

1-1-2014

## The Application of Thai Folk Games in Critical Reflection to Sustain Self-Care for Chronically Ill People in A Philanthropic Primary Health Care Unit

Prasak Santiparp

Suwithida Charungkiatkul

Kiatiwan Amatayakul

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DOI: 10.58837/CHULA.EDUCU.42.0.6

Available at: <https://digital.car.chula.ac.th/educujournal/vol42/iss0/6>

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# การประยุกต์การละเล่นพื้นบ้านไทยในการสะท้อนความคิด เชิงวิพากษ์เพื่อพัฒนาโปรแกรมการดูแลตนเองอย่างยั่งยืน สำหรับผู้ป่วยโรคเรื้อรังในหน่วยบริการสุขภาพปฐมภูมิ

## The Application of Thai Folk Games in Critical Reflection to Sustain Self-Care for Chronically Ill People in A Philanthropic Primary Health Care Unit

ประศักดิ์ สันติภาพ และคณะ  
Prasak Santiparp and Others

### บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อพัฒนาโปรแกรมการดูแลตนเองที่ยั่งยืนสำหรับผู้ป่วยโรคเรื้อรัง โดยการเปลี่ยนทัศนคตินำไปสู่การปฏิบัติดูแลตนเองที่ถาวร ผู้วิจัยออกแบบการศึกษาเป็น ๒ ระยะ คือ ระยะที่ ๑ เป็นการศึกษาวิเคราะห์เอกสารเพื่อพัฒนาโปรแกรมการดูแลตนเองที่ยั่งยืน ระยะที่ ๒ เป็นการศึกษาผลของการใช้โปรแกรมดังกล่าวด้วยวิธีทดลองเปรียบเทียบความรู้ ทัศนคติ การปฏิบัติในการดูแลตนเอง และการใช้ยาของกลุ่มควบคุมและกลุ่มทดลองก่อนและหลังจากการอบรม ๑๒ สัปดาห์ โดยผู้วิจัยควบคุมตัวแปรอายุ เพศ สถานะทางเศรษฐกิจสังคมด้วยการจับคู่ตัวแปร ผลการศึกษาพบว่าการใช้รูปแบบโปรแกรมการศึกษานอกระบบโรงเรียนของ Boone ร่วมกับการใช้ ๖ องค์ประกอบในการเรียนรู้เพื่อการเปลี่ยนแปลงของ Taylor ที่มีองค์ประกอบสำคัญ คือ การสะท้อนความคิดเชิงวิพากษ์ ซึ่งผู้วิจัยได้สังเคราะห์กระบวนการประกอบด้วยการสร้างวิกฤติเทียม การสนทนา การสำรวจข้อเสนอสมมุติฐานใหม่ ผู้วิจัยได้ประยุกต์ใช้การละเล่นพื้นบ้านไทยเช่น การปิดตาตีหม้อ กระจ่ายขาเดียว ในขั้นตอนการสร้างวิกฤติเทียม ผลการศึกษาพบว่าโปรแกรมดังกล่าวสามารถเพิ่มพูนความรู้ การเปลี่ยนแปลงทัศนคติ การปฏิบัติดูแลตนเอง ลดการใช้ยาของกลุ่มทดลองต่างจากกลุ่มควบคุมอย่างมีนัยสำคัญทางสถิติ นอกจากนี้จากหลักการเรียนรู้ตลอดชีวิต ผู้วิจัยได้พัฒนาโปรแกรมโดยเริ่มที่ทุนสังคมอันแข็งแกร่งของสังคมไทยในหน่วยบริการสุขภาพปฐมภูมิที่จัดตั้งโดยจิตกุศลพบว่าการพัฒนาโปรแกรมที่เริ่มจากทุนสังคมนำไปสู่การพัฒนาทุนมนุษย์ และทุนเงินตราอันเป็นการพัฒนาอย่างยั่งยืน

