

# The Effect of a Thai Culturally-Based Mutual Support Program: A Randomized Controlled Trial

Nopparat Chaichumni, Wandee Suttharangsee, Wipa Sae-sia

**Abstract :** Persons with schizophrenia usually have severe psychotic symptoms, which create significant impairments in social relationships. The cultural specifics of different contexts influence decisions and actions of those with schizophrenia and should be carefully considered in nursing interventions. The purpose of this study was to determine the effect of the Thai Culturally-based Mutual Support Program on social functioning of persons with schizophrenia. A randomized controlled trial was conducted from July to December 2013, with 60 adults with schizophrenia treated at one psychiatric hospital in southern Thailand, plus 60 family caregivers. Participants were randomly assigned to either the experimental or control group. The experimental group ( $n = 30$ ) received the Thai culturally-based mutual support program in addition to usual care, whereas the control group ( $n = 30$ ) received only usual care. Social functioning was measured using the Thai Personal and Social Performance Scale before receiving the program, and in week 1, 4, and 12.

Results showed that mean scores on social functioning of participants in the experimental group at week 1, 4, and 12 were significantly higher than before receiving the program. In addition, the experimental group had a significantly higher mean score of social function than that of the control group at week 4, and 12. The results of this study suggested that the Thai culturally-based mutual support program can enhance the social functioning of persons with schizophrenia. Therefore, this program could be used as a nursing intervention for Thais with schizophrenia.

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## Introduction

Persons with schizophrenia usually have severe psychotic symptoms with a prolonged period of illness. One characteristic of the illness is a lack of sociality which is exhibited when persons with schizophrenia cannot build relationships with others.<sup>1</sup> Another characteristic is anosognosia, which is the term for poor insight leading to poor decision-making, poor psychosocial functioning, and a poor course of the

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illness.<sup>2</sup> In a recent study of schizophrenia, 20% of the participants had relapsed in the first 6 months after being discharged from a psychiatric hospital.<sup>3</sup> Couture, Penn, and Robert<sup>4</sup> mentioned that most persons with schizophrenia have a high relapse rate due to significant impairments in social relationships and unemployment.

It has become clear that medications alone are not sufficient for recovery and adaptive adjustment.<sup>5</sup> Psychosocial treatments that enable persons with schizophrenia to cope with the disabling aspects of their illness and achieve personal goals are a necessary component.<sup>6</sup>

A recent review of nursing research regarding the psychosocial treatment of persons with schizophrenia in Thailand and western countries revealed that stress management programs and mutual support groups for families have an effect on families' and patients' functioning.<sup>7-11</sup> A literature review on non-experimental studies conducted in Western countries demonstrated a variety of group participant benefits.<sup>12</sup> Some of these studies lacked either rigorous control or standardized and valid outcome measures. They also mentioned that the programs were culture-specific when applying in another context. In addition, a study<sup>13</sup> involving a mutual support group for people with mental illness demonstrated that empowerment in a mutual support group can be enforced by provision of a peer-based support system and inculcation of a belief system that inspires members to strive for better mental health. However, little study has been done on Asians<sup>7</sup>, particularly Thai people, so there is a need to develop a new intervention that is suitable and effective for persons with schizophrenia in Thai culture.

## **Review of Literature**

Recent studies have indicated that participation in mutual support groups for patients with chronic physical or mental illness, and/or their families, is highly associated with general improvements for persons with schizophrenia and the psychological adjustment of their families.<sup>7-11,14-15</sup> Specifically, participation in mutual support groups is related to lower hospitalization

rates and fewer days spent in the hospital<sup>16</sup>, less substance use and more positive social functioning.<sup>17</sup>

Morosini et al.<sup>18</sup> indicated that social functioning is the level of ability to display appropriate behavior in different societal roles such as self-care, socially useful activities, disturbing and aggressive behavior, and personal and social relationships. Ratings are based on the assessment of four objective indicators: (1) socially useful activities, including work and study; (2) personal and social relationships; (3) self-care; and (4) disturbing and aggressive behaviors.<sup>18-20</sup> The Personal and Social Performance (PSP) Scale was developed through focus groups and reliability studies.<sup>18</sup>

A literature review of mutual support groups found only 4 of 25 studies from 1985 to 2007.<sup>12</sup> These studies were conducted on a sample of Asian populations. Chien and Norman indicated that traditional single or multiple family therapies may not be readily accepted by Asian families because of their reluctance to reveal private thoughts and feelings in the presence of non-family members or close friends.<sup>12</sup> Most Chinese and Asian people believe that excessive emotion, such as anger endangers health and open expression or discussion of feelings, should not be encouraged.<sup>12</sup> This is the opposite to western culture in terms of building trust and relationships. It may be more difficult in Asian culture than in western culture to build rapport between the therapist and Asian persons with schizophrenia and their families in traditional family therapy. Compared to Asian culture, western people tend to disclose their feelings and communicate openly. Asian people tend to show their mutual concern and support by seeking to meet each other's actual needs.<sup>22</sup> In Thailand, Thai society is based on harmonious human relationships and a concomitant avoidance of overt acts that express anger, displeasure, criticism and the like<sup>23</sup>, and it is a society also based on generosity, the ability to live together, to respect elders and to be grateful to parents and older relatives, more dependent than Western people, and often less assertive than Western societies.<sup>23-24</sup>

From a literature review of Thai culture, the main Buddhist principles are the Four Noble Truths (Ariyasacca) and the Noble Eightfold Path.<sup>25</sup> These Buddhist beliefs represent a coping process for dealing with stress or the problems of Thai life and along with, appropriate decision making and practices, are a strong determinant of well-being and mental health.<sup>25-29</sup>

