloped, immature and highly dependent are sexually violated against their will or without their free informed consent by those on whom they depend; or the

situation in which children are sexually violated by member of their own families against social taboo. Sexual abuse can take 3 forms as follow;

3.1 Without bodily contact, i.e. children being displayed naked body, pornography, sexual intercourse or masturbation by adults.

3.2 With bodily contact, i.e. children being caressed breasts or genital or they themselves caressing genitals; children being penetrated in the mount, anal or genital.

3.3 Sex trade, i.e. child pornography or prostitution.

4. Neglect is an act of leaving children by themselves, depriving them of basic necessities such as nourishment, cloth, shelter, health care and education. Neglect can be so continued and intense that children are left exposed to danger. Also neglect can be emotional – parents may fail to develop affective ties with children. Child neglect can severely obstruct normal development of children and cause immaturity and it is the first leading cause of death among children.

As already mentioned, child abuse of different types are not clearly and distinctly separated. For instance, physical abuse in children may be preceded by emotional abuse for emotionally neglected children may develop the courage to defy adults or show aggressiveness which in turn provoke adults into anger and violence against them. Likewise, sexually abused children tend to be physically and emotionally abuse at the same time. Clausen and Crittenden (Clausen and Crittenden, 1991 referred to in Kari Gillan, 2001: 21) uncovered that emotional abuse accompanies almost all cases of physical abuse and it has far more disastrous impacts on child development than physical abuse. Moreover, children subject to emotional neglect usually have parents who have no attachment with their child, are prone to adopt other types of abuse. Diagnostic classification is therefore determined by impacts each type of abuse has on children and its prominence during the specific time period in children life. A study conducted by Wolfe (Wolfe, 1987) uncovered that child neglect is most frequent during infancy and early childhood while emotional and sexual abuse is most frequent during school age and adolescence, and physical abuse is frequent at every age range and is most common in growing adolescents (12-17

years). The study examined child abuse at the age of 12-16 years in general, without classification of types of abuse due to difficulty in classification mentioned above. World Health Organization (1999: 22) attributed child abuse to 3 risk factors namely;

1. Individual factor that consists of parents with difficulty (i.e., young parents, single parents, parents having no child-rearing skills, parents with painful childhood or substance abuse disorder, physical or psychic disability and affective dysfunction) and children (i.e. the prematurely born, the unwanted, ones with emotional disturbance, physical disability or conduct problem).

2. Family factor or families with difficulty (i.e. poverty, low social status, lack of support system, loneliness, high stress and history of domestic violence).

3. Community and society factor or community and society with problems (war, crime, violence in mass media, social values regarding child care and domestic violence).

The study conducted by Oranee Nomrak (1996) on domestic child abuse in students of schools attached to the Office of Bangkok pointed to child, family and environment factors as root causes of child abuse. Family factor, according to the study, included poverty, parental divorce and background of parents; child factor included obstinacy and conduct problem such as car theft; environment factor included improper residence, physically and socially, for child-rearing which leads to stress in both parents and children and uncontrolled influence of media display of bad role models (i.e. whipping, beating of children) on mothers that stimulate them into discharging their emotional stress onto children. Child abuse is therefore seen as an end-result of interactions of pressure from within (individuals who are parents and children) and without (states of marriage and family). Either of these pressures can play the prominent role in specific time period and this varies from family to family. The implication is that adequate and effective interventions require holistic psychological evaluation of psycho-social state of family of abused children and difficulties in children and parents which yields correct understanding of what has happened or is happening in the family that needs to be coped.

Literature and research on Mental Health of Abused Children

Mental Health and Characteristic of Mental Disorders

Below are different definitions of "mental health" as given by psychologists and those associated with the field.

World Health Organization (WHO, 1976. cited by Pleonpit Jantarasak, 1998) defines "mental health" as "an ability of individuals to adjust to society and environment, to have good interpersonal relationship and to satisfy their needs in changing world without getting entangled in emotional conflicts, apart from absence of psychosis and neurosis. Mayshark & Foster (Mayshark & Foster, 1972. cited by Paka Sattayatham, 1997) believed that diagnosis of mental health is possible through direct and indirect observable behaviors exhibited by individuals. Behaviors as diverse as withdrawal, fear, high anxiety, inability to adjust to social groups while bearing memory of violent and harm done are evaluated as indicative of poor mental health or mental ill-being. In Thailand, prof. Fon Sangsingkaew (MD.) (1979: 21) defines "mental health as "state of happiness, emotional stability, adjustment ability in highly changing environment, capacity to work and live with others satisfactorily". Supapand Kotrajaras (1980) characterized the mentally healthy as "ones who deliberate consciously and wisely, are realistic, can manage and control their environment, can meet life challenges without avoidance, have emotional stability, are not excessively sensitive, are satisfied with society, constantly seek to develop one's physical, intellectual, emotional, social capacity to meet challenges, are self-reliable, can truly love others and are satisfied with being loved, with job and social relationship. Paka Sattayatham (1997) defines child mental health as the state of wellbeing, physical and particularly emotional, good attitudes towards family, society, others and one's duty and ability to solve problems appropriate to age.

In the nutshell, mental health is the state of happiness, emotional stability, ability to exert one's best effort to solve problems, adjustment ability and normal daily functioning, and absence of psychosis. Psychological or mental health assessment of abused child in this research means assessment of psychological symptoms associated

with child abuse that disrupt psychic and emotional wellbeing, problem-solving ability, adjustment ability and normal daily functioning of children and can degenerate into or result in mental illnesses. State of mental health is therefore indicative of an individual's wellbeing, meaning the mentally unhealthy tend to have mental ill-being.

Mayshark & Foster (Mayshark & Foster, 1972. cited by Paka Sattayatham, 1997) suggested that behaviors characteristic of poor mental health are withdrawal, fear, anxiety and inability to adjust to groups. Such definition dovetails definition of the mentally unhealthy suggested by Chawiwan Sattayatham (1994 : 33) as persons with emotional conflicts, frustration, stress, anxiety, vulnerability, sadness, grief, headache, irritation, agitation, impulsivity, immersion in anger – which culminate in inadequacy behaviors. Accompanying physical symptoms are insomnia, decreased appetite, migraine, restlessness or organ dysfunction and accompany social symptoms are lack of friends and poor social skills.

Jintana Harindej (1997: 24-25) described typical pathologies of persons with mental disorder as;

1. Fear is the most natural response of persons entangled in sress and anxiety caused by emotional crisis. Fear can be directed at person, activity or place and its expression can be verbal or behavioral – namely, avoidance of object of fear which can transform into confused movement, tremor, faint. Physically, fear is usually marked by hard and fast breathing, chest pain, nausea, vomiting or running stomach.

2. Anxiety is phobia or unreasonable fear originating in projection of impending fearful event. Accompanying symptoms of primary anxiety are turbulent stomach, dry mouth, rapid heartbeat, fast breathing and restlessness.

3. Depression is characteristic of self-destructive tendency. Mild depression is expressed as marked sensitivity, high vulnerability, pessimism while severe depression is expressed as desperation, withdrawal, difficulty falling asleep and lassitude.

4. Mania is an opposite of depression. Persons with mania usually express themselves without inhibition. Generalized mania can be expressed healthily through physically demanding sports or exercise but psychotic mania induces restlessness, difficulty making decision and doing activity.

5. Anger is an irrational response of rage expressed through refusal to listen to others. Severe anger is characterized by hostility towards all others and ensuing violent reactions lacking correspondence with reality.

6. Confusion is a chaotic state in which persons experience amnesia and respond with inadequacy and violence.

7. Withdrawal stems from sudden indifference to people or environments once attached great importance as object of interest and change in habitual practices and daily routines.

Pathologies associated with mental illness thus can affect the person at many levels, namely at his/her pattern of thinking, feeling and behaving and such pathologies can be attributed to internal factors (Umporn Ohtrakul, 1995 : 55-59), such as physical and emotional make-up, and internal factors such as nature of family and parent-child relationship, wider culture and social values, and the persons' surrounds. Being abused is one external factor contributing to psychological symptoms characteristic of mental health problem.

Mental Health of Abused Children

The trauma of child abuse and neglect not only hurts children physically, but also produces disastrous effects on their psyche, emotions and behavior patterns, and disrupts their important development. In some cases, the trauma can lead to death. (WHO, 1999). Below are typical effects of child abuse.

Effect on family and daily routine

This kind of impact is feared by most children, making them reluctant to disclose what has happened or is happening for fear of undesirable outcome. For example, they may be sent away for their parents have proved incompetent to protect them or their parents may be put to jail or their family may have to move somewhere else should they cannot bear social consequences of such disclosure. In cases that

abusers are not family members, parents usually react violently, blame each other or even blame the children themselves, hence corrode family relationship already fragile to the point of break up.

Effect on child development and learning achievement

Abused children are blighted by poor cognitive development, lack of social skills and capacity for imagination, aggressive behavior and attention deficit disorder, poor school performance – for some children this is so serious that they have to be sent for special classes. A study conducted by Somlak Tanpisuth (1994) uncovered that unstable mother-child relationship will restrict children's experimentation with their surrounds and result in deflated self-confidence.