**คำสำคัญ:** การศึกษานอกระบบโรงเรียน / การสะท้อนความคิดเชิงวิพากษ์ / การละเล่นพื้นบ้านไทย / การดูแลตนเอง

## Abstract

The purpose of this study was to develop a sustainable self-care program for chronically ill persons, who practiced self-care through attitude transformation. There were 2 phases of the study: phase 1 developed a sustainable self-care program from a literature review. Phase 2 was the experimental study of the intervention's effects which comprised 12 weekly hour-long sessions. We collected data of self-care knowledge, attitudes, self-care practices and drug use of participants through personal interviews at baseline and 12 weeks later, which were analyzed by t-test, controlled for age, gender, and socioeconomic status. The results showed that Boone's non-formal educational conceptual model combined with 6 core elements of Taylor's transformative learning process was suitable. Furthermore, a synthesis of the critical reflection process was conducted which consisted of trigger event or dilemma simulation, dialogue, and premise exploration. The application of Thai folk games such as "the blind hit the pot" for dilemma simulation was considered suitable. A philanthropic primary health care unit was chosen within a lifelong learning context in this study, which improved social, human and monetary capital. The learners gained self-care knowledge, changed their attitude, improved self-care practices, and decreased drug use significantly. In conclusion, the self-care program with non-formal educational activities and critical reflection to gain self-care knowledge, change personal attitudes, improve self-care practices and reduce drug use was found to be sustainable.

**KEYWORDS:** NON-FORMAL EDUCATION/CRITICAL REFLECTION/THAI FOLK GAME/SELF-CARE

## Introduction

Nowadays, the problem of chronic illness in elders (e.g. cardiovascular disease, hypertension, diabetes mellitus, etc.) is important over the world. In 2011, Thais over 65 years of age constituted 16.78% of population, 38.7% account for dependency and 80% have chronic conditions. Thus elders with chronic disease cause a big burden of family, community, society, and country. Thais with chronic illnesses affect 1,790,275 persons, that increase by 9.2% of the population, and accounted for an outcome loss of about 52,150 million baht. The most common cause of death of Thai people is chronic disease. From the survey project of exchanging useless drugs with eggs, the excessive useless drugs due to drug dependence cost more than 100,000 million bahts per year or about 45% of health expenditures. Most of excessive useless drugs were chronic illness drugs such as antihypertensive drugs and oral hypoglycemic drugs (Ministry of Public Health of Thailand, 2013). To address quality of life and cost concern raised by this figure, health promotion intervention programs for chronically ill persons have become high priority (Lubkin, 1991).

One of the ways to reduce these burdens is promoting self-care in chronically ill persons, especially the elderly. Self-care consists of universal self-care (e.g. diet control, physical activity, stress management,

etc.) and self-care in health deviation (e.g. check-up themselves, drug usage as necessary, etc.) (Orem, 2001). To date, the preventative risk factors of chronic diseases have been focused on. As of yet, research has contributed little understanding to the sustainability of behavioral, psychological and social processes which might temper and indeed improve functioning amongst chronically ill persons (Kaplan, 1992). There has been limited attention given to the individual's frame of mind in efforts to promote health. Experts have suggested the importance of the individual's interest in, need for and/or belief in the intervention offered; unwillingness or inability to take advantage of support networks; experience of power, personal values, motivational improvement, determination, self-confidence, resourcefulness and hope for a better future (Lord & Hutchinson, 1993). It is perhaps not surprising that in an era when resources for health promotion are limited and the expectations as to what can be achieved are high, that 'sustainability' has become a familiar catch-cry. There has been a lack of consensus about conceptual and operational definitions of sustainability in health promotion programs. For health promotion, the sustainability refers to the intervention effects or the mean by which the programs are produced and agencies that implement the interventions. The aim of health promotion is to produce intervention effects that will be sustainable over time.

