

CHAPTER V

DISCUSSION

The study was undertaken to develop an effective instrument of the Mental Health Assessment Tool for Thai Older Adults. The purpose of this study was to develop mental health assessment tool for Thai older adults.

The discussion in this study is divided into: 1) the number and characteristics of participants, 2) discussion of the focus groups and indepth interviews data, 3) discussion of the evidence of the validity, 4) discussion of the evidence of the reliability, and 5) strength and limitations of the study.

5.1 The Number and Characteristics of Participants

5.1.1. The Number of Participants

The sample size of the MHAT-T, 1,266 older people was sufficient for the generalization of the target population and reducing sampling error. According to formulation of Levy and Lemeshow (1999), the sample size should be recruited at about 440 subjects. In additional, Dixon (2001) suggested the number of respondents met the ratio of respondents per item, which would be 10:1 or at least 1,000. Comrey and Lee (1992, cited in Tabachnick & Fidell, 2007) reported a glide sample size for factor analysis considered that the sample size of 300 cases was good; however, 500 cases as very good.

5.1.2. The Characteristics of Participants

Considering the heterogeneity of the sample, data were collected from various settings using a multi-stage sampling method. The variety of the sample characteristics in the current study suggested that the MHAT-T used with older adults believing in Buddhism, Islam, and Catholicism and living in rural and urban areas, as well as with various demographic types (e.g., education, occupation, health status, and marital status). Thus, the sample was good representative people of Thai elderly.

However, approximately two-third of the sample was women and the numbers of elderly were illness more than healthy people. As a result of the instrument is suitable for assessment mental health of Thai elderly particularly successful aging having coping and adaptive well.

5.2 Discussion of the focus groups and indepth interviews

The purpose of the first step in this study was to identify the domain of mental health for Thai older adults. The investigator conducted methods of focus group discussions and in-depth interviews exploring mental health dimensions.

Focus groups and indepth interviews were appropriate for instrumental developing because of getting data from insider perspectives. Their views have been embalmed of their lives and learning experiences of different cultures (Pike, 1954). It was powerful data obtained from focus groups. Phenomena represented similar meaning or intentional dimension of domains. The developmental domains of mental health in current study were divided age into two groups: aged 60-70 years old and aged 80 years and over because young older adults expressed opinions more than old older adults. Like other studies (Plieehor, 2001) most older people aged 80 years and over did not participate with the group and young older adults who were well off financially sat in the front row during rituals and ceremonies, while, other older adults stayed at the middle or back row. In addition, socio-economics in the Thai tradition is more influenced in focus groups. Gray, Kramamon, and Thapsuwan (2008) explained that the effect of income and debt predicts mental health or happiness in the Thai context. Chayovan and Knodel (1997) identified that the younger older adults earn higher income than the older elderly.

5.3 Discussion of the evidence of the validity

For a major part of methodology: the construct, concept and scale are described by using validity testing to clarify the ideas and understand phenomenon (Mishel, 1998; De Vellis, 2003; Burns & Grove, 2005). Discussion of the content validity, construct validity and criteria validity were described as follows.

5.3.1 Content-Related Validity Evidence

The content validity in the current study was acceptable; it was higher than other studies. The reasons for this were various sources: directly interview participants, review literature, and experts. Different previous studies (Ingersall, Sengtienchai, Kespichayawattana, & Aungsuproch, 2004; Namdej, 1996), this study used indepth interviews and focus groups to test specification theory.

Scale was score divided at one point of a four-point scale for agreement (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree). The scale can classify mental health for Thai older adults because it was evaluated by the 15 older adults with different religious in the northern, northeastern, central and southern regions and the Bangkok Metropolitan Area. Like studies (Lynn, 1986), scale should be return to participants.

5.3.2 Construct-Related Validity Evidence

Construct validity is directly concern with the theoretical relationships of a variable (DeVeliis, 2003). In this study, construct validity was described as construct-related evidence of validity by 1) factor analysis, and 2) contrasting groups.

5.3.2.1 Construct-related evidence of validity by factor analysis

Before conducting factor analysis, the investigator must consider the number of subjects, univariate analysis, bivariate analysis and multivariate analysis. One thousand two hundred sixty-six subjects in the current study were adequate (Comrey & Lee, 1992 cited in Tabachnick & Fidell, 2007). Univariate analysis helped described skewness and kurtosis with a zero value indicating distribution was normal (Tabachnick & Fidell, 1996). The slightly negative skewness and slightly peaked kurtosis were found in the current study that showed nearly normal distribution. Bivariate analysis was conducted by item correlation. Other studies (Nunnally & Berstein, 1994; Striener & Norman, 1995) reported correlation with at least one other variable should be at least 0.30. To determine multivariate analysis, the χ^2/df ratio less than 3 was an acceptable recommended threshold (Kline, 1998), and for this study was acceptable.

Determinants of mental health

The determinants of mental health have been reported across studies. A core concept was comprised of five domains: 1) family attachment, 2) mental quality, 3) social well-being, 4) mental status, and 5) mental capacity. The domains were congruent with Mongkol et al (2001) found that Thai mental health was composed: 1) mental status, 2) mental capacity, 3) mental quality, and 4) supporting factors. Like studies (Keyes, 2003), this study found social well-being effect on mental health of older adults.

