A Model of Psychological Well-Being of Teachers Residing

in an Area of Unrest in Southern Thailand: A Structural Modeling Study

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ชื่อวิทยานิพนธ์	แบบจำลองความผาสุกด้านจิตใจของครูที่อาศัยในพื้นที่ความไม่สงบ ชายแดนใต้ : การศึกษาแบบจำลองเชิงโครงสร้าง
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บทคัดย่อ

การศึกษาครั้งนี้ เป็นการศึกษาเชิงพรรณา ณ ช่วงหนึ่งของเวลา เพื่อทดสอบโมเดล ทำนายความผาสุกด้านจิตใจ ของครูที่อาศัยอยู่ในพื้นที่ความไม่สงบชายแดนใต้ ซึ่งสังเคราะห์จากแนวคิดข้อมูลเชิงประจักษ์ ซึ่งอยู่ บนพื้นฐานของทฤษฎีความเครียดและการเผชิญปัญหาของลาซารัสและโฟล์คแมน ชุดของตัวแปรในการทำนาย ความ ผาสุกด้านจิตใจ ของครูกลุ่มนี้ ประกอบด้วยความรู้สึกมีความหมาย การสนับสนุนทางสังคม การรับรู้ความสามารถในการควบคุม การเผชิญปัญหา และความผาสุกด้านจิตใจ

กลุ่มตัวอย่างเป็นครูจำนวน 240 ราย ที่อาศัยอยู่ในพื้นที่ความไม่สงบชายแดนใต้ อย่างน้อย 1 ปี ไม่มีภาวะความเครียดที่ผิดปกติ จากการได้รับการบาดเจ็บ (Post Traumatic Stress Disorder: PTSD) การเก็บรวบรวมข้อมูลโดยใช้แบบสอบถาม การวิเคราะห์ข้อมูล เพื่อทดสอบและปรับโมเดลด้วยวิธีสมการเชิงโครงสร้าง

แบบสอบถาม ที่ใช้ในการศึกษา ประกอบด้วย แบบวัดความหมายของชีวิต (Meaning in Life Questionnaire) แบบประเมินการสนับสนุนทางสังคมระหว่างบุคคล (Interpersonal Support Evaluation List) แบบวัดการรับรู้ความสามารถในการควบคุม (Perceived Control Questionnaire) แบบวัดการเผชิญปัญหาของจาร์โลวิค (Jalowiec Coping Scale) และแบบวัดความผาสุกด้านจิตใจ (Psychological Well-Being MIDUS II version)

ผลการศึกษาพบว่าโมเดลทำนายเริ่มแรกมีสอดคล้องกับข้อมูลเชิงประจักษ์ และโมเดลที่ปรับเพื่อให้เหมาะสมที่สุดสามารถทำนาย ความผาสุกด้านจิตใจ ของครูที่อาศัยอยู่ในพื้นที่ความไม่สงบชายแดนใต้ได้ โดยชุดของตัวแปรในโมเดลร่วมกันทำนาย ความผาสุกด้านจิตใจ ได้ร้อยละ 65 ทั้งนี้การเผชิญปัญหาแบบพึ่งตนเองมีอิทธิพลโดยตรงทางลบต่อ ความผาสุกด้านจิตใจ (β= -.43, p<.01) การเผชิญปัญหาแบบมุ่งมองโลกในแง่ดี มีอิทธิพลโดยตรงทางบวกต่อความผาสุกด้านจิตใจ (β=.53, p<.01) การเผชิญปัญหาแบบมุ่งมองโลกในแง่ดี มีอิทธิพลทางอ้อมต่อความ ผาสุกด้านจิตใจผ่านทางความรู้สึกมีความหมาย (β= .18, p<.05) ความรู้สึกมีความหมาย มีอิทธิพลโดยตรง

ทางบวกต่อ ความผาสุกด้านจิตใจ   (β=.36, p<.01) การสนับสนุนทางสังคมมีอิทธิพลโดยตรง
ทางบวกต่อความผาสุกด้านจิตใจ (β=.25, p<.01) และการสนับสนุนทางสังคมอิทธิพลทางอ้อมต่อ
ความผาสุกด้านจิตใจ   ผ่านทาง การเผชิญปัญหาแบบมุ่งมองโลกในแง่ดี   (β=.18, p<.05) การ
สนับสนุนทางสังคมอิทธิพลทางอ้อมต่อความ   ผาสุกด้านจิตใจ ผ่านทาง ความรู้สึกมีความหมาย
(β= .18, p<.05).

            นอกจากนี้ การรับรู้ความสามารถในการควบคุม มีอิทธิพลโดยตรงทางบวกต่อความ ผาสุก
ด้านจิตใจ (β=.16, p<.05) การรับรู้ความสามารถในการควบคุม อิทธิพลทางอ้อมต่อ ความผาสุก
ด้านจิตใจผ่านทางความรู้สึกมีความหมาย (β = .40, p < .01) การรับรู้ความสามารถในการควบคุม
มีอิทธิพลโดยตรงทางบวกต่อ การเผชิญปัญหาแบบมุ่งเน้นการจัดการกับปัญหาโดยตรง   (β=.15,
p<.05) และการเผชิญปัญหาแบบมุ่งเน้นการจัดการกับปัญหาโดยตรงไม่ มีอิทธิพลโดยตรงทางบวก
ต่อความผาสุกด้านจิตใจอย่างมีนัยสำคัญทางสถิติ (β = .01, p>.05)
 การศึกษานี้ทำให้ได้หลักฐานเชิงประจักษ์เพื่อนำมาใช้ในการสร้างโปรแกรมการให้ความ
ช่วยเหลือ ในการส่งเสริมความผาสุกด้านจิตใจของครูที่อาศัยในพื้นที่ความไม่สงบชายแดนใต้ โดย
การเสริมสร้างให้ครูค้นหาความหมายในตนเอง ใช้การสนับสนุนทางสังคม ช่วยให้มีการใช้รูปแบบ
การเผชิญปัญหาแบบมุ่งมองโลกในแง่ดีและเสริมสร้างความสามารถในการควบคุม

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ABSTRACT

The purpose of this descriptive, cross sectional study was to test the predictive model of the psychological well-being of teachers residing in an area of unrest in southern Thailand, which was synthesized from the empirical data based on Lazarus and Folkman's theory of stress and coping. The causal relationships among variables included sense of meaning, social support, sense of control, coping, and psychological well-being.

The sample was 240 teachers residing in an area of unrest in southern Thailand, who had lived in an area of unrest for at least 1 year, did not have Post Traumatic Stress Disorder (PTSD) and had volunteered to participate in the study. A survey-self report method was used for data collection.

The instruments used for the study were the Meaning in Life Questionnaire, Interpersonal Support Evaluation List, Perceived Control Questionnaire, Jalowiec Coping Scale, and Psychological Well-Being MIDUS II version.

The hypothesized model was tested and modified with the structural equation modeling (SEM) technique by using SEM program.

The result revealed that the initial hypothesized model adequate fit the data.

The modified model adequately (all fit indices) accounted for 65 % of variance in psychological well-being. Self-reliant coping style had a negative direct effect on psychological well-being (β = -.43, p <.01). Optimistic coping style had a positive direct effect on psychological well-being (β = .53, p <.01). Optimistic coping style had a positive direct effect on sense of meaning (β = .18, p <.05). Sense of meaning had a positive direct effect on psychological well-being (β = .36, p <.01). Social support had a positive direct effect on psychological well-being (β = .25, p <.01). Social support also had a positive indirect effect on psychological well-being through optimistic coping style (β = .18, p <.05). Social support had a positive indirect effect on psychological well-being through sense of meaning (β = .18, p< .05). Furthermore, sense of control had a positive direct effect on psychological well-being (β = .16, p <.05). Sense of control had an indirect effect on psychological well-being through sense of meaning (β = .40, p < .01). Sense of control had a positive direct effect on confrontive coping style (β = .15, p <.05). Confrontive coping style did not have a positive direct effect on psychological well-being significantly (β = .01, p>.05).

These results have provided evidence to create interventions to promote and enhance psychological well–being of teachers residing in an area of unrest by using these predictors especially, sense of meaning, social support, optimistic coping style, and sense of control.

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CHAPTER 1

INTRODUCTION

Background and Significance of the Study

Unrest situations occur throughout the world, as in the south of Thailand. Unrest refers to terrorism with a serious threat to life and security with severe consequences (Friedland & Meroai, 1986) and can be caused by bomb blasts and shootings which result in stressful lives for people residing in that area. In Thailand, unrest situations occur monthly in Narativat, Yala, Pattani provinces, and the 4 districts of the Songkhla province. Terrorism has been a severe problem since 2004, especially after terrorists stole weapons from a military shelter in Narativat province (Blenkinsop, 2007).

The cause of the unrest situation is unknown, how the unrest situation started and when it will end is also unknown. According to Udornsin (2006) the problem might have occurred from conflicts and previous problems that have accumulated for a long time. In addition, it might involve problems caused by differences in values, cultures and beliefs. It could also have arisen from the pressure of people who feel a lack of justice from the government.

The character of unrest situations has no pattern as these situations cannot be predicted, are uncertain, have no clear time frame, and occur frequently. Evidence shows acts of terrorism that occurred from January 2004 to December 2014, numbered 14,688 events in Narativat, Yala, and Pattani provinces. During this period

of unrest, 6,286 people died and 11,366 were injured (Panatnashe, 2014). The continuing series of terror attacks on the population of southern Thailand influences the country multi-dimensionally in negative ways such as loss (death, property), physical injuries, disabilities, psychological injuries (mentality) and socioeconomic problems. The majority of effects are psychological consequences that occur in Thai citizens who reside in these areas of unrest. These psychological consequences can occur in a person who is exposed to terrorism both directly and indirectly. According to Romacro-Daza, Weeks & Singer (as cited in Douyon, Marceling, Jean-Gilles& Page, 2005), psychological distress occurs increasingly in both victims and witnesses to the incidents, such as family members of the victims.

An unrest situation is a stressful experience for everyone, particularly for the Thai teachers in this situation. Teachers are one group of people that experience the direct effects from the events. They are one target of terrorism for many reasons. Firstly, most Thai teachers are considered virtuous people. They disseminate knowledge and teach morals to Thai citizens. If people know and understand in the right way, they can differentiate between right and wrong and do the right thing. If terrorists hurt or kill teachers, it is seen to be helping to demolish the bureaucratic system. Secondly, teachers stay in society and live within a community. They work as mediators of the government and serve as a connection between the government and the citizens of different communities. They are seen as representing the government which has an influence on society. They assist people in the community to understand the government and other sectors so that people can participate together in resolving problems in their society (Nararatwang, 2009). Thus, because of their standing in the community, teachers are a target of violence and are innocent victims. Although the

government's policy provides security for them in the form of police and soldiers, violent situations still occur. Nowadays, teachers usually confront events in which violence threatens them every day. Since 2004 to 2013, 158 teachers have died and 122 have been injured due to the unrest situation (The Office of Strategy Management and Educational Integration No. 12 Yala, 2013). The direct effects of terrorist attacks that result in various severities such as injuries, disabilities, loss of a significant person and death, and a high incidence of mental health problems and the relocation of many teachers are outlined in the following paragraph.

It was found that in 2007, 1700 teachers moved outside of the unrest area. In 2008, 797 teachers of elementary schools and high schools in the 3 provinces of deep southern Thailand requested to go into the early retirement project (Isranews online, 2007; Korm Chad Luek News Online, 2009). The reasons for relocation are fear, horror, and lack of confidence in security (Focus team, 2008). The number of teachers staying in the unrest situation has dropped.

In general, the teachers who are residing in these areas of unrest exhibit mental health problems such as stress, fear, horror, paranoia, and low motivation levels. A recent study related to the mental health of teachers in the three areas of southern Thailand, found that 26.04 % of the teachers had mental health problems such as depression more than people in general and 28.83 % of teachers were a suicidal risk (Nararatwang, 2009; Prohmpetch& Naraongart, 2009). Also, they have more mental health problems than other persons in common (Prohmpetch & Naraongart, 2009).

However, there are teachers still living in the area of unrest who have an ability to adapt well. A study found that some teachers who face the unrest situation in the three southern most provinces of Thailand can lead a fairly 'normal' daily life and

undertake their role effectively because they have a state of resilience that gives them strength to live under the unrest situation and their mind and thoughts and life are setup for survival (Detdee, 2008). This implies that some of the teachers residing in this area of unrest have good psychological adaptation although stressful events occur. Successful psychological adaptation originates in a person by a process such as renewed cognition - that leads one to continue to search for meaning (Linley, 2003), to renew life values and to restore a sense of self-concept (Liveh & Antonak, 2001). Thus, the outcomes of adaption are positive (e.g., no mental health problems, positive life changes and integrity of mind). This state should be termed psychological well-being. Psychological well-being is a part of quality of life and mental health that can be measured by subjective assessment (Peterson & Kellam, 1977). It also reflects social function. Psychological well–being has been proposed as occurring when a balance between personal needs and environmental demands are attained (Higgins et al., as cited in Amiot, Blanohard & Gaudreau, 2008). Thus, the construct of this concept is capable of measuring the mental health status of individuals. Psychological well-being is beneficial for a person living under an unrest situation. An individual has different abilities of psychological adaptation so each person also has different psychological well-being. This result is based on several factors.

As per the literature review, factors related to the psychological well-being of a person in a terrorist situation or violent events on a community (i.e., terrorist attacks, missile attacks) include coping - effective coping strategies or active coping (North, 2007: Olff, Langeland & Gerson, 2005; Steger, Frazier & Zacchaini, 2008), a sense of meaning-finding meaning, spiritual meaning (Ai, Cascio, Santanglo & Evans-Campbell, 2006; Mclntosh, Silver & Wortman, 1993; Steger, Frazier & Zacchaini,

2008; Updepraff, Silver, Holman, 2008), conservativism (Bannanno & Jost, 2006) or less negative world view change (Butler et al., 2009), future orientation thinking or optimism (Holman & Silver, 2005), self-esteem (Friedman, Hambien, Foa & Charney, 2004; Hobfool, Watsan, Bell, Bryant, Brymer, Friedman et al., 2007), sense of control or perceived control (Klingman, 2001; Zeidner, 2006), social support–support resources (Klingman, 2001); less social constraints; and social network (Butler, Koopman, Azarow, Blasey, Masgelatene, DiMiceli, et al., 2009).

It is important to identify predictors of psychological well-being. Knowing the factors contributing to psychological well-being would provide evidence for designing an intervention for promoting adaptive outcomes, decreasing psychological distress, and enhancing strength to live in the ongoing situation, especially, for a person in an area of unrest.

Studies of factors related to positive adaptation in terrorism are isolated and incomplete. Most of the studies have been conducted in western countries such as the USA (Adams & Boscarino, 2005; Bonanno & Galea, 2007; Butler et al., 2009; Holman & Silver, 2005; Steger, Frazier & Zacchanini, 2008; Updergraff, Silver & Holman, 2008) and Israel (Zeidner, 2006). Furthermore, these studies included various sectors of the population (e.g., children, adolescents, soldiers, police and students). Many studies were conducted with victims of terrorism and war. The major focus of these studies has been the effect of terrorism on post traumatic stress disorder (PTSD) or on the negative consequences aftermath (Khaled, 2004). Few studies have mentioned the victims who have faced terrorism, and recovered from post traumatic stress disorder.

The results of the studies mentioned previously have been found to be similar

in some populations and countries. No study mentions factors predicting the psychological well-being of a person in the face of terrorism and ongoing terrorism. Nor has any study examined a full causal model of the predictors of the psychological well-being of teachers residing in an area of unrest in southern Thailand. Thus, the researcher conducted this study in order to test the causal model of the predictors for the psychological well-being of teachers residing in an area of unrest in southern Thailand.

Objectives of the Study

The general objectives of this study were to develop and test a causal model of the predictors of the psychological well-being of teachers residing in an area of unrest in southern Thailand (PTRU) with the empirical data. This model examined the causal relationship among a set of four predictors including coping, sense of meaning, sense of control, and social support on psychological well-being. The specific objectives were to examine the following:

1. The accuracy of the hypothesized model of predictors of the psychological well-being of teachers residing in an area of unrest.

2. The influence of coping (confrontive coping style, self-reliant coping style, optimistic coping style, and evasive coping style) on psychological well-being.

3. The influence of the sense of meaning on psychological well-being.

4. The influence of a sense of control on confrontive coping style and psychological well-being.

5. The influence of social support on confrontive coping style and psychological well-being.

Research Questions

The research questions that guided this study are as follows:

1. Does the proposed model of the predictors of the psychological well-being of teachers residing in an area of unrest (PTRU) fit with the empirical data?

2. Does confrontive coping style have a direct effect on psychological well-being?

3. Does self-reliant coping style have a direct effect on psychological well-being?

4. Does optimistic coping style have a direct effect on psychological well-being?

5. Does evasive coping style have a direct effect on psychological well-being?

6. Does a sense of meaning have a direct effect on psychological well-being?

7. Does a sense of control have a direct effect on psychological well-being and indirect effect on psychological well-being through confrontive coping style?

8. Does social support have a direct effect on psychological well-being as well as an indirect effect on psychological well-being through confrontive coping style?

Conceptual Framework

Model development and model testing need to have evidence support, especially evidence from research, and a theory because the model has to be corrected and suitable for the target population being studied.

In this study, a theoretical model for the predictors of the psychological well-being of teachers residing in an area of unrest in southern Thailand (PTRU) (Figure 1)

was synthesized based on the stress, appraisal and coping theory (Lazarus & Folkman, 1984). In short, potential stressful events (potential stressful events is the unrest situation) are primary appraised as stressful/stress appraisal including harm/loss, threat, and challenge. Challenging appraisal is depicted by sense of meaning because the challenge appraisal focuses on the potential for gain or growth inherent in an encounter and the outcome of this type of appraisal is characterized by pleasurable emotions such as eagerness, excitement and exhilaration. Secondary appraisal is evaluating one's ability to deal with a threat or strain which is a judgment concerning what might be done. Some factors influencing secondary appraisal include controllability and social support. Controllability (controllability depicted by sense of control that is perceived as control of the situation) in the context of an individual's own beliefs, values, and experience. Social support is one factor influencing the secondary appraisals. It serves as an evaluation of the benefits or available resources of the individual (depicted by social support) and consequences of a particular coping strategy (depicted by coping). Thus, secondary appraisals guide the use of specific coping styles. Finally, the effectiveness of coping styles determines the reappraisal as well as the individual's psychological adjustment (depicted by psychological well-being as the outcome of the PTRU model). The five major components of the PTRU which are psychological well-being, a sense of meaning, a sense of control, social support, and coping are described as follows:

Psychological well-being

Psychological well-being represents a construct, namely the psychological well-being outcome of the stress and coping theory (Lazarus & Folkman, 1984). Psychological well-being is conceptualized as an outcome of a sense of meaning, a sense of control, social support, and coping.

In this study, the term psychological well-being is used to capture positive functions that serve as the theoretical foundation to generate a multidimensional model of well-being (Ryff, 1989, 1995). Psychological well-being refers to an important aspect of the internal individual dimension of mental health that an individual feels about self and other aspects of positive psychological functions. Consequently, a psychological well-being measure has been developed and uses aspects of Ryff's research (1989, 1995). Ryff (1989, 1995) proposed that psychological well-being is mental health in a positive function. Since, psychological well-being reflects positive health, positive psychological functioning encompasses a breadth of wellness that includes positive evaluations of oneself and one's past life (self–acceptance), a sense of continued growth and development as a person (personal growth), the belief that one's life is purposeful and meaningful (purpose in life), the possession of quality relations with others (positive relationships with others), the quality to manage effectively one's life and surrounding world (environmental mastery) and a sense of self–determination (autonomy). Thus, psychological well-being is operationalized to assess the domain of positive psychological functioning which is the positive outcome of psychological adaptation.

Sense of meaning

Sense of meaning is the identification of a benefit of a hardship or disaster that has happened. A sense of meaning refers to a value of a person in life that has advantage, strength, and opportunity (Tennen & Affect, 1996), especially, the identification of a benefit adversity. It also refers to the sense made of, and significance felt regarding, the nature of one's being and existence (Steger, Frazier, Oishi & Kaler, 2006). This value happens when an individual evaluates anything in life. It was hypothesized that a person who had a high sense of meaning would have better psychological well-being.

This model focuses on situation-specific meaning that concerns the coping process. There are two domains that affect psychological well-being. Sense of meaning has an effect on psychological well-being (posttraumatic growth). Components of sense of meaning are composed of meaning made and meaning making (Park, 2010). Meaning making (search for meaning) is the process of meaning (that is the same meaning such as reports of intrusive thoughts, positive reappraisal coping and emotional support coping). In other words, search for meaning stands for process of meaning. Meaning made stands for outcome (finding meaning) and is the outcome of meaning. Meaning made is depicted as experiencing positive lessons and aspects-identity reorganization. According to the meaning theory (Strarck, 2003), the meaning's function includes the reconstruction process (cognition/thought) in life, moment by moment. This reconstruction is unique for each person. A person has the ability to choose her or his own view point and chooses to remain positive. In this study, the researcher conceptualizes sense of meaning as the process in which the

person searches for meaning once a situation has been appraised as stressful, and meaning as outcome refers to the meaning that the person makes in the aftermath of the events. Sense of meaning can reflect how teachers residing in an area of unrest in southern Thailand view this situation. Thus, sense of meaning represents presence and search.

Sense of control

A sense of control is perceived as control over a situation by an individual's life. It is focused on assessing the events whether it is controllable or not. A sense of control refers to perception or a valued aspect of one's life which is manageable in general (Wallhagen & Lacon, 1995). It has been hypothesized that a person who has a high sense of control would have better psychological well-being, and would use a more confrontive coping style (problem-focused coping) because of evidence support.

In accordance with the person–environment framework (Wallhagen & Lacon, 1999), a sense of control functions to mediate a relationship between objective and subjective control and adaption. Both environmental demands and resources directly influence a sense of control. In addition to this, a sense of control is a control belief that ranges along a continuum from global, to generalized beliefs, to most specific beliefs about controlling discreet aspects of life such as symptoms (Wallhagen & Brod, 1997). The goal of sense of control is to improve functioning (mental and physical health) (Montpetit, Bergeman, Bisconti, & Rausch, 2006).

Sense of control consists of manageability and goal attainment. Sense of control concerns objective and subjective demands, the objective and subjective context (environment) and appraisal (cognition and information process). When a

person faces an unrest situation, a sense of control may help in reducing the importance of the problem. Thus, the function of sense of control is to buffer the impact of the stressful events (Tayior, Helgenson, Reed, & Skakan, as cited in Cote & Peper, 2005). Thus, the consequence is good psychological adaptation under the unrest situation. In other words, sense of control supposes to promote psychological well-being when an individual faces the unrest situation.

Social support

Social support is an external resource used to adapt to events for enhancing positive psychological functioning/mental health/less distress and its functions also are to decrease distress. Social support refers to the perceptual evaluation of the availability of aid support (instrumental support), emotional support, and information support (Cohen & Willis, 1985). It was hypothesized that an individual who is high in social support (perceived social support) would have relatively better psychological well-being, and use a more confrontive coping style.

In this model, the notion of social support appraisal was based on the conceptualization of social support proposed by House (1981) who defined social support as an interpersonal transaction. This support is a support resource which a person who confronts a crisis situation would need. Social support comprises of three dimensions: emotional support, tangible support or material support, and informational support. Emotional support refers to assertions or demonstrations of love, caring, esteem, sympathy, and group belonging (House, 1981). Tangible support or material support refers to actions or materials provided by others that enable the fulfillment of ordinary role responsibilities (House, 1981). Information support refers

to communications of opinion relevant to current difficulties such as advice, personal feed-back, and information that might make an individual's life circumstances easier (House, 1981). These components seem to be in the area of the resource of coping and seem to function as a resource of coping (source of stress buffering).

Cohen and Wills (1985) proposed the stress buffering model and they focused on the perceived availability of social support to act as a stress buffer. Perceived available support will have an interaction with stressful events. In other words, support acts as a moderator (safeguard or cushion).

In the stress buffering model, available support functions to reduce the effects of stress and this contributes to a less negative appraisal (Cohen & Harberman, 1983; Cohen & Mckay, as cited in Cohen & Wills, 1985). The result is the occurrence of psychological well-being in the person facing a crisis situation.

Coping

Coping is an adaptive response to stressful events. Coping refers to cognitive and behavioral efforts to manage the situation (Lazarus & Folkman, 1984; Skinner, 2003; Zeiner & Hammer, 1992). It was hypothesized that an individual employs a various number of coping styles to deal with a stressor (events or situation). A person who uses a more confrontive coping style, a more self-reliant coping style, and a more optimistic coping style would have better psychological well-being. A person who uses a less evasive coping style would also have better psychological well-being.

In this study, based on the stress and coping theory (Lazarus & Folkman, 1984), coping is conceptualized as purposeful efforts that one directs towards resolving the stressful relationship between the self and the environment (problem-

focused coping) or towards palliating negative conditions that arise as results of stress (emotion-focused coping). Therefore, components of coping consist of problem-focused coping and emotion- focused coping. These two types of coping can be further refined into eight specific styles (Jalowiec, 2003). In the present study, only four coping styles (confrontive coping style, self-reliant coping style, optimistic coping style, evasive coping style) were selected for testing in the model because there is evidence to support correlation between these coping styles and psychological well-being.

In addition, a person selects to use different coping styles in order to deal with a stressor. An individual can use any type of coping styles at any time and each person uses coping styles in different amounts (i.e., someone uses few coping styles or someone uses many (several) coping styles). The type of coping styles a person chooses to use depends on the sufficiency of the coping resource or available social support (Lazarus & Folkman, 1984). Thus, coping styles turn results in the psychological well-being of the person when an individual faces the unrest situation.
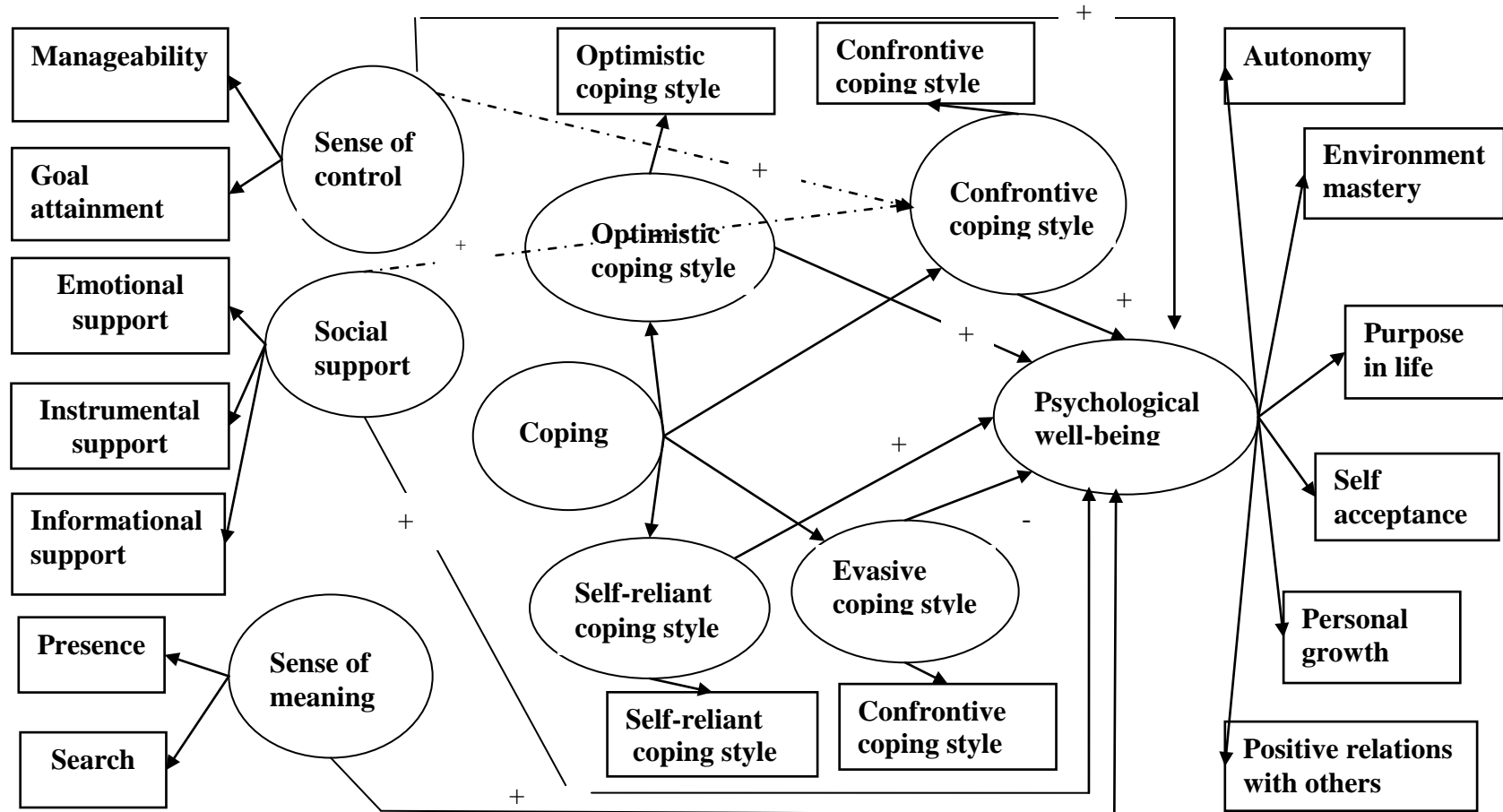
Figure 1 Proposed model of predictors for psychological well-being of teachers residing in an area of unrest in southern Thailand.
Note.   +   refers to positive relationship.   -------- refers to direct effect
            -        refers to negative relationship.   …….. refers to indirect effect

Hypotheses

The hypotheses of this study are as follows:

1. The hypothesized model of predictors for the psychological well-being of teachers residing in an area of unrest fits with the empirical data.

2. Confrontive coping style has a positive direct effect on psychological well-being.

3. Self–reliant coping style has a positive direct effect on psychological well-being.

4. Optimistic coping style has a positive direct effect on psychological well-being.

5. Evasive coping style has a negative direct effect on psychological well-being.

6. Sense of meaning has a positive direct effect on psychological well-being.

7. Sense of control has a positive direct effect on psychological well-being as well as a positive indirect effect on psychological well-being through confrontive coping style.

8. Social support has a positive direct effect on psychological well-being as well as a positive indirect effect on psychological well-being through confrontive coping style.

Definition of Terms

The operational definitions of each study variable are summarized as follows:

1. Coping is defined as thinking, an action or effort to resolve problems from

unrest situations by using several styles. Coping styles are determined by the Jalowiec Coping Scale (Jalowiec, 2003) and only 4 of 8 were used in the study. They were confrontive coping style, optimistic coping style, evasive coping style, and self-reliant coping style.

2. Sense of control refers to a person's thoughts about the situation, and the personal assessment whether the situation can be managed in general. Sense of control is determined by the Perceived Control Questionnaire (PCQ) (Wallhagen, 1988) which are goal attainment and manageability.

3. Sense of meaning refers to a person's interpretation of general things in life and a personal belief that the events make them strong, and it is an opportunity to find advantages from self. Sense of meaning is determined by the Meaning in Life Questionnaire (MLQ) (Steger, Frazier, Oishi & Kaler, 2006) which are presence and search.

4. Social support refers to the adequacies of perception of a person about receiving support from his or her family, friends, neighbors, co-workers, and others. Adequacies of support can be evaluated in terms of as enough or suitable or not. Social support is determined by the Interpersonal Support Evaluation List (ISEL) (Cohen, Mermelstein, Kamarck & Hoberman, as cited in Sarason, Snearin, Pierce & Sarason, 1987) which are emotional support, instrumental support, and informational support.

5. Psychological well-being is defined as having a comfortable mind, and positive feelings which is an individual's feelings about self including self–acceptance or self satisfaction, goals in life, good relationships with others, understanding everything (i.e., situation, self) in their environment and life, self sufficiency for

managing everything (i.e., self life, responsibility) with self, no depression, no suicidal thoughts and no post traumatic distress symptoms (posttraumatic stress disorder), and no mental health disorder. This is determined by the Psychological Well-Being-MIDUS II Version (PWB) (Ryff, Keyes & Hughes, 2004) which are self–acceptance, personal growth, purpose in life, positive relationships with others, environmental mastery, and autonomy.

Significance of the Study

This study examined the causal relationships among coping styles, sense of control, sense of meaning, social support, and psychological well-being of the teachers residing in an area of unrest of southern Thailand. In this study, the model of psychological well-being of teachers residing in an area of unrest in southern Thailand was tested. It explained the relationships among these variables and predictors of psychological well-being of teachers residing in an area of unrest in southern Thailand. This could be helpful for mental health practitioners to understand the psychological well-being of teachers residing in an area of unrest, their effective coping styles, their values and beliefs. Therefore, the results of this study could aid in designing nursing interventions to help teachers residing in an area of unrest to live with better psychological well-being. It could also be useful for policy makers to develop policies to help teachers residing in an area of unrest to live peacefully. The model could also be used to guide future research studies in this area.

CHAPTER 2

LITERATURE REVIEW

In this chapter, both conceptual knowledge and empirical knowledge are integrated as follows:

1. Terrorism or an unrest situation

2. Teachers living in an area of unrest

3. Concept of psychological well-being

4. The process of psychological well-being

5. Measurement of psychological well-being

6. The psychological well-being of teachers residing in an area of unrest

7. Predictors of psychological well-being.

Terrorism or an Unrest Situation

Definition of terrorism

Terrorism is a severe stressful event or situation that has an impact on a person, community, society and a nation. There are several identified definitions. The definitions of terrorism focus on the characteristics of threat, impact, and cause.

Robert (2005) defined terrorism as a traumatic event that refers to an overwhelming, unpredictable, and emotionally shocking experience, whereas Zeidner (2006) mentioned that terrorism is an experience with a serious threat that affects life and personal security that does not know a time frame and has severe consequences

such as intense fear and helplessness.

Moreover, Elsenman et al. (2009) defined the effect of the terrorism as "real of threatened may include adverse health effects in those immediately affected and their community ranging from a loss of well–being or society to injury, illness, or terrorism"

In conclusion, terrorism is an experience with a serious threat that affects life and personal security. It is unpredictable in that there is no clear time frame and results in severe consequences. It has an impact on the physical and psychological condition of a person (Robert, 2005) and can manifest in illness, and a loss of well-being.

