

## Adaptation of Thai Families with Mentally Ill Young People

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**Abstract:** This study, using a descriptive cross-sectional design, aimed to examine factors predicting adaptation of Thai families caring for young people with mental illnesses. The Resiliency Model of Family Stress, Adjustment and Adaptation was used to guide the study. A total of 237 family members of young people with mental illnesses were recruited from four Thai psychiatric hospitals. Participants completed a set of questionnaires, including the: Demographic Data Questionnaire; Thai Family Stress Inventory; Life Skills Profile-20; Chulalongkorn Family Inventory; Demands of Illness Inventory; Family Hardiness Index; and, Family Adaptation Scale. Data were analyzed using descriptive statistics and structural equation modeling.

The results indicated family adaptation was associated with lower family stress, higher patient's life skills, greater family functioning, more positive family appraisal and higher family hardiness. Structural equation modeling fit indices that suggest family functioning and family appraisal of illness mediate the effect of family stress on family adaptation; thereby, suggesting family functioning and family appraisal of illness may ameliorate the effect of family stress on family adaptation. Family functioning also mediated the effect of patient's life skills on family adaptation, suggesting family functioning could reduce the effect of patient's life skills on family adaptation. In conclusion, the findings highlight the importance of family functioning and appraisal of illness in interventions aimed at reducing family stress and promoting family adaptation.

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**Key words:** Family adaptation; Family stress; Mental illness; Young people

### Introduction

Adolescence and young adulthood are considered periods of great risk for the onset of mental illnesses. The most severe and commonly diagnosed mental illnesses, in young people, are schizophrenia, bipolar disorder, depression, attention-deficit/hyperactivity disorder (ADHD) and autism.<sup>1</sup> Mental illness often has severe, long-lasting and devastating effects on the health and well-being of young people,

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their families and society. The number of young people treated for a mental illness has increased each year.<sup>2</sup> Thus, mental illnesses, in young people, are common public health problems with high treatment costs.<sup>3</sup> In Thailand, some 23.8% of young people, 15 to 24 years of age, suffer from mental illnesses.<sup>4</sup>

After a short period of hospitalization, the majority of patients with a mental illness are discharged home to their families who become their primary source of care and the ones responsible for performing their daily treatments. Research has found family members of a child with a mental illness experience significant stress, resulting in confusion, fear, shame, depression and loss.<sup>5</sup> Moreover, families have to face difficulties, related to management of symptoms; learn how to negotiate household roles; and, address needs of other family members. Families, contending with a member with a mental illness, repeatedly have been found to be stressed.<sup>6-8</sup> On the other hand, families are known to be resourceful and have the capacity to grow and change by adapting to their altered circumstances and successfully continuing to function.<sup>9</sup> Although others successfully adapt, some families, who have a member who is mentally ill, cannot cope with such stress.<sup>7,8</sup>

## **Review of Literature**

It is not clear how adaptation in families who have mentally ill young people occurs. However, prior studies, regarding the resilience of families with members who have mental illnesses, suggest knowledge about the specific illness, family hardiness, family support, family sense of coherence and family coping enhance family functioning.<sup>10</sup> Parents of children with ADHD have been found to have high levels of family stress, report greater psychosocial difficulties and deficits in family functioning, and less parental satisfaction than do parents of children without ADHD.<sup>11</sup> Also, in families who have a young person with autism, the child's behavioral problems

and level of functioning have been found to strongly predict the family's level of stress.<sup>12</sup>

Recently, investigations into how resilience factors may mediate the adaptation of families, who have a young person with a mentally ill, have begun. When confronted with the challenges of caring for a family member with a mental illness, Taiwanese families have been found to be able to develop strengths and capabilities to foster the growth and development of individual family members, as well as the family unit.<sup>8</sup> These Taiwanese family caregivers also were found to more effectively adapt when they had lower family stress, greater family resources and more positive interpretations of family caregiving. The data suggest resilience factors, such as hardiness, family functioning and family appraisal, were related to the Taiwanese families' adaptation. Family hardiness also has been found to increase adaptation and decrease demands placed on families with members experiencing psychological disorders.<sup>13</sup> Prior research, in northeastern Thailand, on family caregivers of individuals with schizophrenia, has revealed family stress and negative family appraisal decreases the adaptation of patients' mothers and other relatives.<sup>14</sup> However, the same research revealed healthy family functioning, as well as high levels of functioning among those with schizophrenia, enhance family adaptation of mothers and other relatives. Although previous studies<sup>8,10,13,14</sup> have described relationships among behavioral problems/symptoms of individuals with mental illnesses, as well as family stress, family functioning, family appraisal, family hardiness and family adaptation in families with members who have a mental illness, no studies could be located that described the causal relationships among resilience factors in families with young people who have mental illnesses.

To better understand the adaptation of families with young people who have mental illnesses, it might be helpful to consider theories concerning family stress, coping resources and responses of family members

to restore and survive. Thus, the Resiliency Model of Family Stress, Adjustment and Adaptation,<sup>15, 16</sup> was used, in this study, to examine, in families with young people who had mental illnesses, the pattern of relationships among family stress, patient's life skills, family functioning, family appraisal of illness, family hardiness and family adaptation.