However, the study was obtained specific domains suitable for Thai older adults such as family attachment and social well-being. The result was different from study of Ingersall, Sengtienchai, Kespichayawattana, and Aungsuproch (2004) identified that interdependence influenced on psychological well-being of older adults. Therefore, the MHAT-T can directly assess mental health of Thai older adults.

The details of discussion about resulting factors are presented as follows:

Factor 1: Family attachment

Family attachment can be defined as feelings and a show of love in one's own family, including having respect, harmony, warm contact, security and caring in the family.

Like other studies, (Tomana & Srisuchart, 2005; Polnin, Padungyam, & Kawlraya, 2005), these studies found that older people expected valued, honored, senses of obligation from their children. As a result of religion, Buddhists think that all things in the world are produced by predestined relationships (*Karma*); all things are living from conditional causation (Ghose, 2007). The members of family must been thought to love one another (Phayutto, 2007). A sense of parental entitlement in terms of *Katanyu Katavedi* is taught in the Thai family. Children are taught to respect older people and provide care to their parents (Knodel, & Chayovan, 2008, 2009). As Muslim emphasize the duty of every family to conduct and to be responsible for the Islamic faith and commit to children, thus leading to caring and harmony in the family (Jitmound, 1992; Vongson, 2003).

Factor 2: Mental quality

Mental quality is defined as the ability of give up on the difficulties of life among tolerance, patience, the spiritual bond of your mind, the religious practices that lead to peace of mind, consciousness, making decisions, and learning applied to daily life.

Similar to other studies (Mongkol et al, 2001); kindness and altruism were subcategories in mental quality. As a result of religion, the law of karma (doing good deeds, individuals will get rewarded in return), Thai older adults must collect virtue by making merit such as giving food to a priest (Dongrmonungkorn, 2002; Ghose, 2007), as well as they must have sympathy, empathy, and faith (Bhatt, 2008).

Patience and mindful consciousness emerged from Thai older adults. Buddhism explains the three fundamental states of mind: craving, hatred and state of dynamic flux (Ekman, Davidson, Richard, & Wallance, 2005). If the sources of mind are not balanced between self and others or real and unreal, the toxin in the mind brings mental suffering. Patience and mindfulness practice is a cognitive set that enables individuals to adapt and relates to positive reappraisal (Brown, & Kasser, 2005; Gerland, Gayload, & Park, 2009). These categories might have religious influence on Thai older adults' thoughts, words, and actions.

Factor 3: Mental status

Mental status can be defined as feeling peace of mind, joyful, optimistic, self-esteem, life satisfaction, and happy.

Similar to other studies (Mongkol et al., 2001; Ingersoll, Saengtirnchi, Kespichayawattana, & Aungduroch, 2004), this studies found positive affect or emotion significant aspect of mental health. Happiness as positive emotion is interchangeable with mental health in Thai older adult perspectives (Mongkol, 2001). Joy and optimism are a basic feeling of happiness in Thai culture. Thai older adults have joyfulness; when they sing and joy with their group such as during the harvesting the rice (Ingersoll, Saengtirnchi, Kespichayawattana, & Aungduroch, 2001), being a member of home visit project (Kunanuwatchaidech, 2000), and joy with the village elderly club (Lopanich, 2001). Self-esteem and optimism are the strongest predictors of positive affect (Mahon, & Yarcheski, 2002; Myers, McCollam, & Woodhouse,

2005). In addition, Life satisfaction often is used as an interchangeable term with happiness (Mongkol, 2001; Haybron, 2003).

Factor 4: Social well-being

Social well-being is defined as feeling friendly, stable, secure, and society adds the value of dignity and respect for older adults, including help when requested.

Similar to other studies (David, Oi, Anthoney & Kevin, 2008; Ferna'ndez & Alfredo, 2007; McNicholas, 2001; Seeman & Chen, 2002), for this study social network and social support were significant predictors of mental health outcome in older adults. Keyes explained society acceptance as an important value to older adults (Keyes, 2003). In addition, the level of social support to respect, empathy, love, and close friends' expressions of understanding influenced on mental health (Finfgeld-Connett, 2007; Kurland, Gill, Patrick, Larson & Phelan, 2006).

Compare with other studies, Kuhirunyaratn, Pongpanich, Somrongthong, Love and Chapman (2007) found that community health staff are important sources of support among older adults. However, this current study, community health staff did not influenced on mental health of Thai older adults.

Factor 5: Mental capacity

Mental capacity is defined as the ability to manage stress, coping and adaptive process, and sympathy.

According to Davis and Buskist (2008), mental capacity is the individual's ability to release stress. Like other studies (Ehlert & Straub, 2007; Vaillant & Mukamal, 2001), this studies showed coping and adaptive process are methods and defense mechanisms which could predict well-being.