That intervention programs are pitched at the wrong level of the social system and are thus unlikely to be effective, let alone sustainable (Egan, 2010). For health promotion, this has been characterized as a shift from risk factor interventions to interventions aimed at risk conditions. Risk factor interventions are conceptualized at the individual level of social organization. Typically they focus on health behaviors such as smoking, diet control, and physical activity (Swerissen & Crisp, 2004). On the other hand, risk conditions such as social cohesion and support, income security and access to social, educational and health services are more usually thought of as a function of organizational, community and institutional levels of social organization. For example, there is now strong interest in findings that communities with high levels of income inequality tend to have less social cohesion, more violent crime and higher death rates. There is also evidence that friendship, good social relations, and strong supportive networks improve health at home, at work and in community, whereas low social support has been linked to increased rates of premature death, poorer chances of survival after a heart attack, lesser feelings of well-being, greater depression, greater risk of pregnancy complications and higher levels of disability from chronic diseases (Funnell, 2007). Such findings suggest the appropriateness of an intervention aimed at enhancing sense of self and health, improved

self-care agencies, and better personal control. The studies have documented the significant role in which a chronically ill person's mindset (or attitude toward health, life, and self) played in determining successful self-care management of chronic illness (Skinner, 2003). The patient's negative mindsets interacted dynamically with support systems to create unsuccessful dependence, with frequent readmissions to hospitals. The potential for enhancing a patient's mindset and, in turn, participation in one's own health and health promotion intervention through the application of perspective transformation was thereby identified (McWilliam *et al.*, 1999).

The less negative mindsets and opposition to health promotion programs are, especially those related to self-care, the greater the sustainability of health promotion interventions. A sustainable health promotion program may be approached by enhanced lifelong learning. The organization of economic, co-operate and development OECD suggests lifelong learning as an approach to sustainable development. The concept of lifelong learning as an educational strategy emerged some three decades ago as a result of the efforts of the OECD, the united nations educational, scientific and cultural organization UNESCO, and the Council of Europe. It was a response to the anomaly that while individuals learn throughout life, the provision of education

opportunities is limited largely to the early step of life, dominated by formal education. There was a perceived need to provide a “second chance” to those who did not benefit from educational opportunities available during childhood and youth. So it includes formal education, non-formal education and informal education. In current OECD usage, lifelong learning no longer refers simply to recurrent or adult education but encompasses all learning endeavors over the life span. While the term is widely used in modern times, often as a slogan of sorts, it is open to multiple interpretations; thus it can be used to sustain program developments in many fields. This explores the more precise policy meaning of the concept that underlies recent OECD work (OECD, 2004). The suitable lifelong learning process that may solve this problem is transformative learning.

Transformative learning theory is one of adult education or non-formal education theories. A defining condition of being human is that we have to understand the meaning of our experience. For some, any uncritically assimilated explanation by an authority figure will suffice. But in contemporary societies we must learn to make our own interpretations rather than act on the purposes, judgments beliefs, and feelings of others. Facilitating such understandings is the cardinal goal of education. Transformative learning develops autonomous thinking

(Mezirow, 1991). Thus, the purpose of this study was to develop a sustainable self-care program for chronically ill persons who sustained self-care practicing from attitude transformation by using non formal education activities, transformative learning and applying Thai folk games in critical reflection.

## Objectives

1. To develop a sustainable self-care program for chronically ill persons.
2. To study the effects of intervention in self-care knowledge, attitudes, skills and drug usage of chronic illness person pre and post intervention.

## Methodology

This study was divided it into two phases. Phase 1 was literature reviewing and field visiting to collect qualitative data. Phase 2 was an experiment study of consenting subjects from a philanthropic primary health care center in a suburban area of the northeastern part of Thailand. The dependent variables were self-care knowledge, attitude, practicing, and drug usage. The independent variable was a self-care program based on transformation. Moreover, a study of the program’s sustainability was conducted. For phase 1, the researcher developed a sustainable self-care program and synthesized the activities or intervention for phase

2. In phase 2, the principal investigator paired subjects in the controlled and experimental groups by age, gender, and socioeconomic status following the completion of baseline data collection. Information on demographics, knowledge, attitude, practice of self-caring, and drug usage were gathered on all scalar measures in the subject's place of residence at the baseline and at 12 weeks later. Data were collected by a research assistant, who was kept blind to the subject's assigned group. The experimental group received the intervention program plus the usual care, while the controlled group received the usual care with regular health education as routine health promoting program.