It is clear that these Thai social values including; believing in supernatural powers and karma, being less assertive, avoiding conflict and criticism, being a collectivist society, and believing in prayer, making merit, respecting the elderly, repaying gratitude, compassionate relationships, and believing in Buddhist principles are the most important values and beliefs in the way of life of the persons with schizophrenia.<sup>23-31</sup> Thai social values and Buddhist beliefs represent a coping process for dealing with stress or problems, which are related to the emotional management, problem-solving skills, and communication skills that are the key elements in the mutual support group that can enhance the social functioning of persons with schizophrenia.<sup>12, 24-29</sup>

It is clear that mutual support group members can learn new adaptive behaviors from other peer members with three major elements of social learning: clear instructions, adequate reinforcement, and the effect of good models. A support group usually sets forth carefully considered suggestions, an action plan, or mutually agreed instructions to help the individual eliminate or live more comfortably with their life problems. The sharing of lived experiences within group practice in problem solving, coping strategies, communication skills training, role playing, and modeling, can also encourage the acceptance of the group members' past, discourage denial of their present situation, and encourage coping with their existing problems by using Buddhist principles or by their beliefs and way of life. The effort of behavioral change is usually reinforcing as the group helps other members admit to their problems and approve the extinction of undesirable habits, so the mutual support group has an effect on social functioning.<sup>7-9,12</sup> In addition to make the program sensitive to Thai culture,

a Thai Culturally-based Mutual Support Program (TCMSP) was proposed as the intervention in this study.

## **Study Aim and Hypotheses**

The aim was to examine the effects of the TCMSP on social functioning. The research hypotheses of this study were as follows:

1. The social functioning of persons with schizophrenia, after having received the TCMSP measured at 1 week, 4 weeks, and 12 weeks follow-up periods, would be significantly higher than before having received the program.
2. The social functioning of persons with schizophrenia receiving the TCMSP would be significantly higher than those receiving only the usual care program measured at 1 week, 4 weeks, and 12 weeks follow-up periods.

## **Methods**

**Design:** A randomized controlled trial with a repeated-measures design was used.

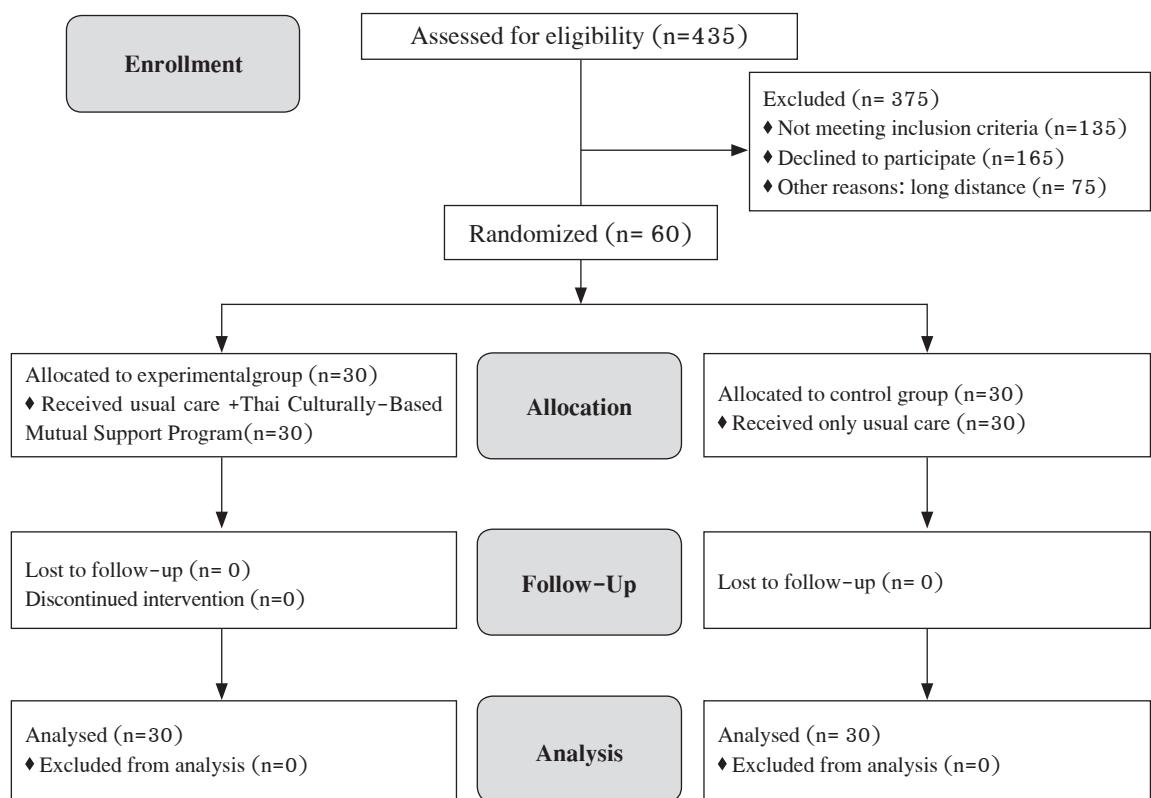
**Sample and Setting:** The study was conducted over six months in a 750-bed psychiatric hospital in Thailand. The target population of this study consisted of persons with schizophrenia who attended the psychiatric hospital, from July to December 2013 and their family caregivers. Participant inclusion criteria were: diagnosed with schizophrenia based on DSM-IV at least 2 years prior; aged between 20-60 years old; practicing Buddhists; had neither substance misuse nor an organic disorder judged to be the major cause of his/her psychotic symptoms; had a score of no higher than 70 on the social functioning scale; had a score of no higher than 36 on the BPRS (Brief Psychiatric Rating Scale) measured during admission at least one week into the hospitalization; had no demonstrable brain disease (i.e., dementia, loss of consciousness) and no history of neurological conditions such as epilepsy, Parkinson's disease or brain injury, or head trauma; had no history of mental retardation (IQ <65) assessed by patient's

history; and had no evidence of current substance (including alcohol) abuse. Potential participants were approached and informed of the study. Written informed consent was obtained from those who agreed to participate in the study.