The study hypotheses included:

- 1) Family functioning, family hardiness and patient's life skills have a positive direct effect on family adaptation.
- 2) Family appraisal of illness and family stress have a negative direct effect on family adaptation.
- 3) Family stress has a negative indirect effect on family adaptation through family functioning, family appraisal of illness and family hardiness
- 4) Patient's life skills have a positive indirect effect on family adaptation through family functioning, family appraisal of illness and family hardiness.

## **Guiding Framework**

The Resiliency Model of Family Stress, Adjustment and Adaptation<sup>15, 16</sup> was selected as the guiding framework for the study because it has: a) potential for guiding research that attempts to explain why families, experiencing chronic stress, are able to adapt and how such families use their strengths, resources and perceptions as components of the adaptation process; and, b) been shown to be helpful in explaining family adaptation among Thai families who have a family member with a mental illness.<sup>14</sup>

According to the Resiliency Model of Family Stress, Adjustment and Adaptation (RMFSAA),<sup>15, 16</sup> a family responds to a stressful life event in two phases, adjustment and adaptation. In the adjustment phase, a family deals with a crisis and, if successful in contending with the crisis, returns to what it perceives to be a normal situation. If a family fails to adequately contend with the crisis, it moves on to the adaptation

phase. In the adaptation phase, while continuing to face the demands of the crisis, the family utilizes resources and makes changes, as needed, to restore family stability and improve family satisfaction.

The RMFSAA contains four concepts related to the adaptation phase: pile-up of demands; family resources and capabilities; family appraisal; and, family adaptation. Six variables associated with these four concepts were included in this study. Specifically, the variables and their related concepts included: family stress and patient's life skills (pile-up demands); family hardiness and family functioning (family resources and capabilities); family appraisal of illness (family appraisal); and, adaptation of the family (family adaptation).

## **Method**

**Research Design:** A descriptive cross-sectional design was used to examine, in families of young Thais who have a mental illness, the pattern of relationships among: patient's life skills; family stress; family functioning; family appraisal of illness; family hardiness; and, family adaption. The hypothesized model is shown in Figure 1.

**Ethical Considerations:** Ethical approval to undertake the study was granted by the Institutional Review Board (IRB) of the primary investigator's (PI) academic institution and the four hospitals used as study sites. Written consent and assent were obtained from family members and their respective young people, after an explanation of the study's purpose and data collection procedure were provided. Confidentiality of data and personal identity of subjects was assured. In addition, assurance was given that they could withdraw from the study at any time without repercussions. The purpose of the study and data collection procedure also was described to the directors of nursing of each study-site hospital, so as to attain access to potential subjects.

**Sample and setting:** A stratified sampling technique was used to select four psychiatric hospitals from four regions (northern, southern, northeastern and central) of Thailand. The four hospitals served as study sites from which 237 subjects were obtained. The names of 300 Thai young people, with mental illnesses, and their respective family members were obtained from review of hospital records, as well as from nurses in the hospitals' inpatient and clinic settings.

Inclusion criteria included being an 18 year or older Thai family member (mother, father, sibling or other relative) who: (a) provided direct care to a young person, 12 to 24 years of age,<sup>17</sup> who had been diagnosed (based on ICD-10)<sup>18</sup> for at least six months prior to the study with at least one mental illness, including schizophrenia, bipolar disorders, depression, ADHD, and autism and its subtypes; (b) lived continuously, in the same household, with the young person for at least one year; (c) was able to communicate in and understand Thai; and, (d) had no history of psychiatric symptoms. A required sample size of 230 subjects was determined via use of Cochran's formula for proportions.<sup>19</sup> Although 300 family members of Thai youths with a mental illness were approached, 48 refused to participate and 15 were excluded because of: other time commitments (n = 5); feeling stigmatized due to having a family member with a mental illness (n = 3); being unable to disclose family matters because of religious principles (n= 4); and, feeling extreme tension when responding to questionnaires (n =3). Thus, a total of 237 family members consented to participate and completed the data gathering process.

The subjects, who were 18 to 76 years of age (average age = 45.6 years), primarily were: mothers (n = 129; 54.4%); Buddhists (n = 226; 95.4%); married (n = 179; 75.5%); educated at the elementary school level (n = 81; 34%); employed (n = 195 = ; 82%); impoverished (n = 103; 43.5%), with a total family income of less than 10,000

baht/month (1USD = 33 baht); involved in caring experiences for 1 to 23 years (average = 5.3 years); and, involved in accompanying their young person to outpatient clinic visits (n =199; 84%) or inpatient hospital visits (n = 38; 16%). Interestingly, 4.6% (n = 11) of the subjects had, in addition to a young person with a mental illness, another family member who was diagnosed with a psychiatric disorder.