The intervention was developed in phase 1. The important intervention was premised on the transformative learning of adult education (Taylor, 2009). Through participation in reflective dialogue guided by one specially trained, experienced doctor, the individual was intended to acquire an understanding which altered their expectations, beliefs, values and perceptions related to their experience of chronic illness. Through the individualized process, the individual might redefine needs action priorities, and thereby consciously choose to modify his or her everyday living (Grabov, 1997). Through participation in the process, the individual might also achieve greater empowerment, through attaining a more

thorough distribution of knowledge, status, and authority in the health promotion process. The steps of perspective transformation vary with the topic, and in this study reflected a self-caring and therapeutic application (Orem, 2001) intended to transpire over the course of self-care. The aims of intervention were to: (i) enable patients to participate as partners in their own self-care; (ii) foster a self-care philosophy; (iii) enhance active decision-making; and (iv) improve the individual's overall mindset, or attitude toward life, self, health and health care. The implementation is in phase 2 by measuring quantitative data (e.g. knowledge, attitude, practicing, drug usage etc.) by personal assessment questionnaires which already tested the validity and reliability by specialist validation (IOC value), exploratory factor analysis, internal consistency (Chronbach's alpha) and KR-20 for reliability at the baseline and 12 weeks later, and then analyzed using t-test comparing between the experimental and controlled groups for age, gender, living arrangements, and accommodation. Inclusion criteria limited the study sample to individuals who were between 20-60 years of age, had hypertension and/or diabetes mellitus, their cognitive abilities intact, and in regular care to manage chronic illness. Exclusion criteria eliminated those who were cognitively impaired or pregnant. The sample size was calculated to compare

the differences in mean change scores on the selected outcome measures of mindset for a medium effect size of 0.80 with an alpha set at 0.05 (two-tailed) and beta set at 0.20, for 31 subjects in each group.

## Results

The result of phase 1, from systematic review to the sustainability of health promotion program or intervention, Boone's conceptual model of non-formal education program was chosen. The model consisted of planning, designing and implementation, evaluation and accountability under 5 assumptions: 1. Planning is a futuristic activity; 2. The planning behavior of the adult education organization is proactive rather than reactive; 3. Planning enhances efficiency in the adult education organization; 4. Planning is sequential in steps, involving collecting and analyzing related information, and identifying, assessing and analyzing needs; and 5. Planning is collaborative, that is, it includes representatives of all who are affected by it. The 4 concepts adhered to include: 1. Planned change; 2. Linkage; 3. Democracy; and 4. Translation (Boone, 1992).

The theory of transformative learning has evolved from three common themes in Mezirow's theory including centrality of the experience, critical reflection, and rational discourse, which is based on critical social theory (Scott, 1997) and psychoanalytic

theory (Boyd & Myers, 1988). Perspective transformation explains how the meaning structures that adults have acquired over a lifetime become transformed. These meaning structures are frames of reference that are based on the totality of individuals' cultural and contextual experience and influence how they behave and interpret events. An individual's meaning structure will influence how they choose to vote or how they react to a given situation. Transformative learning occurs when individuals change their frames of reference by critically reflecting on their assumptions and beliefs and consciously making and implementing plans that bring about new ways of defining their worlds. The theory describes a learning process that is primarily "rational, analytical, and cognitive with inherent logic" (Grabov, 1997). The process of discernment is central to transformative education (Boyd & Myers, 1988). Discernment calls upon such extra rational sources as symbols, images, and archetypes to assist in creating a personal vision as meaning of what it means to be human (Cranton, 1994). The process of discernment is composed of the three activities of receptivity, recognition, and grieving. First, an individual must be receptive or open to receiving "alternative expressions of meaning," and then recognize that the message is authentic. Grieving, considered to be the most critical step of the discernment process, takes place when



an individual realizes that old patterns or ways of perceiving are no longer relevant, moves to adopt or establish new ways, and finally, integrates old and new patterns (Boyd & Myers, 1988).