The inclusion criteria for the family caregivers were as follows: had cared for the person with schizophrenia for at least six months; had been living with the person with schizophrenia for at least six months; and were aged between 20–60 years old.

Based on previous studies on a family mutual support group in the Chinese population<sup>7, 12</sup> indicated an effect size of .70, and a sample of 26 participants

in each group was required in this study to detect any significant difference between the groups at a 5% significance level with a power of .80<sup>32</sup>. Inordinate dropout of participants was prevented by adding 15% more participants per group<sup>12</sup>, so the participants for this study consisted of 60 persons with schizophrenia and their 60 primary caregivers. A total of 435 potential participants were approached in this study; 135 did not meet the study criteria, 165 refused to participate, and 75 had difficulty with transportation. Therefore only 60 participants joined the study and were randomly assigned to either experiment or control group equally (Figure 1).



**Figure 1** The Recruiting Process and the Progress during the Study

**Ethical considerations:** The study was approved by the Research Ethics Committee of Prince of Songkla University and the Research Ethics Committee of the psychiatric institution.

**Instruments:** Four instruments were used, all described below:

*The Demographic Data Questionnaire (DDQ)*, developed by the researchers, consists of general data including items on age, religion, educational level, marital status, occupation, income, the number of previous admissions, problems for the present admission, and duration of time lived in the community.

*The Brief Psychiatric Rating Scale (BPRS)* was developed by Overall and Gorham<sup>33</sup> and was translated by Clinical Lead Teams.<sup>34</sup> This instrument consists of three subscales that cover 18 common psychiatric symptoms which consists of: 1) positive psychotic symptoms including: somatic concern, conceptual disorganization, grandiosity hostility, suspiciousness, hallucinations behavior, unusual thought content, excitement and disorientation, 2) negative psychotic symptom including: emotional withdrawal, mannerism and posturing, motor retardation, uncooperativeness, and blunted affect, and 3) affective symptoms including: anxiety, guilt feelings, tension, inappropriate affect and depressive mood. The 18 items are related on a 7-point, item-specific Likert scale from 1-7 (“1” not present to “7” extremely severe), with the total score ranging from 18-126. Ratings on the BPRS scale are based upon an observation of the patient and a verbal report by the patient. A high score on the BPRS indicated a greater severity of psychiatric symptoms. The current study used this score for screening subjects before implementing the program.

*The Personal and Social Performance Scale* which was developed by Morosini<sup>18</sup>, incorporates four domains, i.e., socially useful activities, personal and social relationships, self-care, and disturbing and aggressive behaviors. Choices (scores) of each area are: absent (0), mild (1), moderate (2), marked (3),

severe (4), and very severe (5). The total PSP score of 0 to 100 is derived from the combined severity of those 4 key domains. The Thai PSP provides a single; overall rating score ranging from 1 to 100, with higher scores representing better personal and social functioning. Clinical judgment is applied to adjust the score within the 10-point interval, taking into account the levels of difficulty in other areas of social functioning, such as physical and psychological health, self-management, general interests, financial management, instrumental daily life activities (e.g. use of transportation, telephone), and coping skills in crisis. The Thai version was translated by Srisurapanont et al., and was tested for internal consistency, yielding a value of .63 (.28-.96,  $p<.001$ ) for domain 1, .75 (.42-.98,  $p<.001$ ) for domain 2, .69 (.35-.97,  $p<.001$ ) for domain 3, .52 (.17-.94,  $p<.001$ ) for domain 4, and .75 (.41-.98,  $p<.001$ ) for the total score.<sup>21</sup>

**Reliability:** The researcher tested the reliability of the PSPS Thai version with four Thai persons with schizophrenia who had similar characteristics to the participants in this study in the outpatient department of the psychiatric hospital. This Thai version demonstrated strong internal consistency for Rater Agreement Indexes (RAI) for 4 cases which were .95, .96, .99, and 1.00.

**Intervention Program:** The TCMSP is integrated with Thai culture taken from a literature review<sup>23-29</sup>; including the principles of Buddhism: the Fourth Noble Truths (including the Truth of Suffering, the Truth of the Cause of Suffering, the Truth of the Cessation of Suffering, and the Truth of the Path to the Cessation of Suffering); and these Thai social values: (including believing in supernatural powers and karma, being less assertive, avoiding conflict and criticism, being a collectivist society, believing in prayer, merit making, respecting the elderly, repaying gratitude, and compassionate relationships; along with the mutual support group model of Chien et al.<sup>7</sup>

The TCMSP was developed by the researcher using the focus group method with 12 experts on Thai culture and mutual support groups: including 2 psychiatric nurses, 2 social workers, 1 psychologist, 2 persons with schizophrenia, 2 family caregivers; 1 nurse lecturer; 1 lecturer in cultural aspects; and

1 monk. This program consisted of 6 phases: 1) engagement phase; 2) self-care enhancement phase; 3) drug compliance enhancement phase; 4) Buddhist-based emotional management training phase; 5) communication skills training phase; and 6) terminating phase (**Table 1**).