The 237 young people, cared for by the study subjects, ranged in age from 12 to 24 years of age (mean = 17.6 years) and primarily: were male (n = 147; 62%); had a high school education (n = 55.3%); had an average of 5.29 (range 0 to 15) hospital admissions; had never been admitted to a hospital (n = 137; 57.8%); and, were diagnosed with schizophrenia (n = 99; 41.8%), ADHD (n = 59; 25%) or depression (n = 34; 14.3%). Their mean age of initial diagnosis was 13.4 years of age.

**Instruments:** A set of seven, self-report questionnaires were used, including the: Demographic Data Questionnaire (DDQ); Thai Family Stress Inventory (TFSI); Life Skills Profile-20 (LSP-20);<sup>20</sup> Chulalongkorn Family Inventory (CFI);<sup>21</sup> Demands of Illness Inventory (DOI);<sup>14</sup> Family Hardiness Index (FHI);<sup>22</sup> and, Family Adaptation Scale (FAS).<sup>23</sup> Instruments originally written in English and not previously translated into Thai (LSP-20 and FAS) were translated into Thai and then back-translated into English to assure no changes in meaning occurred during the translation process.

Prior to use of the instruments, in this study, a panel of five experts (four psychiatric/mental health nursing educators and one psychologist) were asked to assess the content validity index for scales (S-CVI) and the content validity index for items (I-CVI) for each instrument, using a scale of 1 to 4, whereby: 1 = not relevant; 2 = unable to assess relevance without item revision or item is in need of such reversion that it would no longer be relevant; 3 = relevant, but needs minor alteration; and, 4 = very

relevant and succinct. The results of content validity indexes (CVIs) of each questionnaire revealed the: TFSI had a S-CVI = 0.98 and an I-CVI range = 0.65 – 1.00; LSP-20 had a S-CVI = 0.93 and an I-CVI range = 0.65 – 1.00; CFI had a S-CVI = 0.98 and an I-CVI range = 0.80 – 1.00; DOII had a S-CVI = 0.85 and an I-CVI range = 0.55– 1.00; FHI had a S-CVI = 0.94 and an I-CVI range = 0.75 – 1.00; and, FAS had a S-CVI = 0.87 and an I-CVI range = 0.75 – 1.00. If the I-CVI was less than 1 and the S-CIV was less than 0.80, revisions were made so the individual items and entire instrument were appropriate for use with Thai families of young people with mental illnesses. In addition, prior to use in the study, the instruments were pilot tested on 30 family members similar to the study subjects. Reliabilities of the instruments, from the pilot test, revealed the following: TFSI = 0.81; LSP-20 = 0.85; CFI = 0.85; DOII = 0.85; FHI = 0.76; and, FAS = 0.85.

The PI-developed *Demographic Data Questionnaire (DDQ)* requested information regarding each subject's: age; gender; relationship to the young person with a mental illness; religion; marital status; level of education; employment status; family income; years of caring experience; accompaniment of the young person with a mental illness to the clinic or hospital; and number of mentally ill family members in the household. In addition, information was requested regarding each mentally ill young person's: age; gender; level of education; age at diagnosis; number of hospital admissions; and, diagnosis.

The 15-item *Thai Family Stress Inventory (TFSI)* was modified, by the PI from the 11-item Thai Strain Inventory (TSI),<sup>14</sup> after permission to do so was granted by the developer of the TSI. Secondary to content analysis, four items were added to the TSI that were related to: unemployment; theft and destruction of property; drug abuse; and, disagreements about mental illness. In addition, based on the experts'

recommendations, two items were modified to better fit with the entire family context and one item was modified. Thus, the TFSI consisted of 15 items that were rated on a four-point scale (0 = not at all to 3 = extremely). The purpose of the TFSI was to measure, within the past 12 months, the accumulation of stressors, strains and transitions in the family. Examples of items were: "There is conflict in my family among the family members" and "My family member abuses substances." A total score was calculated by summing across all 15 items. Higher scores indicated higher family stress. The instrument's reliability, in this study, was 0.79.

The *Life Skills Profile-20 (LSP-20)*,<sup>20</sup> a 20-item questionnaire, was used to measure perceptions of family members regarding the functionality or disability of their respective mentally ill young person that could cause stressful situations and produce changes within the family system. The scale was composed of five subscales including: self-care; anti-social behavior; withdrawal symptoms; bizarre behaviors; and, compliance behaviors. Examples of the items were: "Does this person, generally, have difficulty initiating and responding in conversations?" and "Does this person generally withdraw from social contact?" Each subject was asked to score each item as 4-3-2-1 from the most left anchor word to the most right anchor word. Examples of anchor words were: no difficulty with conversation; slight difficulty with conversation; moderate difficulty with conversation; extreme difficulty with conversation; does not withdraw at all; withdraws slightly; withdraws moderately; and, totally or nearly totally withdraws. A total score for each subscale was obtained by summing across the subscales' respective items. A total score for the instrument was obtained by summing the subscales' total scores. According to Rosen and colleagues,<sup>20</sup> the internal consistency of the LSP-20 was 0.90. The instrument's reliability, in this study, also was 0.90.