The conclusion from various perspectives concluded that 6 core elements of Taylor's model was suitable for our study; core elements are the essential components that frame a transformation to teaching. These elements, based on the literature, seem to be part of most transformative educational experiences, critical reflection, and dialogue. However, as the study of transformative learning has evolved, other elements have emerged as equally significant, including a holistic orientation, awareness of context, and authentic practice. Individual experience, the primary medium of transformative learning, consists of what each learner brings (prior experiences) and also what he or she experiences within the classroom itself (Taylor, 2009). Critical reflection, a distinguishing characteristic of adult learning, refers to questioning the integrity of deeply held assumptions and beliefs based on prior experience. It is often prompted in response to an awareness of conflicting thoughts, feelings, and actions and at times can lead to perspective transformation. Dialogue is the essential medium through which transformation is promoted and developed. However, in contrast to everyday discussions,

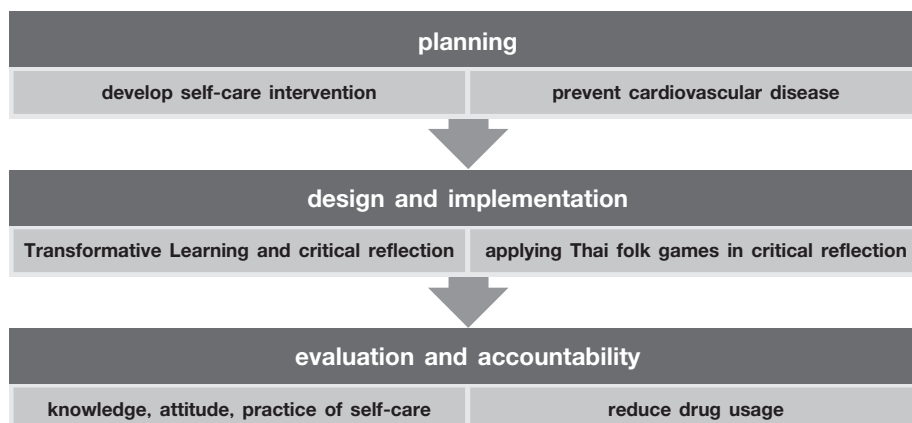
it is used most often in transformative learning “when we have reason to question the comprehensibility, truth, appropriateness (in relation to norms), or authenticity (in relation to feelings) of what is being asserted or to question the credibility of the person making the statement” (Mezirow, 1991). The holistic orientation encourages the engagement with other ways of knowing—the affective and relational. Past research demonstrated that often too much emphasis is given to rational discourse and critical reflection in the fostering of transformative learning and not enough recognition of the role of the affective and other ways of knowing (Taylor, 2009). Developing an awareness of context when fostering transformative learning is developing a deeper appreciation and understanding of the personal and socio-cultural factors that play an influential role in the process of transformative learning. These factors include the surroundings of the immediate learning event, the personal and professional situation of the learners at the time (their prior experience), and the background context that is shaping society. Environmentally, one of the most significant contextual issues of transformative learning is temporal constraint. Research suggests that fostering transformative learning is time-consuming, particularly when an effort is being made to provide access to all participants' voices as well as coming to consensus on various group decisions. Furthermore, working with a rigid time

period poses additional challenges when engaging intense personal experiences that cannot be resolved by the time class is over. These efforts are further compromised with a traditional classroom setting with a short class period. A sixth element is the importance of establishing an authentic relationship. Fostering transformative learning in the classroom depends to a large extent on establishing a meaningful, genuine relationship. Previous research found that establishing positive and productive relationships with others is one of the essential factors in a transformative experience (Taylor, 2009). Thus the sustainable health promotion for self-care was developed from the adult education theory of perspective transformation which is composed of 6 core elements including experience, critical reflection, awareness of context, authentic relation, dialogue, and holistic orientation.