The responses of victims to terrorism

Terrorist situations create trauma. In general, a common response to traumatic events or the common symptoms following exposure to traumatic events include any of the following (United States Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder, 2008):

1. An unusual feeling of being easy startled (e.g., jumpiness, alarm)/ unconfident feeling/difficult making decisions for performance

2. Difficulty in falling asleep or staying asleep; waking up early, being sleepless.

3. Nightmares and /or "flashbacks" (i.e., re-experience the event happening in the mind, repeated visual images of the event)

4. Difficulty in concentrating or paying attention to the environment

5. Carelessness in performing ordinary tasks (i.e., job, role)

6. Outbursts of irritability or anger sometimes without apparent reason/high levels of anger and hostility among trauma victims

7. Loss of religious faith and feeling angry at God

8. Family or work conflicts that were not usually experienced before the trauma

9. Unusual bodily fatigue (i.e., exhaustion, tiredness)

10. Feeling of emotional numbness with intrusive recollection (such being "in a daze' or having a "it doesn't matter" attitude) /insensible person/torpid person/ emotional detachment

11. Recurrent anxiety over personal safety or the safety of loved ones

12. Feeling especially alone (e.g., having a "they were not there" or "they cannot understand" attitude)

13. An inability to let go of distressing mental images or thoughts (i.e., recalling the events all the time, mental suffering all of the time)

14. Feeling of depression, loss or sadness

15. Feelings of helplessness, hopelessness, powerlessness and loss of control about self.

16. Feelings of guilt for not having suffered as much as others

17. Unrelenting self–criticism for things done or not done during the event

18. Anxiety about the uncertainity of the future/role, housing or employment and avoidance of specific reminders of the events

Trauma from terrorism, known as "traumatic stress" is different from general stress (Shalev, 2004). The difference includes symptoms, threat and victims. First,

traumatic stress symptoms are usually found in post traumatic stress disorder (PTSD) such as repeated intrusive recollections of the traumatic event or re-experiencing the event, and unthinkable symptoms (Nordland & Gegax, 2004). PTSD symptoms are systematic. The mechanism of other symptoms involves intrusive recollections (events stimulated unthinkable) (Shalev, 2004). The characteristic of recollection is the repeated visual images of the event (horror). The stress theory does not explain a redundant cycle of this symptom (repeated intrusive recollections). While, the unthinkable symptoms refer to memories that victims are never able to remove, in other words this memory does not go away when the threat is over. This symptom may respond to stress management (e.g., relaxation, imaginary relaxation exercises). Time may be associated or disassociated with the construct of traumatic stress symptoms. A single event or continued event may affect mental health in different ways, especially in mental healing. Some studies mentioned a single event of terrorism. A study found that symptoms aftermath declined with time (Shalev, 2004). Whereas, some studies about continuous terror show that continuous terrorism can cause psychological distress such as PTSD symptoms, and cause the person to be impaired and disturbed (Bleich, Gelkopf & Solomon, 2003).

Secondly, terrorism is a threat that is very extreme. It is not related only to life but it also threatens one's image of the world and no one is immune from such an event. How do stressful events become traumatic? Stressful events become traumatic when people who are victims meet a situation that extends over a long period of time and they have not had previous experience or have had inappropriate experiences such as exposure to extreme cruelty, disfigured dead bodies, and people jumping out of windows or major loss.

Finally, a person who is both a direct and indirect victim may suffer from symptoms because of information overload. Thus, it may be related to cognition, the effect of data, and information.

Teachers Living in an Area of Unrest

In regards to this topic the researcher has described the psychological aspects of teachers living in an area of unrest and the impact of the unrest situation among teachers.

A teacher is an important person in society because of many reasons. The nature of teachers in Thailand is such that they have respect from people in the community because they are the persons who have gained a high level of qualifications. The important qualification is teaching and distributing knowledge to everyone. They are role models of virtue and good morals so they help to grow good people in society. Thus, a teacher should have a good attitude, attention and commitment to his or her career.

For teachers residing in an unrest situation, they have direct exposure to the unrest situation. They are the targets of terrorists in this situation. Especially, as we would like to believe teachers are chaste because they are virtuous people that know what is correct and have knowledge so that they can teach children or younger persons to behave in the correct way. Also they are the best role model for everyone in society. People respect them and obey and follow the guidance of teachers. Teachers instruct students with the heart of giving and benevolence. Their work is with responsibility and with spiritual giving which expresses the role model of a nice person in society. They desire to help their students to achieve in life. Lastly, they are

symbols of the social mechanism that serves as a link between the government and people in the community (Nararatwang, 2009). Thus, as they have no way to fight or protect themselves, being targets of a terror attack is a common occurrence. Some teachers who choose to remain living in an area of unrest demonstrate a resilience that reflects their well being. These teachers who reside in an area of unrest may have good psychological adaptation. This group of teachers can still perform activities such as working and carrying out other daily functions in their life. They do not relocate from the area although the events of terror are constantly happening. One study found that teachers who are living under the unrest situation have resilience of mind (Detdee, 2008). There are 3 components of resilience (Grotberg, 1995): effective coping styles, external support resources and internal factors. Teachers use coping styles especially problem solving skills in order to deal with a life crisis, for example, adjusting their mind and thoughts, adjusting their life ways for survival and building networks in their communities and asking for help from the government. Furthermore, their external support resources that strengthen them to live under the unrest situation include will power from loved one, religious attachment, being surrounded by colleagues and/or a community of unity, receiving help from the government, royal concern, and an ancestor's role model to follow. They also have internal factors to enhance their strength to live among the unrest situation such as, consideration of the family home or feeling bound by family ties in the area, personal determinants, perception of self worth, and love and commitment to their profession. Therefore, teachers who are residing in an area of unrest can adapt to the events, especially teachers who have good psychological adaptation certainly can. The resilience of a teacher is one of flexible adaptation, therefore, this may be part of good psychological

adaptation. There are also other factors that affect psychological adaptation.

In the case of a person who does not achieve psychological adaptation, he or she will experience health problems. Mental health problems of teachers who are residing under the unrest situation are rising. One study found 26% of teachers who performed their work in the area of unrest have a lower level of good mental health (Pompech & Nraongarch, 2009) or experience mental health problems more than other people in general.

The cause (etiology) of mental health problems is not only from unrest situations but also personal problems. A part of the cause may be from the workload of teachers. Nowadays, teachers have many responsibilities that are out of the usual role of the teacher. Furthermore, some teachers have economic problems (loans), incentive working and so on. The most important factor is the impact from the unrest situation. The information from teachers, who share ideas, experiences, and knowledge in a project of knowledge management, can explain what impacts arise from crisis situations on teachers (Songkhla Rarajanagarindra Psychiatric Hospital, 2009).

The unrest situations impact on teachers who reside in that area in many ways. The impacts can be categorized into physical, mental and/or emotional, economical (financial), societal impacts and the impacts on their way of life.

1. Physical impacts include injury, physical disabilities and death. Teachers get hurt and suffer wounds, pain, internal hemorrhaging, deformity of organs or loss of some organs and impairment of physical function. These impacts obstruct their work. Furthermore, the body can show somatic symptoms such as irregular heartbeat, dizziness, insomnia, fatigue, and loss of body weight. These symptoms can occur

when teachers recall details about an upsetting situation.

2. Mental and/or emotional impacts are increased by the danger of the events. An event in this study is defined as being uncertain, and of having no time frame. Sometimes such events increase in severity which can result in stress and feelings of shock especially when teachers confront horror directly. Finally, teachers cannot control emotions and feelings such as anger, revenge, fear, and paranoia. Especially in relation to the events that cause symptoms of paranoia to exhibit in teachers all the time, although the events may have happened a long time ago. Afterwards, other symptoms follow such as anxiety, low concentration levels, changing activities in daily life, frustration, and inconstancy in emotions or swinging emotions. These emotions may cause the sufferer to conflict with others easily. Therefore, teachers will suffer mental health problems if they do not get help from others or have no way of dealing with their feelings and emotions.

3. Economical (financial) impacts arise when a family loses their significant bread winner. The person who survives may need to take over the role and function as head of the family. Some families may have a loan or mortgage, which can cause stress and they feel burdened because they need to spend a lot of money on items such as rent, accommodation expenses, and other living costs. When the responsibility overloads on one person, that person will experience mental health problems later.

4. Societal impacts in that the society and the environment are changing due to the unrest situations. Relationships with friends decrease. No one can trust each other because they do not know who the insurgents are and when events will happen. They cannot perform activities with others as they used to, for example, staying among a lot of people. Consequently, people also do not want to go out of their houses.

5. The impacts on the way of life are constantly changing when a situation happens constantly. Daily living and roles change thus many teachers experience an increase in burden, especially in the case of the head of the family dying, and because they are living in an area of unrest they need to take on more responsibilities such as taking care of others in the family. A change of activity is needed to be appropriate to the situation so that people can be safe. People will not do the same activity at the same time or on time. Especially, when they go to school, teachers increase their alertness and they may vary the way of their journey. Thus, the way of teachers' lives changing constantly may influence their mental health.

Concept of Psychological Well-Being

Definition of psychological well-being

In western countries, there are a number of different perspectives on the concept of psychological well-being (Harrington & Loffredo, 2007; Tang, 2008). Psychological well-being has been examined by different sciences and there are multiple definitions. The attributes of psychological well-being concepts that are most commonly defined in literature are as follows: an individual's feelings and other aspects of psychological functioning (Peterson & Kellam, 1977); a preponderance of positive over negative effects, which emphasizes pleasant emotional experiences (Bradburn, 1969; Joshi, Kumari & Jain, 2008); capacity of a person to resolve problems and distress in life style (Bradburn, 1969) the state of feeling healthy (Joshi, Kumari & Jain. 2008), life satisfaction or satisfaction with all elements of life /whole of life that represents quality of life (Campbell. et al., as cited in Peterson & Kellam,

1977; Joshi, Kumari & Jain. 2008); happiness (Bradburn's, as cited in Peterson & Kellam, 1977); relaxation and peace of mind (Joshi, Kumari & Jain, 2008); and positive mental health (positive affect)/positive psychological functioning or positive mental health function (Ryff, 1989). These definitions are used in different populations and settings such as aging, physical illness, work place etc.

In the context of terrorism, some studies identify that psychological well-being is the positive outcome of psychological adjustment (Butler et al., 2009). Psychological well- being is the state a person feels about themselves and his or her life across six dimensions of well-being (autonomy, environmental, mastery, personal growth, positive relations with others, purpose in life and self acceptance). Psychological well-being is measured with the short version of the Scales of Psychological Well-Being (Ryff, 1989; Ryff & Keyes, 1995). Another study views psychological well-being to be part of psychological functioning that is psychological health. Psychological well-being is measured in the mentality component: stress, emotional problems, feeling depressed and feeling calm (Adams, Boscarino & Dalea, 2006). Therefore, psychological well-being is the positive feelings of people toward their lives as a whole with positive psychological functioning or/ and individual's feelings about self such as happiness, satisfaction and an absence of psychopathology (e.g., anxiety and depression) or no mental health illness/good mental health.

For Thailand, there are several examples of studies that have been conducted in different fields (psychology, psychiatry); and several studies that have been conducted in diverse groups such as drug users (Tuicomepee & Romano, 2005), the elderly (Ingersoll-Dayton, Saengticnchai, Kespichawattana & Aungsuroch, 2004), chronic stress sufferers (Fuller, Edwards, Vorakitphokatorn & Sermsri, 1996), and

students (Phumimala, 2010). The definitions of the attributes in the aforementioned studies are given as follows:

Tuicomepee and Romano (2005) defined psychological well-being as an individual's global judgment about the quality of his/her life. Also psychological well-being can function as a coping mechanism to mediate stress and increase self-efficacy to reduce the incidence of drug use relapse.

Phumimala (2010) mentions that psychological well-being is a positive effect representing mental health, and the satisfaction with one's own experience or life experience and capacity to resolve a problem.

Muangthai (2010) mentions that psychological well-being is the satisfaction of a person when the individual has self actualization in his or her life achievements. Individuals assess their own life as a whole life and the individual has the character of mentality in a positive function that promotes them to have the capacity of life or potential life.

Similarly, Ingersoll-Dayton, Saengticnchai, Kespichawattana, and Aungsuroch (2004) defined psychological well-being as the strength and capacity of people as defined in Ryff's conceptualization (1989).

Consequently, psychological well-being in the context of Thailand is conceived as the strength and capacity of people, an individual's global judgment about the quality of his/her life, or a coping process to decrease problems, mental health (happiness and satisfaction) with one's own experience or life experience.

Psychological well-being in context of a western country seems to be similar to the context of Thailand. It is possible to have congruence in both western countries and Thailand.

The component of psychological well-being

In western countries, the concept of psychological well-being has different components which depend on the view point of the researcher. Ryff and Keyes (1995) distinguished three conceptions of a component for the study of psychological well-being more than 20 years ago.

1. Positive and negative effects. The first conception of a component, for example, Bradburn's (1969) study, has examined both positive and negative effects and has distinguished psychological well-being between the positive and negative effects. They found that the balance between the two parts is happiness. Bradburn is interested in mental health related to behavior. The component of psychological well-being is focused on the individual and on mental health (e.g., emotion, self evaluation or evaluation to what impacts self or self-evaluative judgments as self-evaluative judgments that change over time and exist between individuals and societies (Diener et al., as cited in Tang, 2008). Researchers in the field of psychological well-being agree that psychological well-being generally consists of two important aspects, namely positive and negative effects (Boey & Chiu, 1998).

Similarly, Tang (2008) proposed that psychological well-being includes both positive and negative aspects, and include both positive mental health and mental illness. Health seems to be opposite poles of the same continuum of psychological well-being. Positive mental health and negative mental health cannot be separated as they are connected. According to Atienza, Stephens, and Townsend (2002), they proposed that positive mental health and mental ill-health are two interrelated constructs but globally independent constructs that should be measured on two

independent axes. Hence, a positive effect is used to indicate mental health and a negative effect to indicate mental ill health, and psychological well-being consists of two important aspects, namely positive and negative effects (Boey & Chiu, 1998) and is a multidimensional concept.

2. Life satisfaction. The second conception of the component is in sociology and the sociologist emphasizes life satisfaction as the key indicator of psychological well-being. Campbell et al.'s (as cited in Peterson & kellam, 1977) study focused on satisfaction through many other aspects of psychological function (i.e., the individual has a positive effect rather than a negative effect). In addition, many scholars (Andrews & McKennell, 1980; Bryant & Veroff, 1982; Campbell, Converse, & Rodgers, 1976) viewed life satisfaction as a cognitive component and concluded the more affective dimension of positive functioning.

3. Multidimensional concepts. In a new perspective, psychological well-being is looked at as multidimensional concepts. Ryff (1989, 1995) offers a conceptualization of psychological well-being as positive psychological functioning or positive mental function. Ryff (1989) reviewed the work of numerous western perspectives on psychological health and looked at the underpinning theories. In underlying many theories, positive functioning psychology has the same convergence of factors. Thus, the core dimensions run through the diverse historical conceptualizations of psychological well-being. These dimensions of positive psychological functioning are: 1) self-acceptance (i.e., feeling positive about one's good qualities, and accepting of the bad qualities); 2) positive relations with others (i.e., satisfying human relationships characterized by giving and receiving assistance); 3) autonomy (i.e., the ability to make important decisions independently from others);

4) environmental mastery (i.e., a feeling of competence and control when managing one's everyday affairs and surrounding context); 5) purpose in life (i.e., a sense of direction and a belief that life has meaning); and 6) personal growth (i.e., a notion of continued improvement and development over time).

Overall, the component of psychological well-being can be unidimensional and multidimensional. However, the best representation to measure the mind should be multidimension.

For Thailand, the component of psychological well-being that has been used in many Thai studies is various. In general, psychological well-being is viewed as having two components and six components.

1. Two components of psychological well-being consist of the positive effect and life satisfaction. There are few studies that have looked at psychological well-being as having two components such as the study of Phumimala (2010).

2. Six components of psychological well-being include autonomy, sense of mastery (deal of environment), relationships with others, purpose in life, self-acceptance, and personal growth (Ingersoll-Dayton, Saengticnchai, Kespichawattana & Aungsuroch, 2004; Muangthai, 2010; Pongsitthisak, 2003; Sumnuan, 2002; Tuicomepee & Romano, 2005).

Similarly, Ingersoll-Dayton, Saengticnchai, Kespichawattana and Aungsuroch (2001) modified the construct of psychological well-being from the conceptualization Ryff (1989) proposed to use in western countries. The structure of psychological well-being shows the following five components: 1) harmony ("Samakki prongdong")-experiencing peaceful and happy interactions with and among family members, friends, and neighbors; the success of one's children in their work responsibilities and

family relationships; 2) interdependence ("Peung pa asai gan")- providing assistance to and receiving assistance from family members and others; 3) acceptance ("Yom rab")-relinquishing upsetting thoughts and accepting life circumstances; 4) respect ("Kaorob nabtue")- feeling one's advice is heeded and one's wisdom is appreciated; and 5) enjoyment ("Berg baan")- appreciating simple pleasures that involve others as well as solitary pursuits.

This modified concept of Ingersoll-Dayton, Saengticnchai, Kespichawattana and Aungsuroch (2001) was synthesized by adding qualitative research and focused on the Thai aging population.

From the concept analysis, the differences and similarities in the concept of psychological well-being between the context of Thailand and western countries are mostly in the definitions of attributes, in the studies and the populations.

In western countries most studies are assessed by emphasizing the pathology rather than the strength (Ingersoll-Dayton, Saengtienxhai & Kespichayawattana, 2004). In research, most studies (psychiatry-mental disorder/terrorism) use the conceptualization of psychological well-being as Bradburn (1969) had identified. Studies focus on the negative outcome from events as posttraumatic stress disorder in victims of terrorism. So, researchers often use a tool (PANAS scale) for assessment and some studies also identify the negative effect as depression and anxiety.

In Thailand, the attributes emphasize the capacity of mind and strength of mind which are relevant to the coping mechanisms or in dealing with a problem. This concept is also part of quality of life; reflects the quality of life or good life or it is a positive function of mind or mental health. Accordingly, Lawton (as cited in

Ingersoll-Dayton, Saengticnchai, Kespichawattana & Aungsuroch, 2001) presents a comprehensive description of the various facets of life quality which include: behavioral competence, the objective environment, perceived quality of life, and psychological well-being. Thus, psychological well-being is central to life quality because it serves as an evaluation of the person's competence and perceived quality of life in all domains of contemporary life and is the ultimate outcome. In addition, the component of psychological well-being in Thailand is congruent with its conceptualization. The structure of psychological well-being is specific on dimensions that seem to be similar with the construct of psychological well-being that Ryff proposed to use in Western countries. Although the concept of psychological well-being is derived from same construct such as the conceptualization of Ryff (1989), there are some dimensions that are different because of culture.

The culture of Thailand is different in view of self, especially as the self of Thai people are rather interdependent with others whereas, western people are independent and have autonomy. Markus & Kitayama (1991) explained that in the western view, an individual is a unique set of internal traits, values, and emotions which contributes to autonomy. Individuals are motivated by self actualization realizing oneself and they develop one's distinct potential. In addition to the western view, individuals' view their own personal goals as a higher priority than the goals of others whom they know (Singelis, 1994).

Thus, in this study, the psychological well-being within the context of the unrest situation will be conceived as the individual's feelings and positive mental health function. This conceptualization serves as a good indicator for psychological well-being if we focus on strength or mental health.

The Process of Psychological Well-Being

Psychological well-being is the product of psychological adaptation. Psychological well-being in situations of terrorism can be both process and outcome. In this part, the detail of psychological well-being focuses on process. The process of psychological well-being is relevant to cognition**.** A cognitive process has a major effect on psychological adjustment.

The process of psychological well-being can be separated into four steps: appraisal of the events, recognition - changing the meaning of the events through optimism and sense of control (coping self efficacy), reintegration of changing global meanings through effective coping strategies or problem-focused coping (this step needs to add the utilization of internal resources or/and external resources such as social support), and positive psychological well-being (state of equilibrium of mind/positive emotion/comfortable mind) (Skaggs & Barron, 2006).

1. Appraisal of the events:

When a person confronts a situation or stressful event, the individual needs to appraise the events (stressor is unexpected, significant, and negative). This person may be a survivor or trauma survivor and have both direct and indirect effects from the event. The appraisal of the situation can occur in several ways such as attributions, degree of threat (loss, controllability etc.), and implication. They will interpret the event or situation perceived as important, significant and having an impact on their values, beliefs, and commitments and sense of order in life (Frankl, as cited in Skaggs & Barron, 2006; Park & Folkman, 1997).

Thus, the appraisal of the events is explained by cognitive appraisal from the

stress and coping theory. This is because cognitive appraisal is considered a process that categorizes all aspects of an encounter with regards to the significance for well-being (Lazarus & Folkman, 1984). So, if a situation (stressor) is severe and it interrupts a person's life, the person will change their thoughts about the threat in new ways. Thus, the individual has recognition (reattribute and reappraisal of the threat to be challenging).

2. Recognition:

The character of recognition is reattribution and positive reappraisal of events. Reattribution will occur during the initial appraisal of the events. When an unexpected, significant, negative event occurs, the search for answers (attribution) begins: (Why me? Why has this happened? Who or what is responsible? and What impacts will this have now and in the future?) (Taylor, 1983; Park & Folkman, 1997). Reattribution refers to the continuing search for answers that occurs throughout the process of searching for meaning. This person may look at past behaviors and beliefs for the cause of the events (Cassel, 1982). When a person finds a cause for the event, it may lead to the understanding of the significance of the event and the impact that it will have on life (Taylor, 1983). Thus, reattribution makes causal understanding of the situation or sense of having "made sense" by using questions and acceptance.

Meanwhile, positive reappraisal is the recognition which happens after reattribution. Positive reappraisal refers to cognitive strategies used to evaluate events in a favorable light, and leads to the perception of benefits from the stressful events such as a positive outlook on life, improved relationships, wisdom, faith, increased competence or increased self-esteem (Folkman & Geer, 2000; Folkman & Moskowitz, 2000; O'Cornnor, 2002). Thus, there are three methods of recognition:

making meaning (sense of meaning), optimism and perceived control (self-efficacy especially coping self-efficacy). These are internal resources.

2.1 Making meaning (benefit making/sense of meaning) is the important method which seems to be the main effect in achieved psychological adjustment. In other words, sense of meaning is certainly essential in performing psychological well-being. Meaning making can happen by changing the meaning of the events. When people encounter stressful events, they change the meaning of the events by searching for meaning through focusing on a purpose (set new goals). Searching for meaning refers to a meaning making coping process that may be used to make sense of the event and may lead to life-long changes in global meaning (individual's beliefs, values, and purpose/goals or significant perceptions of one's life or place in the world) for those who find meaning in unexpected, significant, narrative events (Park & Folkman, 1997). After the person finds meaning from a situation, this person has a new purpose in life or/and a restored sense of self concept (Liveh & Antonak, 2001). The individual will cope and this will lead to long life changes (Skaggs & Barron, 2006) or an overcome of the events because the individual has changed the situation (stressful events) to act as a benefit for his or her life.

The person has selected to change the meaning of the situation in order to regain a sense of self-efficacy or control over the events (Taylor, 1983). By creating an illusion, a person will perceive situations different from the way they really are through an unrealistic positive view of self (involved seeing the self as better than others), and exaggerated perceptions of personal control and unrealistic optimism (Taylor & Brown, as cited in Skaggs & Barron, 2006). These illusions may be considered adaptive in difficult circumstances (Taylor & Brown, 1988, 1994, Taylor

et al., 2000). Thus, the technique which changes meaning of a situation creates a positive illusion as optimistic and creates perceptions of personal control.

2.2 Optimism is hope and confidence that things will improve in the future (Skaggs & Barron, 2006). It is positive thinking or future orientation thinking. In general, more people believe in a bright future but optimism becomes unrealistic when the future is perceived as brighter than can be justified (unrealistic expectations).

2.3 Perception of personal control is another way of creating a figment of your imagination. It is personal control (i.e., self-efficacy or/and coping self-efficacy) in their self. Perception of personal control within the context of traumatic events is not perceived as a controlled situation in general stress or secondary appraisal (perceived control situation/appraisal of options for coping) in the stress and coping theory (Lazarus & Folkman, 1984). Because it has its focus on perceived coping self-efficacy in which a person thinks he or she has the ability to cope effectively with the situation or have the confidence to make a judgment in order to control the outcome of the situation. According to the self-efficacy theory (Bandura, 1977), self efficacy is an important prerequisite in changing coping behavior. Self-efficacy contributes to this judgment, which in turn influences coping (Park & Folkman, 1997). So, perceived control is helpful for individuals to employ subsequent coping strategies which are the effective coping strategy.

Thus, a person who uses optimism and perceived controlled to find meaning in a situation which is a new purpose of life in a crisis or severe stressed state, thus changes the crisis to opportunity. It can be called "positive reappraisal"/ reappraisal meaning of the stressor which is one way to create a revised belief system.

3. Reintegration for changing global meaning:

It is the integration of the stressful experience into identity or changed identity (Park, 2010). When attempts to change the meaning of the event are unsuccessful at reconciling situational meaning and global meaning, then efforts are focused on changing the global meaning (McMillen, 1999; Park & Folkman, 1997). Because the individual still has conflict in his or her mind from negative threatening events interrupting their life experience this change in global meaning leads to reviewing the event in a positive light, which is so important to adjustment and psychological states (Staggs & Barron, 2006). The technique for changing global meaning includes reevaluating ordinary events and problem-focused coping.

3.1 Reevaluating ordinary events is one way for changing global meaning. Reevaluating ordinary events is making an ordinary event something special and significant (Folkman & Moskowitz, 2000). An individual needs to seek positive things (appreciate things) in events. The individual may take the time to create positive events or simply just be thankful for each day – taking one day at a time. These positive meaning events may be employed to offset the negativity such as negative feelings (Skaggs, Barron, 2005).

3.2 Problem–focused coping is coping styles that result in successful adaptation. This type of coping is performed in order to change global meaning. It refers to styles to solve or alleviate the problem (Folkman & Greer, 2000; Folkman & Moskowitz, 2000). While this type of coping focuses on decision–making, planning, and generally taking care of the situation, problem-focused coping is part of searching for meaning because it involves refocusing priorities to the situation at hand, evaluating goals in light of priorities, setting realistic and attainable goals (Folkman &

Greer, 2000; Folkman & Moskowitz, 2000). Successful focused coping leads to a sense of personal mastery and control as well as positive psychological well-being (Folkman & Moskowitz, 2000).

Furthermore, problem–focused coping is employed in psychological adjustment in a situation. This coping style is not only based on the kind of appraisal threat but also external resources (i.e., social support). It needs to have other elements to help thriving adaptation, especially, external resources (i.e., social support). For this process of cognition, it should be perceived as social support.

4. Psychological well-being:

After a person applies the cognitive process with reattribution and positive reappraisal, problem-focused coping and reevaluating ordinary events (Shaefer & Moors,as cited in Skaggs & Barron, 2006; Folkman& Greer, 2000; Folkman & Moskowisz, 2000), the person restores sense of self (self-esteem), is able to find positive meaning, is able to redefine priorities, set new goals and revise his or her belief system and subsequently, this individual will have positive psychological well-being that is a state of equilibrium of mind/comfortable mind / positive emotion (no fear, and no anxiety). The overall process of psychological well-being is shown in Figure 2.

Figure 2 depicts the process of psychological well-being that occurs in meaning making and it is adapted from the meaning making model from Park (2010) and concept analysis of searching for meaning in negative events (Skaggs & Barron, 2006).

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┌──────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐
│Potential │   │Appraisal of  │   │Recognition   │   │Reintegration │   │Psychological │
│stressful │──▶│events        │──▶│for changing  │──▶│for changing  │──▶│well-being    │
│situation │   │- Attributions│   │situation     │   │global        │   │              │
│          │   │- Degree of   │   │meaning       │   │meaning       │   │-State of     │
│          │   │threat (loss, │   │-reattribution│   │              │   │equilibrium of│
│          │   │controllability│  │-reappraisal  │   │- Problem–    │   │mind/positive │
│          │   │ect.)         │   │3 methods of  │   │focused       │   │emotion/      │
│          │   │-Implication  │   │recognition:  │   │coping        │   │comfortable   │
│          │   │              │   │making meaning│   │              │   │mind (no fear,│
│          │   │              │   │(sense of     │   │              │   │and no anxiety)│
│          │   │              │   │meaning),     │   │              │   │              │
│          │   │              │   │optimism and  │   │              │   │              │
│          │   │              │   │perceived     │   │              │   │              │
│          │   │              │   │control       │   │              │   │              │
│          │   │              │   │(self-efficacy│   │              │   │              │
│          │   │              │   │especially    │   │              │   │              │
│          │   │              │   │coping        │   │              │   │              │
│          │   │              │   │self-efficacy)│   │              │   │              │
└──────────┘   └──────────────┘   └──────────────┘   └──────────────┘   └──────────────┘
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Figure 2 The process of psychological well-being

Measurement of Psychological Well-Being

There are many instruments to measure psychological well-being in terrorism. These instruments include the Psychological Well-Being Inventory (PWB) (Ryff, 1989), The Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988), and General and Psychological Well-Being (Ware, Kosinski, Turner-Bowker, & Gandek, 2002).

1. Psychological Well-being Inventory (PWB). This questionnaire is most commonly employed to measure the psychological well-being in the general population. There are many versions of the Psychological Well-Being (PWB). Every version of the scale of Psychological Well-being has six dimensions that have been generated from the multiple theoretical accounts of positive functioning (Ryff, 1989). The six dimensions are self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. The original form

contains 20 items per dimension measured on a 6-point Likert-type scale. Some studies used the shorter version which has 14-items per dimension. Ryff reports that the correlations between the original form of the PWB and the 14-item shorter version of the PWB range from .97 to .98.

The reliability of the PWB is high with coefficient alphas for the scales ranging from .87 to .93 (Ryff, 1989) and 6-week test-retest reliability coefficients for the six scales ranging from .81 to .88. Ryff and Keyes (1995) findings supported construct validity for the PWB when they used a confirmatory factor analysis to discover a predicted global psychological well-being factor that encompassed all six dimensions.

2. The Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegan, 1988) is used to assess tracking changes in positive and negative emotions for clients in day to day life. It is also usually used to visually aid the immediate effects of a therapy session as well the outcomes associated with positive psychological interventions or activities. It consists of a 20-item scale (10 which measure positive effects and 10 that measure negative effects). Respondents rate how often they experience 10 positive (e.g., excited) psychological well-being states and this is also assessed with the Index of Affect, a validated instrument used in large–scale national surveys. This 8 item semantic differential scale assesses feelings about life as a whole (e.g., boring-interesting, enjoyable-miserable), with a high score indicating greater psychological well-being. It takes less than 5 minutes to complete. The scale is sensitive to momentary change in effect when clients are directed to complete the form based on their effect over the course of the past week.

3. The Short Form-12, version 2 (SF-12-v2) is used to assess general physical

and psychological well-being. This scale consists of 12 items scored so that high scores reflect better health (Cronbach's alpha = .87). Following the recommended scoring algorithms, the items are summed and converted into standardized T-scores to form 2 scales (Ware, Kosinski, Turner-Bowker, & Gandek, 2002). Although both scales contain all 12 items, the physical health measure (SF-12-v2 physical component, range 7 to 71) emphasizes items on physical functioning, vitality, and body pain over the past 30 days. The psychological health measure (SF-12-v2 mental component, range 7 to 74) stresses items on emotional problems, feeling depressed, and feeling calm or peaceful over the past 30 days. The SF-12-v2 has been reported to have excellent validity and reliability and has been extensively used in health research (Ware, Kosinski, Turner-Bowker, & Gandek, 2002; Ware, Kosinski, & Keller, 1996).

The Psychological Well-Being of Teachers Residing in an Area of Unrest

Because of the various definitions of psychological well-being, the feature of psychological well-being depends on the field of study or the context in which it is used. So, the feature of the psychological well- being of teachers residing in an area of unrest (i.e., ongoing terrorism/ ongoing stressful situation) in southern Thailand is shown as follows:

1. The person can adapt well in situations.

2. The person with successful psychological adaptation (positive outcome) that is experiencing a stable frame of mind with little or no fear.

3. The person should have resilience or resilience components that include problem-solving skills, building networks, perceived self–worth and others (Detdee, 2008) because resiliency is the positive aspect of adaptation or well-being.

4. The person has accepted the situation, maintained daily living as previous, defended obstacles, wishes to survive and has no despair (Knowledge Management Committee of Songkhla Rajanagarindra Psychiatric Hospital, 2008).

5. An individual without mental problems who can confront events in an area of unrest and lives with satisfaction, acceptance, and integrity of mind (Braburn, as cited in Ryff & Keyes, 1995; Peterson & Kellam, 1977).

Predictors of Psychological Well-Being

From a literature review, psychological well-being is an outcome of psychological adaptation (Adams & Boscarino, 2006; Butler et al., 2009), therefore, various factors should affect their outcome. Predictors of psychological well-being could be factors that may be related to psychological well-being or positive adjustment or positive affect or well-being such as coping (Butler et al., 2009; Steger, Frazier & Zacchaini, 2008), sense of control (Zeidner, 2006; Zeidner & Hammer, 1992), sense of meaning (Steger, Frazier & Zacchaini, 2008; Updergraff, Silver & Holman, 2008), optimism (future–orientation thinking) (Zeidner & Hammer, 1992), and social support (Adams & Boscarino, 2005; Bonanno & Galea, 2007) because no prior study has predicted psychological well-being. For this study, the factors that were selected to study are sense of control, and sense of meaning, coping, and social support. The detail of each factor is outlined as follows.

1. Sense of control

Definition of sense of control

Sense of control is synonymous with perceived control and perception of

control. Especially in psychology, a sense of control is used synonymously with personal control (Wallton, Wallton, Smith & Dobbins, 1987).

There is variability in the definition of sense of control and a lack of consensus on the rhetorical underpinning because control is multifaceted and depends on view and theoretical base (theoretical perspective). Therefore, sense of control has been classified in various ways.

The most common classification of control can be defined by three aspects as according to Stephen, (as cited in McNamara, 2001) (1) control can be behavioral or objective controlled environmental events, (2) control can be subjective or perceived control and (3) individual differences described as a need for control or belief in control.

In psychology, most authors view control as a belief or cognition, reflecting the extent to which people think they can influence the situation, either by altering it, by changing its meaning or by regulating their own behavioral or emotional reactions (Ornel & Sanderman, 1992). Meanwhile, sense of control has been defined as "the belief that one can determine one's internal state not including behavior, influence one's environment and/or bring about desired outcomes" (Wallton, Wallton, Smith & Dobbins, as cited in Wallston, 2001).

In addition, there are other definitions that depend on theory (i.e. the social learning theory, social cognitive theory, the life span theory and person/environmental framework). The definition is as follows:

Buller (as cited in Jacelon, 2007) defined sense of control as individual generalized beliefs about his/her ability to affect the desired outcomes and to avoid undesired outcomes.

Chipperfield, Campbell and Perry (2004) defined sense of control as one's perceived influence over the outcome or events in their environment and one's successes.

Wallhagen and Lacon (1995) defined sense of control as perception or a valued aspect that one's life is manageable in general.

Erickson and Ursin (2006) mention that sense of control is a perceived feeling of being able to have control over a situation and preventing an event from happening to the individual.

In conclusion, sense of control or control appraisal should be a belief or cognition in which people think they can influence a situation by changing their self (behavior, thought) or situation. It is also a person's thoughts about a situation, or/and the person assesses that the situation can be managed in general.

Theoretical perspective of sense of control

Theoretical underpinnings explain the sense of control including theories of social learning, self efficacy, planned behavior, the life span theory of control and from a person–environmental framework as follows.

1. The social learning theory: Rotter (1966) mentions that conceived generalized control expectancy is having its greatest influence when the situation is ambiguous and novel. It translates into/ means control appraisal with respect to the specific situation or that the appraised situation is controllable. This conceptualization is based on the locus of control. Internal locus control refers to the belief that events are contingent upon one's own behavior and external locus control refers to events that are not contingent upon one's actions, but upon chance, fate or a powerful other

something. This is a general belief about control and it concerns the extent to which people assume that they can control events and the outcomes are important.

2. The social cognitive theory: There are theories within the social cognitive theory: self efficacy, mastery and control. Self efficacy, the key factor in a human agency, is concerned with what one can do with cognitive, social, emotional and behavioral skills (Bandura, 1977). Mastery is the most influential source of efficacy. Mastery success enhances generalized self efficacy. Personal control enables one to predict events and shape them to one's liking (Bandura, 1977). This is accomplished either by direct or proxy control.