**Table 1** Content outline and activities/methods of TCMSP for persons with schizophrenia and family caregivers

Phase/Session	Goals	Content	Activities/ Methods
- Engagement phase-1	- To orientate to the program and to establish trusting relationships between participants and instructors.	- Orientation to the program and introduction of group leader and members to one another - Negotiation of goals and roles and responsibilities; ensuring confidentiality	- Sharing (10 min.)
- Patients & family caregivers	- To realize the impacts of social functioning problems of persons with schizophrenia and family caregivers in Thai culture.	- An overview of the topics and process of the program to group members - Sharing experiences and discussion about social functioning problems of persons with schizophrenia and their effect on the family caregivers. - Supporting knowledge about the difficulties and impacts of social functioning problems.	- Discussion (10 min.) - Sharing (10 min.) - Sharing and discussion (15 min.)
- Self-care Enhancement phase-2	- To enhance knowledge of health needs such as nutrition, exercise, leisure, housework and occupation.	- Sharing experience about health care needs based on belief in the supernatural and Karma, prayer/making merit in Thai culture.	- Sharing (15 min.) - Discussion (30 min.)
- Patients & family caregivers	- Drug compliance Enhancement phase-3	- Supporting by providing knowledge of health needs such as nutrition, exercise, leisure, hygiene, and work.	- Sharing (30 min.)
- Patients & family caregivers	- To promote compliance with antipsychotic medication	- Provide knowledge and understanding of schizophrenia, cause, treatment, and importance of drug compliance.	- Sharing (20 min.)
- Patients & family caregivers	- To provide knowledge and understanding of antipsychotic medication and the important of continuing medication.	- Promote patient's good insight (awareness of one's disorder) - Promote patient's positive attitude to taking antipsychotic medication by providing knowledge and understanding of the medication (the nature of the medication, mode of action, benefit and consequences of the medication), and tailoring adherence behavior to taking medication by using weekly and daily pillboxes that can increase face-saving (ego orientation) in Thai culture.	- Discussion (15 min.) - Sharing (25 min.)

**Table 1** Content outline and activities/methods of TCMSP for persons with schizophrenia and family caregivers (continued)

Phase/Session	Goals	Content	Activities/Methods
- Buddhist-based emotional management phase-4 - Patients & family caregivers	<ul style="list-style-type: none"> <li>- To explore their feelings about their illness and the expectation of treatment.</li> <li>- The patient and family caregiver can manage and deal with the negative feelings and their problems in daily life.</li> </ul>	<ul style="list-style-type: none"> <li>- Sharing experiences of intense emotions and feelings about their illnesses.</li> <li>- Discuss the ways to deal with negative emotions of patient/family caregiver and support with knowledge and training in management of emotions and turbulence behavior by using case studies and role playing within Thai culture which is sensitive to criticism avoidance and involves prayer, meditation, and good-bad Karma.</li> <li>- Training for application to identify and practice strategies for maintaining well-being in life by using the Ariyasacca principle.</li> </ul>	<ul style="list-style-type: none"> <li>- Discussion (15 min.)</li> <li>- Discussion and training in the skills for dealing with negative emotions (20 min.)</li> <li>- Discussion and training in the skills of problem solving (25 min.)</li> </ul>
Communication skills training phase-5 - Patients & family caregivers	<ul style="list-style-type: none"> <li>- To provide the patient with communication skills within Thai culture such as being less assertive and disclosure of feelings.</li> <li>- The patients can apply the new knowledge to their daily lives.</li> </ul>	<ul style="list-style-type: none"> <li>- Discuss of each member's psychosocial needs.</li> <li>- Effective communication skills for the patient and seeking social support from others: basic communication skills, responding to feelings, steps in seeking support, building social support, getting personal support, and setting boundaries in relationships.</li> </ul>	<ul style="list-style-type: none"> <li>- Discussion (15 min.)</li> <li>- Sharing, demonstrating, modeling, and role playing and home work (45 min.)</li> </ul>
Terminating phase-6 - Patients & family caregivers	<ul style="list-style-type: none"> <li>- To review the previous lessons and to prepare for group termination</li> </ul>	<ul style="list-style-type: none"> <li>- A review and summary of the materials covered in previous sessions</li> <li>- Preparation and discussion on termination issues including; separation anxiety, independent living and use of coping skills learned</li> <li>- Evaluation of learning experiences and goals achievement</li> <li>- Explanation of post-intervention assessment and follow-up in later months.</li> </ul>	<ul style="list-style-type: none"> <li>- Sharing and summarizing (20 min.)</li> <li>- Discussion (20 min.)</li> <li>- Summary and interviews (10 min.)</li> <li>- Sharing (10 min.)</li> </ul>

The content validity of the TCMSP for persons with schizophrenia was approved by a panel of seven experts. The panel consisted of three psychiatrists with expertise working with psychiatric patients, two nursing instructors, expert in caring for persons with schizophrenia, one advanced practice nurse, expert in caring for persons with schizophrenia, and one clinical nurse who had expertise and experience related to mutual support groups for persons with schizophrenia. The engagement phase included guidelines for solving the problems of lifestyle when persons with schizophrenia and their family caregivers stay together in the community. In the drug compliance enhancement phase, the contents of a case study were revised for role playing for training about the effectiveness of promoting drug compliance. In the Buddhist-based emotional management training phase, the contents of meditation and emotional management were summarized and revised. In the communication skills training phase, the contents of the case study for role playing for training about effective communications were revised. The researcher then conducted a pilot study with 6 persons with schizophrenia and 6 family caregivers to ensure the feasibility of the Thai culturally-based mutual support program in clinical settings. After the pilot study: work sheet 1 in the engagement phase was revised for persons with schizophrenia and their families, separately. In the Buddhist-based emotional management training phase, the times for practicing meditation and emotional management were re-organized and revised.