Physical effect

Abused and neglected children suffer poor personal hygiene – i.e. unclean body, neglect of one's body, dental health, sex-transmitted infection or illness such as inflamed vagina from gonorrhea, syphilis, HIV/Aids, herpes, inflamed urinary tubes, inflamed pelvis. Some have old and new wounds or traces of physical violence whose causes are unknown or cannot be rationally explained, for instance, scratching, burning, fingernails, bruises, sheared vagina, broken bones, brain tissue bleeding, and even organ discoordination.

Emotional and psychic effect

Child abuse gives birth to psychic trauma which has disastrous immediate and long-term effects for children as follow;

1. Immediate effect which occurs immediately after abuse and involves Psychological symptoms such as fear, nightmares, anxiety, depression, sensitivity to threats, and in some cases organ dysfunctions expressed as uncontrolled pissing at night, abdominal or genital pain. Immediate effects can be so severe that they cannot

be overcome by usual defense mechanism and result in intense stress. Repeated use of defense mechanism can induce acute psychotic disorders for brief period. In sexually abused children, profound sadness and feeling of guilt may ensue as children blame themselves for the abuse and this can lead to self-mutilation. Some children have overanxious after abuse and expressed phobia, panic, flashback, avoiding of objects that reinforce the experience. These disorders herald Posttraumatic Stress Disorder (PTSD).

2. Long-term effect : Abuse seriously hampers emotional development of children, barring them from establishing basic trust in others - particularly when abusers are members of one's family and the abuse involves incest - causing them difficulty developing interpersonal relationship, social skills, emotional expression, depriving them of adjustment ability, low self-esteem. Abuse also inflicts victims with anger, shame and guilt that result in depression which may aggravate into suicidal tendency. Some children respond by developing personality disorder such as anti-social tendency, drug addiction, multiple personality disorder, sexual disorders (i.e. sexual promiscuity or deprivation of sexual gratification).

Sexual abuse leaves children with long-term emotional effect. Finkelhor and Browne (1986. cited in Suwapak Wetwibul, 1996) explained the birth of psychic trauma as involving 4 processes as follow;

1. Traumatic sexualization : Premature sexual stimulation and techniques used by adults to reinforce child's sexual cooperation such as reward or special favor may drive children into using sex to get what they want, the practice that engenders immaturity sexual behaviors, confused sexual identity and sexual-stimulation disorder.

2. Powerlessness : Children are caused by physical abuse to feel powerless and losing control over their environment, thus develop anxious and phobia.

3. Stigmatization : Children feel themselves alienated and their body damaged and defiled – the so-called damage goods syndrome. The feeling is strongest in cases where organic injury or sex-transmitted diseases are concerned as children fear permanent disability, loss of capacity for sexual gratification, marriage, pregnancy and having children. Some blame themselves to avoid blaming abusers, saying "if I had

not made an advance on him first, father would not have slept with me", and end up with greater guilt, shame and self-devaluation.

4. Betrayal : Children feel themselves betrayed for their being exploited for sexual gratification by loved ones, or for failure of their mothers or guardians to protect them. With their mothers refusing to acknowledge what happened and blame them for it, their feeling of betrayal is magnified to cover persons other than mother, hence impairing their basic trust and can result in rage.

Children vary in their pathological responses to abuse due to many factors. According to Ministry of Public Health (2000 : 4-5), factors associated with psychic effects experienced by abused children are

1. Child age at the time of the first abuse : effects are greatest for school age children (40%), 24% for teenagers and 17% for pre-school age children. Most common symptoms are fear, anxiety, depression and anger.

2. Frequency and duration of the abuse : children subject to frequent or enduring abuse suffer greater effects than one subject to one act of abuse.

3. The use of force or threat : abuses that involve the use of force or physical violence produce the severest physical and psychic effects. Abuses that involve threats result in fear, submissiveness and sense of powerlessness.

4. Family pathology : disturbed family relations produce greater psychic effects than affective ones.

5. Victim-abuser relationship : when abusers are family members who are supposed to provide protection, children feel greater distress, disappointment and betrayal, loss of basic trust, guilt, shame and depression.

6. Family support after the trauma : support from parents and family members can comfort children and enable them to recover in shorter time.

7. Child personality : children with personality or adjustment problem suffer greater psychic effects from abuse.

A study conducted by Mullen on long-term effects of physical, emotional and sexual abuse pertaining to affective functioning and mental state, interpersonal

relationship and sexual deviancy in adulthood (1996. cited in Supaphen Kotchaplayuk, 1998) uncovered correlations between sample groups with history of these 3 types of abuse and psychotic disorders, difficulty having sexual and interpersonal relationship and deflated self-image. A study by Porter Blick and Sgroi (1982. cited in Supaphen, 1988) uncovered sensitivity to threats, guilt, fear, chronic depression, anger, low self-esteem, social skill deficit and decreased self-control. A study by Barker (1995) also uncovered something along this line. According to him, abused children can have healthy physical growth, but impaired emotional development and adjustment ability expressed as deflated self-image, incurable anger, or mental health problem such as behavior disorder, anxiety, depression, poor school performance and personality disorder. A study by Silverman et al. (Silverman et al., 1996) to determine correlations between history of physical and sexual abuse in childhood and adolescence (age not over 18) and psychosocial functioning in mid adolescence and early adulthood demonstrated that about 80% of those with history of abuse have at least one psychotic disorders according to DSM-III-R criteria when they are 21. Comparison with non-abused sample groups also demonstrated that the abused express greater depression, anxiety, psychotic disorders, emotion and behavior problem, suicidal tendency and behaviors than the non-abused.

A study by Daorueng Kongkaew (2001) on violence in children and its effects on physical, emotional and psychosocial wellbeing uncovered that history of abuse correlates directly with psychosomatic disorders, aggressive and delinquent behaviors but correlates negatively with self-esteem, regardless of degree of violence.

A study by Suwapak Wetwibul (1996) on psychosocial state of sexually abused children in the Center for Protection of Child's Rights disclosed emotional problem as common dominant trait of studied groups, with accompanying symptoms of anxiety, sadness, low self-esteem, anti-social behaviors, attention deficit disorder, regressive behaviors, deviant sexual development, emotional and learning dysfunction. All these studies point to a common finding, namely, child abuses have disastrous effects on children physical and mental health that, provided their intensity and durability, can develop into psychotic disorders. This agrees with a link between being abused in childhood and psychopathology in adulthood uncovered by Blumenthal. (Blumenthal,

1994 : 38). Considered this, it is of utmost importance for public health operations that all of disorders be diagnosed and treated as early as possible before they develop into intractable psychosis. In a study conducted to develop Trauma Symptoms Checklist for Children, John Briere (1996) compiled psychological symptoms associated with trauma that include child abuse and neglect that have close alignment with child mental health and classified them into 6 symptom groups namely (1) anxiety, (2) depression, (3) anger and aggressiveness, (4) posttraumatic stress, (5) dissociation and (6) sexual problem.

Anxiety

Anxiety is a state in which a person experiences excessive fear or emotional distress directed at some events or activities, usually involving daily routine such as learning, job, sport or activity performance. Anxiety is phobia without known or justified causes that has physical symptoms and almost are autonomic neurological symptoms such as heart tremor, blackout, dizziness, shaking breath as accompany symptoms. Anxiety differs from generalized fear because the latter has distinct external causes (Somphop Ruengtrakul, 1999) while anxiety is a tangle of reactions against perceived threats or dangers. (Frey, 2001) Abused children subject dual anxiety, one in the face of present abuse and the other in the face of future projected abuse. Anxiety may become chronic and its manifestation can be sadness, anger or aggressiveness, dependent on how each child handle their feelings.

Depression

Depression is a psychic state that responds to mental ill-being, a pathological one that suggests a decrease in hedonic level, indifference and deflated ability. Persons with depression suffer mental pain or emotional discomfort. Children and adolescents with depression display overt behavior problems – when they feel sad, they usually experience boredom, loss of affective ability, indifference to peers and peer activities and they espouse tendency to withdraw, feeling of loneliness, deprivation of love,

attention deficit disorder that occasions poor school performance, lassitude, indifference to one's safety and suicidal mindset. (Somphop Ruengtrakul, 1999)

Abuse and neglect robs children of their childhood energy and may just stay still to convey their depression (Kari Gillan, 2001) or profess excessive inactivity - this can be easily detected and coped by organizing activities as stimulants, though perhaps without much success because children with depression tend to have attention deficit disorder and lack perseverance to see any activity through to its completion. A study by Sonsonet and Hyden (1987. cited in Supaphen Kotchplayuk, 1998) reported that 71% of sexually abused children hospitalized at psychiatric hospitals have depression and suicide is more common among them than among children without history of abuse. This finding found support in a study conducted by Umaporn Trankasombat and Dusit Likanapichitkul (1993. referred in Supaphen, 1998), using Child Depressive Inventory for psychological assessment which indicated history of suicidal attempts among 30% of sample groups who are children aged 10-15 hospitalized in pediatric department. The suicides were reported by parents as being motivated by trauma such as quarrels with parents, illness or parent's punishment.