3. The life span theory of control: the life span theory of control (Schulz & Heckhausen, 1996) proposes the construct of control as the central theme for characterizing human development. In this theory, human initiate behaviors to exert control on their environment. This type of control, creating a direct effect on the environment is termed primary control and is the most desirable type of control. There is also a secondary control mechanism, in which the individual attempts to change the self in order to better adapt to the environment. Although both primary and secondary control may involve cognition and action, primary control is usually active and secondary is often cognitive. Through the life span of a person, primary and secondary control work together to optimize the development of the organism. In this theory, sense of control is a multidimensional construct which is composed of personal control over desirable and perceived other's control (Kunzmann, Little & Smith, 2002)

4. Person-environmental framework: Wallhagen and Lacon (1999) mention that control is defined from within a person–environmental framework as the

perception that is the salient aspect of one's life which is manageable or being managed. It is a function of an individual's appraisal of the balance between perceived demand and available resources. An appraisal that occurs from within the individual's social cultural context includes past as well as present meaning (Wallhagen & Lacon, 1999). In other words, sense of control mediates the relationship between objective and subjective demands, the objective and subjective context, and adaptation. Both environment demands and resources directly influence perceived control (Wallhagen, 1992). The control beliefs range along a continuum from global, generalized beliefs about the nature of and control over one's world, to generalized beliefs about health, to disease specific beliefs and then to the most specific beliefs about controlling discreet aspects of life such as the symptoms of an illness (Wallhagen & Brod, 1997).

In this study, the theory that may be underpinning the sense of control in teachers residing in an area of unrest, is sense of control as explained by the person-environmental framework (Wallhagen & Lacon, 1999) and it also involves the stress and coping theory, and the primary appraisal of the stress and coping theory (Lazarus & folkman, 1984). Primary appraisal is evaluating a potential threat and a person's judgment of the significance of an event as stressful, positive, controllable, challenging, benign or irrelevant.

In accordance with a matching model (Cutrona, 1990; Cutrona & Russel, as cited in Lakey & Cohen, 2000) that can explain the ways of sense of control to operate in the outcome, Cutrona suggests that the control liability of a stressor is the primary dimension in terms of an appropriate match. A person performs an appraisal of stressful events as a form of controllability. This control is not behavioral control

or objective control but it is control over environmental events. Individuals think or feel differently about their personal need for control or their beliefs in control. In other words, it is a perception of controllability over a situation and it is helpful to adapt. Thus, if a person interprets that a situation is controllable, the person will adapt successfully because potentially controllable stressful events are presumed to elicit the need for problem-focused coping (informational and tangible support) to aid in preventing the occurrence of consequences. Whereas, uncontrollable events are presumed to elicit needs for emotion focused coping (emotion support) to help a person recover from the negative emotions elicited by an event (Cutrona, as cited in Cohen, 1992).

Sense of control and psychological well-being

Sense of control is an internal factor which is an advantage for the adjustment of trauma victims (terrorism, war) and bereavement situations.

Some studies have indicated that sense of control is efficacy over one's coping in a loss situation (bereavement) or sense of control serves as an ability to cope with stressful life events successfully and reduce mental health problems leading to less mental distress (Montpetit, Bergeman, Bisconti, & Rausch, 2006).

There is evidence that shows that a sense of control is positively related to problem-focused coping, especially seeking help, and a confrontive coping style. Furthermore, sense of control has an impact upon the appraisal of coping resources (i.e., social support) (Compass, Cornner-Smith, Saltman, Thomsen & Wadsworth, 2001). Another study found that self control is related to stress response and predicted coping (i.e., confrontive coping style) and positive feelings (some part of

psychological well-being) (Klingman, 2001). So it implies that sense of control is linked to psychological well-being.

In traumatic events (i.e., terrorism, war), there is evidence showing that sense of control has an influence on good psychological adaptation or psychological well-being, and is related to coping. Zeidner (2006) studies in the context of terror attacks, and one such study looked at 707 Israeli adults who lived in the midst of the Al-Aqsa Intifada. This study found that sense of control over the severity of a situation or perceived control was associated with high positive affectivity or mental health (r = .23, $p < .001$) and fewer post traumatic symptoms, less physical symptoms, less stress, and less emotion-focused coping.

Similarly, Zeidner and Hammer's (1992) studies among 261 Israeli (adult) residents (in Northern Israel) who experienced missile attacks during the Gulf War (February 1991), found that sense of control correlated negatively with palliative coping (emotion-focused coping). People who felt in control reported less fear, and less depression, and their sense of control also correlated positively with optimism (r = .301, $p < .001$). The interesting point is the context of the study which is the Persian Gulf War that served as a source of severe, prolonged, and objective stress for a considerable part of the Israeli population, who had little control over the source of the stress.

Thus, an individual who has less sense of control over events would have less psychological well-being. In contrast, better sense of control would result in more psychological well-being.

Overall, a sense of control may have a positive influence on coping (confrontive coping style) and psychological well-being.

Measurement of sense of control

There are many instruments for assessing sense of control in terrorism or traumatic events. These instruments include Wallhagen Perceived Control Questionnaire (PCQ; Wallhagen, 1988), the Self-Control Schedule (SCS; Rosenhaum, 1989), and Perceived control (Zeidner & Hammer, 1992).

In this study, the researcher employed Wallhagen Perceived Control Questionnaire (PCQ; Wallhagen, 1988) to measure sense of control because this tool has been developed under the same framework as the stress and coping theory with the relationship between person and environment. In other words, this instrument is derived from a person–environment perspective. Control is defined from within a person–environment framework as the perception that salient aspects of one's life are manageable or being managed. It is a function of an individual's appraisal of the balance between perceived demand and available resources. This is an appraisal that occurs from within the individual's social culture context and includes past as well as present meaning (Wallhagen, 1988). The PCQ was designed to measure what extent a person feels he/she has personal control over the security crisis and their environment. In addition, this instrument has good validity and reliability.

Validity

The content validity of the PCQ has been demonstrated adequately (Wallhagen, 1988, 1999) because the tool was revised based on these findings and analysis of the qualitative data collected during the study of Wallhagen (1999). The revised tool reflected themes from the caregivers' perceptions regarding the meaning of control as well as the statistical considerations regarding the dimensions of the PCQ.

Reliability

The PCQ was developed and tested in several studies. The PCQ is employed in older informal caregivers, elderly (patients) with Type 2 diabetes, and caregivers for persons with cancer.

The PCQ was tested in a sample of 60 years and older (> 60 y) informal caregivers and correlated significantly with less caregiver burden, greater resources, less depressive symptomatology, fewer subjective symptoms of stress and greater life satisfaction (Wallhagen, 1999). The reliability for the overall scale is .94 (Chronbach's alpha) (Wallhagen, 1999).

2. Sense of meaning

Definition of sense of meaning

There are a variety of terms that mention meaning such as meaning in life, sense of meaning, meaning, sense making, making sense, and benefit finding. In common, sense of meaning is synonymous with meaning, making meaning and meaning in life. In addition, if meaning is a process it can be divided into meaning making or finding meaning, and searching for meaning (Park, 2010).

The definition of meaning varies throughout many fields. Researchers have conceptualized meaning in different ways. Typically, meaning is the identification of benefit adversity (benefit finding) (Tennen & Afflect, as cited in Butler, 2007) and it is a positive value from negative events (Affleck & Tennen, 1996). The conceptualizations of meaning range from general to specific including meaning as a general life orientation (Antonovosky, as cited in Steger, Frazier, Oishi & Kaler,

2006; Baumeister, 1991); as personal significance (Lazarus & Folkman, 1984); perceptions of significance (Park & Folkman, 1997; Steger, Frazier, Oishi & Kaler, 2006); as causality and the process of making attributions about why an event occurred (Bulman & Worthman, 1977); as coping activities in which the individual finds redeeming or transcendent features in the events (Thompsom, 1985); and as an outcome of the process of dealing with the traumatic events (McIntosh, Silver & Worthman, 1993), as coherence in one's life (Battista & Almond, 1973; Reker & Wong, as cited in Steger, Frazier, Oishi & Kaler, 2006), as goal directedness or purposefulness (Ryff & Singer, 1998), as "mental representation of possible relationships among things, events, and relationships, the cognizance of order, coherence, and purpose in one's existence, the pursuit and purpose in one's existence, the pursuit and attainment of worthwhile goals and an accompanying sense of fulfillment" (p.221) (Rekcr & Wong, as cited in Steger, Frazier, Oishi & Kaler, 2006).

In studies in the context of traumatic events (terrorism), the operational definition of sense of meaning is mentioned in several ways including assessing responsibility for the events (Bulman & Worthman, 1997), interpreting the experience through one's philosophical or religious beliefs (McIntosh, Silver & Worthman, 1993), and believing that the events have some positive consequence (Updergraff & Taylor, as cited in Park, 2010), having an understanding both of why the event happened, and the positive implications (Janoff-Bulman & Frantz, 1997), reevaluating an event as positive (Thompson, 1985). Thus, it can imply that sense of meaning in terrorism (traumatic events such as terrorism) has the characters as mentioned above (assessing, understanding, interpreting and evaluating events through one's philosophical and religious beliefs of life that is positive).

In conclusion, sense of meaning is a divergent attribute. Although there are various definitions, the definition that seems to represent an effort to encompass all of the major definitions of meaning is offered by Steger, Frazier, Oishi and Kaler. Their definition of meaning refers to the sense made of, and significance felt regarding, the nature of one's being and existence. This definition focuses on situation meaning.

For this study, sense of meaning is also emphasized on situation meaning because the setting of the study is in the area of unrest. So sense of meaning refers to a person's interpretation of general things in life and a person believes that the events make them strong, and it is an opportunity to find advantages from self. In other words, a sense of meaning is defined as a belief or value of a person in life that has advantage, strength, and opportunity. This value is aroused when an individual evaluates anything in life.

Theoretical perspective of sense of meaning

The theory that may underpin sense of meaning can be divided into 2 theories: 1) meaning theory is focused on the coping process phenomena, and 2) a general explanation of the meaning theory.

1. Meaning theory or theory on meaning and meaning making is focused on coping process phenomena/ the context of coping. This theory has been developed by a literature review of Park (2010).

In common, there are two levels of meaning: global meaning and situation meaning (Park, 2010; Park & Folkman, 1997). Both global and situational meaning involves unique groups of individuals and their ways of understanding.

1. Global meaning: Global meaning is assumed to be constructed early in life

and modified on the basis of personal experiences (Austin & Vancouver, 1996). Global meaning seems to have power and influence on a person's thoughts, actions, and emotional responses (Park, 2010).

Global meaning surrounds a person's stable beliefs and valued goals. Global meaning refers to persons' general orientation systems (Pargament, as cited in Park, 2010) and is comprised of beliefs, goals, and subjective feelings (Dittman-Kohli & Westerhof, as cited in Park, 2010; Reker & Wong, as cited in Steger, Frazier, Oishi & Kaler, 2006).

1.1 Global beliefs include broad views concerning justice, control, predictability, coherence, and so on. Global beliefs also are individuals' self-views, and form the core schemas through which people interpret their experiences of the world (Janoff-Bulman & Frantz, as cited in Park, 2010; Koltko-Rivera, 2004).

1.2 Global goals are internal representations of desired processes, events, or outcomes (Austin & Vancouver, 1996). Goals can be desired end states (Karoly, 1999) or states already possessed that one seeks to preserve, such as health (Klinger, as cited in Park, 2010). Typically, global goals are relationships (with loved ones), work, religion, knowledge, and achievement (Emmons, 2003). Goals of each level are involved. The superordinate higher level goals determine mid level and lower level goals.

1.3 Subjective feelings are feelings of meaningfulness, a sense that one has purpose or direction and is thought to be derived from seeing one's action as oriented toward a desired future state or goal (McGregor & Little, as cited in Park, 2010).

2. Situational meaning: Situational meaning is formed in the interaction between a person's global meaning and the circumstances of a particular person-

environment transaction (Park & Folkman, 1997). Situational meaning includes an initial appraisal of the meaning of the event and the search for meaning, either or both of which may in turn affect global meaning.

Situational meaning refers to the significance of a specific occurrence in the context of a particular environmental encounter (Park, 2010). Situational meaning can be considered as a process and outcome. In a process, situational meaning starts with the occurrence of a potentially stressful event and describes an ongoing set of processes and outcomes, including the assignment of meaning to the event (appraised meaning), determination of discrepancies between appraised and global meaning, meaning making (process of meaning), meanings made (outcome of meaning), and the adjustment to the event (Park, 2010). Thus, situational meaning is used in a coping context-coping process-phenomenon. This meaning can be divided into meaning made and meaning-making.

2.1 Meaning making: meaning making is used to represent a process, and is the process of meaning. But the operational definition of meaning-making in most studies has broadening definitions such as reports of intrusive thoughts, positive reappraisal coping, and emotional social support coping (Helgeson, Reynolds & Tomich, 2006; Joseph & Linley, 2005).

2.2 Meaning made stands for outcome (finding meaning), and is the outcome of meaning. In common, conceptual descriptions of meaning made involve restoration or reconstruction of meaning consisting of reappraised situational or global meaning to restore coherence (Pakenham, 2008). In most studies, the character of meaning made (finding meaning) is shown as an individual having found an understanding both of why the event happened and the positive implications (Janoff-Bulman &

Frantz, 1997). Meaning made is also depicted as experiencing positive lessons (McLean & Pratt, 2006), and aspects-identity reorganization (Neimeyer, Baldwin & Gillies, 2006).

In addition, an interesting point is the product of meaning made is various and includes acceptance, perception of growth or positive life change/posttraumatic growth, changes in identity, resolution, and reappraised situational or global meaning (Helgeson, Reynolds, & Tomich, 2006; Joseph & Linley, 2005).

Thus, after an individual passes the process of meaning making, individuals have the following outcomes: (1) a sense of acceptance. The acceptance is understudied and potentially an important response to adversity. (2) perception of growth which involves improving relationships, enhancing personal resources and coping skills, and a greater appreciate for life. (3) Changed identity or identity reconstruction refers to shifts in one' personal biographical narrative and results in experience. (4) reappraised situational or global meaning is a reappraisal meaning of the stressor or the nature of the event, and transforming in positivity (Park, 2010).

2. A general explanation of the meaning theory. This theory on meaning has been depicted by Starck (2003) as the meaning being the domain of life purpose in a crisis situation or life threatening situation (Starck, 2003). The goal of sense of meaning is to assist a person who is free to be responsible for the realization of the meaning of life, and the logos of existence (Frank, as cited in Starck, 2003).

In general, meaning can be separated into searching for meaning and finding meaning (benefit finding). Searching for meaning is the primary motivation of life (Frank, as cited in Starck, 2003). This meaning is unique and specific in that it must and can be fulfilled by the person alone.

Meanwhile, an individual has finding meaning (benefit finding) that is involved in life purpose when a person is confronted with a hopeless situation or facing a fate that cannot be changed in order to stay with the stressful events. Finding meaning is helpful for a person in stressful events since finding meaning is promoting adjustment to a negative life experience (Victor, as cited in Updergraff, Silver & Holman, 2008). Although sense of meaning is an essential function of coping with major life stress (Park & Folkman, 1997), sense of meaning is not coping. The function of finding meaning includes a reconstruction process in response to significant loss and other problems. Finding meaning is drawing on a stress and coping framework (Tedeschi & Nemeger, 2006).

Frank (as cited in Starck, 2003) mentions that the there are three ways to find meaning on the path to uncovering life purpose. The suitable way for a person under a situation is choosing one's own attitude to whatever life presents. Choosing to remain positive, brave or optimistic in spite of difficult circumstance illustrates this way of finding meaning. Thus, finding meaning is proposed as the central role in promoting adjustment to significant negative life events.

Sense of meaning and psychological well-being

Sense of meaning is beneficial for adjusting in severe events because sense of meaning is a domain of post traumatic growth in terrorism (Butler, 2007; Pat-Horenczyk & Brom, 2007). Sense of meaning occurs from a person's interpretation of an event or trauma that is situation meaning when a person confronts stressful situations (Frank, as cited in Starck, 2003). Thus, it can be implied that sense of meaning has an influence on psychological well-being.

There is evident data that shows sense of meaning has an influence on psychological well-being. For example, a study in younger people who confront a terrorist situation indicated that finding meaning was associated with less distress or less PTSD symptoms (McIntosh, Silver & Worthman, 1993).

In another study of terrorism, Steger and colleagues compared the prevalence of posttraumatic growth and PTSD following the September 11, 2001 attacks in the United States and the March 11, 2004, Madrid Spain train bombings. The sample was 188 American students in a mid western college and 48 college students from southern Spain. The results found that the American students informed of more positive change than the Spanish students following terrorism because the culture of both countries is different. The United States of America has high levels of self–enhancement in independent cultures. The Spanish, on the other hand, are less independent, and have more collectivistic cultures. When American students evaluate the disruption caused by trauma, they are likely to focus on positive change in keeping with cultural expectations. In addition, meaning in life (sense of meaning) was related to a more positive outcome (posttraumatic growth or/and psychological well-being) in both countries. This was especially evident in the American college students in which it was found that sense of meaning/ finding meaning was associated with positive life changes or posttraumatic growth or/and psychological well-being ($\beta = .26$, $p < .001$). Finding meaning also is associated with less distress or less PTSD symptoms (Steger, Frazier & Zacchanini, 2008).

Similarly, Updergraff and colleagues' study among a sample of 931 US adults across 2 years after being exposed to the terrorist attacks of September, 11, 2001, showed that individuals who had finding meaning adapted to events successful and

finding meaning was predicted by specific coping-seeking instrumental support and positive reframing. Finding meaning also was associated with positive life changes or posttraumatic growth and less long term fears of subsequence attacks- in 1 year and 2 year post terrorist attack ($\beta = -.25$, $p < .001$; $\beta = -.11$, $p < .001$), respectively. Moreover, finding meaning predicted lower posttraumatic stress symptoms because long term symptoms would be mediated by a reduction in people's fears of future additional terror attacks (Updergraff, Silver & Holman, 2008). Thus, an individual who has finding meaning (benefit finding) may adapt well to the situation and experience less mental health problems.

On the other hand, a person search for meaning positively related to the post traumatic stress/posttraumatic symptoms that were assessed in 1 and 2 years, post September 11, ($r = .25$, $.26$, $p < .001$) and with the outcomes of fears of future terrorism at 1 year ($r = .28$, $p < .001$). Searching for meaning predicted greater posttraumatic stress (Updegraff, Silver, & Holman, 2008). Thus, a person failing to adapt to events, has to search for meaning (not finding meaning) and his or her experiences increased his or her mental health problems such as PTSD.

Measurement of sense of meaning

There are many instruments for assessing sense of meaning in terrorism. These instruments include the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi & Kaler, 2006), and the Life Regard Index (LRI; Battista & Almond, as cited in Steger, Frazier & Zacchanini, 2008).

In this study, the researcher employed the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi & Kaler, 2006) to measure sense of meaning because

this instrument is used to measure situation meaning that is congruent with the operational definition of sense of meaning and it has good validity and reliability.

Validity

The Meaning in Life Questionnaire (MLQ) has been developed and tested by Steger and colleagues (Steger, Frazier, Oishi & Kaler, 2006). Although this instrument was first developed in undergraduate introductory psychology students, it has been used in many studies such as terrorism (Steger, Frazier & Zacchanini, 2008), and loss (McIntosh, Silver & Worthman, 1993). The MLQ has sufficient construct validity and was supported with factor analysis in 151 undergraduate introductory psychology students. The research found that factor loadings were all high (.55 to .84) (Steger, Frazier, Oishi & Kaler, 2006).

In addition, the study in 154 undergraduate introductory psychology students for the replication of the two-factor structure of the MLQ and revision of the MLQ (Steger, Frazier, Oishi & Kaler, 2006), found that the confirmatory factor analysis (CFA) supported the two-factor structure (presence and search). The items factor loadings were between .65 and .83. The CFA path estimate indicated a stronger relation between Presence and Search (alpha = .28). Thus, the MLQ has two subscales: presence of meaning and search for meaning.

The convergent and discriminant validity of the MLQ subscales (across time and informants) has been reported through a multitrait–multimethod matrix method study.

For the convergent validity of the MLQ, when the MLQ-P (Presence of meaning subscale) is compared with two other meaning scales that have the same construct, the MLQ-Presence subscale correlates between .58 and .74 with the

Purpose in Life Test (PIL) and the Life Regard Index (LRI) respectively (Steger, Frazier, Oishi & Kaler, 2006). Thus, the construct of the MLQ-Presence subscale is the same as the PIL and the LRI.

In addition to this, the evidence has shown that the MLQ has discriminant validity. The self–report scores on the MLQ–P have a higher correlation than other self reports on well-being measures (i.e., self–esteem, life satisfaction, optimism).

Reliability

The MLQ has good reliability. The reliability of the MLQ includes internal consistency, and stability reliability.

Internal consistency reliability was tested in a sample of 151 undergraduate introductory psychology students for each individual subscale. The reliability of the MLQ revealed Cronbach's coefficient alpha for each subscale ranging from .82 to .87 (Steger, Frazier, Oishi & Kaler, 2006). So, both subscales of the MLQ have demonstrated good internal consistency.

Stability reliability is tested by using retest intervals of 1 month which has revealed that the stability of the two subscales ranged from .70 to .73 (mean for retest intervals = .70). All subscales showed good stability over time intervals ranging from 1 month (Steger, Frazier, Oishi & Kaler, 2006). In other words, one-month test–retest stability Cronbach's alpha coefficients were good. Therefore, this scale has temporal stability and good reliability.

3. Coping

Definition of coping and theoretical perspective of coping

Coping is used in different conceptualizations (theoretical constructs or defining attributes) by theorists and researchers. Theorists describe coping as attempts to enhance the fit between a person and the environment (French et al., 1974) or attempts to meet environment demands to prevent negative consequences (Lazarus & Folkman, 1984; Pearlin & Schooler, 1978). In addition, other researchers view coping as a part of regulation (behavior, emotion, situation). There are various definitions to describe coping. The definitions of coping that are used in the research are as follows:

1. Lazarus and Folkman (1984) mention that coping refers to constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984; Skinner, 2003).

This definition, which is commonly used, implies that coping may consist of a number of adjustments made either simultaneously or sequentially. It is restricted to instances of perceived stress and it excludes habitual or automatic adjustments to the requirements of daily life.

Therefore, in other words, coping is a goal direction process in which the individual events, thoughts and behavior are towards resolving the source of stress and managing emotional reactions to stress (Lazarus, as cited in Compas, Conner-Smith, Saltman, Thomson & Wadsworth, 2001).

The theory that is underpinning of coping is the cognitive appraisal theory of stress and coping (Lazarus & Folkman, 1984). This theory explains why and how

coping manages or brings psychological well-being as follows:

The theory posits that the ability to cope with negative life events involves making both cognitive and affective appraisals to meet the internal and external demands of one adversity (Weight & Aquilino, as cited in Rosenhaum, 2000).

A cognitive appraisal refers to the subjective meaning individuals attach to an encounter. If a situation or event in itself is neutral only by changing the cognitive appraisal process then the situation or events are evaluated as threatening or challenging

The perception of an event may vary in each person. The cognitive appraisal process is composed of two appraisals: a primary and secondary appraisal (Lazarus & Folkman, 1984). In the primary appraisal, individuals evaluate the degree to which their well-being is at risk. The person perceives a stressor as positive, neutral or negative at first. If the person perceived a stressor as negative, the stressor is further evaluated for its potential harm, threat, or challenge. Secondary appraisal is the process of evaluating one's ability to deal with a strain (Lazarus & Folkman, 1984). An individual's perceived coping resources largely determine the degree to which an individual appraises an event as threatening. When perceived coping resources are high and the harm, threat or challenge is low, then the result is the least stressful consequences. In short, the individual decides whether the conditions or stimuli are a threat (am I OK?). Secondary appraisal includes a review of choices of action if the individual perceives the conditions are a threat (What can I do?). Responses include behaviors such as emotional, cognitive, and physical activity. Secondary appraisal follows primary appraisal, during which the individual assesses whether his or her coping resources are sufficient to overcome the potential negative consequences.

Secondary appraisals are either problem–focused coping or emotion-focused coping. Problem–focused coping are attempts to deal with the cause of the problem in order to change a negative situation. Emotion-focused coping is to regulate the emotional response to the events (Lazarus & Folkman, 1984).

In conclusion, coping depends on the primary appraisal of risk and secondary appraisals of resources and abilities to cope with risk (Folkman & Lazarus, 1991) that also brings about perceived control.

For the structure of coping, Lazarus and Folkman (1984) identified coping with stressors in two major ways (Lazarus & Folkman, 1984) which are problem–focused coping and emotion-focused coping.

1.1 Problem-focused coping consists of direct actions on the environment or on the self to remove or alter circumstances appraised as threatening. In other words, problem-focused coping is also commonly referred to "active coping" designed to manage or solve the problem by removing or circumventing the stressor.

1.2 Emotion–focused coping consists of actions or thoughts to control the undesirable feelings that result from stressful circumstances. In other words, emotion-focused coping is also referred to as "palliative coping", designed to regulate, reduce or eliminate the emotional stress associated with the stressful events. These two types of strategies can be further refined into specific tactics and techniques (Carver, Scheier & Weintrauh, 1989).

Thus, emotion-focused coping has been distinguished into seeking social support, the ventilation of emotion, and denial and positive reinterpretation. Similarly, problem-focused coping can potentially involve a wide variety of actions and distinct activities, and sometimes even forcing oneself to wait before acting.

2. Weiss and colleagues defined coping as acting efforts directed at maintaining, augmenting and altering control over the environment and the self (Weiss, McCabe & Denning, 1994).

For the structure of coping, according to this definition there are two types of coping: primary control coping and secondary control coping.

2.1 Primary control coping is defined as coping intended to influence objective events or conditions;

2.2 Secondary control coping refers to coping aimed at maximizing one's fit to conditions and relinquishing control to define the absence of any coping attempt (Rothbaum, Weisz & Snyder, 1982; Weiss, McCabe & Denning, 1994).

However, the distinction between primary and secondary control coping does not include various forms of disengagement coping (e.g., avoidance, denial, and wishful thinking).

3. Skinner and Welborn (as cited in Compas et al., 2001) defined coping as "how people regulate their behavior, emotion, and orientation under conditions of psychological stress".

For the structure of coping, coping directed at behavior regulation includes information seeking and problem solving, emotional regulation includes maintaining an optimistic outlook, and orientation includes avoidance. Skinner and Welborn distinguished three aspects of self regulation: attempts to direct regulation emotion (e.g., emotion-focused coping, henceforth labeled emotion regulation), attempts to regulate the situation (e.g., problem-focused coping including thinking about how to do so), and attempts to regulate emotionally driven behaviors (e.g., behavior regulation). This definition is similar to Esteinberg and colleagues' definition of

coping as a subset of broader self-regulating behaviors (Essenberg, Faber & Guthric, as cited in Compas et al., 2001).

In studies on traumatic events, researchers use operational definitions of coping in different ways. Typically, the researcher's definition of coping in a crisis situation (terrorism, tornado) involves coping styles. Coping styles refers to a person's cognitive behaviors and efforts to manage (reduce, minimize, master, or tolerate the internal and external demands of) a particular, stressful transaction (Braum-Lowensohn, Celestin,-Westreeich, Celestin, Verleye, & Ponjaeti-Kristoffersen, 2009; Butler et al., 2009; Lazarus & Folkman, 1984; Zeiner & Hammer, 1992). Although individuals use a variety of coping styles, studies found that the coping style that is appropriate to a stress context is problem-focused coping (Zeidner, 2006; Zeidner & Hammer, 1992).

In conclusion, coping refers to the process of a change in cognition and behavior in order to control and manage events that are evaluated as stressful and the result is the release of a stressor. In other words, coping is defined as cognitive and behavioral efforts to manage the situation. The coping process is the process of adaptation. The coping process comprises of cognitive appraisal and coping styles. In this study, coping focuses on coping (coping styles) because the coping styles include (is) the behaviors and thoughts that can be implemented by individuals when they are faced with stressful events, without reference to their efficacy.

Coping and psychological well-being

Coping (i.e., functioning) is important for stress resistance and is an adaptive response to stressful events**.** Coping is also a factor affecting psychological well-

being. Coping emerges after the appraisal of events. Each type of coping results in a different outcome.

There is some evidence suggesting that problem-focused coping may be more functional than emotion-focused coping following exposure to the stress (Billings & Moos, 1984). Studies in natural disasters found that the most frequent coping methods used involve turning to one's family for emotional support, and active techniques (such as staying up at night and talking about the disaster, reading about it, crying, and helping other victims through their disaster-related problems). Others dealt with their experience by avoidance, for example, trying not to think about the natural disaster, avoiding reminders of it, keeping busy, and letting the time pass to allow healing. Also some victims used religious and philosophical perspectives to help with their coping (North, Smith, McCool & Lightcup, as cited in Zeidner & Hammer, 1992).

In addition, the type of coping styles can predict the outcome because the types of coping styles used to cope with problems may serve as mediators of the impact of a traumatic stressor. In a crisis, effective coping styles or active coping seems to be a suitable way of dealing with self (emotion) as well as controlling negative emotions and also actively addressing the problems posed by the stressor. From this reason, a focus on addressing problems can replace feelings of helplessness with an increased sense of control and personal mastery. The result is the individual facing the natural disaster can feel prevailing (Silver & Wortman, 1980). Thus, effective coping or active coping is typically associated with better psychological and physical outcome than other coping style such as avoidant coping (Holahan & Moos, 1985). If a person uses effective coping or active coping, he or she will cope

successfully and demonstrate a good mental health state**.**

In terrorism situations, evidence shows that there is a relationship between active coping (effective coping style or problem-focused coping) and the enhanced mental health of victims of terrorism. In other words, active coping (effective coping style or problem-focused coping) manipulates a person in a crisis situation to have good adaptation and results in less psychological distress (i.e., PTSD, anxiety and depression).

There are several studies (in terrorism) that show the level of relationship between problem-focused coping and positive life changes (i.e., well-being).

Butler et al. (2009) studied 1,762 American citizens who were directly exposed to the terrorist attack of September 11, 2001, and were assessed after the attack in the first month (41 days) and 6 months later. They found that greater psychological well-being was associated with fewer negative worldview changes (less pessimistic coping style or more optimistic coping style), less emotional suppression, and less denial and self-blame. Greater psychological well-being in the short-term was also associated with having a large social network and with coping actively and seeking emotional support. In other words, coping especially, problem-focused coping or active coping (confrontive coping style and self-reliant coping style) is associated with well-being (r = .076, $p < .002$).

Wadsworth et al. (2004) studied voluntary stress responses that were aimed at directly resolving the stress problem or emotional response to the attack of September 11, 2001. They found that the adolescents who used active coping that included cognitive reconstructuring and positive thinking or optimistic coping style had lower levels of anxiety or better mental health.

Similarity, Braum-Lewensohn and colleague's (2009) study on Israeli adolescents who faced ongoing terror in Israeli found that problem-focused coping (i.e., confrontive coping style, self-reliant coping style or information seeking) was associated with less Posttraumatic stress (Braum-Lewensohn, Celestin-Westreich, Celestim, Verteye, Verte, Ponjaert-Kristoffersen, 2009).

On the contrary, if an individual evaluates a situation as a threat, and he or she uses ineffective coping- emotion-focused coping and behavioral disengagement, this will result in unsuccessful adaptation leading to mental health problems. For instance, Butler et al., (2002) studied the responses identified in younger adults coping with the 9-11 terrorist attacks, and found that the use of avoidance coping (evasive coping style) was consistently associated with an increased incidence of mental health problems or was associated with distress symptoms. Giving up, self blame, denial, and substance use were associated with more distress and post-traumatic stress symptoms. Butler and colleague also found in their study that younger adults who used active coping (problem-focused coping) had less general distress.

Similarily, Steger, Frazier and Zacchaini's (2008) study about college students from the United States and Spain who had confronted terrorism (Spain train bombing and terrorist attack in the United States) found that less terrorism–related worry (emotion-focused coping) was related to less severe Posttraumatic stress disorder symptoms.

Lee, Gibson, Markon and Lermyre (2009) studied Canada citizens who had confronted terrorism in Canada, and found that actual avoidance behavior (evasive coping style) was associated with greater psychological stress.

In addition, there is evidence supporting the influence of optimism (which is

one part of coping) on the adaption of victims in disaster (terrorism, hurricane, air flight crash).

For instance, Zeidner & Hammer (1992) studied 261 Israeli adult residents who had experienced SCUD missile attacks during the Gulf War (February 1991), and found that optimism was associated with less anxiety (r = -.13, *p* < .001) less depression (r = -.18, *p* < .001) and physical symptoms (fatigue, dryness of mouth, insomnia, headaches) (r = -.18, *p* < .001) and optimism or future orientation thinking which positively related to mental health (i.e., positive effect, well being) (β = .32, *p* < .001), and predicted positive effects (Zeidner & Hammer, 1992).

Similarlity, Holman and Silver (2005) studied the adjustment of American citizens following the September 11th terrorist attacks in 1, 2 and 3 years after the event, and found that future orientation or optimism related positively to mental health (positive affect) (β = .23, *p* < .001) and negatively related to mental problems (psychological distress) (β = -.07, *p* < .001). Future orientation thinking was also strongly associated with long–term adjustment.

Daugall, Hyman, Hayward, McFeeley and Baum (2001) studied the recovery of emergency workers, airport and medical personal involved in an air flight crash that killed all 132 passengers, and found that optimism was related to less distress at 4-8 weeks, 6, 9 and 12 months after the disaster and optimism positively related to social support (perceived social support) (β = .49, *p* < .001).

In conclusion, coping has an advantage for adjusting in a crisis situation and psychological well-being. In other words, some coping styles (i.e., optimistic coping style, confrontive coping style, self-reliant coping style, and evasive coping style) may have an influence on psychological well-being.

Measurement of coping

There are many instruments for assessing coping in terrorism. These instruments include Ways of Coping Checklist (WCC; Folkman & Lazarus, 1980), Brief COPE (Carver, 1997), the COPE Inventory (Carver, Scheier & Weintraulo, 1989), Jalowiec Coping Scale (JCS) (Jalowiec, 2003; Jalowiec, Murphy & Powers, 1984), and Coping Self-Efficacy Scale (Chesney, Neilands, Chambers, Taylor & Folkman, 2006).

In this study, the researcher employed the Jalowiec Coping Scale (JCS) (Jalowiec, 2003) to measure the coping of teachers because the Jalowiec Coping Scale (JCS) is theoretically derived from Lazarus who mentions the dimensional schema of problem-focused coping versus emotion-focused coping methods. The JCS was designed to measure coping behavior across a wide range of stressful situations. The JCS has been used to assess coping with many kinds of physical, emotional and social stressors such as stressors associated with a wide variety of illnesses, major life stressors (i.e., loss of loved one), family related stressors, work related stressors and even stressors due to natural disasters (e.g., volcanic explosion and hurricane). This instrument has good reliability and validity. In addition, the researcher selected to use 4 specific dimensions of coping style which are confrontive coping style (confronting the situation, facing up to the problem, and constructive problem-solving), optimistic coping style (positive thinking, positive outlook, and positive comparisons to other people), evasive coping style (doing things to avoid or delay dealing with the problem), and self-reliant coping style (depending on oneself to deal with the situation, rather than on others) because these coping styles have been found to

correlate to psychological well-being (Butler et al., 2002; Butler et al., 2009; Holman & Silver, 2005; Silver et al., 2002; Wadsworth, Gudmundasen, Raviv, Ahlkvist, McIntosh, Kline et al., 2004; Zeidner & Hammer, 1992).

Validity

The JCS is widely used in many studies because this tool has good validity: content validity, construct validity and concurrent/predictive validity.

The content validity of the JCS has been demonstrated sufficiently (Jalowiec, 2003). Therefore, the JCS has good content validity.

For construct validity of the JCS, there are empirical construct validity studies that examine the dimensionality of the JCS by determining the agreement of 25 nurse researchers with the author's classification of JCS items into eight subscales. Agreement was highest on the supportant subscale (94%) and lowest on the emotive subscale (54%). The mean for agreement for all eight subscales was 75% (Wegmann & McClane, 2004). In regards to other results, the content validity was analyzed by using 3 judges, and the content validity index for eight subscales was .85 (Ienatsch, as cited in Jalowiec, 2003). Thus, most experts have supported the author's classification of the JCS items into eight subscales.