**Usual care:** Usual care was composed of nursing care to promote the safety of the patient and others, promote self care for daily living, establish a therapeutic relationship, interventions for delusions, hallucinations, and socially inappropriate behaviors, patient and family psycho-education, and advice on available community healthcare services.

**Data Collection:** Participants were randomly assigned to either the intervention or control group by a ward nurse. The participants were asked to complete the Thai PSPS before beginning the intervention.

The experimental groups were led by the researcher and 4 research assistants under the same protocol. One group was composed of 6 dyads of persons with schizophrenia. Participants were given the patient's manual during the program. The experimental groups received a series of six 60-minute practice sessions of the Thai culturally based mutual support program at weeks 2, 3, and 4 according to the guidelines of the program.

The Thai PSPS scale was used to evaluate the outcome by four data collectors who were trained by the researcher and did not know who was in the experimental or control group. The data collection for the outcomes was carried out at four time-points: before the intervention (T0); and after the intervention at follow-up at wk 1 (T1); at wk 4 (T2); and at wk 12 (T3).

**Data analysis:** The data were analyzed using descriptive statistics, and multivariate analysis. Univariate assumptions of dependent variable data were analyzed for normality and homogeneity of variance. All data were normally distributed except for the number of admissions and age in the control and experimental groups. Therefore, the Mann Whitney U-test was used to determine differences in levels of social functioning, age, and number of admissions of persons with schizophrenia between groups (group 1 and group 2). Chi-square analysis was used to determine differences in the sex, status, education, occupation, income, relationship, and dependence on others between groups. Due to non-equal range of time, a mixed linear model was used to analyze differences in social functioning over time between participants in the control and experimental groups.<sup>35</sup> Assumptions of normality and linearity were met. Significance for the mixed linear model analysis was set at  $p < .05$ .

## Results

Findings showed, there was no significant difference among these two groups in participant characteristics (**Table 2**). A mixed linear model, the conditional model, which includes group and time with

a random intercept and slope, was the best fit (AIC = 1893.166). Results from this study revealed that there was a significant difference in social functioning at baseline and over time for all participants in both group ( $p < .01$ ) (**Table 3, 4**) as well as by group

alone ( $p = .02$ ) (**Table 5**), while interaction of a time by group showed a non-significant difference (**Table 3**). Participants in the experimental group had a higher significant improvement in social functioning over time compared to those in the control group (**Table 6**).

**Table 2** Comparison of the Demographic Characteristics of Persons with Schizophrenia in the Control and Experimental Groups

Variables	Control group (n = 30) n (%)	Experimental group (n = 30), n (%)	Statistical value	p-value
Gender			.38 <sup>a</sup>	.56
Male	23 (76.7%)	21 (70.0%)		
Female	7 (23.3%)	9 (30.0%)		
Age [years; mean (SD)]	37.4 (12.5)	35.87 (7.3)	.58 <sup>b</sup>	.58
Number of admissions	4.50	3.97	Mann-Whitney U test	.88
Dependency			5.59 <sup>a</sup>	.13
Cannot take care of self	2 (6.7 %)	1 (3.3 %)		
Mild	8 (26.7%)	8 (26.7%)		
Moderate	19 (63.3%)	14 (46.7%)		
Strong	1 (3.3%)	7 (23.3%)		

<sup>a</sup> = chi-square, <sup>b</sup> = t-test

**Table 3** Comparison of Social Functioning between Baseline, Weeks 1, 4, and 12 for Both Groups (N=60)

Source	Sum of Squares	df	Mean Square	F	p-value
Time	66589.48	3	22196.49	185.89	.00
Time * group	831.43	3	277.14	2.32	.07
Error(Time)	20777.08	174	119.41		

**Table 4** Comparison of Social Functioning between Baseline, Weeks 1, 4, and 12 after Receiving the Program by Time for both the Experimental (n=30) and Control Groups (n=30) (Tests of within-groups)

Group	Source	Sum of Squares	df	Mean Square	F	p-value
Control	Time	26931.29	3	8977.10	66.11	.00
	Error	11814.46	87	135.80		
Experimental	Time	40489.63	3	13496.54	131.01	.00
	Error	8962.63	87	103.02		

**Table 5** Comparison of Social Functioning of Persons with Schizophrenia between participants in the Experimental and Control Groups at Weeks 1, 4, and 12 after Entering the Program (N=60) (Tests of Between-groups)

Source	Sum of Squares	Df	Mean Square	F	p-value
Intercept	1150658.02	1	1150658.02	5106.71	.00
Group	1251.27	1	1251.27	5.55	.02
Error	13068.72	58	225.32		

Table 6 Comparison of Social Functioning of Persons with Schizophrenia at Weeks 1, 4, and 12 (between the experimental and control groups)

Time	Experimental						t	df	p-value	Effect Size				
	Control groups		group		Difference									
	Mean	SD	Mean	SD	Mean	Std.Error								
Wk 1	70.60	13.09	74.03	11.52	3.43	3.18	1.08	58	.29	.28				
Wk 4	77.23	9.81	83.00	9.11	5.77	2.44	2.36	58	.02	.62				
Wk 12	78.47	16.33	88.13	7.45	9.67	3.28	2.95	58	.005	.77				

## Discussion

Results of this study showed the positive effect of a the TCMSP in increasing mean scores of social functioning of persons with schizophrenia after entering the program at week 1, week 4, and week 12. This was demonstrably higher than before entering the program ( $p < .01$ ). Participants receiving the program had higher mean scores of social functioning than participants in the control groups at weeks 4 and 12 after entering the program.