The *Chulalongkorn Family Inventory (CFI)*,<sup>21</sup> a 36-item self-report scale, was used to assess family functioning. The CFI consisted of seven subscales (with various numbers of items) addressing: problem solving (n = 6); communication (n = 5); roles (n = 3); affective responsiveness (n = 5); affective involvement (n = 5); behavior control (n = 4); and, general functioning (n = 8). Examples of items were: "Our family is able to solve daily problems that happen within our family"; "Our family can make decisions about how to solve problems"; "We always discuss whether the method or technique that our family uses to solve a problem is effective"; and, "There are a lot of bad feelings within our family". Each item was scored using a 4-point Likert-like scale (1 = "strongly disagree" to 4 = "strongly agree"). After reversal of the 12 negatively stated items, total scores for each of the subscales were obtained by summing across the subscales' respective items. A total score for the instrument was obtained by summing the subscales' total scores. Higher scores indicated higher family functioning. The CFI has been widely used, in Thailand, due to being culturally appropriate and being shown to be a valid instrument.<sup>14,24,25</sup> The instrument's reliability, in this study, was 0.91.

The *Demands of Illness Inventory (DOII)* was a 19-item self-report scale, translated and modified by Rungreangkulkij and colleagues<sup>14</sup> from the original DOII scale,<sup>26</sup> that appraised the demands placed upon a family unit, as a result of having a mentally ill family member. Examples of items were: "Having a young person with mental illness in my family causes the family to: Prioritize things; Feel burdened; Want him/her to stay in the hospital; and, Want him/her to be healed." Possible item responses were "not at all" = 0 to "extremely" = 3. Prior to calculating the instrument's total score, the negatively stated item (#19) score was reversed. The total score, which could range from 0 to 57,

was obtained by summing response scores across all 19 items. The lower the score, the less negative one's appraisal was regarding the young person's mental illness. Prior research found Cronbach's alpha for the instrument to be 0.90.<sup>14</sup> Reliability of the instrument, in this study, was 0.87.

The *Family Hardiness Index (FHI)*, developed by McCubbin and Patterson<sup>27</sup> and translated into Thai by Santati,<sup>22</sup> was a 20-item questionnaire designed to measure the characteristics of hardiness as a form of stress resistance and adaptation of resources within the family. The instrument consisted of three subscales (commitment, challenge and control). Examples of items were: "We believe things will work out for the better if we work together as a family"; "We seem to encourage each other to try new things"; and, "Trouble results from mistakes we make." Each item had a possible response of: 0 = false or 3 = true. Scoring was reversed for the 9 negatively stated items. To obtain a total score for each of the subscales, the item responses were summed across relevant items. A total score for the entire index was obtained by summing the three subscale total scores. The total score could range from 0 to 60. Higher scores, for the entire instrument, suggested higher family hardiness. Previous research found the reliability of the *FHI* to range from 0.79 to 0.89<sup>13,22,28,29</sup> Reliability of the instrument, in this study, was 0.79.

The *Family Adaptation Scale (FAS)*,<sup>23</sup> an 11-item, three subscale questionnaire with semantic differential items, was used to measure: satisfaction with internal family fit (individual to family unit); family-community fit; and, a combination of both family fit and family-community fit. Examples of items were: "Are you satisfied belonging to your family?" and "Are you satisfied with your family's way of life?" Possible item responses (extreme anchor phrases) ranged from 1 = dissatisfied to 7 = completely satisfied. Each subscale's total score was

obtained by summing the item responses across relevant items. The instrument's total score was obtained by summing the total scores for the three subscales. The instrument's total score could range from 11 to 77. Higher scores suggested a greater level of family adaptation or balance between demands and capabilities within the family. Prior research found Cronbach's alpha for the *FAS* to range from 0.85 to 0.91.<sup>23,29</sup> The instrument's reliability, in this study, was 0.88.

**Procedure:** After subjects, meeting the inclusion criteria, were identified and consented to be in the study, data were collected, in different locations in quiet settings or in a nearby hospital conference room, by the PI and two master's prepared clinical psychiatric nurses who served as research assistants (RAs) trained in the data gathering process. The questionnaires were administered, via interview by the PI or a research assistant, to those who were illiterate. Subjects who were literate were allowed to complete the questionnaires on their own or have the questionnaires administered by interview. In order to address any questions or concerns, the PI or one of the RAs were present during completion of the questionnaires. It took each subject approximately 45 to 60 minutes to complete all seven questionnaires. The PI or one of the RAs reviewed each completed set of questionnaires to assure all items had been answered and clearly marked, and number coded for identification purposes. Referral information was provided (i.e. phone numbers for hot-lines, emergency clinics, primary care systems or social welfare) when questions regarding the health of a family member arose.