Moreover, the emphasis and synthesis of the critical reflection process were conducted from Cranton (1994) and Gardner, Lehmann, Fook and White (2006). The process of critical reflection is trigger the event, dialogue, supporting group, and exploratory assumptions through content, process and premise reflection (Cranton, 1994). Articulate learning with questioning of assumption, awareness of emotional and rational conflicts, and understanding of context and socio-cultural are important.

Opening mind and exploration through discussion in critical incidence are appropriate. Searching and investigating knowledge, describe and dialogue, interpretation from dialogue, exploration of assumption are essential (Gardner *et al.*, 2006). Most of the dialogue in transformative learning is discourse but we think that in the context of health it is appropriate to reduce the social class to make the atmosphere of leaning in calmness, authentic relation, and holistic of emotional and rational orientation, so the using of life's mentoring dialogue is suitable (Herman & Mandell, 2004). So the conclusion and synthesis of the critical reflection process were the compositions of trigger event or dilemma simulation, life mentoring dialogue, and exploratory of assumptions which consists of content reflection, process reflection and premise reflection. The conclusion of the overall process as a model is shown in figure 1 below.

There were activities or intervention in 2 steps as shown in figure 1. To explain the description: Step 1, the core elements of transformative learning is composed of experience, for which we chose adults to learn in our program. Authentic relationships and holistic orientation using neo-humanist activities, critical reflection and dialogue were synthesized by the group which consisted of dilemma simulation or trigger events, life's



**Figure 1** Model of the overall process of the study

mentoring dialogue, content, process and premise exploration. For example, role playing of paralysis and obesity as the results of improper health behaviours, vegetable buffet in the dark as trigger event, self-assessment of self-care by group drawing; story-telling; diary and journal writing; etc. The exploration and dialogue of content, process, premise reflection by the question “what, how, why” to change attitudes for proper health behaviours is the main purpose of our program. In step 2, the application of Thai folk games in critical reflection included: 1) “The blind hit the pot” came from the complication of diabetes mellitus where a cataract led to being blind; 2) “The one leg’s rabbit” came from the complication of diabetes mellitus and hypertension where the vascular obligation’s vein of the leg led to amputation; 3) “Riding the horse to the town” came from the complication of

diabetes mellitus and hypertension where a cerebrovascular accident led to paralysis; 4) “The crow keeps the egg” came from a lifestyle thickled to stress and became the causing factor of cardiovascular disease 5) “The obese hides the clothes” came from the lifestyle that led to obesity and showed difficulty in the way of life which was the causing factor of cardiovascular disease; and 6) “The snake keeps the son and daughter” came from the lifestyle that led to stress and became the causing factor of cardiovascular disease. The result of applying Thai folk games was good practice because those involved were used to these types of entertainment, were reminded the past, made a good atmosphere, made holistic orientation, and made authentic relation and awareness of context. We could say that the application of Thai folk games in critical reflection was a suitable and satisfactory intervention.

The effects of our interventions will be shown in step 2 of our study. From the voluntary attendance in our program, we included 62 persons and divided them into experimental and control groups by paring.

The demographic and baseline clinical characteristics between the two groups were not different; all of participants were Buddhist and most were female with a low socio-economic status (table 1).