This can be explained in terms of time requirement in improving the social functioning. Authors<sup>36,37,38</sup> have indicated that changing in social functioning cannot be accomplished within a short time; people really need time to adapt themselves and perform their social function. So there was a significant difference in social functioning between the control and experimental groups at the week 4 and 12. This is congruent with a study of controlled trials in Hong Kong<sup>7-11, 12, 36-38</sup> which reported that Chinese family carers and patients in the mutual support group indicated statistically

significant improvements in families' and patients' psychosocial functioning at 4 weeks, 6 months, and/or 18 months after the completion of the interventions when compared with their counterparts in the psycho-education and standard outpatient care group.<sup>12, 36-38</sup>

In addition, the outcome over a longer period showed that social functioning of the experiment group was higher than that of the control group at a significant level ( $p < .01$ ). It can be said that the Thai culturally-based mutual support program for persons with schizophrenia demonstrated positive effects at week 4 and 12; this partially supports hypothesis 2.

This may be because of the activities of the TCMSP which emphasized the use of sharing experiences, providing support, and the use of learning principles of modeling, role playing, practice, and feedback, as well as homework assignments. These activities support the effectiveness of a mutual support group intervention for persons with schizophrenia and their family, in improving family and patient functioning and reducing re-hospitalization.<sup>12, 36-38</sup>

An important point of the present study is that it was done within Thai culture. From the literature review, it is evident that Thai society has been strongly influenced by Buddhism which develops characteristics of loving kindness, compassion, polite humanity, and gratitude and caring in the family.<sup>23-31</sup> The main Buddhist principles are the Four Noble Truths (Ariyasacca) and the Noble Eightfold Path. These Buddhist beliefs represent a coping process for dealing with stress or problems of Thai life as well as appropriate decision making and practices that are related to emotional management, problem solving skills, and communication skills which are the components of a mutual support group that can enhance social functioning in persons with schizophrenia.<sup>12, 36-38</sup>

In addition, Thai society is based on many values and beliefs. Believing in supernatural powers and karma, being less assertive, avoiding conflict and criticism, being a collectivist society, and believing in prayer, merit making, respecting the elderly, repaying gratitude, compassionate relationships, avoiding conflict and criticism are important values and beliefs in the way of life of persons with schizophrenia which influence the domain of self-care, personal and social relationships, and emotional management that are related to non-turbulence behavior, in some parts of the domain of social functioning.<sup>12</sup>

Findings from the study are congruent with a study of two controlled trials in Hong Kong, which reported that Chinese family caregivers and patients with schizophrenia who participated in a mutual support group showed improvement in families' and patients' psychosocial functioning scores over time when compared with psycho-education, other treatment models, and standard care groups.<sup>7, 14-15</sup> These results were statistically significant with effect sizes in each trial of .68 and .70, respectively.<sup>12</sup> Similar to previous studies, the findings indicate that participants in a mutual support group had greater improvements in functioning of family and persons with schizophrenia,

and shorter lengths of patient hospitalizations at one month and one year after completion of the intervention, compared with the routine care group.<sup>7, 12</sup> Moreover, in a study of the effectiveness of a mutual support group for families of persons with schizophrenia, the results indicated that cultural orientation influences caregiving decisions and actions of these families which led to improvement in the level of functioning in family caregivers and persons with schizophrenia.<sup>36-38</sup>

It can be said that a mutual support group, integrating the Four Noble Truths (Ariyasacca), the Noble Eightfold Path, and Thai values and beliefs, can have more improvement on social functioning of persons with schizophrenia than usual care. Therefore, mental health professionals, especially psychiatric nurses should consider integrating the Thai culturally-based mutual support group intervention into routine clinical practice and psychiatric rehabilitation, as this may enhance social functioning of persons with schizophrenia in Thailand.

## **Limitations**

The intervention was conducted at only one tertiary hospital in the southern region, which may not be representative of other regions which have different cultures. Also, the present program was planned for people who can read and write and have no severe complications. Therefore, it would have limited application for persons with schizophrenia who have poor literacy or severe complications.

## **Conclusions and Implications for Nursing Practice**

Findings show that the TCMSP had a significantly positive effect on social functioning. This study indicated that cultural orientation strongly influences decisions and actions of persons with schizophrenia in mutual support group which led to improvement in their level of social functioning. The

roles of family caregivers were important in working in partnership to give support, encourage and facilitate persons with schizophrenia to perform activities of daily life.

This study's finding can contribute to nursing practice since the TCMSP contains clear intervention guidelines and methods to be applied by trained nurses or advanced practice nurses to enhance social functioning before the patients discharge from psychiatric hospitals. This supports mental health policy of the Thai government, which is to provide appropriate care to prevent relapse.

Further research to test the program in other hospital settings with randomly selected participants with heterogeneous characteristics, and from several areas is needed to broaden the generalizability of the study. A randomized controlled trial study should be conducted to assess the effectiveness of the TCMSP intervention on social functioning over longer periods (6, 12, and 18 months) to examine the sustainability of social functioning of persons with schizophrenia after the intervention. After this, booster interventions should be provided.