**Data Analysis:** Descriptive statistics were used to assess the demographic characteristics and calculate the instruments' scores. Structural equation modeling (SEM), through the Linear Structural Relationship (LISREL), was performed to test the four study hypotheses and examine the structural relationships among the hypothesized model. The

statistical assumptions of multivariate testing, in this study, did not violate the criteria for SEM. The SEM analyses consisted of the: 1) PRE-processor for LISREL (PRELIS) procedure being performed for data preparation in a covariance matrix form; 2) measurement models being tested for construct validity by confirmatory factor analysis, using the covariance matrix of each variable component; and, 3) measurement models being joined together to make a construct model and be tested as a causal model. The full model was tested for adequacy prior to modifications for better fit and parsimony. The final model was used to test the hypotheses.

## Results

**Relationships between family adaptation and other variables:** The descriptive statistics for the study variables are presented in **Table 1**. Correlations among the study variables were analyzed, using Pearson's correlation coefficient, and are shown in **Table 2**. For measurement model testing, four measurements (patient's life skills, family functioning, family hardiness and family adaptation) were tested. The findings indicated all measurement models had an acceptable overall model fit to the sample data. All factors loaded were substantial and significant. The SEM was employed to test the hypothesized full model (see **Figure 1**). The overall model fit of the hypothesized model analysis demonstrated an inadequate fit to the data. Thus, the hypothesized model was modified by using the modification indices and theoretical support.

As shown in **Figure 2**, the modified model revealed a fit to the data. The model explained 36% of variance in family adaptation. As shown in **Table 3**, the analysis of causal relationships of family adaptation, in Thai families of young people with a mental illness, consisted of direct, indirect and total effects.

**Table 1** Descriptive Statistics of Study Variables (n = 237)

Variables	Possible Range	Actual Range	Mean	Median	Mode	SD	Sk	Ku
Family Stress	0-45	0-33	10.90	9.77	5.00	7.11	0.77	0.17
Patient's Life Skills	20-80	26-80	62.83	64.06	65.00	10.49	-0.54	-0.07
Family Functioning	1-144	54-143	112.76	115.05	119.00	15.60	-0.70	0.76
Family Appraisal of Illness	0-57	3-55	26.22	25.00	23.00	11.36	-0.35	-0.47
Family Hardiness	0-60	19-60	45.09	46.00	54.00	8.01	-0.63	0.04
Family Adaptation	11-77	31-77	66.30	68.23	77.00	8.70	-1.11	1.28

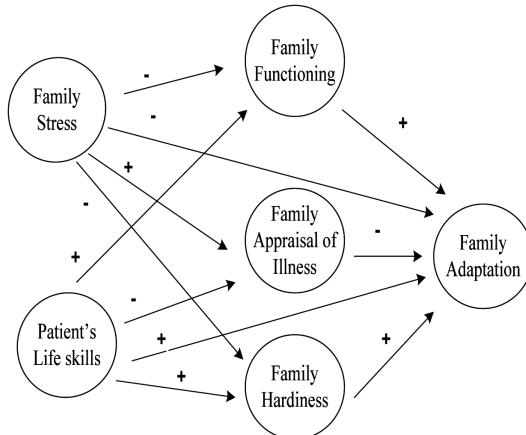
Note: SD = Standard Deviation; Sk = Skewness; Ku = Kurtosis

**Table 2** Correlation Matrix of Study Variables (n = 237)

Variables	FS	PLS	FF	FAP	FH	FAD
FS	1.000					
PLS	-0.369**	1.000				
FF	-0.469**	0.418**	1.000			
FAP	0.446**	-0.225**	-0.226**	1.000		
FH	-0.282**	0.322**	0.722**	-0.141**	1.000	
FAD	-0.313**	0.351**	0.573**	-0.257**	0.456**	1.000

Note: \*\*p < .01

FS = Family Stress; PLS = Patient's Life Skills; FF = Family Functioning;  
FAP = Family Appraisal of Illness; FH = Family Hardiness; FAD = Family Adaptation



$\chi^2 = 453.50$ , degree of freedom = 160, p-value = 0.000,  $\chi^2/\text{df} = 2.83$ ,  
RMSEA = 0.088, GFI = 0.84, and AGFI = 0.79

**Figure 1** Hypothesized Model of Family Adaptation in Families of Young People with Mental Illnesses

Table 3 Total Effects, Indirect Effects and Direct Effects of Causal Variables on Endogenous Latent Variables