Anger and aggressiveness

Anger and aggressiveness is maladaptive pattern of thinking, feeling and behaving that is expressive of anger and uncontrollable hostility towards others. Ordinary children learn to control and display acceptable level of anger and aggressiveness. Abused children, on the other hand, resort to anger and aggressiveness as defense mechanism, imitating rage outbursts they have learned from domestic experiences. Several children react violently to perceived threats either from adults or other children. Tendency towards physical violence and aggressiveness is remarkably greater among abused children than ordinary children and this is detectable since pre-school age. Abused children employ techniques of displacement as defence mechanism, switching their target for rageful outbursts from parents onto other children. There are some, however, who do not display aggressiveness for they internalize such pathology and end up with a tangle of psychotic disorders such as

self-mutilation, depression, indifference, withdrawal and even suicide which are most distinct in sexually abused children. A study by Newberger (1982) uncovered greater tendency towards aggressiveness among children with history of abuse and neglect than among children without such history. A study by Salzinger et al. (1993) confirmed this. The study investigated effects of abuse on social development of children by comparing behavior problems of 2 sample groups – a group of 87 abused children aged between 8-12 and a group of 87 non-abused children of the same ages, employing baseline data for comparison derived from teachers' and parents' assessment. This study demonstrated that abused children are more aggressive, less cooperative and more provoking towards parents and teachers, hence pointing to coorelations between abuse and aggressiveness –the well-known slogan of "violence begets violence." Deprivation of parental love and care can be decisive factor for development of aggressiveness in children.

Posttraumatic stress

Posttraumatic stress is a pathology that responds to experienced trauma, such as formidable threats to one's life, physical and/or emotional integrity, the memory of which still lingers and whose accompanying symptoms are hypervigilance, paranoid, frustration, agitation, restlessness, high distractibility and direct avoidance of stimulants associated with past trauma. Recurrent memories of past trauma in the forms of "flashback", nightmares or hallucinations are characteristic of abused children and their reactions can take several forms, from direct avoidance to frigid indifference, emotional withdrawal and avoidance of situations associated with past trauma. A study by Breslau et al (1992. cited by Yehuda, 2002) uncovered that 39% of sample groups having history of abuse experience posttraumatic stress, and the percentage is largest among the sexually abused.

Dissociation

Dissociation involves a process of “splitting” by which physiological and psychic process interferes with normal pattern of thinking, feeling and behaving and disrupts usual associations of data and experiences by disjointing some specific data and experience from others. Children are more likely to use loss of memory as defence mechanism to avoid pain than adults (Putnam, 1993. cited by Kari Gillan, 2001). By so doing, they can reject painful memories and seemly to be normal. Loss of memory can be partial or complete and it can last for months or years. Child with loss of memory or amnesia behave as if they were in a trance, have misperception of self, undergo unexplainable psychic or behavioral changes, have empty stare and lose touch with reality. The state of dissociation embodies children’s pathological reactions to environment reminding of painful experiences by simply forgetting them. Generally, should the painful episodes end, lost memories are retrieved and children get back to normal without remembering those episodes. On the contrary, should the episodes continued, children resort to imagination for emotional comfort or fancy interventions and punishment of abusers that put an end to their trauma. This is known as projective problem-solving. (Somphop Ruengtrakul, 1999). Severe dissociation in some persons can degenerate into multiple personality disorder.

A study by Macfie et al. (2001) that investigated dissociation in 45 abused and neglected children, in comparison with 33 non-abused children, uncovered greater occurrence of dissociation in the former than the latter.

Sexual problem

Sexual abuse directly correlates impaired sexual development, confused sexual identity and difficulty having normal sexual relationship. Victims of child abuse may display one or more of the following symptoms : excessive sexual expression and sexual behaviors, early sexualize behavior, acts characteristic of sexual preoccupied such as seeking to touch genitals of adults or younger children, and sexually provoking behaviors (Kari Gillan, 2001; Bentovia and Boston, 1988. cited in Suwapak Wetwibul,

1996). Some children misinterpret sexual abuse as a way to get what they want, though in fact it disrupts their sexual development and may inhibits their normal sexual gratification, causing them to experience tensions in sexuality, fear of being victimized, paranoid and loss of basic trust.

In short, all these 6 psychological symptoms are indicators of mental states of abused children that more or less affect their wellbeing and which, unless children are given treatment in time, can degenerate into psychotic illnesses. It is thus logical that early assessment of such symptoms will much facilitate the tasks of supporting teams. Envisage this, the author of this report sought to develop a psychological assessment for such disorders that is appropriate for abused children in Thailand, drawing on John Briere's classification of psychotic disorders associated with PTSD (1996).

Psychological Testing for Abused Children

Identifying types and psychological effects of child abuse that are multiple and complicated is of critical importance for assessment-treatment process. Clinical psychologists thus have an important role to play, that is, to contribute to greater understanding of differences among individuals (Newberger, 1982: 246) through the use of psychological assessment whose purposes are to determine mental states of abused children and make use of obtained data for planning treatment and therapy in conjunction with multidisciplinary teams. Psychological assessment refers to any procedure involving gathering of personal data that is made up of interview, direct observation of behaviors, use of psychological testing – approach to data-gathering and data-interpretation that results in measurable grades with specific methodology. (Suchira Patrayutawat, 1998) Psychological testing embodies technique of measuring sample of behaviors representative of target behaviors, which is characterized by standardized conditions, rating scale and interpretative objectivity. There are several types of psychological tests. (Goldstein & Hersen, 1984)

1. Intelligence Test

Intelligence Test is appropriate for measurement of cognitive and thinking ability, problem-solving capacity, adjustment to situational changes, conceptual thinking, verbal and non-verbal ability, and for identification of maladaptive pattern of thinking.

2. Achievement, Aptitude and Interest Test

Achievement Test is used for measurement of obtained knowledge, skills and capabilities such as school performance test. Aptitude Test refers to a kind of test used for measurement of specific ability associated with certain accumulated skills – a kind of generalized experience. Interest Test is used for measuring preferences, values and personality traits associated with specific requirements such as those for education pursuance or career choosing.

3. Neuropsychological Assessment

Neuropsychological Assessment is used for measurement of brain disorder associated with certain overt behaviors such as seeing, speaking and eye-hand coordination. This kind of assessment makes use of close connection between overt behaviors and brain functions for detecting brain dysfunction through observable behaviors.

4. Personality Assessment

Personality Assessment is used for understanding or describing personality traits through measurement of behaviors, characters and emotional trait. There are 2 types of personality assessment namely;

4.1 Structure or Objective Test uses clear Q&A and fixed choice (either T/F or yes/no structure) and have determinate criteria for rating and interpreting answers (i.e. choice, rating and checklist). Examples of structure test are The Minnesota Multiphasic Personality Inventory (MMPI), The Sixteen Personality Factors (16 PF), The California Personality Inventory (CPI).

4.2 Unstructure or Projective Test uses vague or ambiguous stimuli such as symbols that induce respondents to use their imagination to interpret meanings, hence has no a priori true or false answers. Examples or unstructure test are Rorschach Inkblot, The Thematic Apperception Test and The Sentence Completion

Test – all of which require a high level of expertise and experiences on the part of their administrators.

To ensure maximal validity and reliability of end-results, values and appropriateness of tests should be taken into account before their application. For this, it may be useful to note 2 quality-related criteria for discriminating psychological tests. (Penkhae Sangkaew, 1998: 108-119; Rattana Siripanich, 1996: 119-126; Suchira Pattrayutawat, 1998) namely,

1.Design Properties

1.1 Objectives of test are clearly stated

1.2 Measured contents are specific and standardized.

1.3 Testing procedure is of acceptable standard.

1.4 Test has determinate rating criteria.

2.Psychometric Properties

Effectiveness of test is measured against its ability to evaluate abstractly-constructed variables accurately or almost-flawlessly. Accuracy-related criteria for psychological test consists of

2.1 Validity or the ability to measure accurately. There are 4 types of validity.

2.1.1 Content validity : Test items are evaluated by specialists as thoroughly and inclusively covering all contents/meanings of target variables they are to measured.

2.1.2 Predictive validity : Given correctness of testing procedures, differently-rated behaviors of persons can be effectively predicted.

2.1.3 Concurrent validity : Given correctness of testing procedures, there is correspondence between predicted and actual tendency and behaviors of known group.

2.1.4 Construct validity : There is a correlation between constructed variables and other variables of theoretical relevance.

2.2 Reliability or measurement constancy or trustworthiness of results from measurement. Reliable test means one that has consistent results every time it is used in assessment.

2.3 Item Analysis which means constitutive items of already improved test are analyzed and chosen for use based on their difficulty power and discrimination power.

Good test must have usability in the context of assessment. (Gronlund, 1985: 109-111). Usability is defined by the following features;

1. Simplicity (for both administrators and respondents of test)
2. Time-saving quality – test that takes too much time results in respondents' boredom, exhaustion, lack of motivation to finish it and one that takes too short time, but is densed with contents tend to cause stress, anxiety, rushy and careless handle of test questions, hence resulting in inaccurate raw data.
3. Ease, convenience and fairness of rating used.
4. Time-, labor- and budget-worthy quality.
5. Easy interpretation and usability.

In short, rating of abstract and indistinct invariables requires a set of well-tested, accurate and reliable items for their measurement as this will ensure that assessment results are highly valid and reliable when measured against objectives of test.