Concurrent and predictive validity of the JCS can be strongly supported by the following evidence (Jalowiec, 2003):(1) Greater effectiveness of coping behavior was closely associated with several kinds of better outcomes such as less stress, perception of a better ability to cope with illness, fewer psychological symptoms, better social and emotional functioning, more life satisfaction, and better (higher) quality of life and (2) a greater use of less desirable coping behaviors (evasive, fatalistic, emotive) was associated with poorer outcomes (e.g., more stress, more psychological

symptoms, perception of a poor ability to cope with their illness, less life satisfaction, and a poorer quality of life).

Reliability

The JSC is widely used in numerous studies in many target populations such as with well and sick individuals, including individuals who have experienced traumatic events and is useful for adults of all ages, including adolescents and the elderly. The instrument has also been translated into more than 20 languages including Irish, Chinese, Turkish, Hebrew, Arabic, Indian and Thai. The reliability for the overall scale is .85 (Chronbach's alpha), with a subscale varying from .85 to .86 (Jalowiec, Murphy & Powers, 1984).

4. Social support

Definition of social support

The varieties of definitions of social support (theoretical constructs or defining attributes) are provided by theorists and researchers. Most of them view social support as a multidimensional concept. However, the view (aspect) of social support can be classified to include functional type, structural type, actual or/and perceived support. Functional type support is qualitative, emphasizing on the act of providing social support. The structure of social support is a quantitative construct, focusing on who provides the support or social network. Social network is defined as a "specific set of linkages among a defined set of persons" or alternatively, the set of relationships of a particular individual (Mitchell, as cited in Schaefer, Coyne & Lazarus, 1981). In addition, social support can be measured in two facets: actual support (support

actually received), and perceived support (also known as functional support) - it is the subject judgment that family and friends would provide quality assistance with future stressors.

The definition is emphasized on the functional type of support and through using information (it may imply communication) such as the definition by Cobb (1976).

Cobb (1976) mentions that social support is defined as information leading the person to believe that he or she is cared for and loved, esteemed, and has a network of mutual obligations. Therefore, social support is typified by reciprocal security, mutual respect, and positive feelings.

The conceptualization places emphasis on the functional type of support, and this particular type of relationship as given by the definition of Weiss (as cited in Dimond & Jones, 1982),

Weiss (as cited in Dimond & Jones, 1982) mentions that support is defined as the quality of feeling sustained through the gratification of needs. Social support is a combination of six categories of relational provisions with each ordinarily associated with a particular type of relationship. In other words, social support also is a composite concept including (1) attachment/intimacy, (2) social integration, (3) nurturance, (4) reassurance of worth and (5) availability of assistance.

Conceptualization has a focus on the functional type of support, through interpersonal relationships. The support (i.e., supporting basic social needs) through interpersonal transaction or interaction with others is as given in the definition of House (1981), Kaplan et al. (as cited in Thoits, 1982), and Schmaker and Browwell (as cited in Chaffer, 2004).

House (1981) mentions that social support is an interpersonal transaction involving one or more of the following: (1) emotional concern (likes, loves, empathy) or emotional support that involves the experience of feelings, likes, admires, respected, or loved (2) instrumental aids (goods and services) or tangible aids, goods, or service define instrumental support (3) information about the environment, or (4) appraisal (information relevant to self–evaluation) or appraisal support affirming one's actions or statement.

Kaplan et al. (as cited in Thoits, 1982) mentions that social support is defined as the degree to which a person's basic social needs are gratified through interaction with others. Basic social needs include affection, esteem or approval, belonging, identity, and security. In other words, support is defined by the relative presence or absence of psychological support resources from significant others (Kaplan, as cited in Thoits, 1982). These needs may be met by either the provision of socioemotional aid (e.g., affection, sympathy and understanding, acceptance, and esteem from significant others) or the provision of instrumental aid (e.g., advice, information, help with family or work responsibilities, financial aid). Instrumental aid has socioemotional overtones, of course: practical help from others assures the individual that he or she is cared about.

Schmaker and Browwell (as cited in Chaffer, 2004) mention that social support is defined as an exchange of resources between at least two individuals perceived by the providers or recipient to be intended to enhance the well being of the recipient.

The definition has a focus on the functional type of support by different individuals (social resource) such as the definition of Cohen and Willis (1985), and

Thoits (1986).

Cohen and Willis (1985) mention that social support is defined as "a process through which help is provided to or exchanged with others in an attempt to facilitate one or more adaptational goals. Social support also is defined in terms of a functional type of support that includes emotional support, tangible and informational support.

Thoits (1986) mentions that social support is most commonly referring to functional performance for a distressed individual by significant others such as family members, friends, co-workers, and neighbors.

The definition emphasizes actual support, especially social interactions or relationships. Actual support or received support is naturally occurring helping behaviors that are being provided (Norris & Kaniasty, 1996). This support is provided by a social system as mentioned by Norris and Kaniasty (1996).

Norris and Kaniasty (1996) mention that social support is defined as these social interactions or relationships that provide the individual with actual assistance or that the embedded individual within a social system believes to provide love, care or a sense of attachment to a valued social group or dyad.

Finally, the definition has focus on the functional type of support and perceived social support especially the relationship or/and social relationships such as the definition of Schaefer, Coyne and Lazarus (1981), and Schwarzer, Knoll and Rieckmann (2004).

Schaefer, Coyne and Lazarus (1981) mention that perceived social support refers to assess the person's evaluation of the supportive quality of a relationship whether in a general or specific context.

Schwarzer, Knoll and Rieckmann (2004) mention that perceived social

support refers to the function and quality of social relationships, such as perceived availability of help or support actually received.

Overall the definition of social support is usually used by theorists yet researchers study social support within many contexts. For the context of terrorism, researchers' studies employ the conceptualization of social support (the research's operational definition of social support) that involves material resources (such as income), energy resources (such as the availability of social support or affinity groups) and work resources (such as employment or loss of employment) (Bonanno & Galea, 2007), the availability (focus on the size of the social network) and quality of social resources (that emphasize the measurement of emotional support) (Butler, et al., 2009), as a coping resource mediates coping response (Zeidner & Hammer, 1992), as the potential mediates of relationships among optimism, stress, and mental health. It is also social support by perception (perceived social support) (Daugall, Hyman, Hayman, McFeeley & Baum, 2001).

In conclusion, social support has a divergent definition. In this study, social support is the relationship between people in society. A person gets help from other people in several ways which includes love, attachment, being a participant with social acceptance-self esteem. Information and social support are instrumental in providing (money, time, employment) a resolution for mental health and well-being. This is according to the conceptualization of House which is often used by researchers (Schaffer, 2004). House (1981) has a focus on the functional support that includes emotional, tangible, informational and appraisal support. This component of social support is similar to the type of support that is differentiated primary aspects of support (Jacobson, 1986) as the following outlines: (1) emotional support refers to the

behavior that fosters feelings of comfort and leads an individual to believe that he or she is admired, respected, and loved, and that others are available to provide caring and security, (2) cognitive support refers to information, knowledge, and/or advice that helps the individual to understand his/her world and to adjust to changes within it, (3) material support refers to goodness and sources that help to solve practical problems.

For this study, the researcher also conceived social support by perception (functional support or the construct of functioning) or perceived social support because the measure of functional support is more beneficial than structural support.

Perceived social support refers to the belief that such helping behavior would be provided when needed and/or it is helping behaviors that might happen (Barrere, as cited in Norris & Kaniasty, 1996). Thus, it is social support by perception. Perceived social support can reflect received support because the real perception of a person is created belief (availability of quality social support) and it is beneficial to decrease distress in the long term. Norris and Kaniasty (1992) found that received support exerted its long-term beneficial effect on distress indirectly through perceived support (Norris & Kaniasty, 1992). In other words, the availability of quality social support has importance for victims in the first time and it remains in the long time although there is not real support in later time or quality social support diminishes. The social support will be still in their perception (Norris & Kaniasty, 1992). According to other more recent studies, perceived social support has been found to be effective in reducing the deleterious effects of trauma on posttraumatic stress symptomatology (Daugall, Hyman, Hayman, McFeeley & Baum, 2001; Schnurr, Lunney & Sengupta, 2004). The consequence of recent studies is less illness. As a result, perceived social

support should be selected to study in teachers residing in an area of unrest in southern Thailand.

Theoretical perspective of social support

The theoretical underpinning of social support can be viewed from three perspectives: social and coping perspective, social-cognitive perspective and the social control perspective. This study will use the social and coping perspective to explain how a person who faces stressful events adapts successfully (i.e., good psychological adaptation or psychological well-being) which is also congruent with the model of stress, and Lazarus & Folkman (1984) mention that the role of social support is a coping resource. In the social and coping perspective, the function of social support happens by an adaptation mechanism which includes direct and indirect buffering stress, and this is explained by the buffering hypothesis.

Cohen and Wills (1985) mention the stress buffering model that explains how support is helpful to decrease stress. In the stress buffering model, the role of support has two ways (Cohen & Wills, 1985).

1. Support may intervene between the stressful event (or expectation of the events) and stress reaction by attenuating or preventing a stress appraisal response. More specifically, the perception the others can and will provide a necessary resource may redefine the harm potential of a situation and/or bolster one's perceived ability to cope with imposed demands and hence prevent a particular situation from being appraised as highly stressful (Thoits, 1986). In other words, in theory, social support should only enhance appraisals and coping to the extent that the particular type of social support matches the demand of the stressor (the optimal matching hypothesis;

Cohen & Harberman, 1983; Cotrona & Russell, as cited in Lakey & Cohen, 2000).

2. Sufficient support may intervene between the experience of stress and the onset of the pathological outcome by reducing or eliminating the stress reaction or by directly influencing the physiological process. Support may alleviate the impact of the stress appraisal by providing a solution to the problem by reducing the perceived importance of the problem in tranquilizing the neuroendocrine system so that people are less reactive to perceived stress or by facilitating helpful behaviors or promoting behavior (Cohen & Wills, 1985; House, 1981).

In short, social support might protect against the adverse effect of stress by leading individuals to interpret stressful situations less negatively (Cohen & Harberman, 1983; Cohen & Mckay, 1984). In other words, the support available reduces the effects of stress by contributing to a less negative appraisal.

Social support and psychological well-being

Social support is the external resource of adjustment to stressful events in order to have better psychological functioning. Social support is beneficial in helping adaptation. In general agreement, the individual who has a high level of social support is more likely to have better mental and physical health (House, Landis & Umberston, 1988).

In terrorist situations, social support also provides a benefit to health. It facilitates well-being and limits psychological distress following mass trauma or traumatic events (Polan, Maxico, Kanisty & Norris, as cited in Hobfoll et al., 2007) because the role of social support performs as a coping resource in a time of stress. It functions as a mediator between the appraised threat and the outcome by using

effective coping (providing a solution to the problem) or it assists perceived control or sense of control (reducing the importance of the problem) (Cohen & McKay, 1984; Pearline et al., 1981; Thosts, 1995) or has a capacity for coping or coping efficacy (Pearline, Liebeman, Menaghan & Mullen, 1981). The consequence is successful adaptation and happened psychological well-being.

Previous research indicated that perceived social support had a positive influence on less posttraumatic symptoms. Perceived social support was associated with less anxiety (Floran, Mikulincer & Hirschberger, 2002) and less depression (Galea et al., 2002; Strous, Misbae, Ranen, Benatov, Green & Zivotofsky, 2007; Witner & Culver, 2001).

Furthermore, empirical data on terrorism shows that high social support (especially, a social network that is a structure support) enhances good adaptation or well-being.

For example, Butler and a colleague studied 1,762 American citizens who were directly exposed to the terrorist attack of September 11, 2001. They assessed the subjects after the attack in the first month and 6 months later, and found that greater well–being was associated with a larger (high) social network size (Butler et al., 2009). Likewise, Adams and Boscarino's (2005) study of 2,368 adults living in New York City who were exposed to the World Trade Center disaster, one year after the attacks, found that individuals (residents) who experienced greater exposure to the World Trade Center disaster had more psychological problems than those who had less exposure 1 year after the attacks. However, the psychological social resource factors affect psychological well-being in a person that has had high exposure. Especially, social support (emotional, instrumental, and informational) from others

and coping resources such as self–esteem which enables a person to adapt to new situation demands, lowers the stress associated with those demands, and thus the person exhibits less psychological distress, thus these are the most important factors of a stress moderator. Therefore, the result is social support and self-esteem were associated with better psychological well-being ($\beta = .34$, $p < .001$ and $\beta = .18$, $p < .001$ respectively).

Similarly, Bonanno and Galea (2007) studied 2,752 adults residing in the New York City area, during the first 6 months after the September 11, 2001, terrorist attack, and found that social support was associated with resilience. Furthermore, the prevalence of resilience (resilience was defined as having 1 or 0 posttraumatic stress disorder symptoms and as being associated with low levels of depression and substance use) was uniquely predicted by social support. This study may imply that social support correlated with psychological well-being.

In addition, evidence from disaster situations reveals that social support correlated with effective coping (problem-focused coping) and optimism. For example, Daugall, Hyman, Hayward, McFeeley and Baum (2001) studied the recovery of 159 emergency workers or disaster workers who worked on the crash site of the US air flight 427 at , 2, 4, 6, 9 and 12 months after the incident (work at the crash site), and found that perceived social support positively related to the use of coping (problem-focused coping especially seeking social support, confrontive coping style) at the first two assessments ($r = .23$, $p < .001$ and $r = .30$, $p < .001$) and more available social support was associated with more optimism (ranging from .45 to .55, $p < .001$). More optimism was associated with less distress at each time point (at 2 and 12 months) (ranging from -.36 to -.43, $p < .001$). Thus, an optimist had more

available social support, and more social support in turn predicted greater use of seeking social support as a coping mechanism (strategy) because the role of social support as a possible mediator of the effect of optimism or social support is a potent mediator of the relationship between optimism and stress.

Overall, social support (perceived social support) and a social network site correlated with effective coping (problem-focused coping) and optimism, and it may also have an influence on psychological well-being.

Measurement of social support

There are many instruments for assessing social support in terrorism. Some instruments measure perceived social support. Other instruments measure actual support and/or structure support (social network). These instruments include the Social Support Questionnaire (SSQ; Sarason, Levine, Basham & Sarason, 1983), the Social Support Questionnaire (SSQ: Schaefer, Coyne & Lazarus, 1981), the Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck & Hoberman, as cited in Sarason, Shearin, Plerce & Sarason, 1987), the Social Provisions Scale (SPS; Cutrona & Russell, 1987), Inventory of Socially Supportive Behaviors (ISSB; Barrera, Sandler & Ramsey, 1981). Social Network Index (SNI; Cohen, as cited in Lakey & Cohen, 2000; Cohen, Doyle, Skoner, Rabin & Gwaltnery, 1997), the Single Items Measure of Social Support (Blake & Mckay, as cited in Butler et al., 2009), Norbeck Social Support Questionnaire (NSSQ) (Norbeck, Lindsey & Carrieri, 1981), Personal Resource Questionnaire (PRQ) (Brandt & Weinert, 1981), and Coping Resource Inventory (CRI; Hammer & Marting, as cited in Zeidner & Hammer, 1992).

In this study, the researcher employed the Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck & Hoberman, as cited in Sarason, Shearin, Plerce & Sarason, 1987) to measure social support. This instrument is focused on measuring interpersonal support. The component of social support in the tool is congruent with the conceptual definition of this study that is focused on perceived support through relationships and it is House's conceptualization of social support. The component includes the belonging (emotional) and self esteem, appraisal (informational), and tangible support.

Validity

The construct validity of measures of perceived support is extensive, as such measures correlate with a wide range of other measures of relationship perceptions (Lakey & Cohen, 2000). The validity of the ISEL and other social support measures ranges from .30 to .46.

Reliability

This tool has been used extensively in many healthy and ill populations (Lindsey & Yates, 2004). It is also most commonly used to measure social support especially to measure perceived support (Lakey & Cohen, 2000). The ISEL has excellent internal consistency (alpha ranging from .77 to .86) and good test-retest reliability (Pearson correlation of .87) (Cohen et al., 1985).

Summary

Overall, the literature review mentions the psychological aspect of teachers residing in an area of unrest, the concept of psychological well-being, the process of psychological well-being and the predictors of psychological well-being.

The concept of psychological well-being is used in several fields, and it is used from different perspectives depending on the person using it (i.e., researchers, theorists). Psychological well-being within the context of terrorism (a situation of unrest), as used in this study, focuses on the positive functioning of mentality that is a part of quality of life. The occurrence of psychological well-being is not simple. Thus, psychological well-being of teachers residing in an area of unrest should have factors that influence psychological well-being. There is evidence of factors that correlate with psychological well-being or/and positive outcomes of psychological adaptation. These factors may have an inference to be predictors of psychological well–being and need to be tested in this study.

CHAPTER 3

METHODOLOGY

In this chapter, the methodology of this study is presented, including the research design, population, sample selection, and setting. Instruments are described as well as the data collection procedures and human subject protection. Finally, data management and statistical analysis are presented.

Research Design

A descriptive, cross-sectional research design was used to examine the linkage among coping, sense of control, sense of meaning, social support, and psychological well-being of teachers residing in an area of unrest. The casual relationship among the set of the four predictors of coping, sense of control, sense of meaning, and social support on psychological well-being were examined.

Although a longitudinal design is more desirable in studying the dynamic process of mentality (psychological well-being) which can change overtime, this study could not follow a longitudinal study. The context of a study limits longitudinal design in an area of unrest as a risky situation. In addition, there is also a high cost and complexity of time intervals, thus, the data was collected on each participant on one occasion.

The structural equation modeling (SEM) technique was used in this study to test the proposed model of the predictors of the psychological well-being of teachers residing in the area of unrest. According to Burns and Groves (2005), SEM is designed to test theories. In a theory, all concepts are expected to be interrelated.

Testing the structure of relationships within the theory as a whole provides much more information about the validity of the model than setting only specific propositions. In addition, it is expected that the statistical model derived from the SEM would be consistent with the proposed model. Although the consistency (between the statistical model and proposed model) does not prove the accuracy of the theory that backs up this proposed model, this consistency does provide support for the theory (Burns & Grove, 2005). In other words, the consistency is from contributed theories. The researcher may feasibly know what appropriate theories support the proposed model. The theory is defined as a systematic set of relationships providing a consistent and comprehensive explanation of a phenomenon (Hair, Anderson, Tatham, & Black, 1998). The relationships examined in the model were linear, and unidirectional. The weights of the coefficients and the level of statistical significance were examined.

Population, Sample, and Setting

Population

The target population was teachers who had been residing in an area of unrest in southern Thailand. These teachers were working in schools (e.g., elementary schools, high schools) located in both rural and urban areas in the three provinces (Narativat, Yala, and Pattani) and four districts of Songkhla province (Chana, Saba Yoi, Na Thawi, and Thepha).

.   **Sample**

The sample was sampling from teachers who were residing in an area of unrest in southern Thailand and who met the following inclusion criteria:

1. Have lived fully in the area of unrest for at least one year.

2. Have had direct experience in confronting a violent situation as a survivor, witness, or victims of an unrest situation as evidenced by being injured, having lost a significant person in their family or being close to the situation (witness of events).

3. Not having a serious mental illness or mental health problems at the present or have not had a history of being admitted to a mental health hospital and did not suffer from posttraumatic stress disorder (PTSD) as evidenced by having a score $\leq$ 3 on the PTSD Screening Test.

Sample size determination

For the structural equation modeling, the required sample size was calculated to be a minimum of 20 subjects for each observed variable (Munro, 2001) because a large sample size is more likely to show that the estimated population parameter is reliable.

Thus, the sample size for this study was 240 cases because there were 8 variables consisting of 7 independent variables (3 scales and 4 subscales of coping) and one dependent variable in this study. For each latent variable, a minimum of five cases per item was minimally needed (Hair, Anderson, Tatham, & Black, 1998). This sample number is suitable to study because 240 subjects are a large sample size. According to Kline (1998), a general rule in structural equation modeling is to have as

large a sample as one can. Generally, a sample size less than 100 is "small", 100-200 subjects is "medium", and a sample size more than 200 is considered to be "large"(Kline, 1998).

Setting

Data were collected in the place of the unrest situation (a state of confronting terrorism with serious threats to life and security resulting in severe consequences) occurring in Narativat, Yala, Pattani provinces, and 4 districts of Songkhla Province.

Instrumentation

The instruments selected to collect data on the variables of interest included a set of questionnaires as follows: 1) The PTSD Screening Test, 2) A personal information questionnaire (A Personal Data Collection Form), 3) Jalowiec Coping Scale Questionnaire (JCS), 4) The Meaning in Life Questionnaire (MLQ), 5) Perceived Control Questionnaire (PCQ), 6) The Psychological Well-being-MIDUS II Version (PWB), and 7) The Interpersonal Support Evaluation List (ISEL).

1) The PTSD Screening Test (Mental Health Department, 2009). This scale consists of 8 items and is used to screen PTSD. Each item of the scale included 2 choices (no = 0, yes = 1). The total score ranges from 0-8. A score that is more than 4 reflects mental health problems following stressful events or a disaster (such as a natural disaster, terrorist attack or human made disaster) (Appendix A).

2) A personal information questionnaire (A Personal Data Collection Form). It was developed by the researcher to collect teachers' personal information. This scale consists of 24 items and is used to assess subjects' characteristics. It included personal

information of the sample exposed to terrorist attacks and information of confronting a situation (situation of unrest) (Appendix A).

3) Jalowiec Coping Scale Questionnaire (JCS; Jalowiec, 2003): The 60-item Jalowiec Coping Scale (revised Jalowiec coping Scale) is the second version which has been developed from a prior version that had 40 items (Jalowiec, Murphy & Powers, 1984). This scale is used to assess coping styles that subjects employed to deal with the situation. This instrument was permitted by Jalowiec to be employed in this study (Appendix B).

Due to the proposed model derived from literature review, the researcher chose to use only four subscales of the JCS which is a total of 39 items. These items are:

Confrontive coping style: confronting the situation, facing up to the problem, and constructive problem-solving. This subscale has 10 items (items 4, 13, 16, 25, 27, 29, 33, 38, 43, and 45).

Evasive coping style: doing things to avoid or delay dealing with the problem. This subscale has 13 items (items 7, 10, 14, 18, 20, 21, 28, 35, 40, 48, 55, 56, and 58).

Optimistic coping style: positive thinking, positive outlook, and positive comparisons to other people. This subscale has 9 items (items 2, 5, 30, 32, 39, 47, 49, 50, and 54).

Self-reliant coping style: depending on oneself to deal with the situation, rather than on others. This subscale has 7 items (items 19, 22, 31, 37, 41, 52, and 57).

The scores of the 1984 revised version of the Jalowiec Coping Scale have three main types of score (1) composite scores are scores for each of the coping styles that can be expressed as either raw scores or individualized adjusted scores. The

individualized adjusted scores comprise of two types: mean item scores and subscale percentage scores.(2) Use Score, and (3) Effectiveness Score. Only the use score and effectiveness score can be obtained for each of the four coping styles (subscales) and also for the overall scale (i.e., overall use and overall effectiveness).

For this study, the type of score that the researcher employed in data analysis was used score. The range of scores used for each coping style is: Confrontive coping style (0-30), Evasive coping style (0-39), Optimistic coping style (0-27), and Self-reliant coping style (0-21). All items were rated on a 4-point scale ranging from 0 to 3 (0 = never used, 1 = seldom used, 2 = sometimes used and 3 = often used).

4) The Meaning in Life Questionnaire (MLQ; Streger, Frazier, Oishi & Kaler, 2006). The objective of the MLQ is to assess the extent to which people feel their lives are meaningful (one's life is meaningful)/having meaning in life.

The MLQ contains two subscales (Presence and Search subscales) with 10 items. The presence subscale includes questions 1, 4, 5, 6, and 9 (reverse-code question). The search subscale includes the questions 2, 3, 7, 8, and 10. All items are rated on a 7-point scale, ranging from 1 to 7 (1 = absolutely untrue, and 7 = absolutely true). The score of each subscale (presence of meaning in life and search of meaning in life) has a range from 5-35. The total score has a range from 10-70. The higher scores indicate higher levels of sense of meaning or meaning in life.

5) Perceived Control Questionnaire (PCQ; Wallhagen, 1988).

The objective of the PCQ is to assess to what extent subjects feel they have personal control over the security crisis and their environment.

The PCQ has 20 items composed of two subscales: manageability and goal attainment. The PCQ uses a 5-point Likert–type response format rating ranging from

1 to 5 (1= strongly disagree, and 5 = strongly agree). The total score ranges from 20 to 100. The higher scores indicate greater perceived sense of control.

6) The Psychological Well-being-MIDUS II Version (PWB) (Ryff, Keyes, & Hughes, 2004).

The scale is designed to assess the psychological well-being of teachers residing in an area of unrest. The scale is composed of six dimensions (self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth) and each dimension has 7 items. The scale is measured on a 7-Likert–type scale, ranging from 1 to 7 (1 = Strongly agree, and 7 = Strongly disagree). Negatively worded items (i.e., items, 1, 4, 7, 8, 11, 14, 16, 19, 20, 22, 23, 25, 28, 30, 32, 33, 36, 39, 40, and 42) are reverse coded before scoring and analysis. The total score ranges from 42-294. The higher scores indicate high psychological well-being.

7) The Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck, & Hoberman, as cited in Sarason, Shearin, Plerce & Sarason, 1987)

The ISEL is used to assess the perceived availability of these three categories: tangible (instrumental), appraisal (informational), and belonging (emotional). It is a general population version. It consists of 40 items. Half are positive statements about interpersonal support and half are negative statements about interpersonal support. Each item is rated on a four-point rating scale ranging from 0 to 3 (0 = definitely false, and 3 = definitely true). Negative worded statements are reversed scored before analysis. The total score ranges from 0 to 120. A higher total score reflects a higher perceived level of social support.

Translation of the Instruments

The instruments used in this study needed to be translated from English into the Thai language. Three experts were employed to translate the instruments. The experts consisted of 1) a specialist in mental health who uses Thai and English languages effectively, 2) a specialist who is a native English speaker, and 3) a specialist in the context of terrorism). The researcher performed the translation of the instruments by using the back translation technique and decentering process (Brislin as cited in Polit & Beck, 2008) as follows:

1. A back translation technique was employed to ensure accuracy in translation. This step (translating process) was performed by using three individuals for the translation.

The first translator (bilingual expert) translated the instruments into the Thai language. Next, the second translator (back translator) translated from Thai language into the original version, and the back translator evaluated the accuracy of using Thai language or the accuracy of worded meanings (semantic equivalence) and conceptual equivalence (meaning in the structure of the instrument reflects the meaning in the structure of the concept of study/culture of target) (Polit & Beck, 2008). The results found that the first translator and the back translators mutually agreed that both versions of the final back translation conveyed the same meaning.

Lastly, the third person was a native English speaker who is an expert in the English language. This person checked the worded meaning of the English that was used, and that the instrument had accuracy, congruence, and the same meaning. There was no discrepancy in meaning between the original and the back translated version.

So the consideration of this person confirmed that both versions had the same meaning, and the Thai version had accuracy.

2. These experts were used to translate and modified instruments to fit with the context of the study that is terrorism or a situation of unrest. Thus, each instrument in the present study passed the process of decentering which is a method of translation and modification to fit with the culture or the context of the study in order to ensure culturally equivalent versions of these instruments in Thai language. The idea of decentering is based on the assumption that the truth can be symmetrically translated that allows changing, modifying, or even adding items that are culturally appropriate (Polit & Beck, 2008).

After all the experts had been asked to perform this step, the results showed that most of the instruments (Jalowiec Coping Scale, Interpersonal Support Evaluation List, Perceived Control Questionnaire, Meaning in Life Questionnaire and Psychological well-being MIDUS II version) did not have any problems in the Thai context or Thai culture. Therefore, no modifications were needed on any of the items. However, the Interpersonal Support Evaluation List, and Perceived Control Questionnaire, needed some items modified by adding and changing some detail such as providing an example in order clarify some words.

Validity and Reliability

Validity

The researcher tested the face validity and construct validity. The procedures for establishing the validity of each instrument are as follows:

For testing face validity, the researcher evaluated the translated tool (the translated versions of the instruments) by assessing five teachers who were researchers or scholars and understood the context of the area of unrest. The outcome showed that they agreed with this concept in the questionnaires that involved teachers residing in an area of unrest. Some items in some scales (such as psychological well-being) needed some words modified in order to make the instruments more appropriate for the target population and for the accuracy of their constructed concept.

Lastly, the researcher conducted confirmatory factor analysis in order to verify the construct validity of each instrument and to conclude the congruency in both conceptual and semantic equivalent, and to confirm the construct validity. For this study, confirmatory factor analysis was conducted in the step of data analysis (test measurement model) as demonstrated in the measurement model.

Reliability

A pilot study was conducted with 30 teachers residing in an area of unrest. The pilot subjects followed the inclusion criteria of the study which were the same as that in the field of study.

The result of the pilot study (testing instruments) showed some problems that may occur during data collection. For example, the length of time to answer the questions or the respondent's answers took a long time (at least one hour). This finding was helpful in making decisions to change the methods of obtaining answers from the respondents. Instead of reinterviewing the response back the same day of the data collection, the researcher or research assistants asked the subjects to send their response back within the following week.

The researcher considered the answers of the subjects and deleted some items in the personal questionnaires that were not important. The researcher also had a plan to provide compensation to the subjects in this study in order to increase motivation for giving answers.

Furthermore, the researcher found that some tools (such as ISEL) were not concise. Also some words or some sentences were not clear. So, the ISEL needed to be modified as some words were difficult to understand however, it still had to retain the same meaning.

For the testing reliability of the instruments, internal consistency reliability was performed to show the extent to which all items were measuring the same attribute. The internal consistency reliability of the instruments was assessed using Cronbach's alpha coefficient.

In this present study, the internal consistency alpha coefficient for each scale (Jalowiec Coping Scale Questionnaire, The Meaning in Life Questionnaire, Perceived Control Questionnaire, The Psychological Well-being-MIDUS II Version, The Interpersonal Support Evaluation List) in both the pilot and large study are shown in Table 1.

Table 1

Reliability of the Instrument of the Pilot Subjects (N=30) and Study Subjects (N= 240)

Concept	Instrument	Number of Items	Reliability	
			N=30	N=240
Post Traumatic stress disorder (PTSD)	The PTSD Screening Test	10	.83	.78
Psychological well-being	The Psychological Well-Being-MIDUS II Version	42	.72	.88
	Self–acceptance	7	.56	.61
	Personal growth	7	.57	.60
	Purpose in life	7	.66	.59
	Positive relationships with others	7	.59	.84
	Environmental mastery	7	.64	.62
	Autonomy	7	.57	.59
Coping	Jalowiec Coping Scale	39	.92	.91
	Confrontive coping style	10	.81	.82
	Evasive coping style	13	.79	.72
	Optimistic coping style	9	.85	.72
	Self-reliant coping style	7	.69	.73
Sense of meaning	Meaning in Life Questionnaire	10	.77	.74
	Presence	5	.67	.63
	Search	5	.76	.75
Sense of control	Perceived Control Questionnaire	20	.88	.83
	Manageability	13	.76	.79
	Goal attainment	7	.89	.76
Social support	The Interpersonal Support Evaluation List	40	.92	.87
	Emotional support	21	.86	.77
	Instrumental support	12	.77	.62
	Informational support	7	.67	.71

Ethical Considerations

The research proposal was submitted to and approved by the Dissertation Committee of the Faculty of Nursing, Prince of Songkla University. Additionally, approval for the investigator to contact potential subjects from the director of a school

and the Board of Region Educational Institutions was undertaken.

In this study, all subjects were informed that they could refuse to participate or withdraw from the study at any time. At any time while subjects were answering questions, if they felt any sign of psychological distress such as crying, sadness and so on, the researcher allowed the subjects to stop answering the questions. The affected subject could withdraw from the study. In this study, a small number of subjects (5 subjects) refused to give answers the first time after they were assessed by using PTSD screening test. These subjects were persons who had mental health problems (post traumatic stress disorder). The researcher advised those who were found to have mental health problems to meet or consult with a psychologist or psychiatrist. During the data collection, the names of the subjects were protected with coded numbers. The coded number was the only identification to appear on each package. All data was kept in a locked place, to which only the researcher had access. When the data was not being used it was separated from the informed consent. Subjects were informed that all questions would be destroyed at the end of the study (Appendix C).

Data Collection Procedures

Data were collected after approval was given. Before data collection took place, the researcher had prepared to conduct data collection using a structured self report questionnaire in the 3 provinces in southern Thailand. This study needed research assistants because some data in regards to the teachers was held by the Primary Educational Service Area Office in the four provinces (Narativat, Yala, Pattani, Songkhla). Therefore, research assistants were needed to help collect this data. In addition, these institutions could provide assistance in seeking and contacting

this group of teachers to be the target population for this study. The process of data collection is shown as follows:

Preparation phase:

1. The researcher requested permission from the director of the Regional Educational Institutions/the director of the Educational Service Area-Primary Educational Service Area Office and Secondary Educational Service Area Office which was responsible for schools that are located in the three provinces (Narativat, Yala, Pattani) and the four districts of Songkhla province (Chana, Saba Yoi, Na Thawi, and Thepa), and the director of the school for requesting a list of teachers' names.

2. The researcher prepared eight research assistants for collecting data. The characteristics of the research assistants included a teacher who was working in the educational headquarters or the Primary Educational Service Area Office and who supervised schools that were located in the 3 provinces (Narativat, Yala, Pattani, Songkhla), he/she was not a sample in the study, he or she was a post graduate student with a Masters degree.

Next, the methods used to prepare the eight research assistants were training and practivity to collect data with the researcher. The training course included screening the subjects, administering (using) the instruments, issues pertaining to informed consent and the use of human subjects, and a trial practice of the instruments with the subjects. The researcher explained and helped to solve any problems the research assistants had about the questionnaires.

Data collection phase:

1. On the data collection day, the researcher checked the criteria of the subject against the inclusion criteria of the study for confirmation by asking and screening with the questionnaire for PTSD. The researcher and eight research assistants invited teachers to participate in this study. Subjects who were congruent with inclusion criteria received information about the objective of the study, the rights of the subjects and so on in order to make a decision to respond to the questionnaires.

2. The researcher and eight research assistants collected data using a package of instruments. These instruments were self-report questionnaires. The set of questionnaires were administrated by subjects reading them on their own. The completion time for responding to the instrument package was approximately 1 hour. Thus, the subjects took the questionnaires, and then the research assistants got them back (1 week later) after the subjects had finished filling them in. When the researcher or/ and research assistants met the subjects, they asked "How did you feel while answering the questions?" to provide any suggestions in regards to their mental health. Some subjects responded in similar answers such as it reminded them of the events but they could overcome that feeling.

3. The researcher and the eight research assistants examined the completed data. If some places of the data were incomplete, the researcher asked the subjects immediately or in some cases by telephone to complete the incomplete questionnaire.

Data Analysis

Data Management and Preliminary Data Analysis

The researcher performed data management and preliminary data analysis by using the data analysis program for the windows software package. The aim was to examine the accuracy of the data, testing underlying assumptions (statistical assumption) for multivariate analysis, and to examine the validity and reliability of the questionnaires.

In regards to data management, the procedure included coding, data entry, data cleaning and editing, and data analysis. The details of data management and data analysis of this study were performed as follows.

1. The mean score of the variables that were measured by interval scale were calculated from the score of all items measuring those variables including SOC (Sense of control scale/Perceived Control Questionnaire), SS (Social support scale/Interpersonal Support Evaluation List), 4 subscales in the CP (Coping scale/Jalowiec Coping Scale included confrontive coping style, optimistic coping style, evasive coping style, self-reliant coping style), PWB (Psychological well-being scale/Psychological Well-Being MIDUS II Version), and SM (Sense of meaning scale/Meaning in Life Questionnaire).