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### **References**

1. Dangdomyouth P, Stern PN, Oumtanee A, Yunibhand J. Tactful monitoring: How Thai caregivers manage their relative with schizophrenia at home. *Issues Ment Health Nurs.* 2008; 29: 37-50.
2. Arango C, Amador X. Lessons learned about poor insight. *Schizophr Bull.* 2011; 37(1): 27-28.
3. Ascher-Svanum H, Zhu B, Fraies DE, Salkever D, Slade EP, Peng X, & Conley RR. The cost of relapse and the predictors of relapse in the treatment of schizophrenia. *BMC Psychiatry.* 2010; 10(2): 1-7. doi:10.1186/1471-244x-10-2
4. Couture SM, Penn DL, Robert DL. The functional significance of social cognition in schizophrenia: A review. *Schizophr Bull.* 2006;32: 44-63.
5. Mueser K T, & Sengupta A. Family treatment and medication dosage reduction in schizophrenia: Effects on patient social functioning, family attitudes, and burden. *J Consult Clin Psychol.* 2001; 69(1): 3-12.
6. Kern RS, Glynn SM, Horan P, Marder R. Psychosocial treatments to promote functional recovery in schizophrenia. *Schizophr Bull.* 2009;35(2): 347- 361.
7. Chien WT, Chan SWC. The effectiveness of mutual support group intervention for Chinese families of people with schizophrenia: A randomized controlled trial with 24-monthfollow-up. *Int. J. Nurs Stud.* 2013; 50 (10), 326-1340.
8. Chien WT, Norman I, Thompson DR. Perceived benefits and difficulties experienced in a mutual support group for family carers of people with schizophrenia. *Qual Health Res.* 2006;16(7): 962-981.
9. Chien, W. T., & Wong, K. F. S. The family psycho-education group program for Chinese people with schizophrenia in Hong Kong. *Psychiatr Serv.* 2007; 58 (7):1003-1016.10.
10. Giron M, Fernandez-Yanez,A, Mana-Alvarenga S, Molina-Habas A, Nalasco A, & Gomez-Beneyto, M. Efficacy and effectiveness of individual family intervention on social and clinical functioning and family burden in severe schizophrenia: A 2-year randomized controlled study. *Psychol Med.* 2010; 40(1): 73-84.
11. Suphaaksorn, B. The effect of stress management program on functioning of schizophrenic patients in community. (Unpublished master thesis). Chulalongkorn Univ., Bangkok, Thailand; 2010.
12. Chien WT, Norman I. The effectiveness and active ingredients of mutual support groups for family caregivers of people with psychotic disorders: A literature review. *Int J Nurs stud.* 2009; 46: 1604-1623.

13. Maton KE, & Salem DA. Organizational characteristics of empowering community settings: A multiple case study approach. *Am J Community Psychol.* 1995; 23: 631–656.
14. Guo X, Zhai J, Liu Z, Fang M, Wang B, Wang C, Hu B, Sun X, Lv., Lu Z, Ma C, the Research Team. Effect of antipsychotic medication alone vs. combined with psychosocial intervention on outcomes of early-stage schizophrenia. *Arch Gen Psychiat.* 2010; 67 (9): 895– 904.
15. Barreira PJ, Tepper MC, Gold PB, Holley D, Macias C. Social value of supported employment for psychosocial program participants. *Psychiatr Q.* 2011; 82: 69–84. Doi: 10.1007/811126-9148.9
16. Makin-Byrd K, Cronkite RC, Timko C. The influence of abuse victimization on attendance and involvement in mutual-help groups among diagnosed male veterans. *J Subst Abuse Treat.* 2011; 41: 78–87.
17. Wanwa D, Lueboonthavatchai O. The effect of family mutual support group on family functioning as perceived by family caregivers of schizophrenic patients. *J Psychiatr Nurs and Ment Health.* 2014; 28(1): 68–80.
18. Morosini PL, Magliano L, Brambilla L, Ugolini S, Pioli R. Development reliability and acceptability of a new version of the DSM-IV Social and Occupational Functioning Assessment Scale (SOFAS) to assess routine social functioning. *Acta Psychiatr Scand.* 2000; 101:323–329.
19. Bae S, Lee S, Park Y, Hyun M, & Yoon H. Predictive factors of social functioning in patients with schizophrenia: Exploration for the best combination of variables using data mining. *Korean Neuropsych Ass.* 2010; 7: 93–101. doi: 10.4306/pi2010.7.2.93
20. Brissos S, Molodynki A, Dias VV, & Figueira ML. The importance of measuring psychosocial functioning in schizophrenia. *Ann Gen Psychiatr.* 2011; 10 (18): 1–7.
21. Srisurapanont M, Arunpongaisal S, Chuntaruchikapong S, Silpakit C, Khuangsirikul V, Karnjanathanalers N, & Samanwongthai U. Cross-cultural validation and inter-rater reliability of the Personal and Social Performance Scale, Thai version. *JMA of Thailand.* 2008; 91(10):1603–1608.
22. Hsu J. Family therapy for the Chinese: problems and strategies. New York, NY: Oxford University Press; 1995.
23. Lueboonthavatchai P, Thavichachart N. Universality of interpersonal psychotherapy (IPT) problem areas in Thai depressed patients. *BMC.* 2010;10(87): 1–7.
24. Klausner W. Reflections on Thai culture. Bangkok: The Siam society under royal patronage; 2002.
25. Phra Payutto P, Olson GA. *Buddhadhamma: Natural laws and values of life.* New York, NY: University of New York Press; 1995.
26. Chinnawong T. The influences of Thai Buddhist culture on cultivating compassionate relationships with equanimity between nurses, patients and relatives: grounded theory approach. [Thesis]. NSW, Australia: Lismore Univ.; 2007.
27. Sethabouppha H, Kane C. Caring for the seriously mentally ill in Thailand: Buddhist family caregiving. *Arch Psychiatr Nurs.* 2005;19(2): 44–57.
28. Klinsontorn S. The influence of cultural values on decision-making groups in Thailand. [Thesis]. Florida, United State: Nova Southeastern Univ.; 2000.
29. Sanseeha L, Chontawan R, Sethabouppha H, Dissayavanish C, Turale S. Illness perspectives of Thais diagnosed with schizophrenia. *Nurs Health Sci.* 2009; 11: 306–311.
30. Wattana W. Esan folk treatment among persons with schizophrenia receiving services at Loei Rajanagarindra Psychiatric Hospital. [Thesis]. Chiang Mai, Thailand: Chiang Mai Univ.; 2006.
31. Wichiarajote W. The theory of affiliative society. Bangkok: College of Education, Prasanmitr; 1973.
32. Cohen J. (Ed.). *Statistical power analysis for the behavioral sciences* (2<sup>nd</sup> ed.). New York, NY: Lawrence Erlbaum Associates; 1988.
33. Winter B. Linear models and linear mixed effects models in R with linguistic applications. (2013); arXiv:1308.5499. [<http://arxiv.org/pdf/1308.5499.pdf>]
34. Chien WT, Thompson DR. Evaluation of a peer-led mutual support group for Chinese families of people with schizophrenia. *Am J Community Psycho.* 2008; 42:122–134.
35. Chien WT, Chan WCS, Morrissey J, Thompson DR. Effectiveness of a mutual support group for families of patients with schizophrenia. *JAN.* 2005; 51(6): 595–608.
36. Chien, W.T. Effectiveness of psycho-education and mutual support group program for family caregivers of Chinese people with schizophrenia. *The Open Nurs J.* 2008; 2: 28–39.
37. Overall JE, Gorham DR. The brief psychiatric rating scale. *Psychological Reports.* 2005; 10: 799–812.
38. Clinical Lead Team. *Brief psychiatric rating scale (BPRS): Suansaranrom version.* Suratthani: Suansaranrom Hospital. 2005.