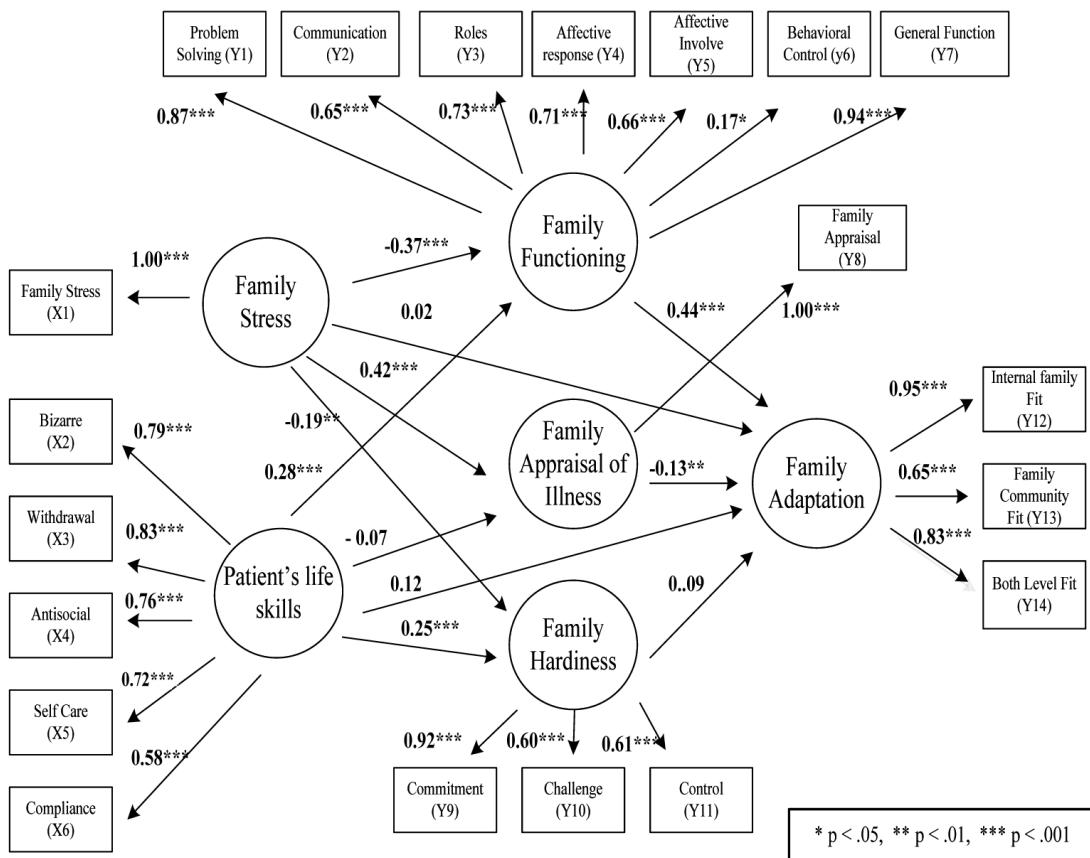
Causal Variables	Affected Variables										
	Family Functioning			Family Appraisal of Illness			Family Hardiness			Family Adaptation	
TE	IE	DE	TE	IE	DE	TE	IE	DE	TE	IE	DE
Family Stress	-0.37***	-	-0.37***	0.42***	-	0.42***	-0.19**	-	-0.19**	-0.21**	-0.23***
Patient's life skills	0.28***	-	0.28***	-0.07	-	-0.07	0.25**	-	0.25**	0.27**	0.15**
Family Functioning	-	-	-	-	-	-	-	-	-	0.44***	-0.44***
Family Appraisal of Illness	-	-	-	-	-	-	-	-	-	-0.13**	-0.13**
Family Hardiness	-	-	-	-	-	-	-	-	-	0.09	-0.09
Structural Equation Fit	R <sup>2</sup> = 0.29			R <sup>2</sup> = 0.20			R <sup>2</sup> = 0.14			R <sup>2</sup> = 0.36	

Modified Model

 $\chi^2 = 154.63$ , df = 136,  $\chi^2 / \text{df} = 1.14$ , p-value = 0.131, GFI = 0.94, RMSEA = 0.024

Note: TE = Total Effects; IE = Indirect Effects; DE = Direct Effects

\* p &lt; .05; \*\* p &lt; .01; \*\*\* p &lt; .001



$\chi^2 = 154.63$ ,  $df = 136$ ,  $\chi^2 / df = 1.14$ ,  $p\text{-value} = 0.131$ ,  $GFI = 0.94$ ,  $AGFI = 0.91$ ,  $RMSEA = 0.024$

Figure 2 Modified Model of Family Adaptation in Thai Families of Young People with Mental Illnesses

Regarding hypothesis 1, family functioning had a positive direct effect on family adaptation ( $\beta = .44$ ,  $p < .001$ ). However, family hardiness and patient's life skills had no direct effect on family adaptation ( $\beta = .09$ ,  $p > .05$ ;  $\beta = .12$ ,  $p > .05$  respectively). Thus, the findings of this study partially supported the hypothesis.

Regarding hypothesis 2, family appraisal of illness was found to have a direct negative effect on family adaptation ( $\beta = -.13$ ,  $p < .01$ ). However, family stress had no direct effect on family adaptation ( $\beta = .02$ ,  $p > .05$ ). Thus, the findings of the study partially supported the hypothesis.

Regarding hypothesis 3, family stress had a negative indirect effect on family adaptation ( $\beta = -.23$ ,  $p < .001$ ) through family functioning and family appraisal of illness. However, family stress was found not to have a negative indirect effect on family adaptation through family hardiness. On the other hand, family stress had a negative total effect on family adaptation ( $\beta = -.21$ ,  $p < .01$ ). Thus, the findings of this study partially supported hypothesis 3.