2. Mean, standard deviation, skewness, and kurtosis were analyzed for all subscales of the sense of control scale, social support scale, coping scale, psychological well-being scale, and sense of meaning scale.

3. Frequency and percentage were used to describe the demographic characteristics of the subjects.

4. Cronbach's alpha coefficients were calculated to evaluate the internal consistency reliability of each scale.

5. Associations between the constructs based on the PTRU model (The predictors of the psychological well-being of teachers residing in an area of unrest in southern Thailand) were examined by using multiple regressions.

6. Structural equation modeling (SEM) was used to assess the predictive utility of the modified PTRU model by using the SEM program.

Testing the Assumption of Structural Equation Modeling

The structural equation model is an extension of multiple regression, path analysis, and factor analysis. The assumption of the structural equation modeling is tested for several multivariate analysis techniques-multiple regression, and path analysis (the relationship among the variables). So the assumptions of multivariate analyses are applied to SEM including multivariate normality, absence of outliers, linearity, homoscedasticity, and the absence of multicollinearity. Assumptions were determined using statistical significance that was set at $p < .05$ for this study.

Normality testing: Normality is the assumption that a variable and all linear combinations of the variables are normally distributed. In other words, regression assumes that variables have normal distributions. Non-normality distributed variables include highly skewed or kurtosis variables, or substantial outliers that can distort relationships and significant tests or substantial outliers that have an untrustworthy output.

In the criteria of normality for this present study, the skewness coefficient and

kurtosis coefficient must not be beyond ± 3. Kolmogorov-Smirnov tests that were non significant were accepted (Kline, 2011; Munro, 2001).

From testing, it was found that most item scores of univariate data had normal distribution, except for some items in the psychological well-being scale. For the psychological well-being scale, some items were not normally distributed including W16 (skewness = -2.56, kurtosis = 4.98), W23 (skewness = -3.53, kurtosis = 3.36), and W30 (skewness = -2.64, kurtosis = 3.08).

The researcher transformed the skewness/kurtosis of data using the inverse method of Osborne (as cited in Kline, 2011). After data transformation, the results revealed the following: W16 (skewness = - 0.59, kurtosis = 0.99), W23 (skewness = - 0.98, kurtosis = -0.16), and W30 (skewness = -0.99, kurtosis = 0.88). Thus, all item scores of the psychological well-being had normal distribution and all these items did not violate the assumption.

Next, all variables in this study were tested for multivariate normality. The skewness and kurtosis of each variable were not more than 3. None of the variables in this analysis had problematic levels of skewness or kurtosis. Therefore, the data (psychological well-being scale, coping scale, sense of meaning scale, sense of control scale, and social support scale) appears to be sufficiently multivariate and normally distributed.

Absence of outliers: An outlier is a case with such an extreme value on one variable (a univariate outlier) or such a strange combination of scores on two or more variables (multivariate outliers) that they distort statistics (Tabachnick & Fidell, 2010). SEM is a robust statistic when it has the absence of outliers.

For this study, Mahalanobis distances were analyzed to identify multivariate

outliers. Mahalanobis distances were examined to identify whether or not there were outliers and influenced cases that might have an impact on the regression solution. An outlier can highly influence the precision of the estimation of regression weights.

Mahalanobis distances can be evaluated for an individual case by using the χ^2 statistics (distribution) with the degree of freedom equal to the number of variables in the analysis. The acceptable criterion for multivariate outliers is Mahalanobis distance at $p \leq .001$(Tabachnick & Fidell, 2010). Also the researcher considered standard residual. A value of standard residual > 3 standard deviation means an outlier.

When conducting multiple regression for testing of this assumption, it was found that 10 cases with p value of Mahalanobis < .001 and were considered to be outliers (standard residual more than 3/$\geq$ 3SD from the mean is considered as extreme outliers) in the score of psychological well-being. However, these outliers still were retained in the further analysis because the sample had the same characteristics as the inclusion criteria and the sample was a member of the target population. Tabachnick and Fidell (2010) mention that the outliers may be retained if they represent a valid segment of the population. In addition, the result of multiple regression analysis of two data sets (with the outliers included and with the outliers excluded) showed quite similar results (Duffy & Jacobsen, 2001). The proportion of variance explained by the regression analysis was 47 % and 48.1 %, respectively.

Linearity testing: Linearity is an assumption that there is a straight-line relationship between a predictor (independent variable) and a criterion (dependent variable) (Tabachnick & Fidell, 2010). The linear relationship between independent and dependent variables were tested by the residual plot (scatter plot) which is the

graph between the standardized residuals (y-axis) versus the predicted values (x-axis). The residual is the difference between the actual and expected score (or observed and predicted score).

In this study, as there were seven independent variables (sense of control, sense of meaning, 4 coping styles, and social support) and one dependent variable (psychological well-being), a partial regression plot was used to determine whether or not the relationship between each predictor and the criterion was linear when other variables were controlled. The scatter plot showed a horizontal line. So it was concluded that the relationship between each independent variable and dependent variable was linear. There was no curvilinear or quadratic relationship in any pair of variables.

Testing of homoscedasticity: Homoscedasticity is defined as a constant error variance between a predicted and observed score or it refers to homogeneity of variance. In other words, the variance of errors is the same across all levels of the independent variable (equal variance).

This assumption was checked by a residual scatter plot. The scatter plot of the Standardized Deleted Residuals (Y-axis) and the Standardized Predicted scores (X-axis) were plotted. If the homoscedasticity assumptions are met, the plot of points will appear as a rectangular band in a scatter plot (Tabachnick & Fidell, 2010).

When standardized predicted scores (values) were plotted against an observed value, the data formed a straight line from the lower-left corner to the upper-right corner indicating no violation of the assumption. In addition to this, the equal scatter points around the zero axis of the residual also indicate ample assumption of

homoscedasticity (Tabachnick & Fidell, 2010).

In this study, the scatter plot of the Standardized Deleted Residuals and the Standardized Predicted scores of the 240 teacher residing in an area of unrest showed a rectangular band and indicated homoscedasticity. Thus, there is a homoscedasticity.

Testing of multicollinearity: Multicollinearity refers to the predictor variables (independent variables) that have high intercorrelation. Multicollinearity was examined by Pearsons' correlation analysis among the predictors, tolerance, and variance inflation factor (VIF).

For the first criterion, Pearsons' correlation analysis was performed between key variables of the model to determine the linear relationship among the predictor variables and psychological well-being, and multicollinearity among independent variables. Correlation coefficients among the predictors are expected to be less than .8 (Hair, Anderson, Tatham & Black, 1998). In this study, the correlation matrix among the predictors variables (see Chapter 4, Table 6) ranged from .13 to .69, p < .01 (p. 129). This indicated non serious multicollinearity.

Furthermore, tolerance, and variance inflation factors (VIF) were used to test multicollinearity. Tolerance is the amount of variability in one independent variable that is not explained by the other independent variables. Tolerance has a value range from 0 to 1 (Munro, 2001). Multicollinearity exists if the tolerance value is 0.10 or less. A VIF is a reciprocal of tolerance; therefore, variables with high tolerance have small VIF (Munro, 2001). A VIF value greater than 10 or more indicates multicollinearity among the predicted variables.

In this study, tolerance was between 0.40 and 0.88 and a VIF value was between 1.13 and 2.94. Thus, there is an absence of multicollinearity.

Testing the Proposed Theoretical Model

The hypothesized model (Figure 1, p.15) was tested through Structural equation modeling (SEM) and using SEM program (Amos Program). Structural equation modeling (SEM) is a technique that is employed to test the causal relationships of the theoretical model with multivariate analysis. SEM has been employed for research because SEM has various benefits over other techniques. Thus, SEM analysis was carried out to test the proposed structural model in the present study.

SEM tests two models simultaneously including a measurement model (construct of latent variable) and structural (theoretical) model. Thus, before the structural model is analyzed, this measurement model should be estimated for each construct separately.

Testing measurement model

The measurement model (e.g., coping, sense of control, sense of meaning, social support, and psychological well-being) was estimated for the construct validity separately. Confirmatory factor analysis (CFA) of these five latent variables were used to estimate the relationships between the observed variables (items) and the underlying latent construct in order to determine that it fits the data. In other words, each measurement model included in the full model was tested separately to ensure a good fit before the theoretical model was further tested.

The parameter estimation was done by using the maximum likelihood method. The maximum likelihood method is a full-information technique which estimates the entire system of the equation simultaneously (Byrne, 2010). The maximum likelihood method also offers consistent efficient estimation under the assumption of multivariate normality and is relatively robust against moderate departures from the latter.

Confirmatory factor analysis (CFA) was performed in order to analyze the construct validity of measurements. The first factor loading for each latent variable was set at 1.0. This procedure was done because latent constructs are unobservable and have no definite scales. Hence, the first step should constant one factor loading for each factor to a nonzero value, which typically is set to 1.0 for identification purposes (Byrne, 2010).

Since the variables of coping, sense of control, sense of meaning, social support, and psychological well-being have two levels of measurement and the instrument is in its basic stage of development in Thai version, a first-order CFA and second-order CFA were performed. In first-order CFA, each item was allowed to load on their respective latent factors. The relationships between the observed variables and the underlying latent constructs were estimated. In the second-order CFA, the indicators (items) from the first-order factors were loaded on the higher order factor. The strength of the loading variables on the associated factors indicated the reliability of the empirical indicators employed to measure the underlying factors. According to Tabachnick and Fidell (2010), values of factor loadings lower than .33 (less than 10 % overlap) are considered unacceptable.

In this study, the results showed that some first–order CFA models and

second–order CFA models of some measurement models did not support the researcher's priori hypotheses. The fit indices of some measurement models did not show good fit the first time. So, these measurement models were modified. Items were eliminated when reliabilities of indicators were low ($<$ .33) until the criteria for a good model-fit were reached (Haire et al., 2004) (see detail in Chapter 4).

Testing structural model

The structural model is a model of the hypothesized relationship between the theoretical construct. The initial structural model was proposed to test the fit of the model with the data (hypothesis 1) and to test the hypothesized relationships among theoretical constructs (hypothesis 2-8) as shown in figure 1 (p.15). In the initial structural model, nine paths between study variables were allowed. Testing of the structural model was divided into three steps as follows: 1) testing the initial structural model, 2) model modification, and 3) final modified model (the accepted structural model).

1. Testing the initial structural model: In this step the initial structural model was examined to identify problems before testing the fit of the model.

The identification problems that might offend estimations included (1) unreasonable estimates or impossible estimates such as negative error variance (or non significant error variances for any construct), (2) squared multiple correlations (R^2) greater than one or low squared multiple correlations (R^2) for endogenous variables, (3) standardized parts greater than +1 or -1 or standardized coefficients exceeding or very close to 1.0/ high correlations ($\pm$ 0.90 or greater) among estimated coefficients, and (4) high standardized residuals (Hair, Anderson, Tatham & Black,

1998).

Statistic analysis was used in the initial estimation process (testing the initial structural model) including path analysis and multiple regressions.

Path analysis was used to assess correlations between exogenous variables (sense of control, sense of meaning, 4 coping styles, and social support) and endogenous variables (psychological well-being). Path analysis was performed through Pearson's correlation coefficients. Thus, the standardized path coefficient (β) was used to estimate the magnitude of the effect of one variable to another variable. The effects were classified into three types: direct, indirect, and total effect. The total effect was the sum of the direct and indirect effects. The results from path analysis can guide the researcher in determining which variables should be included or excluded in the model.

Multiple regressions were used to estimate the squared multiple correlations (R^2). Hierarchical regression analysis was used to determine the prediction of coping, sense of control, sense of meaning, optimism, and social support on psychological well-being. The results reported the predictors that were significant at $p \leq .05$, and the level of significance predictors.

The next step involved testing the fit of the model. When the researcher did not find offending estimates, the model was deemed as having established acceptable estimates. The researcher then assessed the goodness of fit of the overall model. The aim was to determine the goodness of fit between the hypothesized model and the sample data.

2. Model modification: when the initial hypothesized model did not fit the data, the researcher modified the model by adding or deleting paths (parameters)

between the variables as suggested from the SEM program. The researcher made decisions to modify the model based on the modification indices. The SEM program showed modification indices that included standardized residual, modification indices (Chi-square test or χ^2) and path coefficients.

Firstly, the standardized residual value was used to detect model misspecification. Standard residuals present estimates of the number of standard deviations. The observed residuals are from the zero residuals that would exist if the model fit was perfect (Byrne, 2010). Standardized residual values > 2.58 are considered to be large and indicate misfit. So, large standardized residual values needed to be fixed.

Secondly, modification indices (MI) are one type of information related to misspecification that reflects the extent to which the hypothesized model is suitable (Byrne, 2010).

In AMOS, the MI value is associated with the expected parameter change value (EPC or Par change). Par change represents the predicted estimate change in a negative or positive direction. The MI value is considered for added paths when the MI has a high value (at least more than 10). However, it is important to determine to what extent to include additional parameters in the model in regards to (1) the additional parameters are substantively meaningful, (2) the existing model exhibits adequate fit, and (3) the EPC or Par change is substantial. Thus, the decision for model trimming or model building used modification indices (MI).

Thirdly, a path coefficient is another indicator of model modification. Although statistical perspective proposes that a nonsignificant parameter should be deleted from the model, the substantial theoretical interest must be considered (Byrne,

2010). If a parameter is not significant but of sufficient substantive interest, then the parameter should probably remain in the model. In this study, two nonsignificant paths were deleted from the structural model. One nonsignificant path that linked to other significant path remained in the structural model in order to explain phenomena of psychological well-being.

3) The final modified model (the accepted structural model).

After the structural model had been modified, the goodness of fit, path coefficients, and R^2 were examined. If the overall fit of the structural model varied markedly, identification problems were indicated. This structural model needed to have repeat modification. The structural model was modified and tested until the data fitted adequately.

The summary of the development and test of model is depicted in Figure 3.

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┌─────────────────────────────────────────┐
│ 1. **Test assumption of multivariate**   │
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                    ↓
┌─────────────────────────────────────────┐
│ 2. **Testing measurement model**         │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ 3. **Testing structural model**          │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ 3.1 a) **Testing the initial structural  │
│ model**: The structure needs an initial  │
│ *investigation for a proper solution*    │
│ before testing the fit of the model.     │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ b) **Hypothesized model assessment**:    │
│ to use statistical analysis including    │
│ path analysis and multiple regressions.  │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ No offending estimates found             │
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                    ↓
┌─────────────────────────────────────────┐
│ c) **Testing the fit of the model**      │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ **Fit indices of model was poor**        │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ 3.2 **Model modification**: to modify    │
│ the model by adding or deleting paths    │
│ (parameters) between the variables as    │
│ suggested from (modification indices).   │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ 3.3 **Final modified model**/ revised    │
│ model.                                   │
└─────────────────────────────────────────┘
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┌─────────────────────────────────────────┐
│ **Testing the fit of the model**:        │
│ Examine goodness of fit, path            │
│ coefficients, and $R^2$                  │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│ **Model of PTRU**                        │
└─────────────────────────────────────────┘
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Figure 3 The summary of development and testing of the model

Assessment of the overall model fit

The overall model fit was assessed by examining fit indices. Fit indices are used to estimate the consistency between the data and the hypothesized model. A model is "good" if there is a fit between the sample covariance matrix and the estimated population covariance matrix. Model-fit statistics (fit indices) can be classified into three types: absolute fit, incremental fit (comparative or relative fit) and adjusted or parsimonious fit measures (Hair et al., 1998; Kline, 1998).

First, absolute fit indices determine the degree of which the proposal model fits the observed covariance matrix. In general, absolute fit indices include the Chi-square statistics (χ^2), the goodness–of-fit statistic (GFI) and the root mean square error of approximation (RMSEA).

Second, incremental fit indices compare the proposal model to some baseline model (independent model or the null model). In the independent model, the observed variables are assumed to be uncorrelated with each other. The number of incremental fit indices includes Tucker-Lewis Index (TLI), Relative Fit Index (RFI), Incremental Fit Index (IFI), and Comparative Fit Index (CFI).

Third, adjusted or parsimonious fit indices were used to compare models on the basis of criteria such that less complex models have better fit than those that are more complex. Adjusted or parsimonious fit indices include Normed Fit Index (NIF), and Akaike Information Criterion (AIC).

In this study, the researcher chose to use the set of fit statistics in Amos which are CMIN (a Chi-square statistics/χ^2), DF (degree of freedom), p (probability value), CMIN/df, goodness–of-fit statistic (GFI), comparative fit index (CFI), Tucker-Lewis

Index (TLI) or Non-normed fit index (NNFI), root mean square error of approximation (RMSEA), and Akaike Information Critrion (AIC).

First, the Chi-square statistics (χ^2) were used to assess the difference between the covariance matrix of the sample and the covariance matrix of the model (Byrne, 1998). In addition, Chi-square tests were used as an index of the significance of the discrepancy between observed data and the restricted structure resulting in the full measurement of the theoretical model (Munro, 2001). For χ^2 statistic, the larger probability (exceeding 0.05 or 0.01) indicates a better fit model (Bentler, 1995; Hair et al., 1998). In other words, χ^2 statistic was expected to be non-significant in order to confirm the null hypothesis. Congruency with the null hypothesis means there was no difference between the data and the model.

However, the χ^2 test is not sufficient to evaluate the fit of the model because it is sensitive to the sample size. The use of Chi-square is appropriate for sample sizes between 100 and 200 (Haire et al., 1998). When the sample size is very large, the χ^2 test has a greater tendency to indicate significance differences although the difference between the sample covariance matrix and the fitted model is small (Munro, 2001). Therefore, this study did not use non-significant χ^2 as the critical fit indices because of the large sample size (n = 240).

The researcher used χ^2/degrees of freedom ratio (Wheaton, Multhen, Alwin & Summers, as cited in Byrne, 2010) to counter balance when χ^2 is significant. It is used for evaluation if the model is truly representative of the observed data. Ideally, the χ^2/df ratio of 1.0 indicates an absolute fit. The values of 2.0-3.0 are good and values greater than 5.0 are unacceptable (Hair et al., 1998). Thus, the χ^2/df ratio index is expected to be less than 3 and p value >.005.

Second, the goodness–of-fit statistic (GFI) was used in this study. The GFI is a measure of the relative amount of variance and covariance in the sample covariance matrix that is jointly explained by the estimated population covariance matrix (Byrne, 2010). The value ranges from 0 (poor fit) to 1 (perfect fit). Higher values of GFI indicated better fit but there was not an absolute acceptable threshold level to establish (Hair et al., 1998). A value of 0.90 or above indicates a good fit model (Tabachnick & Fidell, 2010).

Third, the comparative fit index (CFI) is an index that reflects model fit at all sample sizes. It is more appropriate in the model development strategy or when a small sample size is available (Byrne, 2010) or it may be less affected by a small sample size (Kline, 1998). A CFI close to 1 indicates that the observed data better fits the model. A value of CFI greater than 0.90 indicates an acceptable fit (Bentler, 1995). CFI values greater than 0.95 are often an indication of good–fitting models (Hu & Bentler, as cited in Ullman, 2001).

Fourth, the Tucker-Lewis Index (TLI) or Non-normed fit index (NNFI) was computed to find any number of changes. It is used to compare between the purposed model and the null or independent model. The TLI is a revision of the normed fit index (NFI). It is known that the NIF has shown a tendency to underestimate fit in a small sample size. TLI takes into account the degree of freedom of the model. Therefore, TLI can assess model fit very well at all sample sizes. The TLI includes a correction for model complexity (Kline, 1998). The TFI is usually lower than is the GFI. The typical range for TLI lies between zero and one, but it is not limited to that range. TLI values close to 1 indicate a very good fit. If the TLI is greater than 0.90 this indicates an acceptable fit to the data (Byrne, 2010). In addition, TLI has been

revised to take sample size into account resulting in a new fit index named the comparative fit index.

Fifth, the root mean square error of approximation (RMSEA) estimates the lack of fit in a model compared to a perfect (saturated) model (Ullman, 2001). The RMSEA takes into account the error of approximation in the population. The value of RMSEA represents the goodness of fit that could be expected if the model is estimated in the population, not just the sample drawn for the estimation (Hair et al., 1998). The value of RMSEA ranges from 0 to 1.00. A value of less than 0.08 is an indicator of an acceptable value and values of less than 0.05 indicate a good fit model (Byrne, 2010). MacCallum and colleagues mention the use of confidence intervals to assess the preciseness of RMSEA estimates. AMOS reports a 90 % interval around the RMSEA value. A small RMSEA with a wide confidence interval would indicate the imprecision of the RMSEA value in reflecting the model fit in the population. The upper bound of 90% interval ≤ 0.06 has been recommended by Hu and Bentler (1999).

Lastly, the Akaike Information Criterion (AIC) is regarded as an information theory goodness of fit measure. The AIC penalizes models that are too complex. These were employed for a parsimony adjustment in this study. These indices are used to compare different models. The values closer to 0 are ideal. In common, a small value indicates a good-fitting and parsimonious model. Therefore, a model with the smallest AIC compared to other competing models represents a better fit of the hypothesized model (Tabachnick & Fidell, 2010).

In conclusion, fit indices including GFI, CFI, TLI and NFI were used to

determine the overall model fit. The RMSEA, and AIC were used to determine a good-fitting parsimonious model.

Summary

This study was a cross sectional, descriptive design. SEM technique was employed to test the predictive model of psychological well-being of teachers residing in an area of unrest in southern Thailand. The causal relationships among variables included sense of meaning, social support, sense of control, coping, and psychological well-being. The process of development and testing of the model should follow the regulation of SEM in order to have a final structural model that is the best fit.

CHAPTER 4

RESULT AND DISSCUSSION

This chapter presents the following results: 1) the subjects' characteristics; 2) the characteristics of the study variables; 3) the relationship among study variables: social support, sense of control, sense of meaning, coping, and psychological well-being; 4) measurement model; 5) model testing and modification/the structural model: the initial structural model, model modification, and the accepted structural model that was selected to determine the hypothesis relationship; and 6) the discussion of the results: the subjects' characteristics, level of psychological well-being, the measurement model, and respective research questions and hypotheses.

Subjects' Characteristics

The personal information of the subjects (n = 240) is presented in Table 2. Nearly three-fourths of the subjects were female (73.3%). The average age was 42.13 years (SD = 10.29). More than half of the subjects were married (63.7 %). About half had an Islamic religious affiliation (52.1%). Most subjects had a bachelor degree (83.3 %). They earned a salary of approximately 25,786.12 Baht/month (SD = 14,435.28). The subjects got worker's special welfare in violent areas (45.8 %). Subjects received special compensation for working in area of unrest (90.9%). The subjects had economic problems such as inadequate income and were in debt (37.9 %). The employment positions of the subjects were civil servant/government

officer (72.5%). The average length of time in government service was 14.92 years (*SD* = 11.71). Workplace or school located in Yala province (37.9 %). (Table 2)

The information in regards to the unrest situation which subjects faced is presented in Table 3. Subjects had periods of affecting situations ranging from 3 months through to 15 years. The average length of time of a confronting situation was 5.78 years (*SD* = 2.77). More than half of the subjects have lived in this area for a long time/long period of residency (66.3%). Subjects faced unrest situations by themself and/or had been injured (22.5%). Subjects were witness to an unrest event (36.7%). Subjects had been seriously injured in the event (19.6 %). The number of times having experienced an assault by a terrorist was 1-2 times (54.6%). Most of most recent assaults had happened 1-3 years ago (30.3 %). Subjects had mental health problems from initially having faced a situation (32.1 %), and were undergoing treatment (24.7%) (Table 3).

Table 2

Personal Information of Subjects Exposed to Terrorist Attacks (N = 240)

Personal information	Number	Percentage
Gender		
Male	64	26.7
Female	176	73.3
Age (years) (*M* = 42.13, *SD* = 10.29)		
21-40	114	47.5
41-60	126	52.5

Table 2 (continued)

Personal information	Number	Percentage
Marital status		
Single	41	17.1
Married	153	63.7
Widowed/ Separated/Divorced	46	19.2
Religion		
Buddhism	115	47.9
Islam	125	52.1
Education level		
Lower than bachelor's degree or diploma	9	3.8
A bachelor's degree/an academic degree	200	83.3
A master's degree	31	12.9
Income (Baht/month) ($M = 25{,}786.12$, $SD = 14{,}435.28$)		
Less than 15,000	65	27.1
15,001-25,000	80	33.3
25,001-35,000	37	15.4
35,001-45,000	34	14.2
45,001-55,000	12	5.0
More than 55,000	12	5.0
Worker's special welfare		
No	130	54.2
Yes	110	45.8
Type of welfare		
Special compensation for working in area of unrest	100	90.9
Special pension from soldier's welfare	5	4.6
Welfare of a minister of the government	3	2.7
Compensation for disability	1	0.9
Scholarship for child and offspring	1	0.9

Table 2 (continued)

Personal information	Number	Percentage
Economics		
Inadequate income and in debt	91	37.9
Somewhat inadequate, but no debt	17	7.1
Adequate (sufficient)	117	48.9
Adequate and have savings	15	6.2
Position		
Civil servant/ government official	174	72.5
Employee	26	10.8
Government employee	40	16.7
Length of time in government service or work in the school (years)($M = 14.92$, $SD = 11.71$)		
Less than 10 years	128	53.3
10-20	36	15.0
21-30	33	13.8
31-40	43	17.9
Type of school		
Government school	224	93.3
Private school /religious school	16	6.7
Location of workplace		
Yala province	91	37.9
Pattani province	76	31.7
Narativat province	59	24.6
Songkhla province	14	5.8

Table 3

Information of confronting situation (unrest situation)

Information of situation	Number	Percentage
Period of affecting situation (years) (*M* = 5.78, *SD* = 2.77)		
Less than 1 year	11	4.6
1-4	59	24.6
5-8	141	58.8
More than 9 year	29	12.0
Reason for not relocating from the area of unrest		
Have lived in this area for a long time /long prior residency /long periods of residency	159	66.3
No position in other areas so subject cannot request to relocate	31	12.9
Commitment of being a teacher	32	13.3
In process to relocate	4	1.7
Having married a person from the area	7	2.9
Others (do not meet the criteria, being the employee teacher, waiting to get promotion as government official)	7	2.9
Having direct experience of an assault by a terrorist		
No (only a witness)	88	36.7
Yes	152	63.3
Kind of assault experienced from a terrorist		
Faced by self and/or injured	54	22.5
Relatives encountered situation and injured	32	13.3
Loss of significant person in family	34	14.2
(i.e., relative, member of family, husband/wife)		
All experiences	32	13.3

Table 3 (continued)

Information of situation	Number	Percentage
Injured from events/having severe injury from the events		
No	193	80.4
Yes	47	19.6
Number of times to have experienced an assault by a terrorist (times)		
0	88	36.7
1-2	131	54.6
3-4	9	3.7
5-6	8	3.3
7-10	4	1.7
Last assault happened (years)		
Less than 1	20	18.3
1-3	33	30.3
4-6	32	29.4
7-9	24	22.0
Having mental health problems after terrorist attacks		
No	163	67.9
Yes (e.g., stress, anxiety, insomnia)	77	32.1
If yes, getting treatment		
No	58	75.3
Yes	19	24.7

Characteristics of the Study Variables

Table 4 shows the score of the psychological well-being, coping (confrontive coping style, evasive coping style, optimistic coping style, self-reliant coping style), sense of meaning, sense of control, and social support. It showed that the subjects had an overall psychological well-being average score of 194.03 ± 22.43. The subscale that had the least average score was autonomy ($M = 28.48$, $SD = 4.88$). Whereas, purpose in life had a high average score ($M = 34.13$, $SD = 5.09$).

Sense of meaning had an average score of 53.55 ± 6.03. Sense of control had an average score of 74.43 ± 10.05. Social support had an average score of 84.50 ± 14.11. For coping, the subjects used lower self-reliant coping style (M = 14.00, $SD = 3.59$). Confrontive coping style ($M = 20.74$, $SD = 5.05$) and optimistic coping style ($M = 20.25$; $SD = 4.16$) were the most common coping style employed by the subjects. Furthermore, the score of all the variables showed normal distribution (skewness < ±3 and kurtosis < ±3) (Table 4). Most levels of psychological well-being were moderate (50.8 %) (Table 5).

Table 4

Possible Range, Minimum, Maximum, Mean, Standard Deviation, Skewness, and Kurtosis of the Study Variables (N = 240)

Variables	Possible range	Minimum	Maximum	*M*	*SD*	Skewness	Kurtosis
Psychological well–being	42-294	127.00	247.00	194.03	22.43	-0.35	-0.21
1. Autonomy	1-49	9.00	42.00	28.48	4.88	0.03	1.19
2. Environmental mastery	1-49	13.00	42.00	32.98	5.65	-0.52	0.06
3. Purpose in life	1-49	19.00	42.00	34.13	5.09	-0.71	0.09
4. Self–acceptance	1-49	16.00	42.00	32.14	4.97	-0.22	-0.38
5. Personal growth	1-49	20.00	42.00	33.35	4.88	-0.33	-0.54
6. Positive relationships with others	1-49	19.00	42.00	32.96	5.11	-0.25	-0.50
Coping 1. Confrontive coping style	0-30	5.00	30.00	20.74	5.05	-0.48	-0.05
2. Evasive coping style	0-39	2.00	31.00	19.06	5.67	-0.38	-0.19
3. Optimistic coping style	0-27	5.00	27.00	20.25	4.16	-0.54	0.03
4. Self-reliant coping style	0-21	4.00	21.00	14.00	3.59	-0.51	-0.03
Sense of meaning	10-70	35.00	70.00	53.55	6.03	-0.36	0.26
Sense of control	20-100	46.00	100.00	74.43	10.05	0.01	0.01
Social support	0-120	42.00	112.00	84.50	14.11	-0.53	0.10

Table 5

Level, Actual Score and Percentage of Psychological Well-Being (N = 240)

Level of Psychological well-being	Actual Score	Number	Percentage
Mild	(127-173)	24	10
Moderate	(174-216)	122	50.8
High	(217-247)	94	39.2

The Relationship Among Study Variables: Social Support, Sense of Control, Sense of Meaning, Coping, and Psychological Well-Being.

Bivariate correlational analysis among measured variables was employed for preliminary data analysis in order to test the assumption of multicollinearity. Also it was tested to determine the relationship between the criterion (psychological well-being), and the mediators (confrontive coping style, evasive coping style, optimistic coping style, self-reliant coping style), sense of meaning, sense of control, and social support.

Bivariate correlation indicated a significant positive and negative correlation among each independent variable (coping, sense of meaning, sense of control, social support) (r ranged from .13 to .69, p < .05). Thus, it indicated non-serious multicollinearity between the independent variables.

However, sense of meaning did not correlate with self-reliant coping style, sense of control did not correlate with self-reliant coping style, social support did not correlate with self-reliant coping style, and sense of meaning did not correlate with sense of control. The relationship among the study variables are described in Table 6.

Table 6

Correlation Matrix of the Key Variables

Variable	1	2	3	4	5	6	7	8
1. Psychological well-being	1.00							
2. Confrontive coping style	.26**	1.00						
3. Evasive coping style	-.14*	.51**	1.00					
4. Optimistic coping style	.34**	.69**	.45**	1.00				
5. Self-reliant coping style	.15*	.69**	.57**	.58**	1.00			
6. Sense of meaning	.74**	$.09^{ns}$	.09**	.13*	$.11^{ns}$	1.00		
7. Sense of control	.37**	.23**	-.17**	.16*	$.12^{ns}$	$-.02^{ns}$	1.00	
8. Social support	.59**	19**	-.15**	.26**	$.04^{ns}$	.43**	.32**	1.00

* Significance at the .05 level ** Significance at the .001 level ^{ns} Non significance

Measurement Model

The measurement model testing is needed to be done before examining of the structural equation model. The aim is to test for construct validity. So, five latent variables in the purposed structural model were tested. Confirmatory factor analysis (CFA) was carried out to examine construct validity of social support, sense of control, sense of meaning, coping, and psychological well-being.

The measurement model of each latent variable was performed for both first-

order CFA model and second-order CFA models. For each variable, one item's factor loading was constrained to be 1.00 in order to make the model overestimated (Kline, 1998).

All associations between the factors were not analyzed. Each observed variable was allowed to load on its respective latent variable and could not load on other latent variables. But, for the latent variable which is a multidimensional construct (social support, sense of control, sense of meaning, coping, and psychological well-being), all factors were intercorrelated in the first-order CFA model.

For the second-order factor/ second-order CFA model, covariance among all first order factors is explained by the regression analysis on the second-order factor (Kline, 1998). The variance of the second order-factor was constrained to be 1.00 for the purpose of model identification. The relationship between an observed variable and underlying latent construct was estimated. The factor loading of variables on the correlated factor indicators was employed to evaluate the underlying factor. The acceptable value of factor loading is more than .33 (Tabachnick & Fidell, 2010). The parameter which was not significant was deleted from the path model because it was regarded as an unimportant parameter (Byrne, 2010).

Social support subscale

1. First-order CFA model of social support

The first-order CFA model of social support was performed. The first-order CFA model tested the hypotheses that: social support is a multidimensional construct

composed of three factors; emotional support (20 items), instrumental support (10 items), and informational support (10 items).

There were 40 observed variables in the first order factor. The variables were loaded on the factor in the following pattern: S3, S4, S5, S7, S8, S10, S12, S13, S15, S20, S21, S24, S25, S27, S28, S31, S32, S34, S37, and S40 were loaded on emotional support; S2, S9, S14, S16, S18, S23, S29, S33, S35, and S39 were loaded on instrumental support; S1, S6, S11, S17, S19, S22, S26, S30, S36, and S38 were loaded on informational support.

The finding of the first-order CFA (model of social support) indicated that most of the items of the subscale had low to moderate standardized factor loading and the percentage of variance in each item was adequately accounted for by the variance in its latent construct (Figure 4, Table 7).

There were 14 items (S3, S5, S7, S8, S9, S10, S31, S32, S37, S2, S18, S29. S19, S26) that showed low factor loading (.14 to .32), respectively. Indices indicated the GFI = .86; TLI = .96; CFI = .97; χ^2 = 779.03; DF = 737; p = .137; χ^2/df = 1.06 and RMSEA = 0.15; 90 % CI [0.01, 0.03].

To improve the fit indices, the model was re-specified by deleting 14 items resulting in a set of 26 items. The result of the respecified model indicated an improvement of fit as the last model of social support demonstrated a good fit of the model to the sample data. The fit indices showed as: GFI = .92; TLI = .99; CFI = .99; $\chi 2$ = 272.91; DF=272; p = .470; χ^2/df = 1.003; and RMSEA = .004; 90 % CI [0.00, 0.03].