Majority of test now in use in clinical psychology are diagnostic and screening tests. Clinical psychological assessment aims at uncovering psychopathology of tested persons and this involves specifying multiple types of pathology as suggested by features of the tests. End-results of psychological assessment are data that is used for disease diagnosis and treatment follow-up, hence it is of utmost importance that the test has validity and reliability to fit the task. Screening test that meets reliability criteria must have the following properties; (Tassani Nutchprayoon and Termsri Chamnijarakij, 1998)

1. Sensitivity or chance that positive diagnosis of disease in patients is true.

2. Specificity or chance that negative diagnosis of disease in patients is true.

The quality of sensitivity and specificity are decisive criteria for deciding between psychological tests – namely diagnostic or screening test – to minimize risks and flaws involved in assessment and to apply the test to preventive planning of treatment for diagnosed disorders.

Application of psychological test for assessment of child mental health and behavior problem.

Symptoms or behaviors typical of mental ill-being affect daily life and functioning of individuals, though the degree varies from persons to persons. Types and intensity of disorders can be approached through the use of mental health assessment which have several types (Suwani Kiewkingkaew, 1987: 28. cited in Jrinya Suksompotch, 1999 : 20-21) as follow**;**

1. Direct assessment of mental health involves the use of mental health assessment tools to determine mental well-being directly. Mental well-being, however, is a more subtle phenomenon than symptomatic mental disorders which are observable. But without precise knowledge about nature of mental well-being, objective criteria for assessment cannot be formulated and applied. As a result, psychological tests for mental well-being available in Thailand are few. One such test is Index of Psychological Well-being.

2. Social adjustment-oriented assessment of mental health involves the use of tools such as Indicator Related to Social Disorganization – examples of social disorganization are difficulty adjusting to social, family, workplace and the like – that is based on the assumption that mental health is a healthy adaptive ability. This kind of test is not common in Thailand. Its examples included The Structure and Scale Interview to Assess Maladjustment.

3. Assessment of mental health based on psychotic disorder and symptom analysis which relies on the idea that pervasiveness of psychotic disorders and symptoms are indicative of mental ill-being. Assessment tests of this type are most

common and they are designed for measurement of anxiety, depression, stress and obsessive-compulsive disorder etc..

Assessment of mental health and behaviors in children makes use of a foray of data-gathering techniques, for example, questionnaire, observation, self-monitoring, self-report or other-report tests and checklist. The idea is to grasp the general picture of individual children and to obtain as much understanding of their behaviors and disorders as possible. (Ollendice & Meador In Goldstein & Hersen, 1984) Children development at each age range is one factor that needs to be taken in account when choosing psychological test for children since cognitive, perceptual and emotional capacity of children develop unequally at different stages of their development. This is true as well with age-specific limitations such as language skills.

Psychological test for child mental health and child behavioral development is a kind of personality assessment test which is used to measure behaviors, characters and emotional trait of individuals. Though structure and unstructured tests are equally informative of child mental states, unstructure test takes longer time for testing and interpretation of results and its results are highly dependent on level of expertise and experiences possessed by test administrators. Structure test, on the other hand, affords more convenience, is time-saving and use determinate rating criteria that renders interpretation of results much easier. Rating and checklist is one of structure tests whose use has become popular in assessment of child mental health and behaviors. It is well-equipped for measuring multiple types of disorders and behaviors as specified by objectives of assessment test, its end-results consist of detailed data not available from interview or observation and it can be used equally well for self-report or other-report tests. For other-report tests to result in personal data useful for assessment and treatment of children, it requires contribution from persons close to children who have good awareness of their behaviors yet whose assessment is free of prejudice. Data provided by self-report tests are also important and useful for they represent children’s perception of self with regard to emotions, feelings and behaviors. Examples of psychological tests for child behavior problem assessment include Behavior Problem Checklist (Quay & Peterson, 1967), Child Behavior Checklist (Achenback &

Adelbrock, 1979), State-Trait Anxiety Inventory for Children (Spielberger, 1973) and Children Depressive Inventory (Kovac, 1978). Behavior Problem Checklist is made up of 55 items, has 3-level rating scale and is capable of assessing problems in 3 separate areas namely conduct problem, personality problem and inadequacy-immaturity problem. Child Behavior Checklist (Achenback & Adelbrock, 1979) classifies behavior problems in children into externalizing (such as aggressiveness) and internalizing (such as anxiety and withdrawal) ones. It is made up of 118 items, has 3-level rating scale for measuring against distinct average norms for male and female, with 2 age ranges (4-5 years and 12-16 years). Both are types of rating-scale psychological test and are effective for diagnosis of more than one type of child behaviors simultaneously. State-Trait Anxiety Inventory for Children is an example of rating-scale tests used for assessment of type-specific psychotic disorders. It consists of 20 items for measuring state anxiety and 20 items for measuring trait anxiety and is effective with children aged from 9 onwards. Children Depressive Inventory is widely used for measuring depression in children aged between 8-17. It consists of 27 items, each with 3 choices of answer, and determinate criteria for judging clinical importance of different levels of depression measured by the test.

In Thailand, there are many objective psychological tests available for measuring psychotic symptoms and conduct problems in children, for example, Indicators of Aggressiveness (Tipawal Suthin, 1996), RADS (Reynolds Adolescent Depressive Scale) (Raerai Tiwawong, 1992), Thai Youth Checklist (TYC) (Somsrong Suwanlert and Suwattana Sripuenphol, 1999) and SCL-90 (Symptom Distress Checklist 90) (Derogalis L.R & Cori L. referred to in Ploenpit Jantrasak, 1998: 51). Indicators of Aggressiveness is made of 58 items for self-report, 5-level rating scale and is used for measuring aggressive behaviors in adolescents. RADS is made up of 30 items for self-report and is used for measuring depression in adolescents. Both tests belong to the group of uniscale assessment of psychological symptoms. TYC belongs to other group – the multiscale assessment test. It was initially invented for epidemiological survey and comparative study of behavior and emotional problems in Thai children and adolescents and is a kind of teacher- and parent-report tests. TYC is

a valid and reliable psychological test that derives standard criteria from sample groups of 360 and it can measure multiple types of psychotic disorders and behaviors in children and adolescents. SCL-90 too is a multiscale psychological test that is used widely in Thailand. Developed by psychologists of Somdejchaopraya Mental Hospital, SCL-90 has 90 items for self-report and is capable of measuring 9 types of psychotic disorders namely (1) somatization, (2) obsessive-compulsive, (3) Interpersonal sensitivity (4) Depression, (5) Anxiety, (6) Hostility, (7) Phobic anxiety, (8) paranoid ideation and (9) Psychotism. SCL-90 is a psychological test in widespread use for abused children in Thailand as well. There is, however, a significant difference between abused and non-abused children, that is, abused children experienced trauma that left scares on their psyche and affected their emotional wellbeing. Hence, stimulus-specific symptoms such as posttraumatic stress or dissociation may occur to abused but not un-abused children. For greater diagnostic efficiency, a psychological test that is suitable to special conditions and predicaments of abused children and that is inclusive of all potential psychotic disorders, with standard norm derived from abused children themselves, is needed.

Development of psychological test for abused children

Though effects of child abuse on mental well-being are diverse, there are few multiscale psychological tests available to measure them – most test are type-specific or uniscale. For example, Child Sexual Behavior Inventory developed by Friedrich et al. (1993) measures only sexual behaviors of abused children, Child Dissociative Checklist developed by Putnam et al. (1993) is a tool for assessing abuse-induced dissociation alone and Children's PTSD Inventory of Saign (1993) for assessing PTSD according to DSM-III classification criteria. Moreover, though Fao et al. (1997) developed Posttraumatic Diagnosis Scale (PTDS) according to DSM-IV classification criteria, his self-report test still measured only one symptom at a time, meaning the helping teams must repeat the test should they need more comprehensive data of multiple, not single, types of disorders and that would surely cause tested children more trouble. In western countries, multiscale tests for use with abused children have

been developed to fill the gap, for example, House-Tree-Person and Draw-A-Person (Valerie, 1994). These tests, however, require a level of interpretative ability and sophistication of test administrators.

Later John Briere (1996) developed Trauma Symptom Checklist for Children as a tool for measuring posttraumatic distress and related psychological for children aged between 8-16 years. The test is made up of 54 items for self-report and derives average norm from totally 3,008 samples, by dividing age range into 2 – 8-11 years and 12-16 years. It meets the criteria of reliability (0.82-0.89), concurrent validity, content validity and discrimination power. According to the test, there are 6 types of psychotic disorders associated with PTSD in abused children that need to be measured namely;

1. Anxiety scale which is reflective of generalized anxiety, sensitivity to stimuli, object-specific fear (i.e. fear of women, men, darkness or being murdered) which characterize phobia or projected fear associated with past trauma. High rating with respected to this disorder signals anxiety disorder, anxious hyperarousal associated with PTSD. Anxiety diagnosis differs between abused and non-abused children for the former is overwhelmed by fear associated with past trauma – sensitivity to threats – while the latter usually exhibit projected fear that has nothing to do with reality

2. Depression scale which is a feeling of sadness, unhappiness, loneliness, guilt and self-mutilation or suicidal tendency. High rating with respect to this disorder signals depression and grief-intensive responses to trauma which can be either brief or chronic and heralds suicidal tendency, especially among adolescents.