Regarding Thai culture, Buddhism involves both happiness and mental capacity (Ekman, Davidson, Richard, & Wallance, 2005), including mental quality. Mental quality refers to empathy, sympathy, faith and transcendence (Bhatt, 2008). Although, mental capacity refers to mental functioning, older adults believe sympathy is one functioning in daily life, this may be because society expects older adults which to have sympathy.

5.3.2.2 Construct-related evidence of validity by contrast group approach

Construct validity was supported by the MHAT-T to detect differences in mental health among groups of subjects. Using interdependent t-test, significant mean differences were found among older adults in community and older adults with depression who were diagnosed by the doctor with the following factors: family attachment, mental capacity, mental quality, and social dignity and support. However, mental status of the MHAT-T discriminates that older adults in community and older adults with depression were not different in the current study, which might be related to treatment. Most older adults with depression had been treated for at least two months, so they could control their emotions, thinking perception and performance.

5.4 Discussion of the evidence of the reliability

Reliability of the MHAT-T had been estimated across studies by internal consistency, and test-retest stability. The internal consistency and test-retest stability were estimated in this study. The overall results that the MHAT-T was a good acceptable reliability to measure mental health for Thai older adults.

The internal consistency coefficients of the MHAT-T were good reliability for a new instrument. Cronbach's alpha coefficients were used to estimate the internal consistency reliability of the revealed 0.91 in the main study (N=1,266). The criteria of Cronbach's alpha coefficients should be at least 0.7 in a newly developed instrument (Nunnally & Berstein, 1994).

The alpha of the MHAT-T in the current study was high because of the impacts of the number of subjects and the number of items on internal consistency. Similar to other studies (Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aunguroch, 2004; Namdej, 1996), this study reported an acceptable internal consistency. Among 460 older adults, Cronbach's alpha of 0.82 (interpersonal well-being index) and 0.69 (intrapersonal well-being index) was reported for the 15 items of psychological well-being insights for Thai elders (Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aunguroch, 2004). Among 248 older adults, Cronbach's alpha

of 0.85 was reported for the 42 items of psychological well-being in the construction of mental health screening test of the aged (Namdej, 1996). In addition, the alpha of 0.93 was reported in the larger (1,800 subjects), heterogeneous samples, including agriculturalists ($n = 465$), government officers ($n = 373$), and office workers ($n = 318$) etc. (Otrakul, Charoenkul, Smithtikrat, Tantipiwatanaskul, & Krabwong, 1997).

According to Ferketich (1991), item total correlation as homogeneity is supported by the large percentage of the scale items. Using the criteria that items with a score of less than 0.30 should be deleted, 20 items were deleted in the pilot study. Thus, the item total correlation of the MHAT-T was high and ranged from 0.763 to 0.877 because 20 items lower than 0.3 were deleted in the pilot study.

Test-retest reliability was acceptable; it was higher than the other studies. As a result of timing and the attributes of mental health construct, the time is different for the test. Eight months and three weeks are commonly used to test for stability. In this study, the Pearson Moment Correlation of the MHAT-T was 1.00 in mental capacity, mental quality and social well-being dimensions within two weeks. Compared with other studies, test-retest reliability ($r = 0.68$) of psychological well-being insight from Thai elders was reported within three weeks (Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aunguroch, 2004). Test-retest correlation was 0.43 for the index of well-being and for the index of general affect among eight months (Campbell, Coverse, & Roders, 1976). Two weeks seems to produce higher test-retest reliability than three weeks, which might be related to the learning effect.

The different attributions of mental health constructs in the current study and the previous studies may explain the different findings. The stability of the MHAT-T was higher than the previous recruited by Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aunguroch (2004). The ICC of 0.68 indicated the stability of psychological well-being index in 460 older adults aged 60 years and over (Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aunguroch, 2004). A result of the attribute of the MHAT-T measured a stable concept that was constant overtime such as mental capacity, mental quality and social well-being.

Like other studies (Burns & Grove, 2001), this study reported some constructs such as hope changed all the time little or much up to the situation we measure. The study of Bradburn (1969) reported the happiness construct as mental

status. The ICC of 0.45 indicated the lower level of stability because it changes from day to day. The ICC of 0.544 was reported in the stability of the MHAT-T, respectively, indicating mental status can change over a short period.

5.5 Strengths and limitations of the study

Strengths of the study

This study is a pioneer instrument in using assessment test to measure mental health for Thai older adults. The appropriateness of the MHAT-T supported psychometric properties for Thai older adults.

The MHAT-T is suitable instrument for assessment mental health for Thai older adults as follows:

1. Instrument was established from participants, literature reviews, and experts
2. Instrument was established from various characteristics of participants (i.e. gender, religion, education, living areas and etc).
3. The numbers of items are 32 items done by taking only 15 minutes.
4. Instrument is easily employed among health care providers, health volunteers, and older adults.

Limitations of the study

Limitations of the study were: 1) the number of male were less than female because in rural area male have been worked in agricultural and in urban area male have been worked at factories. On the other hand, female have been worked at home. 2) the number of depression clients were limited since most clients did not directly obtained medicine at hospital by themselves. Their cousin came to obtain.