Table 7

Standardized Factor Loadings and R^2 of 40 Items from the Social Support Subscale (First- Order CFA of Original Subscale)

Factor/subscale	Indicator	Factor loading	R^2
Emotional support	S3: Most of my friends are more interesting than I am.	.31	.09
	S4: There is someone who takes pride in my accomplishments.	.38	.14
	S5: When I feel lonely, there are several people I can talk to.	.31	.10
	S7: I often meet or talk with family or friends.	.27	.07
	S8: Most people I know think highly of me.	.21	.04
	S10: I feel like I'm not always included by my circle of friends.	.25	.06
	S12: There are several different people I enjoy spending time with.	.46	.21
	S13: I think that my friends feel that I'm not very good at helping them solve their problems.	.56	.32
	S15: If I wanted to go on a trip for a day (e.g., to the mountains, beach, or country), I would have a hard time finding someone to go with me.	.40	.16
	S20: I am as good at doing things as most other people are.	.36	.13
	S21: If I decide one afternoon that I would like to go to watch a movie that evening, I could easily find someone to go with me.	.40	.16
	S24: In general, people do not have much confidence in me.	.63	.39
	S25: Most people I know do not enjoy the same things that I do.	.44	.19

Table 7 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	S27: I don't often get invited to do things with others.	.59	.35
	S28: Most of my friends are more successful at making changes in their lives than I am.	.42	.17
	S31: If I wanted to have lunch with someone, I could easily find someone to join me.	.20	.04
	S32: I am more satisfied with my life than most people are with theirs.	.19	.04
	S34: No one I know would throw a birthday party for me.	.57	.32
	S37: I am closer to my friends than most other people are to theirs.	.14	.02
	S40: I have a hard time keeping pace with my friends.	.38	.14
Instrumental support	S2: If I needed help fixing an appliance or repairing my car, there is someone who would help me.	.14	.02
	S9: If I needed a ride to the airport very early in the morning, I would have a hard time finding someone to take me.	.22	.05
	S14: If I were sick and needed someone (friend, family member, or acquaintance) to take me to the doctor, I would have trouble finding someone.	.44	.19
	S16: If I needed a place to stay for a week because of an emergency (for example, water or electricity out in my apartment or house), I could easily find someone who would put me up.	.41	.17
	S18: If I were sick, I could easily find someone to help me with my daily chores.	.16	.03

Table 7 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	S23: If I needed an emergency loan of $100, there is someone (friend, relative, or acquaintance) I could get it from.	.49	.24
	S29: If I had to go out of town for a few weeks, it would be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.).	.32	.10
	S33: If I was stranded 10 kilometers from home, there is someone I could call who would come and get me.	.44	.19
	S35: It would be difficult for me to find someone who would lend me their car for a few hours.	.52	.27
	S39: If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me.	.39	.15
Informational support:	S1: There are several people that I trust to help solve my problems.	.44	.20
	S6: There is no one that I feel comfortable to talk about intimate personal problems.	.55	.30
	S11: There really is no one who can give me an objective view of how I'm handling my problems.	.46	.21
	S17: I feel that there is no one I can share my most private worries and fears with.	.61	.37
	S19: There is someone I can turn to for advice about handling problems with my family.	.26	.07
	S22: When I need suggestions on how to deal with a personal problem, I know someone I can turn to.	.35	.12

Table 7 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	S26: There is someone I could turn to for advice about making career plans or changing my job.	.14	.02
	S30: There really is no one I can trust to give me good financial advice.	.64	.42
	S36: If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it.	.36	.13
	S38: There is at least one person I know whose advice I really trust.	.32	.10
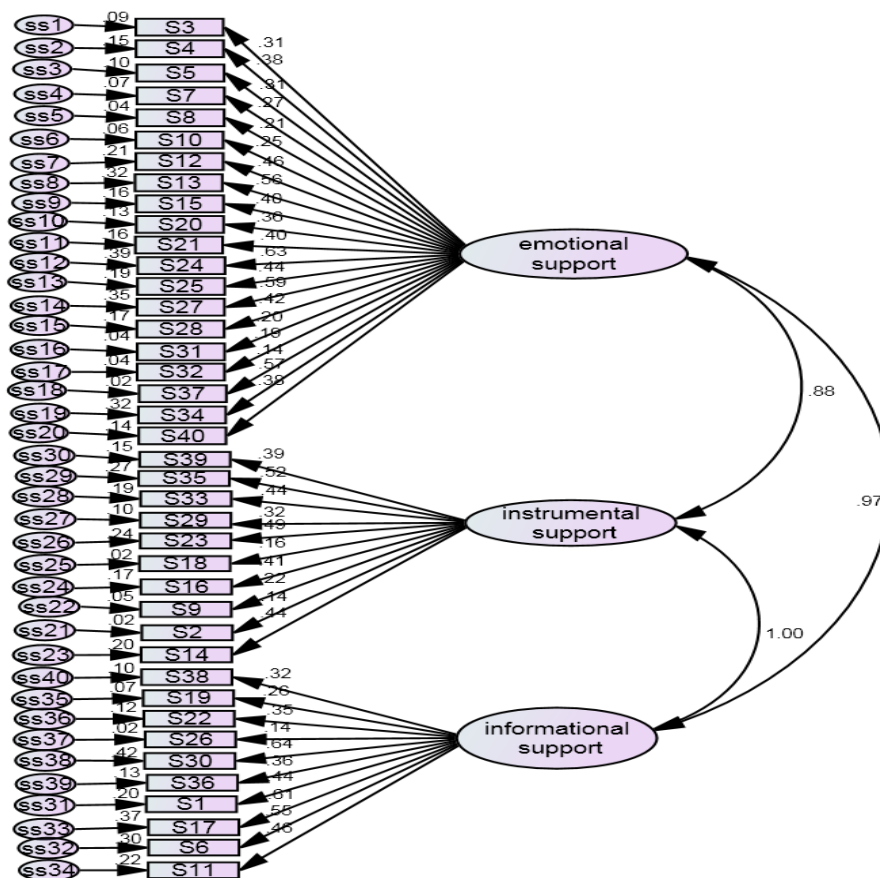
Figure 4 Measurement model of the Social Support subscale 40 items (first-order CFA)

2. Second-order CFA model of social support

The second order CFA model was conducted after factor analysis to examine the construct validity of the higher latent variable (social support). The results of the second-order CFA model of measurement model showed a satisfactory overall fit: GFI = .91; TLI = .96; CFI = .97; $\chi 2$ = 309.305; DF = 272; p = .082; $\chi 2$ /df = 1.12; and RMSEA =.02; 90 % CI [0.00, 0.04]. Results suggested that the three subscales (first–order factor) were reliable to measure social support.

In sum, a second-order CFA model of social support with 26 items (Figure 5, Table 8, 9) was used in the full model (structural equation modeling). This model consisted of 3 factors: 1) emotional support (12 items), 2) instrumental support (6 items), and 3) informational support (8 items).

Table 8

Factor Loadings and R^2 of the Subscales of the Social Support 26 Items (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Social Support	Emotional support	.90**	.80
	Instrumental support	.88**	.77
	Informational support	.90**	.81

**p< .001

Table 9

Standardized Factor Loadings and R^2 of the 26 Items from the Social Support Subscale (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Emotional support	S4: There is someone who takes pride in my accomplishments.	.36	.13
	S12: There are several different people I enjoy spending time with.	.46	.21
	S13: I think that my friends feel that I'm not very good at helping them solve their problems.	.57	.32
	S15: If I wanted to go on a trip for a day (e.g., to the mountains, beach, or country), I would have a hard time finding someone to go with me.	.40	.16
	S20: I am as good at doing things as most other people are.	.36	.13
	S21: If I decide one afternoon that I would like to go to a movie that evening, I could easily find someone to go with me.	.40	.16
	S24: In general, people do not have much confidence in me.	.63	.40
	S25: Most people I know do not enjoy the same things that I do. S25: Most people I know do not enjoy the same things that I do.	.46	.21
	S27: I don't often get invited to do things with others.	.62	.38
	S28: Most of my friends are more successful at making changes in their lives than I am.	.53	.28
	S34: No one I know would throw a birthday party for me.	.57	.32
	S40: I have a hard time keeping pace with my friends.	.41	.17

Table 9 (continued)

Factor/subscale	Indicator	Factor loading	R^2
Instrumental support	S14: If I were sick and needed someone (friend, family member, or acquaintance) to take me to the doctor, I would have trouble finding someone.	.54	.29
	S16: If I needed a place to stay for a week because of an emergency (for example, water or electricity out in my apartment or house), I could easily find someone who would put me up.	.40	.16
	S23: If I needed an emergency loan of $100, there is someone (friend, relative, or acquaintance) I could get it from.	.54	.29
	S33: If I was stranded 10 kilometers from home, there is someone I could call who would come and get me.	.43	.18
	S35: It would be difficult for me to find someone who would lend me their car for a few hours.	.56	.32
	S39: If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me.	.41	.17
Informational support:	S1: There are several people that I trust to help solve my problems.	.55	.31
	S6: There is no one that I feel comfortable to talk about intimate personal problems.	.56	.32
	S11: There really is no one who can give me an objective view of how I'm handling my problems.	.50	.25
	S17: I feel that there is no one I can share my most private worries and fears with.	.61	.37
	S22: When I need suggestions on how to deal with a personal problem, I know someone I can turn to.	.35	.12

Table 9 (continued)

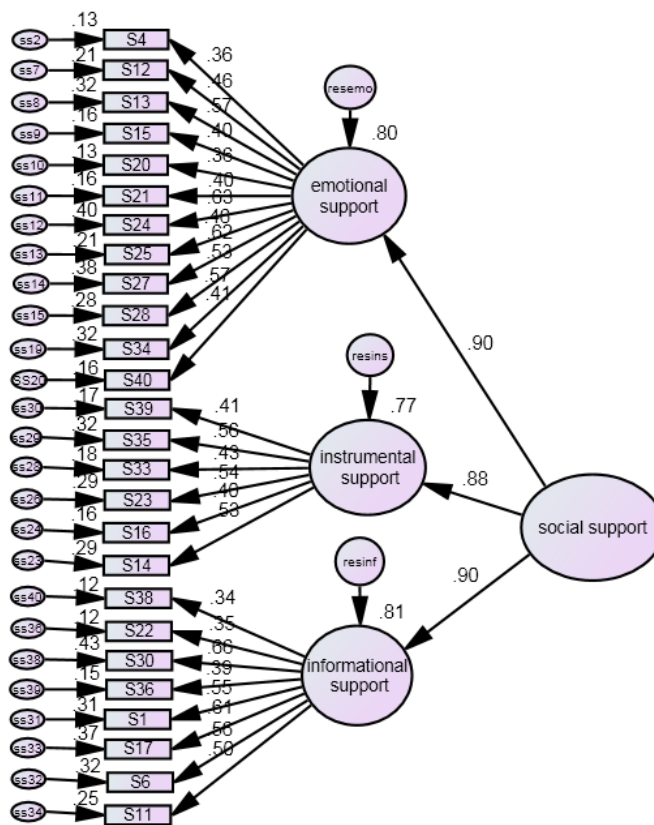| Factor/subscale	Indicator	Factor loading	R^2
	S30: There really is no one I can trust to give me good financial advice.	.66	.43
	S36: If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it.	.39	.15
	S38: There is at least one person I know whose advice I really trust.	.34	.12

Figure 5 Measurement model of the Social Support subscale 26 items (second-order CFA)

Note. resemo = residual covariance of emotional support
resins = residual covariance of instrumental support
resinf = residual covariance of informational support

Sense of control subscale

1. First-order CFA model of sense of control

The first-order CFA model of sense of control was conducted. The first-order CFA model tested the hypothesis that sense of control is a multidimensional construct which is composed of two factors: manageability (13 items) and goal attainment (7 items). There were 20 observed variables in the first-order CFA. The observed variable loaded on the pattern followed: T1-T13 loaded on manageability; T14 –T10 loaded on goal attainment. The finding from the first factor order CFA indicated that most of the items of the subscale had poor to moderate factor loadings and the percentage of variance in each item was adequately accounted for by the variance in its latent construct (Figure 6, Table 10), in which 2 items (T2, T4) had lower factor loadings (.25, .31) and the fit indices indicated good fit of the model to the data: GFI = .91; TLI = .92; CFI =.93; χ2 = 239.81; DF = 169; p = .000; χ^2 /df = 1.42 and RMSEA = .042; 90 % CI [0.03, 0.05].

The model was respecified by dropping 2 items (T2, T4) which had a factor loading of less than .33. The results revealed good fit: GFI =.91; TLI =.92; CFI =.93; χ2 =196.99; DF =134; p = .000; χ^2 /df =1.47and RMSEA =.044; 90 % CI [0.03, 0.06].

Table 10

Standardized Factor Loadings and R^2 of 20 Items from the Sense of Control Subscale (First-Order CFA of Original Subscale)

Factor/subscale	Indicator	Factor loading	R^2
Manageability	T1: I am able to handle my current situation.	.62	.38
	T2: I am able to accomplish what I have to do.	.25	.06

Table 10 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	T3: I cannot cope with my current situation.	.40	.16
	T4: Things in my life are do able.	.31	.10
	T5: My current situation is under control.	.51	.26
	T6: I do not think I can do what is required of me.	.35	.12
	T7: I am unable to contend with my current situation.	.64	.41
	T8: My situation is manageable.	.51	.26
	T9: I am not sure I can deal with events in my life right now.	.45	.21
	T10: The situation in which I am now is too difficult for me to handle.	.45	.20
	T11: My current situation is impossible to deal with.	.64	.41
	T12: I know I can manage my current situation.	.63	.40
	T13: My situation is such that I can do what has to be done.	.44	.19
Goal attainment	T14: I know that things will work out.	.75	.56
	T15: Things will work out in the end.	.82	.67
	T16: I am able to accomplish things in my daily life that are important to me.	.56	.31
	T17: My current situation will be resolved as best as can be expected.	.54	.30
	T18: I am not sure how things will work out.	.35	.12
	T19: When I think about my situation I know I can make it.	.46	.21

Table 10 (continued)

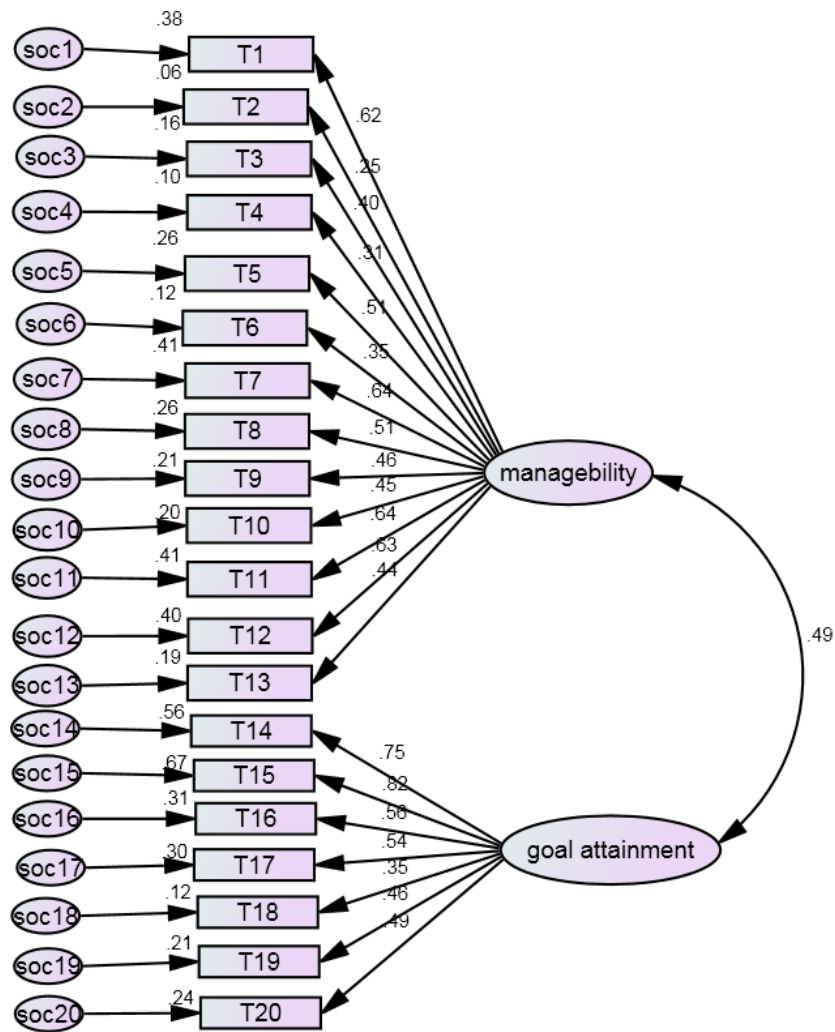| Factor/subscale	Indicator	Factor loading	R²
	T20: There is nothing in my current situation that cannot be resolved.	.49	.24

Figure 6 Measurement model of the Sense of Control subscale 20 items (first-order CFA)

2. Second -order CFA model of sense of control

After the findings (first-order factor) showed that the two subscales were reliable to measure sense of control, a second-order CFA model was conducted and then factor analysis was used to examine the construct validity of the higher latent variable (sense of control). The second-order CFA model of sense of control showed that the two factor model had an acceptable fit: GFI = .91; TLI = .92; CFI = .93; $\chi 2$ = 196.99; DF = 134;p = .000; χ^2 /df = 1.47 and RMSEA = .04; 90 % CI [0.03, 0.06].

The final second-order CFA model of sense of control subscale was comprised of 2 factors with 18 indicators: 1) manageability (11 indicators), and 2) goal attainment (7 indicators) (Figure 7, Table 11, 12).

Table 11

Factor Loadings and R^2 of the Subscales of the Sense of Control 18 Items (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Sense of control	Manageability	.85**	.72
	Goal attainment	.57**	.32

**p< .001

Table 12

Standardized Factor Loadings and R^2 of 18 Items from the Sense of Control Subscale (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Manageability	T1: I am able to handle my current situation.	.62	.37
	T3: I cannot cope with my current situation.	.40	.16

Table 12 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	T5: My current situation is under control.	.51	.26
	T6: I do not think I can do what is required of me.	.34	.12
	T7: I am unable to contend with my current situation.	.64	.41
	T8: My situation is manageable.	.51	.26
	T9: I am not sure I can deal with events in my life right now.	.47	.22
	T10: The situation in which I am now is too difficult for me to handle.	.45	.20
	T11: My current situation is impossible to deal with.	.65	.42
	T12: I know I can manage my current situation.	.63	.39
	T13: My situation is such that I can do what has to be done.	.44	.19
Goal attainment	T14: I know that things will work out.	.75	.56
	T15: Things will work out in the end.	.82	.67
	T16: I am able to accomplish things in my daily life that are important to me.	.56	.31
	T17: My current situation will be resolved as best as can be expected.	.55	.30
	T18: I am not sure how things will work out.	.35	.12
	T19: When I think about my situation I know I can make it.	.46	.21
	T20: There is nothing in my current situation that cannot be resolved.	.49	.25
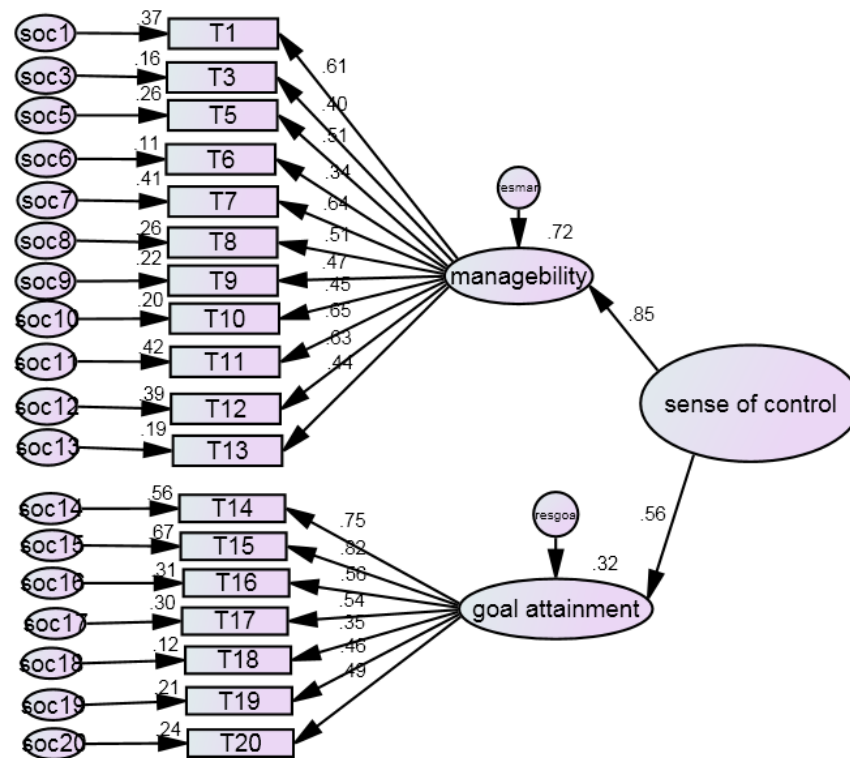
Figure 7 Measurement model of the Sense of Control subscale 18 items (second-order CFA)

Note. resman = residual covariance of managebility; resgoa = residual covariance of goal attainm

Sense of meaning subscale

1. First-order CFA model of sense of meaning

The first-order CFA model of sense of meaning was performed. The first-order CFA model tested the hypothesis that sense of meaning is a multidimensional construct composed of two factors: presence (5 items), and search (5 items). There were 10 observed variables in this first- order CFA. The observed variables were loaded on the factor in the following pattern: M1, M4, M5, M6, M9 were loaded on the presence subscale; M2, M3, M7, M8, M10 were loaded on the search subscale. The findings from the first–order CFA indicated that most of the items of the subscale

had fair to good standardized factor loading and the variance in each item was adequately accounted for by the latent construct of the variable (sense of meaning). Only one item (M9) had factor loadings lower than an acceptable value (.33). Fit indices indicated a good fit of the model to the sample data: GFI = .97; TLI = 1.00; CFI = 1.00; $\chi2$=33.84; DF = 34; p = .475; χ^2/df = 0.99 and RMSEA = .00; 90 % CI [0.00, 0.05](Figure 8, Table 13).

After this the first–order CFA model was respecified by dropping less factor loadings (M9), the result showed the fit indices: GFI = .97; TLI = .98; CFI =.99; $\chi2$ = 31.22; DF = 26, p = .220; χ^2 /df = 1.20 and RMSEA = .03; 90 % CI [0.00, 0.06].

Table 13

Standardized Factor Loadings and R^2 of 10 Items from the Sense of Meaning Subscale (First-Order CFA of Original Subscale)

Factor/subscale	Indicator	Factor loading	R^2
Presence	M1: I understand my life's meaning.	.51	.26
	M4: My life has a clear sense of purpose.	.56	.55
	M5: I have a good sense of what makes my life meaningful.	.57	.32
	M6: I have discovered a satisfying life purpose.	.74	.32
	M9: My life has no clear purpose.	.30	.09
Search	M2: I am looking for something that makes my life feel meaningful.	.71	.51
	M3: I am always looking to find my life's purpose.	.74	.54
	M7: I am always searching for something that makes my life feel significant.	.60	.36

Table 13 (continued)

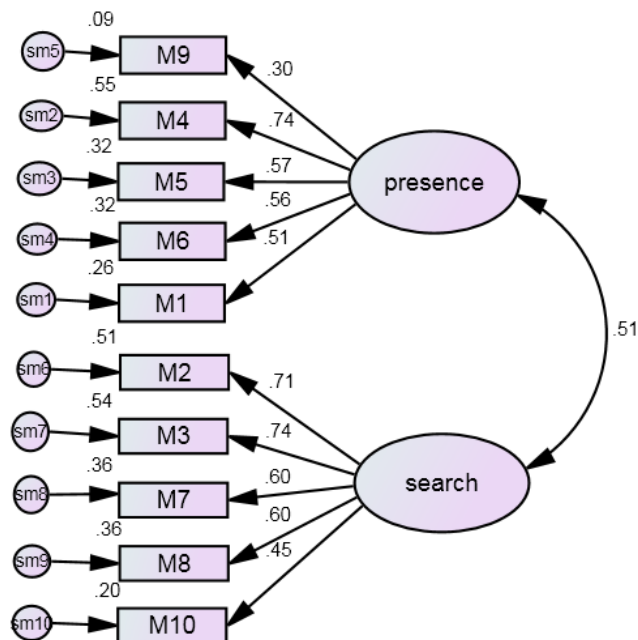| Factor/subscale	Indicator	Factor loading	R2
	M8: I am seeking a purpose or mission for my life.	.60	.36
	M10: I am searching for meaning in my life.	.45	.19

Figure 8 Measurement model of the Sense of Meaning subscale 10 items (first-order CFA)

2. Second-order CFA model of sense of meaning:

The second- order CFA model of sense of meaning was conducted and factors were analyzed to examine the construct validity of the higher latent variable (sense of meaning).

The item loadings in the second-order CFA were similar to the first-order

CFA. The second-order CFA of the measurement model showed that this scale had reliability to measure the latent variable (sense of meaning). It revealed that the two-factor model had an acceptable fit: GFI = .97; TLI = .98; CFI = .99; χ2 = 31.22; DF = 26; p = .220; χ2/df = 1.20 and RMSEA =.03; 90 % CI [0.00, 0.06].

The final second-order CFA model of the sense of meaning subscale consisted of two factors with 9 indicators; 1) presence subscale (4 indicators), 2) search subscale (5 indicators) (Figure 9, Table 14, 15).

Table 14

Factor Loadings and R^2 of the Subscales of the Sense of Meaning 9 Items (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Sense of meaning	Presence	.93**	.86
	Search	.55**	.31

**p < .001

Table 15

Standardized Factor Loadings and R^2 of 9 Items from the Sense of Meaning Subscale (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Presence	M1: I understand my life's meaning.	.51	.26
	M4: My life has a clear sense of purpose.	.74	.55
	M5: I have a good sense of what makes my life meaningful.	.57	.33
	M6: I have discovered a satisfying life purpose.	.57	.32

Table 15 (continued)

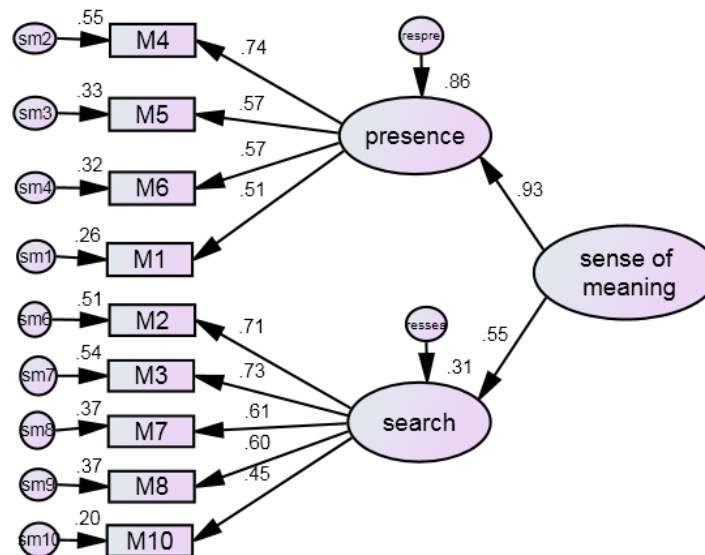| Factor/subscale	Indicator	Factor loading	R^2
Search	M2: I am looking for something that makes my life feel meaningful.	.71	.51
	M3: I am always looking to find my life's purpose.	.73	.54
	M7: I am always searching for something that makes my life feel significant.	.61	.37
	M8: I am seeking a purpose or mission for my life.	.60	.37
	M10: I am searching for meaning in my life.	.45	.20

Figure 9 Measurement model of the Sense of Meaning subscale 9 items (second-order CFA)

Note. respre = residual covariance of presence; ressea = residual covariance of search

Coping subscale

1. First-order CFA model of coping

In this study, there were 4 dimensions/4 coping styles of the coping scale. The first-order CFA model of the coping subscale was performed. The first-order CFA tested the hypothesis that coping is a multidimensional construct composed of four factors: confrontive coping style (10 items), evasive coping style (13 items), optimistic coping style (9 items), and self-reliant coping style (7 items). There were 39 observed variables.

The first factor CFA were loaded on the factors in the following patterns: C4, C13, C16, C25, C27, C29, C33, C38, C43, C45 were loaded on the confrontive coping style; C7,C10, C14, C18, C20, C21, C28, C35, C40, C48, C55, C56, C58 were loaded on the evasive coping style; C2, C5, C30, C32, C39, C47, C49, C50, C54 were loaded on the optimistic coping style; C19, C22, C31, C37, C41, C52, C57 were loaded on the self-reliant coping style.

The findings for the first factor CFA found that most items of the subscale has mild to good standardized loadings (factor loading) and the percentage of variance in each item was adequately accounted for by its latent construct. 10 items of the coping scale (C14, C20, C28, C40, C48, C55, C56, C32, C49, and C50) had standardized factor loadings lower than an acceptable value (range from .14 to .32) (Table 22). Most of fit indices indicated an acceptable fit of the model to the sample data but only GFI showed poor fit: GFI =.86; TLI =.92; CFI =.93; $\chi2$ = 792.05; DF = 696; p = .007; χ^2/df = 1.14 and RMSEA = .03; 90 % CI [0.01, 0.03] (Figure 10, Table 16).

Thus, this model was re-specified by omitting 10 items with low factor

loadings. The result of the respecified model indicated an adequate fit of the model to the sample data. GFI =.91; TLI =.97; CFI =.98; χ2 = 397.19; DF = 371; p = .168; χ^2/df =1.07; and RMSEA= .02; 90 % CI [0.00, 0.03].

Table 16

Standardized Factor Loadings and R^2 of 39 Items from the Coping Subscale (First-Order CFA of Original Subscale)

Factor/subscale	Indicator	Factor loading	R^2
Confrontive coping style	C4: Thought out different ways to handle the situation.	.45	.21
	C13: Tried to look at the problem objectively and see all sides.	.42	.17
	C16: Tried to keep the situation under control.	.34	.11
	C25: Tried to change the situation.	.38	.14
	C27: Tried to find out more about the problem.	.35	.12
	C29: Tried to handle things one step at a time.	.64	.41
	C33: Tried to work out a compromise.	.58	.33
	C38: Set up a plan of action.	.46	.21
	C43: Practiced in your mind what had to be done.	.64	.41
	C45: Learned something new in order to deal with the problem better.	.46	.22
Evasive coping style	C7: Tried to get away from the problem for a while.	.35	.12
	C10: Tried to put the problem out of your mind and think of something else.	.38	.14
	C14: Day dreamed about a better life.	.21	.05

Table 16 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	C18: Tried to get out of the situation.	.34	.11
	C20: Told yourself that the problem was someone else's fault.	.15	.02
	C21: Waited to see what would happen.	.50	.25
	C28: Slept more than usual.	.23	.05
	C35: Let time take care of the problem.	.54	.29
	C40: Put off facing up to the problem.	.25	.06
	C48: Tried to ignore or avoid the problem.	.14	.02
	C55: Told yourself that this problem was really not that important.	.27	.07
	C56: Avoided being with people.	.29	.08
	C58: Wished that the problem would go away.	.38	.14
Optimistic coping style	C2: Hoped that things would get better.	.54	.29
	C5: Told yourself that things could be much worse.	.46	.21
	C30: Tried to keep your life as normal as possible and not let the problem interfere.	.57	.32
	C32: Told yourself not to worry because everything would work out fine.	.30	.09
	C39: Tried to keep a sense of humor.	.49	.24
	C47: Thought about the good things in your life.	.37	.14
	C49: Compared yourself with other people who were in the same situation.	.30	.09
	C50: Tried to think positively.	.32	.10

Table 16 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	C54: Tried to see the good side of the situation.	.36	.13
Self-reliant coping style	C19: Kept your feelings to yourself.	.50	.26
	C22: Wanted to be alone to think things out.	.39	.15
	C31: Thought about how you had handled other problems in the past.	.60	.36
	C37: Told yourself that you could handle anything no matter how hard.	.47	.22
	C41: Tried to keep your feelings under control.	.51	.26
	C52: Preferred to work things out yourself.	.57	.33
	C57: Tried to improve yourself in some way so you could handle the situation better.	.46	.21
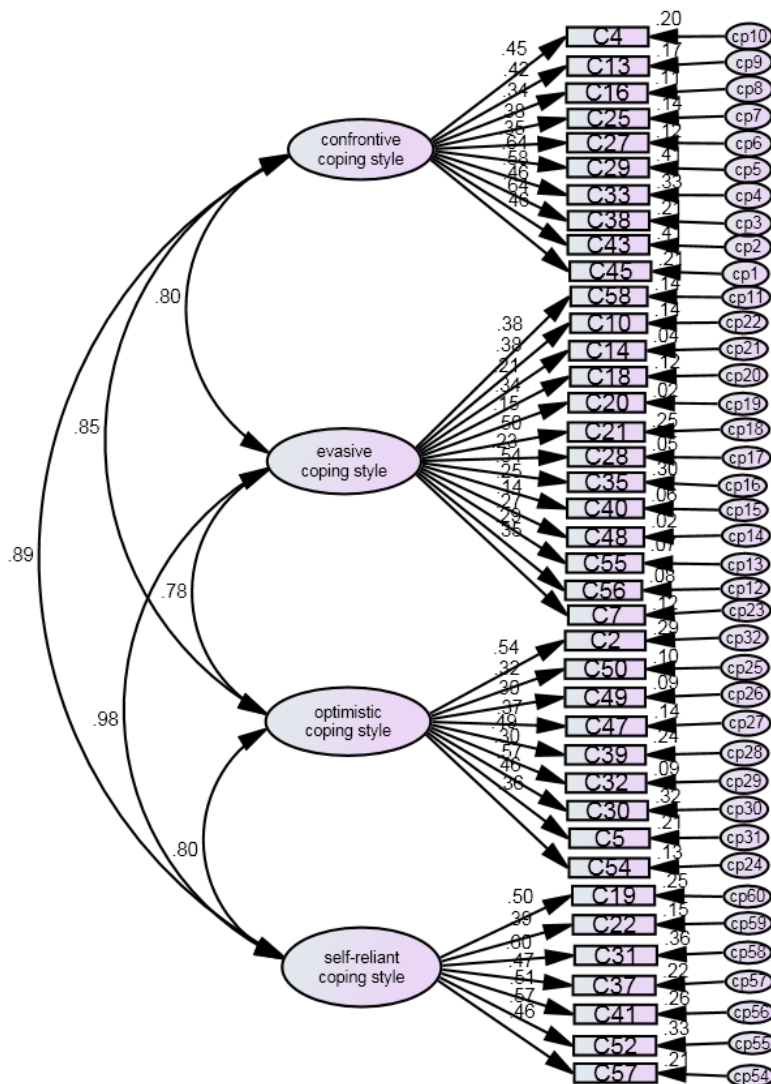
Figure 10 Measurement model of the Coping subscale 39 items (first-order CFA)

2. Second-order CFA model of coping

The second-order CFA model of coping was conducted in order to examine the construct validity of a higher latent variable (coping) after the four subscales (first-order factor) were reliably measured. The second-order of measurement model indicated an acceptable fit as follows: GFI = .90; TLI = .96; CFI = .97; χ^2 = 421.85; DF = 374; p = .081; χ^2/df = 1.10; and RMSEA = .02; 90 % CI [0.00, 0.03].

The last model of the coping subscale comprised of 4 factors with 29

indicators: 1) confrontive coping style (10 indicators), 2) evasive coping style (6 indicators), 3) optimistic coping style (6 indicators), and 4) self-reliant coping style (7 indicators) (Figure 11, Table 17, 18).