3. Anger scale is associated with aggressive pattern of thinking, feeling and behaving such as narrow-mindedness, difficulty controlling anger, propensity to quarrelling or fighting. Anger closely aligns with aggressiveness and hostility that usually drive children into trouble at home or school, such as rampaging or fighting with others. Abused children felt and burst out rage against what they deem as “injustice” of past trauma and in this way are different from non-abused children who attach less importance and meaning to their aggressive behaviors.

4. Posttraumatic stress scale include typical symptoms of psychological symptoms associated with PTSD, i.e. recurrence of painful trauma in thoughts, feelings and memories, nightmares, phobia of women and men, use of thoughts as escapade for painful experiences (visible through obsession with the past, stillness, lack of emotional expression, concentration problem or restlessness) that disrupt their daily life and normal functioning. Diagnosis of PTSD, however, must comply with DSM-IV classification criteria.

5. Dissociation scale represents mild or fair degree of confusion in one's thinking process or behaviors, loss of sense of self, emptiness, frigid indifference, displacement or dislocation ideation. High rating for this disorder signals loss of sensitivity to environment, tendency to use one's thought or imagination as escapade from negative effects on self.

6. Sexual Problem scale is characterized by unhealthy attitudes towards sex or sexual obsession, with accompanying disorders of inadequacy-immaturity sexual behavior, negative responses to sex, fear of being victimized, psychic tension associated with sexual experiences, unwanted indulgence in sex – all of which are common in sexually abused children.

Literature and research associated with child abuse and its effects on mental health of children collaborate that psychological symptom such as anxiety, depression, anger and aggressiveness, posttraumatic stress, dissociation and sexual problem contribute to mental health problem of abused children. Drawing on this and using multiple types of these psychological symptoms as parameter, the researcher sought to develop an alternative multiscale psychological test for mental health assessment for abused children. The test will facilitate preliminary assessment of abused children and enable the helping teams to readily intervene to give help to ones diagnosed with mental health problem.

CHAPTER III
RESEARCH METHODOLOGY

This chapter divide into 2 parts. The first part is the item selection and scale construction and the second is the examination of test's qualities and determine the appropriate cut off point in order to develop to be screening test for abused children with mental health problems.

Part I: Item selection and scale construction

The procedures of this part are follows:

1. Review the relevant literature, research and theory that associate with psychological symptoms related to abused for framing and defining the scale for measure trauma symptoms. Therein the researcher using John Briere's classification of psychological symptoms related to trauma (1996) consist of 6 domain, namely Anxiety, Depression, Anger and aggression, Posttraumatic stress, Dissociation and Sexual problem to be indicators for mental health of abused child.

2. Define the definition of all clinical scales in order to develop a pool of items.

3. Develop a pool of potential items from the standard and popular psychological tests used in assessing children with mental health and behavior problem, there are;

3.1 Trauma Symptoms Checklist for Children (John Briere, 1996)

3.2 Thai Youth Checklist for aged 12-16 (Somsong Suwannalerd and Suwattana Sripeunpon, 1999)

3.3 Symptoms Distress Checklist 90 (SCL-90)

3.4 Raynold Adolescent Depression Scale: RADS (Rayrai Theewatat, 1992)

3.5 Children Depressive Inventory: CDI (Kovacs, 1978)

Item selection based on operational definition accompanied with Diagnostic and Statistical Manual of Mental Disorder, 4th Edition (DSM-IV) (Pramote Sukhanit and Manote Lhortrakul, trans, 1998) and adjusted to suit Thai culture.

4. The content validity and construct validity of the test was examined by a child psychiatrist, a child psychologist and a psychologist. The item were consulted in the content and dialogue and selected if agreed by all of specialist, 14 items were discard as redundant or as less meaningful indicator of the domain of interested. The 85 items, left from 99 items, of resultant measure were then include to tap 6 scale: Anxiety, Depression, Anger and aggression, Posttraumatic stress, Dissociation and Sexual problem. Characteristic of the test contained the items which a list of thoughts, feelings, and behavior in accordance with each symptoms.

4.1 Anxiety scale reflect the extent to which the child is experiencing generalized anxiety, hyperarousal, and worry, as well as specific fears of men or women, of the dark, and of being killed. Also the episode of free-floating anxiety and fear of impending danger

Ex. - Worrying about things
- Feeling nervous or jumpy inside.

4.2 Depression scale taps feelings of sadness, unhappiness, and loneliness, episode of tearfulness, and depressive cognitions such as guilt and self denigration, and also self injurious impulses and suicide.

Ex. - Feeling lonely
- Feeling stupid or bad

4.3 Anger and aggression scale include the extent of angry thoughts, feelings, and behaviors, also with feeling mad and mean, feeling hatred, having difficulty de-escalating anger, wanting to yell or hurt people, and arguing and fighting

Ex. - Wanting to yell at people
- Getting mad and can’t calm down

4.4 Posttraumatic tress scale consist of items reflecting classic posttraumatic symptoms. These include intrusive thoughts, sensations and memories of painful past events, nightmares, fears of men or women and cognitive avoidance of negative or hyperarousal symptoms.

Ex. - Remembering things I don't want to remember
- Bad dreams or night mares

4.5 Dissociation scale measure the extent to which the child experiences dissociative symptomatology include intrusive derealization, one's mind going blank, emotional numbing, pretending to be someone else or somewhere else, daydreaming, memories problems and dissociative avoidance.

Ex. - Pretending I'm somewhere else
- My mind going empty or blank

4.6 Sexual problem scale measure sexual distress and preoccupation, some are negative thoughts, feelings or response about sexual stimuli. Some are not symptomatic but atypical when they occur earlier in development than expect or which greater than usual frequency. Other items are unwanted sexual response or conflict, or fear of being sexually exploited.

Ex. - Wanting to say dirty words
- Getting scared or upset when I think about sex

The subjects asked to mark how often each of these things happens to them. Each items is rated on a 4 point scale(0-3)

0 "never"	refers to	the subject never thinks, feels of these things or it never happens to them.
1 "sometimes"	refers to	the subject have sometimes thinks, feels of these things, or it happen to them sometimes.
2 "lots of time"	refers to	the subject have thinks, feels of these things lots of time, or it happen to them frequently.
3 "almost all the times"	refers to	the subject thinks, feels of these things always, or it happen to them almost all the time.

Scoring of the response is arbitrary weight style, rated form 0-3 according to response level.

5. After the content validity and construct validity was accepted, the test was tried out with 60 7^{th} –9^{th} grades students, that were not in actual sample groups for item analysis. Determined discrimination power of the clinical scale used independent t-test at 0.05 level of significance and Cronbach's alpha coefficient was used for estimated the reliability of each scale.

6. After the examination of item analysis, 71 items, 6 domain were analyze the internal consistency by using Cronbach's alpha coefficients. The reliability were as followed:

6.1 Anxiety (13 items) = 0.7486
6.2 Depression(14 items) = 0.8241
6.3 Anger and aggression(12 items) = 0.7690
6.4 Posttraumatic stress(12 items) = 0.8119
6.5 Dissociation(13 items) = 0.8210
6.6 Sexual problem(8 items) = 0.8085

Part II Developing the test for screening abused child with mental health problem

This part is to examined the psychometric quality of the scales for develop the capability and reliable screening test. The procedures are follows:

Sample of the research

A sample divided into 2 groups

1. Normal or non-abused group: 7^{th} – 9^{th} grades students in Nonthaburi Province, ages 12-16, have normal social functioning and have no history of mental illness.

In 2003, Data from Nonthaburi Educational Area Office showed 24,438 students attend in 7^{th} – 9^{th} grades in Nonthaburi.(Nonthaburi Educational Area Office, 2004)

Sampling procedure

The following formula was used for estimate the sample size (Cite in Sucheera Pattrayootthawat, 1998 b: 47)

$$n = \frac{NZ^2}{4NE^2 + Z^2}$$

n = Number of the sample
N = Number of the populations
Z = 1.96
E = the error = 0.05

Used confidential level at 95%, the sample size will be at least 379 persons.

Simple random sampling was used to obtained representative of the sample. Thereby, Nonthaburi Educational Area divided the schools into 2 areas, the researcher chose 2 schools from 20 schools allow the division of the Educational Area.

Area 1 :consisting Amphur Muerng and Amphur Bangkruay include of 11 secondary schools, the researcher randomly chose a secondary schools for this area. The result was Wat Khemaphirataram school.

Area 2 :consisting Amphur Bangyai, Amphur Bangbuathong, Amphur Pakkret and Amphur Sainoi include of 9 secondary schools, the researcher randomly chose a secondary schools for this area. The result was Suankularb Wittayalai Nonthaburi school.

Totally, 410 students were drawn on.

2. Abused group: abused children ages 12-16, who were taken care by Care Network for Abused Children of Nonthaburi.

Because of the characteristic of the samples that are rare, turnable in unpredicted time and number of case, so the researcher used accidental sampling to

obtained representative of the sample and collecting data from June to August, 2004.Inclusive Criteria are follows:

2.1 capable to read and write

2.2 understandable the test

2.3 willing to participate in research

According to criteria, 33 abused children were selected.

Table 1 Sample of research

Sample group	Number of samples
Non-abused children	410
Suankularb Wittayalai Nonthaburi school	200
Wat Khemaphirataram school	210
Abused children	33
Srithanya Hospital	10
Thunyaporn Home for Girls	20
Child's Right Protection Center	3

Data Collection

Procedures of data collecting in each sample groups are follows:

1. Normal or non-abused group

1.1 The researcher submitted a letter of introduction from Faculty of Graduate Studied, Mahidol University to the school director requesting for permission and cooperation in data collection process.