**Table 1** Demographic and clinical characteristics of participants (n=62)

<b>Demographic characteristics</b>	<b>Experimental gr.</b> <i>Mean ± SD or Proportion(n)</i>	<b>Controlled gr.</b> <i>Mean ± SD or Proportion(n)</i>	<b>t-test or Chi-square test</b>	<b>p-value</b>
Age	49.58 ± 7.44	49.45 ± 6.29	0.074	0.941
Gender (female)	96.8%(30)	96.8%(30)	<0.001	1.000
Religion (Buddhist)	100%(31)	100%(31)	<0.001	1.000
<b>Education</b>				
Primary	32.3%(10)	38.7%(12)		
Secondary	41.9%(13)	41.9%(13)	1.259	0.739
High school	22.63.2%(7)	19.4%(6)		
Graduate	3.2%(1)	0%(0)		
Salary	1703.23 ± 1817.96	1409.68 ± 952.31	0.796	0.430
<b>Income</b>				
Enough	93.5%(29)	83.9%(26)	0.425	0.212
Not enough	6.5%(2)	16.1%(5)		
<b>Marital status</b>			6.096	0.730
Bachelor	3.2%(1)	6.5%(2)		
Marry	80.6%(25)	80.6%(25)		
Widow	16.2%(5)	12.9%(4)		
<b>Occupation</b>				
Agriculture	41.9%(13)	51.6%(16)		
Government	3.2%(1)	0%(0)	1.560	0.668
Private	25.8%(8)	25.8%(8)		
Housewife	29.0%(9)	22.6%(7)		
Drug Usage (baht/ day)	4.23 ± 0.89	4.58 ± 1.01	-1.427	0.159

From 38 items of self-care knowledge, The 5-point likert scale of self-care attitude and health behaviours, the baseline of knowledge, attitude and health behaviors were not different between the experimental group and control group. The comparison of the experimental and control groups was significantly different in knowledge, attitude and self-care practice (table 2).

## Discussion

Currently, chronic disease is one of the most important health problems in society. To date, research in this area has focused largely on identifying and preventing risk factors of chronic diseases. As of yet, research has contributed little understanding of the sustainability of behavioral, psychological and social processes which might

temper and indeed improve functioning chronically ill persons (Kaplan, 1992). Addressing the sustainability of health promotion interventions for chronically ill persons have become a high priority. Boone's conceptual model for non-formal education was chosen because collaborative, proactive and linkage programs are leading to a sustainable program. From sustainable self-care after intervention, we choose transformative learning and focus on the 6 core elements from Taylor's model. It will be sustainable due to the transformative frame of reference leading to sustainable health behaviors from dependent care to self-care. The results of our study show that the self-care interventions improve self-care practicing by self-care knowledge and attitude transformation leading to fewer drug expenses.

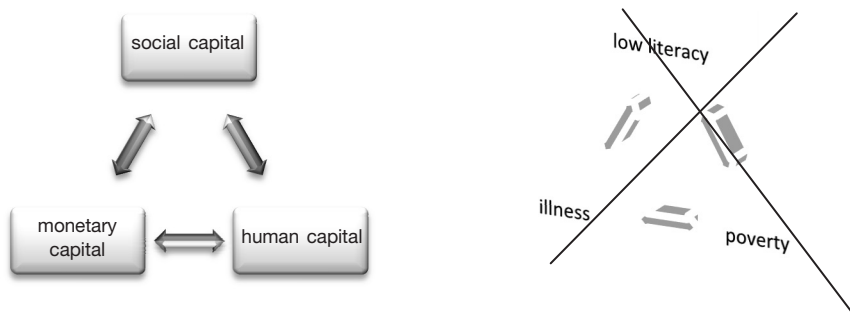
**Table 2** Self-care knowledge, attitude and health behaviors of participants after intervening (n=62)

<b>Self-care and drug usage</b>	<b><i>Experimental gr.</i></b> <b><i>Mean ± SD</i></b>	<b><i>Controlled gr.</i></b> <b><i>Mean ± SD</i></b>	<b><i>t-test</i></b>	<b><i>p-value</i></b>
Self-care Knowledge	18.13±3.22	16.13±1.28	3.210	0.003
Positive attitude	2.34±0.50	2.02±0.53	2.202	0.032
Negative attitude	2.63±0.54	3.05±0.65	-2.995	0.004
Positive practicing	1.68±0.47	1.41±0.29	2.797	0.007
Negative practicing	2.23±0.61	2.64±0.53	-2.391	0.020
Drug Usage (baht/day)	3.87±0.89	4.69±1.09	-3.354	0.001

The critical reflection is necessary for transformative learning. The process of critical reflection is synthesized by our study which is dilemma simulation, dialogue, and premise exploration. The application of Thai folk games in critical reflection is good practice due to its suitability for the Thai lifestyle, the good atmosphere, learning stimulus, authentic relationship, holistic orientation and awareness of the context.