Table 17

Factor Loadings and R^2 of the Subscales of the Coping 29 Items (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Coping	Confrontive coping style	.94**	.87
	Evasive coping style	.85**	.72
	Optimistic coping style	.91**	.82
	Self-reliant coping style	.96**	.93

**p< .001

Table 18

Standardized Factor Loadings and R^2 of 29 Items from the Coping Subscale (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Confrontive coping style	C4: Thought out different ways to handle the situation.	.46	.21
	C13: Tried to look at the problem objectively and see all sides.	.41	.17
	C16: Tried to keep the situation under control.	.34	.11
	C25: Tried to change the situation.	.37	.14
	C27: Tried to find out more about the problem.	.35	.12

Table 18 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	C29: Tried to handle things one step at a time.	.64	.41
	C33: Tried to work out a compromise.	.58	.33
	C38: Set up a plan of action.	.46	.21
	C43: Practiced in your mind what had to be done.	.63	.40
	C45: Learned something new in order to deal with the problem better.	.46	.21
Evasive coping style	C7: Tried to get away from the problem for a while.	.36	.13
	C10: Tried to put the problem out of your mind and think of something else.	.39	.15
	C18: Tried to get out of the situation.	.35	.12
	C21: Waited to see what would happen.	.49	.24
	C35: Let time take care of the problem.	.56	.32
	C58: Wished that the problem would go away.	.48	.23
Optimistic coping style	C2: Hoped that things would get better.	.53	.28
	C5: Told yourself that things could be much worse.	.48	.23
	C30: Tried to keep your life as normal as possible and not let the problem interfere.	.58	.33
	C39: Tried to keep a sense of humor.	.46	.21
	C47: Thought about the good things in your life.	.35	.12
	C54: Tried to see the good side of the situation.	.33	.11

Table 18 (continued)

| Factor/subscale	Indicator	Factor loading	R^2
Self-reliant coping style	C19: Kept your feelings to yourself.	.50	.25
	C22: Wanted to be alone to think things out.	.38	.14
	C31: Thought about how you had handled other problems in the past.	.60	.36
	C37: Told yourself that you could handle anything no matter how hard.	.47	.22
	C41: Tried to keep your feelings under control.	.50	.25
	C52: Preferred to work things out yourself.	.60	.36
	C57: Tried to improve yourself in some way so you could handle the situation better.	.47	.22
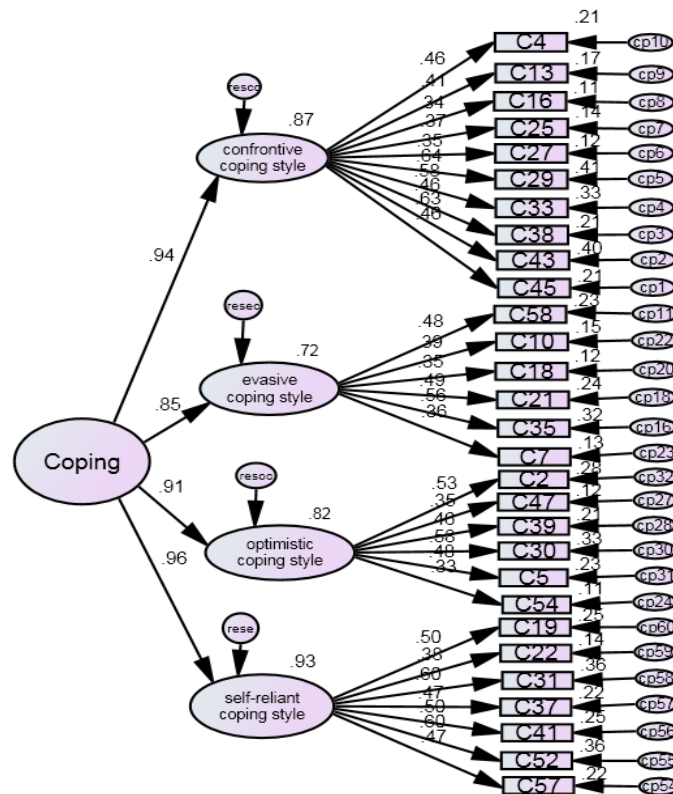
Figure 11 Measurement model of the Coping subscale 29 items (second-order CFA)

Note. rescc = residual covariance of confrontive coping style
resec = residual covariance of evasive coping style
resoc = residual covariance of optimistic coping style
resse = residual covariance of self-reliant coping style.

Psychological well-being subscale

1. First-order CFA model of psychological well-being

The first-order CFA model of psychological well-being was performed. This first-order CFA tested the hypothesis that psychological well-being is a dimensional construct composed of six factors: autonomy (6 items), environment mastery (6 items), purpose in life (6 items), self-acceptance (6 items), personal growth (6 items), and positive relations with others (6 items). There were 42 observed variables in the first–order CFA. The observed variables had the following loaded on the factors: W1-

W7 loaded on autonomy; W8-W14 loaded on environment mastery, W15-W21 loaded on purpose in life, W22-W28 loaded on self-acceptance, W29-W35 loaded on personal growth, and W36-W42 loaded on positive relations with others. The findings from the first order factor CFA identified that most of the items of the subscale had moderate to good standardized factor loadings and the percentage of variance in each item was adequately accounted for by the variance in its latent construct (Figure 12, Table 19).

There are 8 items (W6, W7, W11, W16, W21, W28, W30, and W31) which showed lower factor loadings (ranged from .12 to .32). The most of fit indices showed acceptable fit of the model to the data. However, only goodness of fit indice (GFI) was poor; GFI = .88; TLI = .99; CFI = .99; $\chi2$ = 806.60; DF = 80; p = .468; χ^2/df = 1.00; and RMSEA = .004; 90 % CI [0.00, 0.02]. Thus, this CFA model was respecified by dropping the lower factor loadings (less than .33).

The results related to the respecified model demonstrated the acceptable fit indices: GFI = .90; TLI =.97; CFI = .97; $\chi2$ = 548.78, DF = 51; p =.126; χ^2/df = 1.07; and RMSEA = .02; 90 % CI [0.00, 0.03].

Table 19

Standardized Factor Loadings and R^2 of 42 Items from the Psychological Well-Being Subscale (First-Order CFA of Original Subscale)

Factor/subscale	Indicator	Factor loading	R^2
Autonomy	W1: I am not afraid to voice my opinions.	.48	.23
	W2: My decisions are not usually influenced by what everyone else is doing.	.49	.24

Table 19 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	W3: I tend to be influenced by people with strong opinions.	.41	.17
	W4: I have confidence in my opinions.	.38	.15
	W5: It's difficult for me to voice my own opinions on controversial matters.	.53	.28
	W6: I tend to worry about what other people think of me.	.27	.07
	W7: I judge myself by what I think is important, not by the values of what others think is important.	.32	.10
Environment mastery	W8: In general, I feel I am in charge of the situation in which I live.	.38	.15
	W9: The demands of everyday life often get me down.	.35	.13
	W10: I do not fit very well with the people and the community around me.	.54	.29
	W11: I am quite good at managing the many responsibilities of my daily life.	.30	.09
	W12: I often feel overwhelmed by my responsibilities.	.62	.38
	W13: I have difficult arranging my life in a away that is satisfying to me.	.37	.14
	W14: I have been able to build a living environment and a life style for myself that is much to my liking.	.44	.19
Purpose in life	W15: I live life one day at a time and don't really think about the future.	.51	.26
	W16: I have a sense of direction and purpose in life.	.27	.07

Table 19 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	W17: I don't have a good sense of what it is I'm trying to accomplish in life.	.43	.18
	W18: My daily activities often seem trivial and unimportant to me.	.59	.34
	W19: I enjoy making plans for the future and working to make them a reality.	.49	.25
	W20: Some people wander aimlessly through life, but I am not one of them.	.43	.19
	W21: I sometimes feel as if I've done all there is to do in life.	.12	.02
Self acceptance	W22: When I look at the story of my life, I am pleased with how things have turned out.	.48	.23
	W23: In general, I feel confident and positive about myself.	.50	.25
	W24: I feel like many of the people I know have gotten more out of life than I have.	.42	.18
	W25: I like most parts of my personality.	.46	.21
	W26: In many ways I feel disappointed about my achievements in life.	.49	.24
	W27: My attitude about myself is probably not as positive as most people feel about themselves.	.44	.19
	W28: When I compare myself to friends and acquaintances, it makes me feel good about who I am.	.27	.07
Personal growth	W29: I am not interested in activities that will expand my horizons.	.53	.28

Table 19 (continued)

| Factor/subscale	Indicator	Factor loading	R^2
	W30: I think it is important to have new experiences that challenge how you think about yourself and the world.	.29	.09
	W31: When I think about it, I haven't really improved much as a person over the years.	.31	.09
	W32: I have the sense that I have developed a lot as a person over time.	.39	.15
	W33: For me, life has been a continuous process of learning, changing, and growing.	.42	.18
	W34: I gave up trying to make big improvements or changes in my life a long time ago.	.54	.29
	W35: I do not enjoy being in new situations that require me to change my old familiar ways of doing things.	.42	.17
Positive relations with others	W36: Most people see me as loving and affectionate.	.39	.16
	W37: Maintaining close relationships has been difficult and frustrating for me.	.48	.23
	W38: I often feel lonely because I have few close friends with whom to share my concerns.	.56	.31
	W39: I enjoy personal and mutual conversations with family members and friends.	.38	.14
	W40: People would describe me as a giving person, willing to share my time with others.	.58	.34
	W41: I have not experienced many warm and trusting relationships with others.	.43	.19
	W42: I know that I can trust my friends, and they know they can trust me.	.36	.13
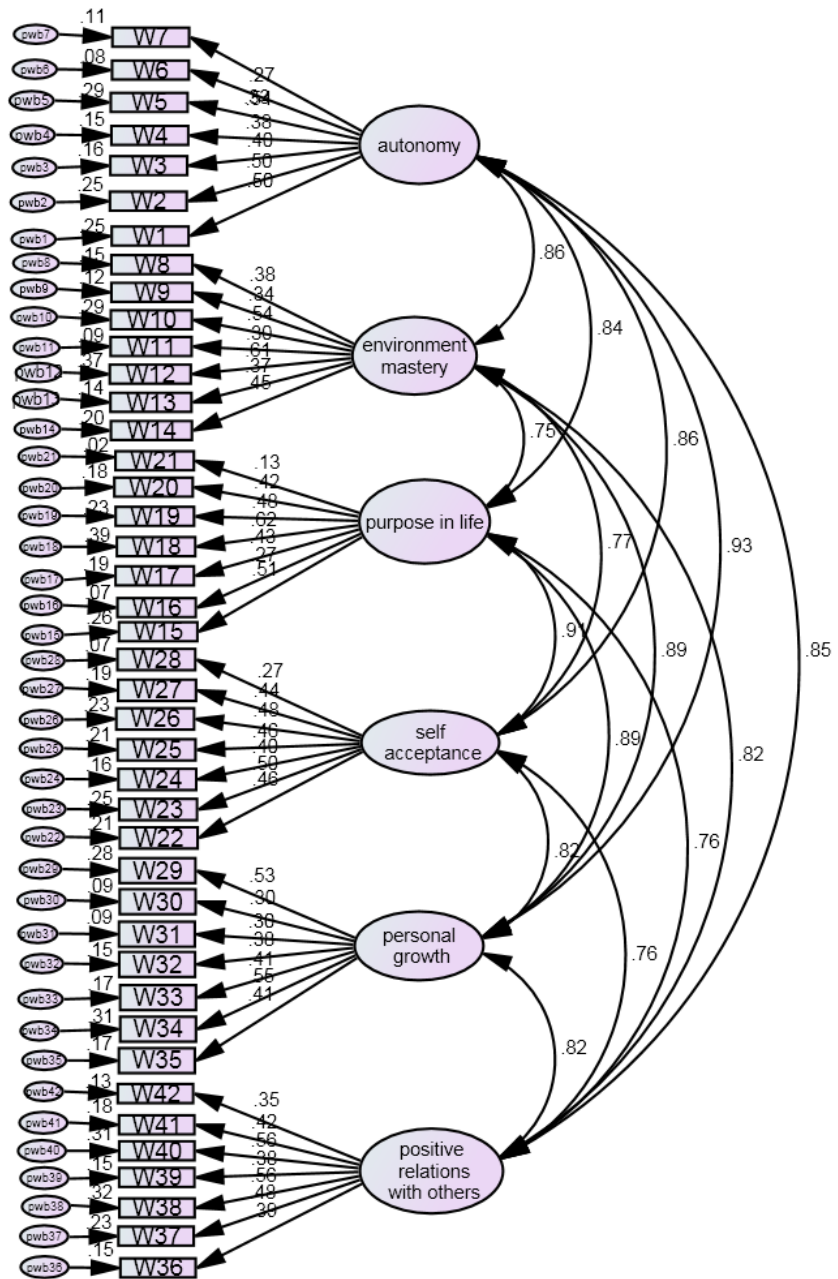
Figure 12 Measurement model of the Psychological Well-Being subscale 42 items (first-order CFA)

2. Second-order CFA model of psychological well-being

The second-order CFA model of psychological well-being was performed to
check the construct validity of the higher latent variable (psychological well-being).
The second-order CFA of the measurement model showed that this scale had

reliability to measure latent variables (psychological well-being). It revealed that the six factor model had an acceptable fit: GFI = .90; TLI = .97; CFI = .97; $\chi 2$ = 557.12; DF = 52; p = .132, χ^2 /df = 1.07; and RMSEA = .02; 90 % CI [0.00, 0.03] (Figure 13, Table 20, 21).

The last second-order CFA model of the psychological well-being subscale comprised of 6 factors with 34 indicators; autonomy (5 indicators), environment mastery (6 indicators), purpose in life (5 indicators), self acceptance (6 indicators), personal growth (5 indicators), and positive relations with others (7 indicators).

Table 20

Factor Loadings and R^2 of the Subscales of the Psychological Well-Being 34 Items (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Psychological well- being	Autonomy	.96**	.93
	Environment mastery	.89**	.79
	Purpose in life	.94**	.89
	Self acceptance	.88**	.78
	Personal growth	.97**	.95
	Positive relations with others	.87**	.75

**p < .001

Table 21

Standardized Factor Loadings and R^2 of 34 Items from the Psychological Well-Being Subscale (Second-Order CFA)

Factor/subscale	Indicator	Factor loading	R^2
Autonomy	W1: I am not afraid to voice my opinions.	.48	.23
	W2: My decisions are not usually influenced by what everyone else is doing.	.49	.24
	W3: I tend to be influenced by people with strong opinions.	.42	.17
	W4: I have confidence in my opinions.	.38	.14
	W5: It's difficult for me to voice my own opinions on controversial matters.	.53	.29
Environment mastery	W8: In general, I feel I am in charge of the situation in which I live.	.38	.15
	W9: The demands of everyday life often get me down.	.36	.13
	W10: I do not fit very well with the people and the community around me.	.55	.30
	W12: I often feel overwhelmed by my responsibilities.	.61	.37
	W13: I have difficult arranging my life in a away that is satisfying to me.	.37	.14
	W14: I have been able to build a living environment and a life style for myself that is much to my liking.	.44	.19
Purpose in life	W15: I live life one day at a time and don't really think about the future.	.49	.24
	W17: I don't have a good sense of what it is I'm trying to accomplish in life.	.40	.16

Table 21 (continued)

Factor/subscale	Indicator	Factor loading	R^2
	W18: My daily activities often seem trivial and unimportant to me.	.58	.34
	W19: I enjoys making plans for the future and working to make them a reality.	.49	.25
	W20: Some people wander aimlessly through life, but I am not one of them.	.42	.18
Self acceptance	W22: When I look at the story of my life, I am pleased with how things have turned out.	.48	.23
	W23: In general, I feel confident and positive about myself.	.51	.26
	W24: I feel like many of the people I know have gotten more out of life than I have.	.43	.18
	W25: I like most parts of my personality.	.45	.21
	W26: In many ways I feel disappointed about my achievements in life.	.48	.23
	W27: My attitude about myself is probably not as positive as most people feel about themselves.	.46	.21
Personal growth	W29: I am not interested in activities that will expand my horizons.	.53	.28
	W32: I have the sense that I have developed a lot as a person over time.	.39	.15
	W33: For me, life has been a continuous process of learning, changing, and growing.	.41	.17
	W34: I gave up trying to make big improvements or changes in my life a long time ago.	.55	.29
	W35: I do not enjoy being in new situations that require me to change my old familiar ways of doing things.	.40	.16

Table 21 (continued)

| Factor/subscale	Indicator	Factor loading	R^2
Positive relations with others	W36: Most people see me as loving and affectionate.	.41	.17
	W37: Maintaining close relationships has been difficult and frustrating for me.	.47	.22
	W38: I often feel lonely because I have few close friends with whom to share my concerns.	.56	.31
	W39: I enjoy personal and mutual conversations with family members and friends.	.38	.15
	W40: People would describe me as a giving person, willing to share my time with others.	.58	.34
	W41: I have not experienced many warm and trusting relationships with others.	.44	.19
	W42: I know that I can trust my friends, and they know they can trust me.	.35	.12
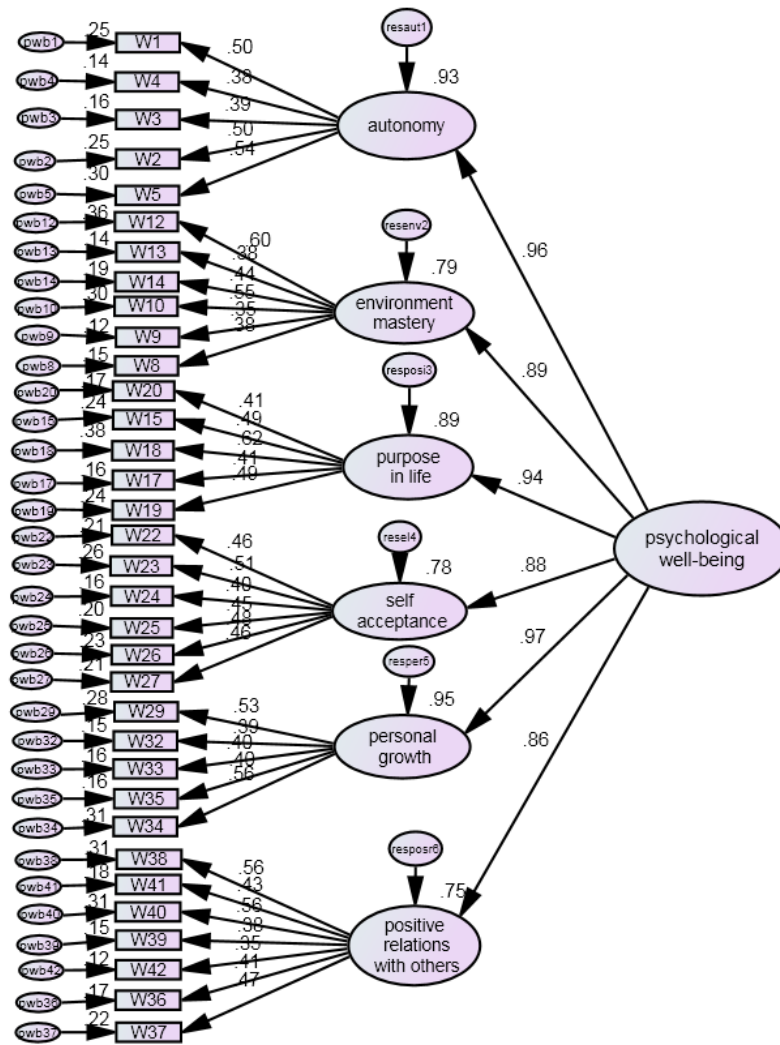
Figure 13 Measurement model of the Psychological Well-Being subscale 34 items (second-order CFA)

Note. resaut1 = residual covariance of autonomy
resenv2 = residual covariance of environment mastery
resposi3 = residual covariance of purpose in life
ressel4 = residual covaraince of self acceptance
resper5 = residual covaraince of personal growth
resposr6 = residual covariance of positive relationships with others.

Model Structural testing and Modification

The initial structural model of predictors for psychological well-being of teachers residing in an area of unrest in southern Thailand (PTRU model, Figure 1, p.15) was constructed to test hypothesized relationships (hypothesis 2-8). The hypothesized model had four exogenous variables (social support, sense of control, sense of meaning, coping), and one endogenous variable (psychological well-being).

The first factor loading of each latent variable was constrained to 1.00. Model estimates and model fit were examined to identify any improper solutions or identification problems (Loehlin, 2004), and the hypothesized relationships. The criteria of the model fit were the same as the measurement model. There are three steps outlined as follows.

Step one: Test of the initial structural model

The initial structural model (Model A, Figure 1, p.15) was used to test the hypothesized relationships.

1. Test the direct path of coping (confrontive coping style, self-reliant coping style, optimistic coping style, and evasive coping style) on psychological well-being.

2. Test the direct path of sense of meaning on psychological well-being.

3. Test the direct path of sense of control on psychological well-being as well as the indirect path of sense of control on psychological well-being through confrontive coping style.

4. Test the direct path of social support on psychological well-being as well as the positive indirect effect on psychological well-being through confrontive coping style.

The initial results of the SEM analysis showed that sense of meaning (β=.39, p<.01), social support (β=.30, p<.01), and optimistic coping style (β=.50, p<.01), self-reliant coping style (β=-.54, p<.01), and sense of control (β=.17, p<.05) significantly contributed to psychological well-being. In addition, sense of control slightly contributed to confrontive coping style (β=.19, p< .01).

However, the results revealed nonsignificant effects of confrontive coping style (β=-.06, p>.05), and evasive coping style (β=.22, p>.05) on psychological well-being. Also there were nonsignificant effects of social support on confrontive coping style (β=-.07, p>.05).

When the measurement model and structural model of the hypothesized model were analyzed simultaneously in a single analysis, the results revealed that the initial hypothesized model (model A) adequately fit the empirical data: GFI = .94; TLI = .97; CFI = .97; χ^2 = 147.69; DF = 106; p = .005; χ^2/df = 1.39; AIC = 241.69; NFI = .914; and RMSEA = .041; 90 % CI [0.02, 0.06] (Figure 14). The initial model accounted for 65% of the variance explained in psychological well-being.
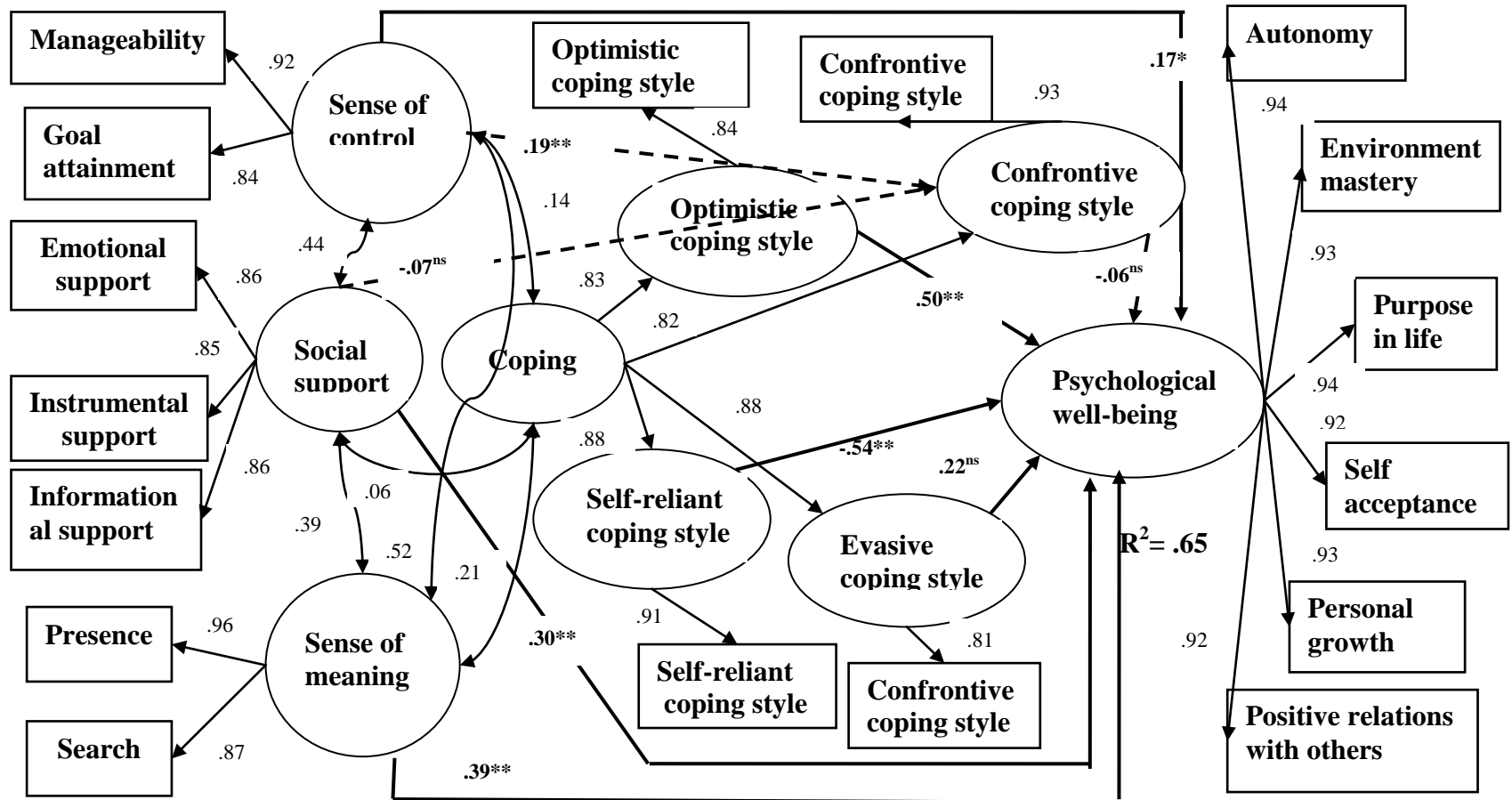
Figure 14 Parameter estimates of initial structural model of predictors for psychological well-being of teachers residing in an area of unrest in southern Thailand.

Note.   Model fit indices: GFI = .94; TLI = .97; CFI = .97; $\chi2$ = 147.69; DF = 106; p = .005; $\chi2/df$ = 1.39; AIC = 241.69; NFI = .914; and RMSEA = .041; 90 % CI [0.02, 0.06].

——— refers direct effect   ……   refers indirect effect

$*p < .05$ $** p < .01$ [ns] non significance

Step two: Model modification

In the second step, an initial structural model was evaluated and modified based on the modification indices, data from the first estimation and theoretical reasoning to achieve the best model. Although the initial model did fit the data, it still needed to be modified to better fit the data. Some paths were not significant allowing re-specify of the model. Theoretical evidence (substantive knowledge, literature support) and statistical point of view were used in this step (Hair et al., 1998).

The model was respecified to be the final model by dropping non-significant paths, changing the structure of the model, and adding paths. Justifications for the respecification are presented as follows:

First model modification was the step of model trimming. For model trimming based on the statistical evidence, the results from the initial hypothesized model (Model A) suggested that there were nonsignificant effects of confrontive coping style on psychological well-being ($\beta = -.06$; $p > .05$), evasive coping style on psychological well-being ($\beta = .22$; $p > .05$), and social support on confrontive coping style ($\beta = -.07$; $p > .05$).

Thus, two nonsignificant paths were deleted from the model, except path of confrontive coping style on psychological well-being. Because this path was a nonsignificant path that was linked to other significant paths and evidence supported. Also evasive coping style (latent variable) that did not correlate to psychological well-being needed to drop from the Model A. Byrne (2011) mentioned that paths were deleted

if variables are not significantly related or nonsignificant parameters are considered unimportant to the model and therefore, are dropped from the model. The estimation showed an adequate fit with data (Model B). The indices: GFI =.94; TLI =.97; CFI = .98; χ2 =120.92; DF= 93; p = .027; χ^2/df =1.30; AIC= 206.91; NFI =.92 and RMSEA = .035; 90 % CI [0.01, 0.05]. This model accounted for 65% of the variance of psychological well-being (R^2 = .65) (Table 23).

Step three: Final model (the accepted structural model)

The best model should be as parsimonious as possible. With this regards, Model B was further examine and the following tasks were performed: (1) adding the path (the effect) of social support on optimistic coping style (MI = 5.83; EPC = 0.06), (2) adding the path (the effect) of social support on sense of meaning (MI = 22.20; EPC = 0.36), (3) adding the path (the effect) of optimistic coping style on sense of meaning (MI = 9.27; EPC = 0.61), and (4) adding the path (the effect) of sense of control on sense of meaning (MI = 14.32; EPC = 0.31). There were considered based on both statistical and theoretical suggest.

According to Daugall, Hyman, Hayward, McFeeley & Baum (2001) perceived social support is positively related to optimism. The study of Updepraff, Silver and Holman (2008) found that social support predicted finding meaning in life. In addition, Skaggs and Barron (2006) mention that positive interpretation (such as a positive outlook on life) leads an individual to the perception of benefit from the stressful event or to find

meaning in life. In addition, a sense of personal control is way to search meaning and to find meaning (sense of meaning).

Therefore, sense of meaning and optimistic coping style were re-specified in the final structural model to be outcome variables of social support and endogenous variables in the model.

Four paths were added to the structural model: the effect of social support on optimistic coping style, the effect of social support on sense of meaning, the effect of optimistic coping style on sense of meaning, and the effect of sense of control on sense of meaning, resulting in Model C. In other words, the Model C comprised of seven variables consisting of six independent variables (3 scales and 3 subscales of coping) and one dependent variable (psychological well-being). There were ten significant paths and one nonsignificant path. The ten significant path coefficients included: the effect of social support on psychological well-being, the effect of sense of meaning on psychological well-being, the effect of optimistic coping style on psychological well-being, the effect of self-reliant coping style on psychological well-being, the effect of sense of control on psychological well-being, the effect of sense of control on sense of meaning. the effect of social support on optimistic coping style, the effect of sense of control on confrontive coping style, the effect of social support on sense of meaning, and the effect of optimistic coping style on sense of meaning. Only one nonsignificant path included the effect of confrontive coping style on psychological well-being.

The estimation showed a good fit with the data. The indices: GFI = .95; TLI = .98; CFI = .98; $\chi 2$ = 111.43; DF= 92; p = .082; χ^2/df = 1.21; AIC = 199.43; NFI = .93 and RMSEA = .030; 90 % CI [0.02, 0.05]. This model accounted for 65% of the variance of psychological well-being (Table 23).

Consideration for selecting best model

The researcher needed to modify the model until the model did not have problems, no modification indices suggested, and that the model did fit to the empirical data. After the steps of the modified model and final modification model, the best model was selected for the final model. The researcher considered every fit index of each model (Table 23) because each indice measures only a specific point. The goodness of fit indices needs to employ various types (Pedhazur & Schmeldn, 1991).

In this study, all structural models (Model A, Model B, and Model C) had GFI, CFI, TLI, and NFI that reached the standard (greater than 0.90). The highest value of GFI, CFI, TLI, and NFI was Model C. All structural models also had RMSEA less than 0.05. The low value of RMSEA was the Model C. It indicated the fit model. The AIC of Model C was smaller than the other models so it indicated that Model C was most parsimonious (best). In addition, all structural models reached the standard of Chi-square per df test (X^2/df) (less than 3 and p value >.005). The lowest value of Chi-square per df was Model C. The p value reached the standard, the value of Chi-square per df could be acceptable.

In short, these results of fit indices could assist in choosing the best model. The best model that was the final structural model was Model C because of these reasons: (1) It showed the phenomenon of psychological well-being, and the correlation between number of variable and prediction of outcomes (psychological well-being). (2) It expanded new knowledge. (3) It was more parsimonious model than others. (4) It had good values of fit indices. The results of the final model estimation indicated the best fit with the data. All fit indices measured were in acceptable ranges: GFI = .95; TLI = .98; CFI = .98; $\chi2$ = 111.43; DF= 92; p = .082; χ^2/df =1.21; AIC = 199.43; NFI = .93 and RMSEA = .030; 90 % CI [0.02, 0.05]. Overall, the model accounted for 65% of the variance of psychological well-being showing ten significant paths and one nonsignificant path (Table 22 and Figure 15). The relationships among the variables are presented in the subsequent hypothesis testing section.

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Table 22

Unstandardized and Standardized Regression Coefficients, Standard Error, Explained

Variance (Squared Multiple Correlations: R^2) of the Final Model (Model C)

Criterion variables	Predictors	Regression coefficients		R^2
		Unstandardized (standard error)	Standardized (β)	
Psychological well-being	Social support	0.42**(0.13)	0.25**	0.65
	Sense of meaning	0.50**(0.12)	0.36**	
	Sense of control	0.27*(0.14)	0.16*	
	Optimistic coping style	2.21**(0.68)	0.53**	
	Self-reliant coping style	-1.61**(0.57)	-0.43**	
	Confrontive coping style	0.03^{ns}(0.41)	$.001^{ns}$	
Sense of meaning	Social support	0.22*(0.09)	0.18*	
Sense of meaning	Optimistic coping style	0.54*(0.22)	0.18*	
Optimistic coping style	Social support	0.07*(0.03)	0.18*	
Confrontive coping style	Sense of control	0.07*(0.03)	0.15*	
Sense of meaning	Sense of control	0.49**(0.11)	0.40**	

$*p < .05$ $** p < .01$ ^{ns} non significance

Summary of Hypothesis Testing

Hypothesis testing

The hypotheses (1-8, p.16) were tested and could be answered after using SEM. The parameter showed that the final hypothesized model would be used to answer the hypotheses. The model needed to fit with the sample data well after the structural model was modified. So this parameter estimation of the final model would be employed to answer the hypotheses as followed:

1. The initial hypothesized model had an acceptable fit to the data.

2. Confrontive coping style did not have a significant positive direct effect on psychological well-being

3. Self-reliant coping style had a negative direct effect on the psychological well-being.

4. Optimistic coping style had a positive direct effect on psychological well-being.

5. Evasive coping style did not have a significant negative direct effect on psychological well-being.

6. Sense of meaning had a direct effect on the psychological well-being.

7. Sense of control had a significantly positive direct effect on psychological well-being. Sense of control had a positive indirect effect on psychological well-being through confrontive coping style.

8. Social support had a positive direct effect on psychological well-being.

However, social support did not have a positive indirect effect on confrontive coping style, which reflected that social support did not have an indirect effect on psychological well-being through a mediating effect of confrontive coping style. So, hypothesis 1, 4, 6, and 7 were supported. Hypothesis 2, 3, and 5, were not supported. Hypothesis 8 was partially supported.

In conclusion, the final model had a fit with the data that was acceptable in all fit indices (comparative fit indices, predictive fit indices, and parsimonious fit indices). It accounted for 65 % of the variance of psychological well-being that was not different from the initial structural model. Furthermore, this model was a more parsimonious model than the other models.

The total direct effect and indirect effect of the final model (final structural model) is presented in Table 24. The following results are based on the parameter estimates on the final model or final structural model (Table 22).