1.2 The researcher met the director of school and requested for collaboration in meeting the sample group to collected data and dispatch the consent form to the subjects.

1.3 Collected data from sample group by time and date that have appointed.

1.4 Administrating in group testing situation and the setting is classroom. The researcher introduce oneself, explained the purpose of the research, inform the respondents of the protection of their rights, explained about characteristic of the test and how to answer question in each item.

1.5 The researcher ask if the child understand what they are suppose to do whether there are any questions. If there are any question while completing test, the researcher explained to them by individual all the time.

2. Abused group

2.1 The researcher submitted a letter of introduction from Faculty of Graduate Studied, Mahidol University to the director of Center of Care Network for Abused Children of Nonthaburi namely, Srithanya Hospital, Thunyaporn Home for Girls and Child's Right Protection Center and dispatch the consent form to the subject.

2.2 The researcher met the child and collected data by oneself. Administering the test both of individual and group testing situation up to number and character of the subject at the time.

2.3 Started the administration by introduce oneself, rapported, explained the purpose of the research, inform the respondents of the protection of their rights and explained the character of the test and how to answer question in each items.

2.4 The researcher ask if the child understand what they are suppose to do whether there are any questions. If there are any question while completing test, the researcher explained to them by individual all the time.

Data Analysis

1. Independent t-test analysis was used to determined concurrent validity of each scale, compare between abused and non-abused group at statistical significant level of 0.05.

2. The revised test that were selected only the scale with discrimination power, able to differentiate abused and non-abused group, using sensitivity and

specificity analysis to determined the appropriate cut off point in order to screening for abused child with mental health problem. Ranges of score, which calculated sensitivity and specificity of each scale were between mean of non-abused group plus half of its standard deviation and mean of abused group minus half of its standard deviation. Considered and selected the score which have suitably sensitivity and specificity to set up the cut off point to discriminate abused children with mental health problem.

CHAPTER IV
RESULT

The objective of this research is to develop the Mental Health Screening Test for Abused child, which used in screening abused children with mental health problem. The test was administered to 410 normal or non-abused boys and girls students in 7^{th} – 9^{th} grades ages 12-16 years who have no history of mental illness, and 33 abused boys and girls ages 12-16 who were taken care by Care Network for Abused Children. Results of the research are presented as follows:

1. Concurrent validity of the test
2. Reliability analysis
3. Examination of Specificity, Sensitivity and cut off point

Table 2 Compare mean of psychological symptoms between abused and non-abuse group.

Scale	Abused children (n = 33)		Non-abused children (n = 410)		t	p-value
	M	SD	M	SD		
Anxiety	12.42	6.93	11.99	4.79	0.48	0.632
Depression	15.39	9.25	9.35	6.37	5.05	0.000
Anger and aggression	8.79	5.98	8.84	4.09	0.07	0.471
Posttraumatic stress	12.94	7.97	10.91	4.93	2.15	0.016
Dissociation	12.06	8.33	8.81	5.13	3.31	0.0005
Sexual problem	3.82	34.84	3.58	3.30	0.38	0.350

According to table 2, showed abused children displayed significantly higher scores than non-abused children for 3 scale: Depression, Posttraumatic stress and Dissociation but not have significant distinction in Anxiety, Anger and aggression and Sexual problem scale.

That inferred Depression, Posttraumatic stress and Dissociation scale are significant indicator for mental health of abused child, so the researcher selected only distinctively scales in order to sought the appropriate cut off point for screening abused child with mental health problem.

Table 3 Mean, Standard deviation, Reliability, Sensitivity, Specificity and cut off point of Depression scale.

	Mean	SD	Reliability
Non-abused children	9.35	6.37	0.82
Abused children	15.39	9.25	

Scores	Sensitivity(%)	Specificity(%)
14	51.51	79.51
13*	60.60	75.85
12	60.60	69.5
11	60.60	62.44

Table 3 showed the internal consistency of Depressive scale is 0.82.

At scores 11-14, sensitivity are 51.51% to 60.60% and specificity are 62.4% to 77.51%.Therefore, to be considered the children have depressive symptoms, cut off point at 13 is appropriate(sensitivity is 60.60% and specificity are 75.85%)

Table 4 Mean, Standard deviation, Reliability, Sensitivity, Specificity and cut off point of Posttraumatic stress scale.

	Mean	SD	Reliability
Non-abused children	10.91	4.93	0.81
Abused children	12.94	7.97	

Scores	Sensitivity(%)	Specificity(%)
13	48.48	63.66
12*	51.51	55.36
11	54.54	45.36
10	60.60	38.78
9	63.63	32.97

Table 4 showed the internal consistency of Posttraumatic stress scale is 0.81.

At scores 9-13, sensitivity are 48.48% to 63.63% and specificity are 32.97% to 63.66%.Therefore, to be considered the children have Posttraumatic stress, cut off point at 12 is appropriate.(sensitivity is 51.51% and specificity are 55.36%)

Table 5 Mean, Standard deviation, Reliability, Sensitivity, Specificity and cut off point of Dissociation scale.

	Mean	SD	Reliability
Non-abused children	8.81	5.13	0.82
Abused children	12.07	8.33	

Scores	Sensitivity(%)	Specificity(%)
11	48.48	73.9
10	54.54	67.3
9	54.54	60.0
8*	60.60	51.95

Table 5 showed the internal consistency of Dissociation scale is 0.82.

At scores 8-11, sensitivity are 48.48% to 60.60% and specificity are 51.95% to 73.9 %.Therefore, to be considered the children have Posttraumatic stress, cut off point at 8 is appropriate.(sensitivity is 60.60% and 51.95%)

CHAPTER V
CONCLUSION DISCUSSION AND RECOMMENDATION

This research is on purpose to develop the Mental Health Screening Test for Abused Children in order to discriminate abused children who have mental health problem. This last chapter described the conclusion, discussion and recommendation for the study.

Conclusion

To develop the Mental Health Screening Test for Abused Child the researcher had reviewed the relevant literature, research material and theory of child abuse and psychological symptoms related to abuse and develop the test by using John Briere's classification of psychological symptoms related to trauma (1996) including 6 symptoms: anxiety, depression, anger and aggression, posttraumatic stress, dissociation and sexual problem. Selected items the standard and popular psychological test used in assessing children with mental health and behavior problem and adjusted them to suit children of Thai culture. The content validity was examined by 3 experts, after revised follow by their comments and suggestions the test were tried out with 60 students for item analysis and reliability testing. The test which consist of 71 items, 6 domain, were used in 2 sample groups (abused children and non-abused children). Analyze the concurrent validity, sensitivity and specificity in order to determined the appropriate cut off point of each scale. The testing outcome is:

Nature of the test

The test is a self-report measure of posttraumatic distress and related psychological symptomatology in which the child directly write their response. The child is presented with a list of thoughts, feelings, and behaviors and asked to mark

how often each of these things happens to them. The test including 3 clinical scales and consist of 39 items: Depression 14 items, Posttraumatic stress 12 items and Dissociation 13 items and its reliability is 0.82, 0.81 and 0.82 respectively.

Scoring and interpretation

Scoring the answer that the child response for each items, rated on a 4 point scale and its score is vary from 0-3.

Never	scored 0.
Sometimes	scored 1.
Lots of time	scored 2.
Almost all the times	scored 3.

The examination reveals specific areas in which the child may be experiencing symptomatology if the sum of scores of individual scale touching cut off point, suggestive of difficulty in each symptoms.

Cut off point of Depression scale is 13.

Cut off point of Posttraumatic stress scale is 12.

Cut off point of Dissociation scale is 8.

Discussion

Nature of the test

The research used self-rating and checklist technique to constructed the scales of the Mental Health Screening Test for Abused Child base on John Briere's classification of psychological symptoms related to trauma (1996) including of 6 symptoms: anxiety, depression, anger and aggression, posttraumatic stress, dissociation and sexual problem. Developing pool of items from standard self-rating and checklist psychological tests used in assessment children with mental health and behavioral problem in accordance with each symptom. As a result, the test is self-

rating scale on purpose to gathered the detail in specific areas which the child may be experiencing symptomatology by perception of themselves.

Examined content validity and construct validity of the test by comment and suggestion from 3 experts, a child psychiatrist, a child psychologist and a psychologist. Researcher chose the meaningful and measurable items that all of experts were agreed.

In order to analyze reliability of the test the researcher used Cronbach's alpha coefficients to calculate the internal consistency of each clinical scales: Anxiety, Depression, Anger and aggression, Posttraumatic stress, Dissociation and Sexual problem scale. The reliability are 0.75, 0.82, 0.77, 0.81, 0.82, 0.81, respectively. Considered by William (1994 cite in Sucheera Pattrayoottrawat, 1998b) suggested that coefficients alpha range from 0.80-1.00 is relatively high reliable likewise Fisher and Cocoran (1994 cite in Sucheera Pattrayoottrawat, 1998b) had offered, reliability coefficients is higher that 0.71 relatively high reliability. So, all scales of the test demonstrate high reliability, enable for assess children with mental health problem.