Regarding hypothesis 4, patient's life skills had a positive indirect effect on family adaptation ( $\beta = .15$ ,  $p < .01$ ) through family functioning. However, no positive indirect effects on family adaptation

were found through family appraisal of illness and family hardiness. On the other hand, patient's life skills had a positive total effect on family adaptation ( $\beta = .27$ ,  $p < .01$ ). Thus, the findings of this study partially supported hypothesis 4.

## Discussion

The fact family functioning was found to have a positive direct effect on family adaptation is congruent with findings of previous studies.<sup>14,30</sup> This finding also validates the resiliency model in that family functioning was the mediator to predict satisfaction in family life.<sup>16</sup> In addition, the finding suggests assisting families of young people with mental illnesses, without encouraging the functioning of the families, would not be beneficial for promotion of adaptation within these families.

Contrary to a prior research,<sup>13</sup> family hardiness was found not to have a direct effect on family adaptation. This may be because family hardiness was overshadowed by family functioning, as analyzed by use of structural equation modeling. However, correlations, among the studied variables, showed a high positive correlation between family functioning and family hardiness (see Table 2). This finding is similar to those of prior studies,<sup>10</sup> wherein family hardiness has been shown to have a positive relationship with family functioning within families who have a family member with a mental illness.

A possible explanation of the study's finding that family hardiness did not have a mediating effect on family stress and adaptation might be that family hardiness serves as a stress buffer only when the stressor is particular pernicious. Moreover, it might be that family hardiness is interrelated to family functioning and family appraisal of illness. No prior studies could be located that examined, among families of young people with a mental illness, the influence of family stress on family hardiness.

Contrary to previous research,<sup>30</sup> the patient's life skills were found not to have a direct effect on family adaptation. In light of Saunders'<sup>30</sup> suggestions that patient's behavioral problems are important factors in predicting family functioning, among families who have a mental ill member, this finding may be due to the family stress, from facing the patient's life skills, being buffered by the family functioning.

Family appraisal of illness was found to have a negative direct effect on family adaptation which may be explained by the fact that, in this study, families of young people with mental illnesses perceived their caregiving situations as stimulating and at a low stress level (see Table 1). The presence of positive family appraisal of illness might help protect the health of family members which, in turn, could facilitate family adaptation.<sup>8,14</sup> These findings suggest in order to promote family adaptation, family members need to view the illness of their respective young person from a positive perspective.

The study's findings also failed to support a direct negative effect of family stress on family adaptation. A possible explanation could be the resiliency in families of young people with a mental illness. As proposed by the model, family stress had an effect on family functioning, family hardiness and family appraisal of illness. Interestingly, the findings revealed both family functioning and family appraisal of illness had an effect on family adaptation. Family functioning and family appraisal of illness were shown to be part of the family's adaptive powers, in that they directly enhanced family adaptation. In addition, there may have been potential mediating variables associated with family resources and capabilities (i.e. family problem-solving and coping) based on the resiliency model. However, these mediating variables were not considered in this study. Another possible explanation is families of the young people with mental illnesses may have been

more sensitive to other types of family adaptation not measured in this study.

Previous studies have documented family burden and family demands to be negatively associated with family functioning in families of patients with mental illnesses.<sup>31-35</sup> However, those studies focused on a simple relationship between family stress and family functioning. This study made a contribution regarding stress and adaptation by demonstrating the pathway through which family stress influenced family adaptation. The study's findings suggest family stress had a negative indirect effect on family adaptation through family functioning and family appraisal of illness. In addition, family stress was found to have a negative total effect on family adaptation. This could be because stress, in families of young people with mental illnesses, disrupted the family functioning and family appraisal of illness which, in turn, affected the family adaptation.

Patient's life skills were found to have a positive indirect effect, on family adaptation, through family functioning. In addition, patient's life skills had a positive total effect on family adaptation. These findings are congruent with prior findings.<sup>14,30,34</sup> The presence of a family member with a mental illness has been found to potentially lead to dysfunction in every aspect of family functioning.<sup>30</sup>

The findings indicate there was no direct effect of patient's life skills on family appraisal of illness. A possible explanation could be that mental illness is chronic, unpredictable, difficult to manage and hard to understand. In addition, the subjects played a caring role, for their young people with mental illnesses, over an extended period of time (1 to 23 years; mean = 5.29 years). This amount of time may have contributed to their perception that their ill family member's life skills were not necessarily important or influential in affecting their family adaptation. Another explanation could be that the young people with mental illnesses, who were cared

for by the subjects, had relatively high levels of functioning (mean = 62.83, SD = 10.94). Moreover, family members might have received adequate support and services from health professionals for their respective patient's treatments and multiple needs. Families who had resources available, for dealing with a young person's symptoms, may have had the belief their particular situation was controllable and manageable.