In this study the context is health-based and we choose the area to study in primary health care unit in a suburban area in the northeastern part of Thailand. The spiritual monks, doctors and dentists establish the philanthropic primary health care unit collaborate with community linkage to Governmental office and policy. We choose to start from social capital to improve the quality of life of people in the community or society (human capital), because the prosperity index (economy, entrepreneurship & opportunity, governance, education, health, safety & security, personal freedom, social capital) of Thailand is highest in social capital (rank 19 in 144 countries) (Legatum Institute, 2013). When we talk about health equity, we should talk about accessibility and quality. Although the universal coverage scheme policy of Thailand's public health has

succeeded in accessibility, the quality is questioned. The philanthropic health care unit is one of the ways to decrease this problem. From the past to the present, most of the monetary donations and charities have come to build hospital buildings or buy technologically advanced instruments for secondary, tertiary health care units, which are difficult to access for the rural areas. There are some new ideas from philanthropic doctors to help the poor directly by establishing primary health care units. Those will be close to the community and specialize in treatment. Religion plays a major role and the monks are the mediator of this. All of this occurs because of the strength of Thailand's social capital. From our purpose of study, self-care will reduce drug and hospital care services and lead to decreased expense; furthermore, those who used to take time to care for an chronically ill person will have time to go to work and earn money, so it improve monetary capital. The effects of the program will invite other people to give, share and come to the program, so it will increase social capital again and become a sustainable cycle of a lifelong learning society that can get rid of a vicious cycle of low literacy, poverty, and illness (figure 3).



**Figure 3** Show sustainable practicing in a lifelong learning society

### Recommendation

The term of sustainability in our study implies 2 meanings: one is sustainability of the program or intervention for which we use the non-formal conceptual model of Boone with the main principle of collaboration and linkage as described above. The other meaning is to sustain health behaviors, which we choose transformative to transform habitual perspectives by the 6 core elements of Taylor and apply Thai folk games in the

critical reflection. The term of critical reflection implies 2 meanings also: one is important or crisis or dilemma, the other meaning is critique, which means more than 1 frame of reference. Thus from our study, we conclude that sustainable health promotion intervention for chronically ill persons can be used by non-formal education activities combined with transformative learning activities to change attitudes and improve self-care practicing.

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#### ผู้เขียน

- นายประศักดิ์ สันติภาพ** นิลิตดุษฎีบัณฑิตสาขาวิชาการศึกษานอกระบบ ภาควิชาการศึกษาดลชีวิต คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย กรุงเทพมหานคร ๑๐๓๓๐  
อีเมล: sakpeace5623@gmail.com
- อาจารย์ ดร.สุวิธิดา จรุงเกียรติกุล** อาจารย์ประจำสาขาวิชา การศึกษานอกระบบโรงเรียน ภาควิชาการศึกษาดลชีวิต คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย กรุงเทพมหานคร ๑๐๓๓๐  
อีเมล: suwithida@yahoo.com
- รองศาสตราจารย์ ดร.เกียรติวรรณ อมาตยกุล** อาจารย์อาวุโสสาขาวิชา การศึกษานอกระบบโรงเรียน ภาควิชาการศึกษาดลชีวิต คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย กรุงเทพมหานคร ๑๐๓๓๐  
อีเมล: -

#### Authors

- Prasak Santiparp** Doctor's Degree Student, Department of Lifelong Education Faculty of Education, Chulalongkorn University, Bangkok, Thailand 10330 Email Address: sakpeace5623@gmail.com
- Suwithida Charungkiatkul** Depart of Non-formal Education, Lifelong Education, Faculty of Education, Chulalongkorn University, Bangkok, Thailand 10330  
Email Address: suwithida@yahoo.com
- Kiatiwan Amatayakul** Depart of Non-formal Education, Lifelong Education, Faculty of Education, ChulalongkornUniversity, Bangkok, Thailand 10330 Email Address: -