To be a measure of mental health in abused children, Know group technique were used to examined concurrent validity of each clinical scale. Independent t-test was using in compare abused children with non-abused children, founded Depression, Posttraumatic stress and Dissociation scale demonstrated significantly higher in children with history of abused. This shows the Depression, Posttraumatic stress and Dissociation scale have ability to discriminate samples of abused children from non-abused children, implied these scale are essential indicators for mental health in abused children. For Anxiety, Anger and aggression and Sexual problem scale are also higher in abused children sample group but not significantly, that the scales have inappropriate of concurrent validity.

As expected, Depression, Posttraumatic stress and Dissociation scale demonstrated significantly higher in abused children, consistence to characteristics of the test as several study provided data that support concurrent validity of these scales. Thereof, abused children usually have emotional difficulties, ineffective, withdrawal,

inattention, loss of power and low energy (Somphop Ruerngtrakul, 1999). The study of Allen and Tarnowski (1989) to compare abused and non-abused children founded children with history of abuse are more depress, hopeless and less self-esteem than non-abused children. In addition, the children who have histories of stressful or traumatic events that threaten their life, both physical and psychological, usually responds to traumatic experienced with posttraumatic stress. This psychopathology is a specific trauma symptoms that aggravate by traumatization, that caused posttraumatic stress is remarkably symptom of abused victims. Correlate with study of Breslau and colleague (1991 cite in Yehuda, 2002) uncovered that 39% of person having history of abused experienced posttraumatic stress. Similarity to dissociation, the process of "splitting" by which physiological and psychic process interferes with normal pattern of thinking, feeling, and behaving and disrupted usual associations of data and experience. The children tend to use loss of memory as defence mechanism from painful trauma so abused children almost having dissociation, cause of misperception.(Putnam, 1993 cite in Kari Killen, 2001). The study of Macfie and colleague(2001) about dissociation symptoms in 45 abused and neglected children compared with 33 non-abused children, founded the symptoms are presence in abused sample group more than non-abused group.

In this research Anxiety, Anger and aggression and Sexual problem scales also have different between 2 sample groups but not significantly. Though Anxiety and Aggression are effects from abuse but are also found in child and adolescent who are not abused (Finch, Lipovsky & Casat, 1989; King, Ollendick & Gullone, 1981 cite in Graham & Naglieri, 2003). The study of Saroch Kamrat (1979) was supported, 35% of school aged children tend to be typical of emotional sensitivity, worrying, high anxiety that suggested the incident of mental health problem in adolescent are increasingly. Likewise study of Plernpit Chantarasak (1998) that used SCL-90 to survey mental Health in adolescent, reveals 38.2% of sample group are typical of hostility higher than normality and 45.9% have typical of phobic anxiety are also higher than norms. This evidence may be imply that Anxiety and Aggression are important problems both of abused and non-abused child and adolescent equally.

Suggested to caregiver, teacher or all of parties concerned should regarded to such problems in non history of abused child as abused. Additional, though abused children learning and modelling aggressive that they have received, they may used internalize defence mechanism changing aggressive into self-degenerate behavior, depress, ineffective, indifferent and withdrawal and all of these symptoms presence in Depression scale of this research. So, the scores of abused group of Anger and aggressive scale are demonstrated not higher than non abused group significantly.

For Sexual problem scale regarding to thinking, feeling, or behaving which negative response to sex, inappropriate sexual response, sexual preoccupied and sexually provoking behaviors. This scale not found significantly different, too. May because all of these symptoms especially appears in sexual abused victims (Friedrich, 1993: 59-66) but this study not have to classified type of abuse clearly caused the Sexual problem scores not have significantly distinction between 2 sample groups. In addition, the factors that maybe related to differentiate between scores of each clinical scale are imbalance of sample size, abused child's individual factors such as type, duration and frequency of abuse, the duration of treatment or intervention that the child received. These factors may effects severity of each symptom if it have contained in the study, it will make the research more precisely.

In the nutshell, the Mental Health Screening Test for Abused Children which the researcher selected only scales with discrimination power, remaining of Depression, Posttraumatic stress and Dissociation scale are accepted psychometric validity both content and concurrent validity and the scales relatively high internal consistency. Thereby the test is available to be instrument for screening abused children in depression, posttraumatic stress and dissociation symptoms so researcher took these qualified scales to determined proper cut off point by analyzed sensitivity and specificity of each clinical scale.

Scoring and Determining for cut off point

Examination of concurrent validity on individual scale of the test reveals Depression, Posttraumatic stress and Dissociation scale are essential indicator for mental health of abused child. So, the researcher took these scale to define proper cut off point to screening abused children with mental health problem. Pirom Kamolrattanakul(1990 cite in Charntong Lailerd, 1992: 46) suggested the criteria for selected cut off point should considered a harmful if the result is false(false positive and false negative) and a resource if the result is true(true positive and true negative), the incident of disease, sensitivity and specificity of the test. Tutsanee Nuchprayoon and Termsri Chamnijarakij (1998) have presented, qualification of screening test should be considered sensitivity and specificity, must be pleasurable and acceptable. If the disease is severity, important in public health, curable or can prevent if can detect it in early and use correct intervention. The cut off point require high sensitivity for efficiency in screening all person who have difficulties.

Cut off point of Depressive scale is 13, sensitivity is 60% and specificity is 75.85%.

Cut off point of Posttraumatic stress scale is 12, sensitivity is 51.51% and specificity is 55.36%.

Cut off point of Dissociation scale is 8, sensitivity is 60.60% and specificity is 51.95%.

Thereabout, sensitivity and specificity of the scales are relatively moderate, and equally. The researcher selected cut off point that have more sensitivity though the specificity quite low, that make the result have many “false positive”. But it’s useful if the next step of diagnosis is low cost, not harmful for subjects, and able to do frequently. (Tutsanee Nuchprayoon and Termsri Chamnijarakij, 1998) So, if the sum of scores of individual scale touched cut off point, suggested the children may experience difficulty in each symptoms.

Finally, the result of this research is the Mental Health Screening Test for Abused Child, consist of 3 scales: Depression, Posttraumatic stress and Dissociation scale, the significant symptoms of abused children. The test have efficiency and accepted psychometric qualities to be screening test which useful for multidisciplinary team to screening for abused child with mental heath problem. Screening is as important as diagnosis because it's the way to find out the person who tend to fall ill in coming, and if they received correct intervention may the prognosis altered to be good and decrease severity. This screening test able to used in planning appropriate treatment, evaluate the effective of treatment and follow up. Moreover, the therapist can used item's details to obtain basis data for counselling or psychotherapy in further. Cut off point of each scale have proper sensitivity and specificity but in another sample groups the cut off point is changeable by purpose, however. In addition, result from test is only primarily data should not be considered in isolation, the evaluator should assessed include of battery of relevant standard psychological tests, clinical interview and corollary information (i.e. parent, teacher, medical personnel) as necessary for an accurate diagnosis.

Recommendation

1. Recommendation from result of the research

1.1 The data from Mental Health Screening Test for Abused Child is only primarily, should not considered in isolation. If any symptoms are detected, the evaluator asked to assess a traumatized child is advised to include a battery of relevant standard tests or more clinical interview and corollary information such as from parent, teacher, medical personnel as necessary.

1.2 This research demonstrate that depression, posttraumatic stress and dissociation are essential indicator for mental health of abused children which in helper team should concern and pay attention when planning for therapeutic and rehabilitation program.

1.3 Anxiety, Anger and aggression and Sexual problem scale that were not significantly distinction, it's also attend in evaluation a traumatized children by using the item's detail to be basis data for counselling or psychotherapy.

1.4 This research uncovered, the scores of Anxiety and Anger and aggression scale both of abused and non-abused sample groups are indistinguishable, implying the children who have no histories of abused are also have trouble with anxiety and anger and aggression, too. Thus all parties concern should recognize and pay attention for child and adolescent's mental health especially in such symptom.

2. Recommendation for next research

2.1 Psychometric characteristics of the test must be study more, such as predictive validity or criterion related validity by compare with other standardize psychological tests for more properly and more reliable.

2.2 The test maybe study in larger sample size and considered more individual factors such as type of abuse, duration and frequency of abuse, and the duration of treatment that children received for more advantage in studying child abuse.

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APPENDIX

APPENDIX A

The Mental Health Screening Test for Abused Child

ชื่อ-สกุล.....เพศ.....

อายุ.....

การศึกษา.....