Given family appraisal of illness was not found to be a mediator between a patient's life skills and family adaptation suggests the family members, in this study, appear to have had strengths for dealing with stressors related to mental illness. Previously, family caregivers of mentally ill family members have been found to put effort into gaining a sense of control over the regulation their relatives' symptoms.<sup>36,37</sup> Thus, if the functionality of a family member who has a mental illness is high, the family may be more likely to have a sense of control over life's outcomes.

## **Limitations**

Like all studies, this study has limitations that should be noted. The family members, in this study, were able to receive care for their mentally ill young people at one of the four psychiatric hospitals used as a study site. Thus, the study's findings may not be generalizable to families who do not have access to or receive care from a similar type of healthcare facility. Due to the sensitive nature of issues related to mental illness, one has to assume the subjects were honest in their responses to the questionnaires. However, there was no assurance this occurred.

## **Conclusions and Recommendations**

The findings help explain, from the perception of family caregivers, the adaptation process of families of young people with a mental illness, as well as highlight the importance of family functioning

and family appraisal of illness in interventions aimed at reducing family stress and promoting family adaptation. Thus, future studies need to consider: examination of the effect of family hardiness on family stress and family adaptation; patient's life skills effect on family adaptation; the effect of family stress on family adaptation; the effect of patient's life skills on family appraisal of illness; and, family appraisal of illness in regards to patient's life skills and family adaptation. In addition, future study sites need to be different from those used in this research.

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## การปรับตัวของครอบครัวไทยที่มีเยาวชนป่วยด้วยโรคทางจิตเวช

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**บทคัดย่อ:** การวิจัยนี้เป็นการศึกษาเชิงพรรณนาแบบภาคตัดขวาง มีวัตถุประสงค์เพื่อศึกษารูปแบบ ความล้มเหลวของตัวแปรที่มีอิทธิพลต่อการการปรับตัวของครอบครัวที่มีเยาวชนป่วยด้วยโรคทางจิตเวช โดยใช้กรอบแนวคิด The Resiliency Model of Family Stress, Adjustment, and Adaptation ซึ่งเน้นถึง ความแข็งแกร่งของครอบครัว เพื่อให้ครอบครัวมีการเจริญเติบโตและมีพัฒนาการที่ดี กลุ่มตัวอย่างคือ สมาชิกครอบครัวของเยาวชนที่ป่วยด้วยโรคทางจิตเวช จำนวน 237 คน ที่มีคุณสมบัติตามเกณฑ์ที่กำหนด และตอบแบบสอบถามซึ่งประกอบด้วย ข้อมูลส่วนตัว, แบบวัดความเครียดในครอบครัว, แบบวัดทักษะชีวิตของผู้ป่วย, แบบวัดการทำหน้าที่ของครอบครัว, แบบวัดความเข้มแข็งของครอบครัว, และแบบวัดการปรับตัวของครอบครัว สถิติที่ใช้ใน การวิเคราะห์ข้อมูล คือ โมเดลสมการเชิงโครงสร้าง

ผลการศึกษาพบว่าการปรับตัวของครอบครัวที่มีเยาวชนป่วยด้วยโรคทางจิตเวชมีการปรับตัวได้ดี เมื่อมีความเครียดในครอบครัวในระดับต่ำ มีทักษะชีวิตของผู้ป่วยสูง การทำหน้าที่ของครอบครัวสูง การให้ความหมายต่อการเจ็บป่วยของสมาชิกในครอบครัวในทางบวกสูง และความเข้มแข็งของครอบครัวสูง ความเครียดของครอบครัวมีอิทธิพลต่อการปรับตัวของครอบครัวโดยส่งผ่านการทำหน้าที่ของครอบครัว และการให้ความหมายต่อการเจ็บป่วยในครอบครัว ความเครียดจากทักษะชีวิตของผู้ป่วย มีอิทธิพลต่อการปรับตัวของครอบครัวโดยส่งผ่านการทำหน้าที่ของครอบครัว ซึ่งให้ข้อเสนอแนะว่าควรมี การส่งเสริมการทำหน้าที่ของครอบครัว และการให้ความหมายต่อการเจ็บป่วยในครอบครัวเพื่อช่วยลด อิทธิพลของความเครียดในครอบครัว และความเครียดจากทักษะชีวิตของผู้ป่วย ที่จะช่วยส่งเสริมการ ปรับตัวของครอบครัวที่มีเยาวชนป่วยด้วยโรคทางจิตเวชได้ นอกจากนี้ผลการศึกษาครั้งนี้ทำให้เกิด ความเข้าใจในการพัฒนาโปรแกรมที่นำไปสู่การลดความเครียดในครอบครัวและความเครียดจาก ทักษะชีวิตของผู้ป่วย การเพิ่มการทำหน้าที่ของครอบครัวและการให้ความหมายต่อการเจ็บป่วยใน ครอบครัวที่เป็นทางบวก เพื่อส่งเสริมการปรับตัวของครอบครัวที่มีเยาวชนป่วยด้วยโรคทางจิตเวช

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