# ผลของโปรแกรมการดูแลแบบเกือกุลบันพื้นฐานของวัฒนธรรมไทยต่อการทำหน้าที่ทางสังคมของผู้ที่เป็นโรคจิตเภท

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**บทคัดย่อ :** โรคจิตเภทเป็นการเจ็บป่วยทางจิตรุนแรง มีความบกพร่องด้านสัมพันธภาพทางสังคมอย่างชัดเจน ลักษณะอย่างหนึ่งของการเจ็บป่วยคือ การขาดทักษะทางสังคม ซึ่งแสดงออกถึงการที่ผู้ที่เป็นโรคจิตเภทไม่สามารถสร้างสัมพันธภาพกับผู้อื่น วัดถูกประสงค์ของการศึกษาครั้งนี้เพื่อ ศึกษาผลของโปรแกรมการดูแลแบบเกือกุลบันพื้นฐานของวัฒนธรรมไทยต่อการทำหน้าที่ทางสังคมของผู้ที่เป็นโรคจิตเภท กลุ่มตัวอย่างประกอบด้วย ผู้ที่ได้รับการวินิจฉัยเป็นโรคจิตเภท จำนวน 60 คน ที่เข้ารับการรักษาณ โรงพยาบาลส่วนราษฎร์ย์ จังหวัดสุราษฎร์ธานี ในช่วงเดือนกรกฎาคม ถึง ธันวาคม 2556 และผู้ดูแลผู้ป่วยจำนวน 60 คน กลุ่มตัวอย่างถูกสุ่มเข้ากลุ่มทดลองและกลุ่มควบคุม กลุ่มทดลอง จำนวน 30 คนได้รับการดูแลตามปกติ และโปรแกรมการดูแลแบบเกือกุลบันพื้นฐานของวัฒนธรรมไทย ซึ่งประกอบด้วยกิจกรรม ดังนี้ การสร้างสัมพันธภาพและความห่วง การส่งเสริมการดูแลตนเอง การส่งเสริมความร่วมมือในการกินยา การฝึกทักษะการจัดการกับอารมณ์บันพื้นฐานของแนวคิดพุทธศาสนา การฝึกทักษะการสื่อสาร และการลีนสูดกิจกรรม กลุ่มควบคุมจำนวน 30 คนได้รับการดูแลตามปกติ

ผู้วิจัยประเมินการทำหน้าที่ทางสังคมด้วยแบบประเมินความสามารถในการทำหน้าที่ส่วนบุคคล และทางสังคม ข้อมูลที่ได้จากการประเมินก่อนการทดลอง หลังการทดลองสัปดาห์ที่ 1, 4 และ 12 นำมาวิเคราะห์โดยใช้สถิติเชิงพรรณนา โควีสแควร์ (Chi square) การทดสอบที (t-test) การทดสอบเมนวิทney (Mann-Whitney U test) และ mixed linear model

ผลการศึกษาพบว่า การทำหน้าที่ทางสังคมของผู้ที่เป็นโรคจิตเภท หลังได้รับโปรแกรมสูงกว่าก่อนได้รับโปรแกรมทั้งในสัปดาห์ที่ 1, 4 และ 12 อย่างมีนัยสำคัญทางสถิติ เมื่อเปรียบเทียบระหว่างกลุ่มทดลองและกลุ่มควบคุม พบว่า กลุ่มทดลองมีคะแนนการทำหน้าที่ทางสังคมสูงกว่ากลุ่มควบคุมทั้งในสัปดาห์ที่ 1, 4 และ 12 อย่างไรก็ตามในสัปดาห์ที่ 1 คะแนนการทำหน้าที่ทางสังคมของกลุ่มทดลองสูงกว่ากลุ่มควบคุม อย่างไม่มีนัยสำคัญทางสถิติ

ผลการศึกษานี้เสนอแนะว่า โปรแกรมการดูแลแบบเกือกุลบันพื้นฐานของวัฒนธรรมไทยสามารถนำไปใช้เพื่อพัฒนาความสามารถในการทำหน้าที่ทางสังคมของผู้ที่เป็นโรคจิตเภทในประเทศไทย

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**คำสำคัญ :** พื้นฐานของวัฒนธรรมไทย การดูแลแบบเกือกุล การทำหน้าที่ทางสังคม โรคจิตเภท การวิจัยเชิงทดลองทางคลินิก

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