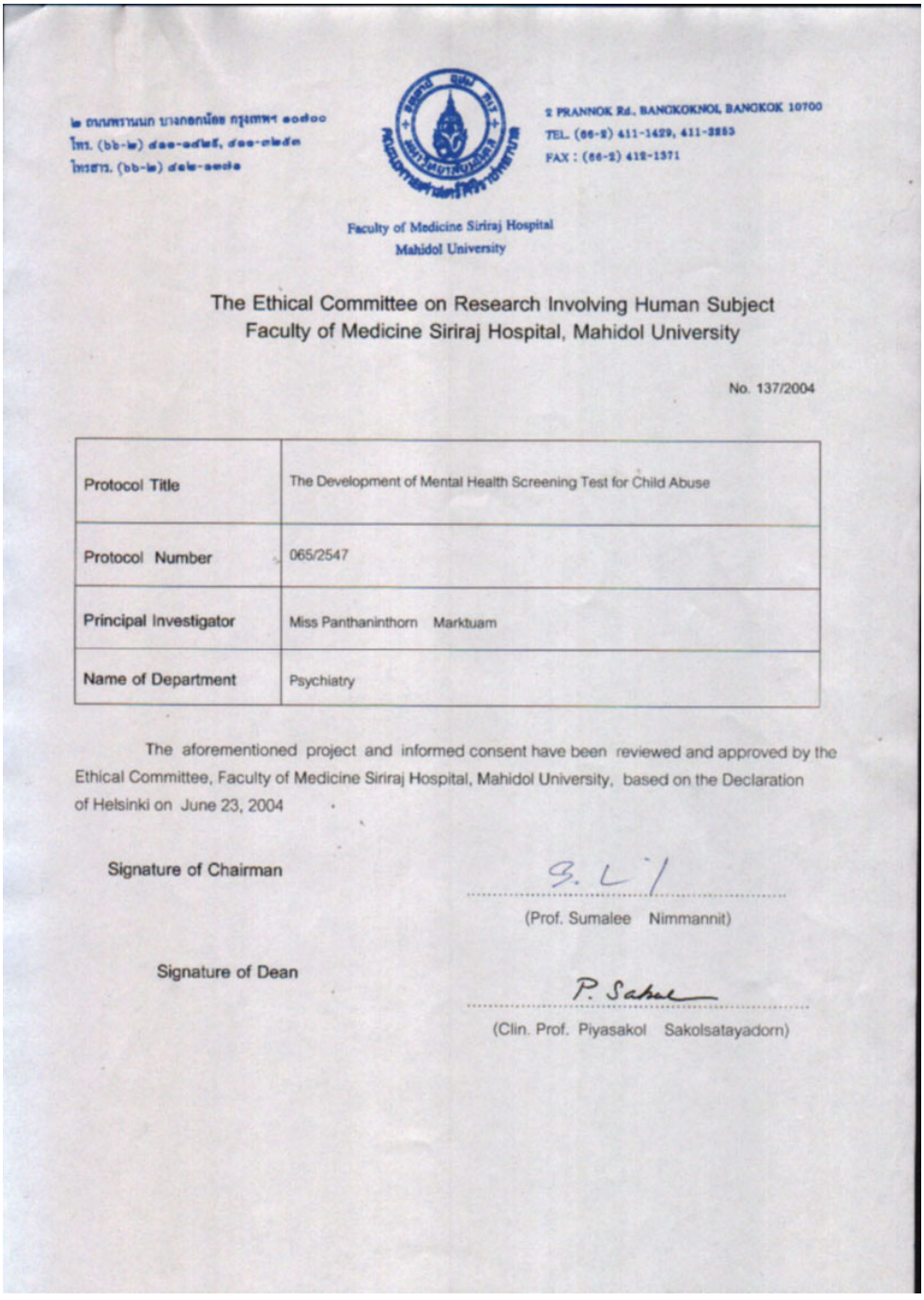
ทดสอบวันที่.....

คำแนะนำในการทดสอบ

ประโยคต่อไปนี้เป็นข้อความเกี่ยวกับความคิด ความรู้สึกหรือพฤติกรรมบางส่วนของท่าน โปรดอ่านแต่ละข้อความอย่างระมัดระวัง แล้วพิจารณาว่าท่านมีความคิด ความรู้สึกหรือพฤติกรรมดังกล่าวมากน้อยเพียงใด ประโยคทั้งหมดนี้ไม่มีคำตอบถูกหรือผิด ให้เลือกตอบในข้อที่ตรงกับความเป็นจริงในตัวท่านมากที่สุดโดยใส่เครื่องหมาย ✓ ลงในช่อง □ ที่ต้องการ โดยเลือกเพียงข้อละ 1 คำตอบ

ท่านเคยคิด/รู้สึก/หรือเคยมีพฤติกรรมตามข้อความต่อไปนี้มากน้อยเพียงใด	ไม่เคยเลย	บางครั้ง	บ่อยๆ	เกือบตลอดเวลา
1. รู้สึกกลัวคนจะทำร้าย				
2. จำในสิ่งที่ฉันไม่อยากจำ				
3. มีความคิดหรือภาพที่น่ากลัวผุดขึ้นมาในใจฉัน				
4. รู้สึกโดดเดี่ยวไม่มีใคร				
5. อยากร้องไห้				
6. รู้สึกว่าตัวเองโง่				
7. รู้สึกเสมือนกับว่าฉันเป็นคนอื่น				
8. จิตใจเลื่อนลอย				

APPENDIX B
The Ethical Committee on Research Involving Human Subject
Faculty of Medicine Siriraj Hospital, Mahidol University



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The Ethical Committee on Research Involving Human Subject
Faculty of Medicine Siriraj Hospital, Mahidol University

No. 137/2004

Protocol Title	The Development of Mental Health Screening Test for Child Abuse
Protocol Number	065/2547
Principal Investigator	Miss Panthaninthorn Marktuam
Name of Department	Psychiatry

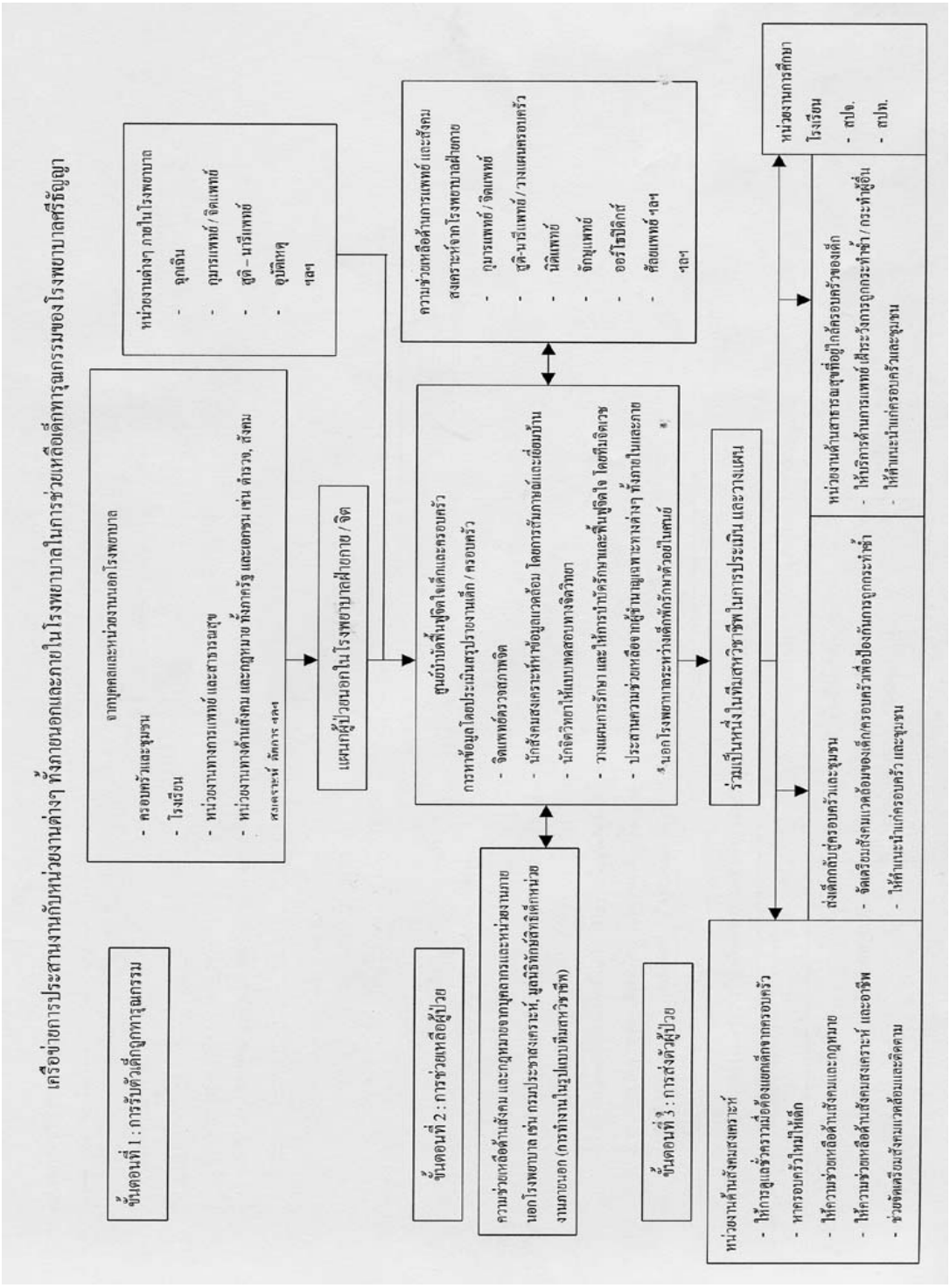
The aforementioned project and informed consent have been reviewed and approved by the Ethical Committee, Faculty of Medicine Siriraj Hospital, Mahidol University, based on the Declaration of Helsinki on June 23, 2004

Signature of Chairman .....
(Prof. Sumalee Nimmannit)

Signature of Dean .....
(Clin. Prof. Piyasakol Sakolsatayadorn)

APPENDIX C

The Diagram of Working Process of Nonthaburi's Care Network for Abused Child



BIOGRAPHY

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