Table 23

Comparative of the Fit Indices Used in This Study. Chi-Square ($\chi 2$), Norm Chi-Square (χ^2 /df), and Explained Variance (R^2) on Psychological Well-Being Between the Initial and Modified Model

Fit Indices	Possible Range	Indicator of Acceptable Fit	Model A	Model B	Model C
GFI	0-1	> 0.9	0.94	0.94	0.95
TLI	0-1	> 0.9	0.97	0.97	0.98
CFI	0-1	> 0.9	0.97	0.98	0.98
NFI	0-1	> 0.9	0.91	0.92	0.93
RMSEA	0-1	< 0.05	0.041	0.035	0.030
$\chi 2$		*p*> 0.05	147.69, *p* = .005	120.92, *p* =.027	111.43, *p* = .082
χ^2 /df	≥ 1	1-3	1.39	1.30	1.21
AIC			241.69	206.91	199.43
R^2	0-1		0.65	0.65	0.65

Table 24

Standardized Direct Effect, Indirect Effect and Total Effect of Causal Variables an

Affected Variables of the Final model (Model C)

| Paths		Effects (Standardized coefficient β)		
		Direct	Indirect	Total
Social support	Psychological well-being	0.249**	0.173**	0.422**
Sense of meaning	Psychological well-being	0.363**	-	0.363**
Sense of control	Psychological well-being	0.160*	0.147*	0.307*
Optimistic coping style	Psychological well-being	0.527**	0.064**	0.592**
Confrontive coping style	Psychological well-being	0.007^{ns}	-	0.007^{ns}
Self- reliant coping style	Psychological well-being	-0.425**	-	-0.426**
Social support	Sense of meaning	0.180*	0.032*	0.212*
Optimistic coping style	Sense of meaning	0.177*	-	0.177*
Social support	Optimistic coping style	0.183*	-	0.183*
Sense of control	Confrontive coping style	0.147*	-	0.147*
Sense of control	Sense of meaning	0.403**	-	0.403**

*$p < .05$ ** $p < .01$
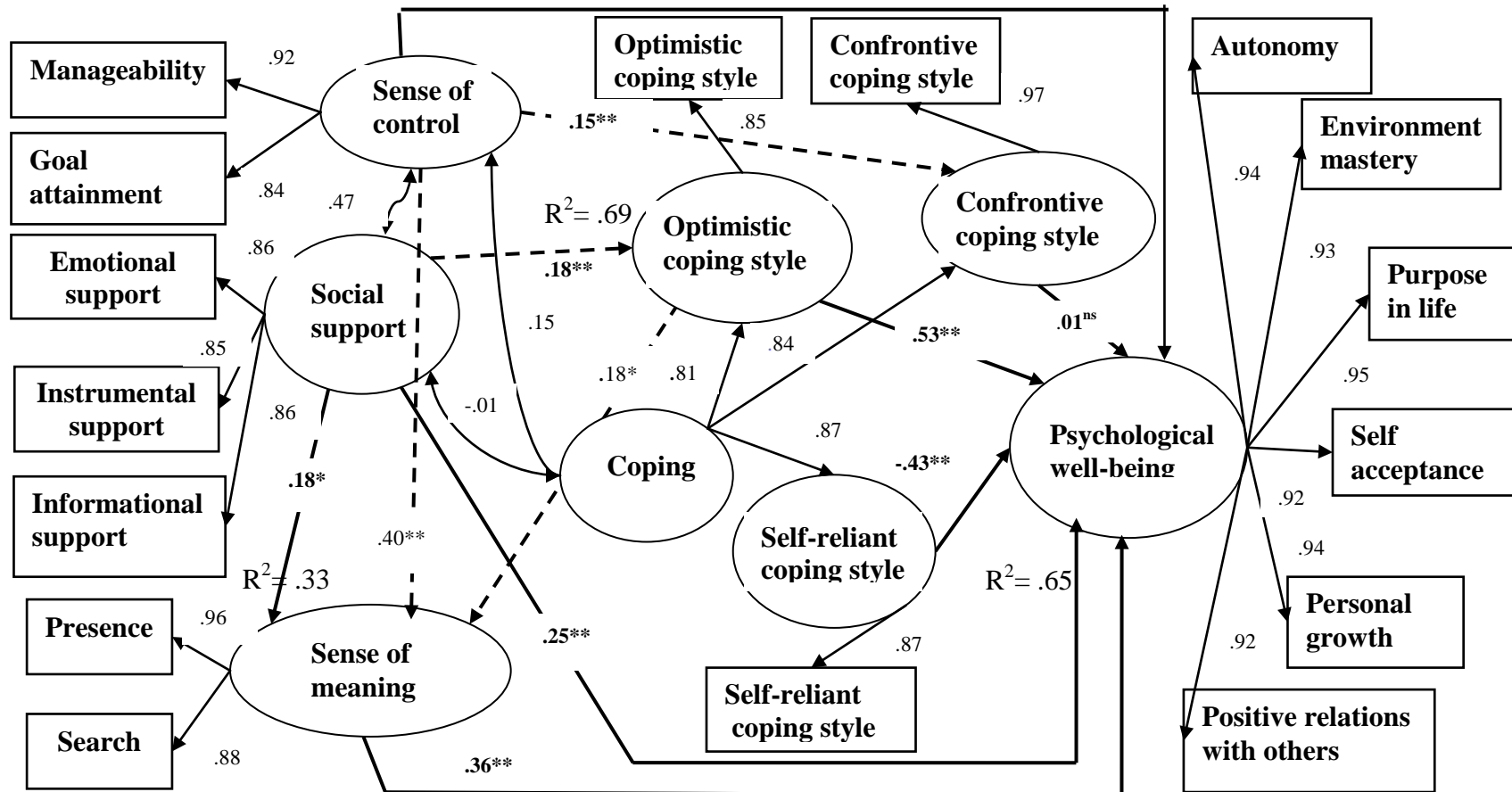
Figure 15 Parameter estimates of final structural model of predictors for psychological well-being of teachers residing in an area of unrest in southern Thailand.

Note.   Model fit indices: GFI = .95; TLI =.98; CFI = .98; $\chi 2$ = 111.43; DF=92; p = .082; χ^2/df =1.21; AIC = 199.43; NFI =.93 and RMSEA = .030; 90 % CI [0.02, 0.05].

—— refers direct effect   …… refers indirect effect

$*p < .05$ $** p < .01$ ^{ns} non significance

Discussion

Subjects' Characteristics

Teachers who worked at elementary schools in the 3 provinces and 4 districts of Songkhla province participated in this study. The data was received from 240 Thai teachers. Most of the teachers were women who face unrest situations by themselves. The data was collected by the researcher and research assistants. The questionnaire used to collect the data took a long time to fill in. This amount of time may have had an effect on the answers. Some of the subjects took the questionnaire home and then sent completed answers back in the following week. About 1.25% did not want to sign their name on the consent form because they did not feel safe in doing this. However, subjects who accepted filling in the questionnaires to provide answers had an understanding as having given consent. Therefore, subjects did not need to sign their name on the consent form.

The gender was female (73.3% female) more than male. Religious affiliation was Islamic (52.1%). The possible reason for this is that most Buddhist teachers have been relocated from the area of unrest situations since 2007. Most of the subjects had a direct experience (40.4%) in confronting a situation several times over (at least more than 6 times). 19.6% had experienced some serious injuries in these situations. This reflected the severity of the situation and the major impacts experienced because these subjects have been living in this area for a long time. They still had to carry out daily living activities such as working, and travelling. Thus, the mentality or/and mental

health of these subjects such as psychological well-being was required for them to remain in this type of situation as well as for their quality of life.

Level of psychological well-being of teachers residing in an area of unrest in southern Thailand

The results revealed that 50.8 % of the subjects had moderate psychological well-being, 39.2 % had high psychological well-being, and 10 % had low psychological well-being (Table 5). So, mostly the level of psychological well-being was moderate. This is congruent with the study of Prohmpetch & Naraongart (2009) who surveyed the mental health status of Thai teachers in the three southern border provinces, and found that 26 % of teachers who worked in these areas had a lower level of good mental health (mental health status). Thus, this implies that most of the teachers still experienced good mental health.

The incidence of psychological well-being of teachers residing in an area of unrest may reflect mental health and quality of life. This psychological well-being also may reflect the social functioning of persons because psychological well-being is part of quality of life. Thus, some teachers who were residing in an area of unrest may still have good mental health.

Most subjects may not have difficulties with physical health or/and mental health. In the demographic data, 19.58 % had severe injuries from unrest events. Therefore, the current level of stressful events may have less effect on psychological well-being. Similarly the study by Heidrich (1993) found that physical health had an influence on psychological well-being. Elderly persons who did not have good

physical health had less psychological well-being. In addition, the development of a person in the past may influence the mental health of the person in the present. Teachers may have had good development in their past life because all dimensions of this scale can reflect the development of a person.

Measurement model

The study investigated the measurement property of the questionnaires in relation to the psychological well-being of teachers residing in an area of unrest in southern Thailand. The results revealed that the initial structural model of each subscale had poor to good fit with the sample data. All scales in this study needed to be modified to data fit with the model because the questionnaires of five variables (social support-40 items, coping-60 items, and psychological well-being-40 items, sense of control-20 items, sense of meaning,-20 items) included a lot of items. Some items of the instruments were similar in meaning. As a result, when all measurement models were put in the structural model, it might have affected the goodness of fit of the model.

The indicators in each instrument needed to have strong factor loading (more than .50). The indicators that did not have modifications had large factor loadings. These factors produce reasonable results because large factor loadings (more than .50) do not measure the other indicators in the instrument (Kline, 1998). However, Tabanick and Fidell (2010) mention that values of factor loadings > .33 are considered acceptable values. For this study, low factor loadings (less than .33) were dropped from the measurement model in order to resolve the fit data that can have an effect on the full model.

In the Psychological Well-Being subscale, 8 items which had low factor loadings (less than .33) were dropped out of the initial model leaving a remaining 34 items. This did not have an effect on the construct validity because the total items which remained in the model still had at least 5 items per dimension. If this instrument had 3 items per dimension that were similar to the short version of the psychological well-being instrument, it might not have construct validity. For the reason is that the short version of the psychological well-being instrument had problem in construct validity.

The Interpersonal Support Evaluation List (ISEL) was used to measure the latent variable -social support which consisted of 26 items. 14 items (factor loadings less than .33) were dropped from the measurement model for the best fit. Other possible causes were the redundancy of items in the scale. The remaining items were similar to the ISEL–short version (Cohen & Hoberman, 1983).

The Meaning in life questionnaire was used to measure the latent variable-sense of meaning and consisted of 9 items. One item had lower factor loadings (less than .33). Therefore items were dropped from the measurement model. This instrument had good construct validity

The Perceived Control Questionnaire was employed to evaluate the latent variable- sense of control which consisted of 18 items. The original instrument comprises of 20 items. In this study, 2 items were dropped because of lower factor loadings. The construct validity was appropriate because of 7 items per dimension.

The Jalowiec Coping Scale (39 items and 4 dimensions) was used to measure the latent variable–coping, and consisted of 29 items. In this study, 10 items were

dropped from the model because of lower factor loadings. In general, the measurement model needed to have at least 2 items per dimension (Kline, 1998).

Among the results of the CFA of the measurement model, this revealed the poor fit of the model to the sample data in the first time (original scale). The possible reasons were: (1) all instruments were developed in western countries which have a difference in life style. Although, the translation from the original language (English) to Thai language used the back translation technique, it (some items) did not take into account Thai culture. In other words, the cross culture may affect the use of western instruments. These instruments need to be tested for cross culture in order to select reliable and valid items for the measurement of each scale such as coping.

(2) each measurement model had a higher standard residual covariance that reflected a problem with some items. In order to have a good model fit, the last results of the structural equation model need to resolved by deleting low factor loading items (less than .33) and the error covariance between the items that had residual covariance more than 2.0 needed to be fixed.

A model of predictor for psychological well-being of teacher's residing in an area of unrest in southern Thailand

This present study provided new evidence using structural equation modeling to explore the relationships among social support, sense of meaning, coping and psychological well-being. A set of five predictors on psychological well-being were tested with a large sample size (n = 240) of teachers residing in an area of unrest in southern Thailand.

The measurement model and theoretical model of psychological well-being of teacher's residing in an area of unrest in southern Thailand were tested revealing that the initial hypothesized model was an adequate fit with the empirical data. Fit indices indicated the overall model fit. Significant Chi-square values were seen in the model of psychological well-being of teacher's residing in an area of unrest in southern Thailand because of the large sample size. Other fit indices revealed that all of these indices; GFI, TLI, CFI, NFI, and RMSEA were in acceptable ranges. A set of variables in the theoretical model accounted for 65% (R^2= .65) of variance explained in psychological well-being. However, the model needed to be modified in order to be a best fit with the data and more parsimonious model.

The final structural model was modified by dropping nonsignificant path coefficients, changing some structures, and adding path coefficients.

Firstly, one latent variable (evasive coping style) and two nonsignificant paths were dropped from the initial hypothesis model: the path of social support on confrontive coping style, and the path of evasive coping style on psychological well-being. But one insignificant path (the path of confrontive coping style on psychological well-being) remained in structural model.

Secondly, the structure of the model was respecified; sense of meaning and optimistic coping style were respecified to be endogenous variables. Evidence had suggested that sense of meaning was affected by social support and optimistic coping style (Updepraff, Silver & Holman, 2008; Updegraff & Taylor, 2000). Optimistic coping style was affected by social support (Daugall, Hyman, Hayward, McFeeley & Baum (2001). Sense of meaning was affected by sense of control (Skaggs and Barron (2006)

Thirdly, four path coefficients were added: the effect of social support on optimistic coping style, the effect of social support on sense of meaning, the effect of optimistic coping style on sense of meaning, and sense of control on sense of meaning because there is some incidence support. Thus, optimistic coping style, and sense of meaning were the mediated variables. Shrout and Bolger (2002) mention that mediated paths are considered indirectly associated in SEM. When the paths representing the indirect associations are significant, then mediation exists. Also this path did not diminish the model's parsimony. In fact, non-anticipated parameters in the model lead to an exploratory approach to model testing rather than to a confirmatory approach and diminish the model's parsimony (Byrne, 1994).

All fit indices showed acceptable values. R^2 values did not change ($R^2 = 0.65$) when comparing R^2 between the initial hypothesized model and the final structural model (Model C).

This model showed that 11 parameters in this model yielded in psychological well-being a significant p-value and nonsignificant p-value. Overall the model accounted for 65 % of variance explained in psychological well-being showing ten significant paths and one nonsignificant path (Table 22 and Figure 15). The detail of the final model (final structural model) is shown as follows:

1. Direct effect of coping (confrontive coping style, optimistic coping style, self-reliant coping style) on psychological well-being.

The empirical PTRU model demonstrated that confrontive coping style did not have a direct effect on psychological well-being significantly ($\beta = .01$, $p > .05$). However, optimistic coping style had a direct effect on psychological well-being

(β = .53, p< .01). Also self-reliant coping style had a direct effect on psychological well-being (β = -.43, p < .01) but had a different direction from the hypothesis.

1.1 Effects of confrontive coping style on psychological well-being

The direct effect of confrontive coping style on psychological well-being was not found. Individuals who employed more confrontive coping style did not have better psychological well-being.

This study is not congruent with other studies that found that active coping (problem-focused coping) was associated with less general distress/lower PTSD (North, 2007; Resnick. 1988; Silver et al., 2002; Strous, Misbacli, Ranen, Benatov, Green & Zivotofsky, 2007) better psychological and physical outcome (Holahan & Moos, 1985).

The possible reason is the nature of events. Unrest situations cannot be predicted and have a level of uncertainity to them. Subjects might evaluate the unrest situation as a threat (danger). This event is severe and usually happens in everyday or nowadays.

Altrough subjects used more confrontive coping style than other coping styles (M=20.75, SD=5.05) (Table 7), confrontive coping style may be not effective for unrest situation that subjects must face in everyday. Furthermore, subjects can select to use diverse coping style. Thus, confrontive coping style did not have effect on psychological well-being significantly.

1.2 Effects of optimistic coping style on psychological well-being

Optimistic coping style had a direct effect on psychological well-being (β = .53, p < .01). Individuals use a higher level of optimistic coping style. This style manipulated individuals who face a crisis situation to experience better psychological well-being.

The result of this study corresponds with the study conducted by Zeidner & Hammer (1992) which found that dispositional optimism (future orientation thinking) correlated to less anxiety, less depression and less physical symptoms as well as better mental health (positive affect). It also predicted positive effects. Similarly, Daugall, Hyman, Hayward, McFeeley and Baum (2001) found that dispositional optimism correlated to less distress at 4-8 weeks, 6, 9 and 12 months after the disaster and dispositional optimistic workers related to greater use of problem-focused coping, coping by seeking social support and less avoidance coping. Similarly, Butler's et. al. (2009) found that greater psychological well-being was associated with fewer negative worldview changes (less pessimism).

In this study, optimistic coping style is one of the emotion focused-coping mechanisms to change an individual's emotional reaction to an event. This coping style emphasizes the positive aspects of events and can be effective.

One explanation is the function of an optimistic coping style in an uncontrollable situation (uncertain situation) changes the state of an uncontrollable event to a controllable event. The optimistic coping style may be one type of a coping style that can reduce both arousal and simultaneous processing of information from the environment. Especially, information about events that makes one feel negative feelings such as fear, and anxiety (Miller, as cited in Lazarus and Folkman, 1984).

Another explanation is that teachers may be a dispositional optimistic person who has a tendency to be optimistic or/and have a habitual inclination.

The cause of the optimistic person to have a hopeful view of future events may well stem from a positive interpretation of the present (Affect & Tennen, 1996). The optimist believes that adversity can be treated successfully. In other words, they feel a sense of control over the situation so they select to use active coping strategies in response to trauma (the attack), and in doing so, they enhance psychological well-being.

From the abovementioned, using an optimistic coping style may reduce the likelihood of experiencing mental health problems or/ and having better psychological well-being.

1.3 Effects of self-reliant coping style on psychological well-being

Self-reliant coping style had a direct effect on psychological well-being ($\beta = -.43$, $p < .01$). Teachers who used a more self-reliant coping style are more likely to have poorer psychological well-being. In other words, teachers who used less self-reliant coping style had better psychological well-being.

The result is not congruent with several studies that found that problem-focused coping or active coping was associated positively with greater psychological well-being (Butler et al., 2002; Butler et al., 2009), less general distress/ lower PTSD (Silver et al., 2002). This is incongruent with the study of Steger, Frazier and Zacchaini (2008) who found that self-reliant coping style (such as information seeking) was associated with well-being.

The possible reason is that the events in previous studies are general events

(such as a natural disaster, war, terrorist attack over a short period of time). In this study, the unrest situation is not typical. The unrest situation usually occurs in the three provinces on a daily basis. Thus, it is ongoing event and it does not have a trend to stop. It is dangerous for life and it threatens human life everyday. This event cannot be controlled. The subjects who reside in the area of unrest have the possibility of confronting an act of terrorism once a day. Because of the ongoing unsafe situation, the people living in these areas need help from the military or others. Therefore, the individuals who employed a less self-reliant coping style had better psychological well-being.

2. Effects of sense of meaning on psychological well-being.

The empirical PTRU model demonstrated that sense of meaning had a direct effect on the psychological well-being of Thai teachers residing in an area of unrest. The path model that summarizes the results showed that a higher sense of meaning had a direct effect on psychological well-being (β =.36, $p < .01$).

Individuals who employed more sense of meaning had better psychological well-being. The finding corresponded with the study of Updepraff, Silver and Holman (2008), who found that finding meaning correlated with positive life changes or post traumatic growth and less long term fear of subsequent attacks 1 year and 2 years post terrorist attack.

It also is similar to some studies which emphasized on the negative outcome (such as psychological distress, PTSD). For example, Steger, Frazier and Zacchanini (2008), who that found that finding meaning in life correlated with less distress or less PTSD symptoms. This is congruent with the study of McIntosh, Silver & Wortman,

(1993) who found that individuals experiencing various types of serious traumas and who had found meaning in the event were less distressed.

In this study, sense of meaning focused on situation or meaning of events. Sense of meaning involves the cognitive appraisal process. A person who has sense of meaning will employ challenge appraisal. In other words, individuals look at stressful events (unrest situation) to be challenging. These people will not have an emotional response to the events. Meanwhile, stressful events generate meaning in life for this person (Michael, 2006). Thus, meaning in life occurs because a person appraises an event as a challenge. Lazarus and Folkman (1984) mention that a challenged person is more likely to have better mental health because this person has a positive feeling about the demanding encounter that is reflected in the pleasurable emotions he or she experiences.

Moreover, an individual who finds meaning will not look at the big picture of his or her life. Individuals who see a big picture of his or her life (have higher global focus meaning) find less meaning in their life. On the other hand, individuals who have a perspective in their life that has an emphasis on some points such as their experience (the events) and they interpret the events with their broader comprehension of the world and life will find meaning (Park & Folkman, 1997).

Finding meaning or meaning made provides individuals with posttraumatic growth (Steger, Frazier & Zacchanini, 2008) and it also increases their quality of life or psychological–well-being.

The methods provided to find meaning include identity reorganization, resolution, and a reappraisal of a situation (Helgeson, Reynolds & Tomich, 2006). It

enhances an individual to view and understand why the events have happened and what he or she should do with events (Janoff-Bulman & Frantz, 1997).

Furthermore, individuals who use their own attitude to life as it presents and choose to remain positive, brave or have an optimistic perspective although circumstances maybe difficult, therefore, as a consequence find meaning (Frank, as cited in Starck, 2003).

Some evidence has shown that teachers think and feel that working in the area of unrest is a sacrifice for all people. So they have a responsibility and are concerned about the students who are poor yet still want to take the opportunity to study, these teachers are significant for these children's education. Therefore, they need to reside in the area. Although both live amongst dangerous events, they still reside in the area which defines their meaning in life (Songkhla Rarajanagarindra Psychiatric Hospital, 2009). In other words, this teacher may have a positive attitude to his or her life which is important in the role to search for meaning. When an individual feels that he or she is important, and has value and self-esteem, consequently, good adaptation occurs.

Another reason is that a person may have, in his or her personality, hardiness. Hardiness includes three elements which are commitment, control, and challenge. Some studies revealed that a person who had this personality feature would report fewer symptoms after being exposed to a stressful situation (Funk, as cited in Kaplein & Weinman, 2004).

The commitment of a person refers to or expresses that what is important to the individual and what is the meaning of significance to them. The commitment of each person influences the appraisal through manner to shape or cue -sensitivity or/ and evaluate /look at the situation differently because everyone have various facets of

a situation (Lazarus & Folkman, 1984). So, commitment has an influence on primary

appraisal (Park & Folkman, 1997).

This commitment can drive a person toward a course of action that can reduce

the threat and help sustain coping efforts in the face of obstacles. Thus, a very strong

commitment creates invulnerability (Lazarus & Folkman, 1984). So, in this case the

individual appraises the challenge and then finds meaning.

3. Direct effect of sense of control on psychological well-being and direct effect of sense of control on confrontive coping style and sense of meaning.

The empirical PTRU model indicated that sense of control had a direct effect

on psychological well-being ($\beta = .16$, $p < .05$). Meanwhile, sense of control had a

significant direct effect on confrontive coping ($\beta = .15$, $p < .05$) and sense of control

had an effect on sense of meaning ($\beta = .40$, $p < .01$). .

3.1 Effects of sense of control on psychological well-being

Sense of control had a direct effect on psychological well-being ($\beta = .16$,

$p < .05$). Individuals that had more sense of control had better psychological well-

being.

In this study, sense of control is one of the secondary appraisals in the coping

process (controllability of the outcomes). Situation of appraisal control is to control

over environment conditions or situation.

This result is congruent with another study. For instance, Zeidner (1992) who

found that sense of control over the severity of a situation or perceived control was

associated with high positive affectivity (psychological well-being) and fewer

posttraumatic symptoms, less physical symptoms, and less stress, and less emotional-focused coping.

The possible cause that cause individuals to feel more sense of control situation is that some teachers maybe familiar with the situation (such as cause, method to protect against events-use a security guard during journeys to school) because it has happened for several years. They learn many ways to protect their body and mind from any events. Evidence shows that there is an organization for teachers in the three provinces of deep southern Thailand that helps the teachers in this area and acts as an advocacy.

Another reason, is that a person may have the personality trait of hardiness. Hardiness contains 3 elements which include commitment, the tendency to appraise demands as challenging rather than threatening, and having a sense of control over one's fate (Kobaza, as cited in Kaplein & Weinman, 2004). Lazarus and Folkman (1984) mention that situational appraisal control is based on the selected facets of encountering and also attention which is guided by personal factors such as belief and commitment. Thus, although the unrest situation has been happening for a long time, from the aforementioned these reasons may cause some teachers to feel as well as believe that they have more sense of control over the situation, which in turn leads to good adjustment to the events and psychological well-being.

3.2 Effects of sense of control on confrontive coping style

The finding showed that sense of control had a significant positive direct effect on confrontive coping ($\beta = .15$, $p < .05$). A person who had more sense of control used a more confrontive coping style.

The result is congruent with Silver and Wortman (1980), who mentioned that a focus on addressing problems can replace feelings of helplessness with an increased sense of control and personal mastery. This is congruent with the study of Compass, Cornner-Smith, Saltman, Thomsen and Wadsworth (2001) who found that a sense of control is related to problem-focused coping, especially seeking help. It also has an impact upon the appraisal of coping resources (i.e., social support).

Most of the subjects used a confrontive coping style. The confrontive coping style had the higher score ($M = 20.74$, $SD = 5.05$) (Table 4) because some subjects have resided in an area of unrest for a long time, and have confronted this situation for several years. Also the situation has happened over a long period of time (approximately 9 years).

From the demographic data, the subjects had a period of an affecting situation ranging from 3 months through to 15 years ($M = 5.78$, $SD = 2.77$) and the subjects' reason for working in the area is that they (66.2% subjects) have lived in this area for a long time (Table 3). So they may have developed and refined an effective coping mechanism, and are thus better prepared to deal with traumatic stressors (Zeidner, 2006).

Similarly, Guttman and Levy (as cited in Zeidner, 1992) mention that a person who faced serious events over a year would have considerable experience dealing with stressful events and he/she might have to adopt a problem-focused coping attitude toward environmental stressors and he/she tended to deal with stress encounters in active ways and under the conditions of the situation.

Confrontive coping style is effective coping or active coping. The effectiveness of a coping strategy in reducing distress depends on the degree to which

it matches the appraisal situation. Perceived control or sense of control is particularly important in determining the appropriate fit (Zakowski et al., 2001). So, sense of control involves employing coping (problem-focused coping, emotion-focused coping).

Situations that can control may be best dealt with by focusing on the problem itself (problem-focused coping), whereas the problem-focused efforts (problem-focused coping) may be ineffective or detrimental in the face of an uncontrollable situation because problem-focused coping attempts to deal with the cause of the problem in order to change a negative situation (Lazarus & Folkman, 1984).

In the unrest situation, which is a crisis event, effective coping strategies or active coping seem to be a suitable way of dealing with self (emotion) as it controls negative emotions well and also actively address the problems posed by the stressor.

From the aforementioned reason, a person who had more sense of control used a more confrontive coping style.

3.3 Effect of sense of control on sense of meaning

The PTRU model expands knowledge about the role of sense of control on sense of meaning. It indicated that sense of control had an indirect effect on psychological well-being through sense of meaning ($\beta = .40$, $p < .01$).

Sense of control had an effect on sense of meaning. The individuals who had a more sense of control had more sense of meaning.

Staggs and Barron (2006) mention that techniques change meaning of a situation and create positive figment of imagination such as optimism and perception of personal control. When person interprets events in positive way/ implications or

believes that the events make them strong or it is an opportunity to find advantage from self. It implies that finding meaning happen (Janoff-Bulman & Frantz, 1997).

Person will interpret events in positive way when he or she look situation as controllability. Thus person may think to have ability to cope effectively with the events or confidence to make a judgment in order to control the outcome of the event because subjects were teachers. This occupation involves autonomy for decision making. It also may help for having sense of control (Seeman, Seeman, & Budros, 1998 as cited in Ross, 1999). Also most subjects had a bachelor degree (83.35%). Ross (1999) mention that education develops the ability to solve problem increase control over events and outcome of life.

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4. Direct effects of social support on psychological well-being and indirect effects of social support on psychological well-being through optimistic coping style and sense of meaning.

The empirical PTRU model demonstrated that social support had a direct effect on psychological well-being (β = .25, $p < .01$). This study also expanded new knowledge that social support had a direct effect significantly on an optimistic coping style (β = .18, $p < .05$), optimistic coping style had a direct effect on sense of meaning (β = .18, $p < .05$), and social support had a direct effect significantly on sense of meaning (β = .18, $p < .05$). In other words, better psychological well-being was found in higher social supporting individuals who had a more optimistic coping style and those higher social supporting individuals who had more sense of meaning. Thus, optimistic coping style and sense of meaning were mediating variables among social support, and psychological well-being.

4.1 Effects of social support on psychological well-being

For the role of moderator variable, social support had a direct effect on psychological-well–being (β = .25, *p* < .01). Better psychological well-being was found in individuals who had more social support.

The results of this study are congruent with the study of Adams, Boscarino (2005) who found that social resources and self-esteem were associated with better mental health or psychological well-being. This is congruent with the study of Butler and colleagues who that found that greater well-being was associated with a large (high) social network size (Bulter et al., 2009).

The prior study of Hammer and Mating (as cited in Zeidner & Hammer, 1992) found that resources have a direct effect on lowering symptoms such as grief and, depression and psychiatric symptoms and physical and psychological symptoms.

Similarly, Holahan and Moos (1985, 1990) mention that when the stressors are high, personal and social resources should primarily predict stable functioning indirectly through an active coping effort, whereas under less stressful conditions resources should operate in a direct way to improve daily functioning. This is congruent with the study of Zeidner and Hammer (1992) who found that social resources predicted fewer physical and psychological symptoms 16 weeks later.

The possible reason for this is when individuals face stressful events (under conditions of adversity), the traumatic stress or the effects they feel and find that they do not want to reside alone. The presence of others is not only confronting, but also promotes adaptive behavior (Solomon, 1986).

In the present study, social support is based on the perception of the individual (perceived social support). Perceived social support from family and friends, in other

words, it is relationship interactions/interpersonal relationships.

From the demographic data, 70% of the subjects have approximately 3-5 family members and 63.75% of the subjects are married, therefore, they have interactions with others, and interpersonal support.

Social support facilitates individuals and provides them with the sense of caring, love, understanding, acceptance, and they have suitable qualified people that can consult and advise the individual who has lost loved ones about their troubles, conflict, suffering or distress (Adams & Boscarino, 2005). By the policies of Department of mental health, there also are social support facilities (i.e., social workers, psychologist, and counselors) in the area of unrest (such as community hospital, general hospital). Social support facilities facilitate individuals and provide them emotional strength. This contributes to individuals having good adaptation.

4.2 Effects of social support on optimistic coping style

The PTRU model expands knowledge about the role of social support on psychological-well being. It demonstrated the social support had an indirect effect on psychological well-being through optimistic coping style. In other words, social support had an effect on optimistic coping style ($\beta = .18$, $p < .05$). The individuals with more social support (perceived social support) used a more optimistic coping style.

The result of this study is congruent with Daugall, Hyman, Hayward, McFeeley & Baum (2001) who found that perceived social support was positively related to optimism (or optimistic coping style).

In this study, social support has a role as a mediator of disaster–related stress.

It also buffers the stressor affecting in the short and long period of time. Social support facilitates coping and the ability to deal with a situation effectively (Lazarus & Folkman, 1984; Pearline, Liebeman, Menaghan & Mullen, 1981). Social support may assist a person to have positive interpretation or positive thinking resulting in better psychological well-being.

When individuals received suggestions or advice (which are some characteristics of social support/ information support), the advice or/and encouragement might assist the individual to think and consider for themselves such as what is going on? Social support provides the guide or ways to think, consider, and make decisions how to deal with a situation, therefore individuals might rethink and reappraise anything in their life at that time. They could change their point of view in their life (such as having positive thinking about the future of the state of events and feeling optimistic about their personal future).

In addition, they might interpret stressful situations less negatively because the support available reduces the effects of stress by contributing to a less negative appraisal (Cohen & Harberman, 1983; Cohen & Mckay, 1984). This in turn could change a person's point of view to positive thinking.

4.3 Effect of optimistic coping style on sense of meaning

The PTRU model expands knowledge about the role of optimistic coping style on psychological-well being. It indicated that the optimistic coping style had an indirect effect on psychological well-being through sense of meaning ($\beta = .18$, $p < .05$). Optimistic coping style had an effect on sense of meaning. The individuals who used a more optimistic coping style had more sense of meaning.

The possible reason is that individuals might have the nature of positive thinking in the future/future orientation thinking. Optimism appraised the threat (events) to be a challenge as the same as sense of meaning. Both optimistic coping style and sense of meaning focused on the context of the coping process.

Sense of meaning is positive reappraisal coping. The meaning is the domain of life purpose in a crisis situation or life threatening situation (Starck, 2003). Optimistic coping style is one way to find meaning. Strark (2003) mentioned that there are three ways to find meaning on the path to uncovering life purpose including choosing one's own attitude to whatever life presents, and choosing to remain positive or brave, and having optimistic thinking. This is congruent with Updegraff and Taylor (2000) who mention that an active coping style such as positive reinterpretation or an optimistic coping style may be an early coping response that may influence the capability to finding meaning. Whenever a person finds meaning or has meaning in life, the person can adjust their mind and consequently have better psychological well-being.

4.4 Effects of social support on sense of meaning

The PTRU model expands knowledge about the role of social support on psychological-well being. It demonstrated the social support had an indirect effect on psychological well-being through sense of meaning ($\beta = .18$, $p < .05$). In other words, social support affected sense of meaning. The individuals with more social support had more sense of meaning.

Social support (the personal resources) has a role as a mediator of disaster–related stress. Social support plays a role in coping with stressful events. It also buffers the stressor affecting in the short and long time. Social support assists a person

to find meaning or make meaning in life resulting in better psychological well-being.

It is possible when individuals receives suggestions or advice (which are some characteristics of social support/ information support), that they may rethink and reappraise their life or areas of their life at that time. The advice or/ and encouragement might assist them to think and reconsider aspects of their life or themselves such as 'what is going on'?; 'what is his or her purpose in life now'? Thus, they could change their point of view of life to find meaning which may happen directly or over a period of time.

This is congruent with the study of Undergraff and Talor (2000) who mention that a positive consequence from negative events happened in individuals who have dealt with adversity and have an increased appreciation of supportive social ties.

Another reason for this finding meaning may be due to the collective nature of the terrorist attack. Congruent with the study of Updepraff, Silver and Holman (2008), they found that the seeking instrument support (i.e., getting help and advice from others) predicted finding meaning in the early weeks following the attack. According to Baumeisterm (1991), social relationships had an influence to having meaning in life. Thus, meaning in the aftermath was influenced by social support.

However, other paths in the PTRU model did not affect on psychological well-being as per literature review (as show in initial structural model, Figure 14 p. 171). These paths included (1) the path of evasive coping style on psychological well-being, and (2) the path of social support on confrontive coping style. The reason can explain as follow:

1. Effects of evasive coping style on psychological well-being

Evasive coping style did not have a direct effect on psychological well-being significantly. Person used more evasive coping style did not have more psychological well-being.

This study is not congruent with some studies (that usually study in negative outcome). For example, study of Lee, Gibson, Markon & Lermyre (2009) found that actual avoidance behavior was associated with greater psychological stress, also appraisal of individual preparedness was associated with higher psychological stress. Study of Silver et al. (2002) found that actual avoidance behavior was associated with greater psychological distress.

Plausibility, evasive coping style (thinking of denial, denial-like forms of coping or/ and avoidance) is emotion-focused coping. It may be done in a short run because it give one a breather from stress and protects one from having to deal with the aversive implications of the stressful situation.

 According to Lazarus and Folkman (1984), avoidance coping is used in early stage of crisis when individuals confronted threat that happened in long time. In orther words, the stressor (threat) was chronic persistent stress or/ and intensity. This coping style proved helpful for loss sense of control. According to, Suksawat and Arunya (2008) found that students who confronted an unrest events used avoidance of problem in early phase because they could not adjust to situation.

In other word, this coping style is beneficial to person in an early period or after the events occurs immediately. Few subjects might stay in early stage of crisis. When time passes for long time, individuals would be gradually replaced by problem-focused coping (Lazarus and Folkman, 1984). Evasive coping style did not help

person to adjust in long time.

In addition, subjects might be person who had high self–esteem. So they did not use evasive coping style. Congruence with study of Thoits (1995) showed that individuals with high self-esteem or a high feeling of control will adopt active coping strategies focused on problems, whereas individuals with a low self-esteem will adopt passive–avoidant coping styles focused on emotions. Because of the aforementioned reason, evasive coping style did not have a direct effect on psychological well-being.

2. Effects of social support on confrontive coping style

The finding that social support did not have a direct effect on confrontive coping style. Individual had more social support did not used confrontive coping style.

 The result of this study is not congruent with Daugall, Hyman, Hayward, McFeeley & Baum (2001) found that evidence from disaster situations reveals that social support correlated with effective coping (problem-focused coping).

Possibility, the social support scale that used to measure social support (perceived) may not appropriate in context of terrorism, especially for problem sovling coping. In this study, social support (perceived social support) was measured by Interpersoanl support evaluation list (ISEL). This instrument is used in general population.

Another reason is that subjects might not receive social support that could facilitate to face with unrest situation directly because social support will help to cope effectively by using appropriate coping that fit situation or events, type of support should be suitable for each type of coping.

Summary

This present study proposed a model for the predictors of teachers residing in an area of unrest. The result of the structural equation modeling study indicated the overall adequate fit between the respecified model and sample data which showed a significant pathway. Some variables were not predictors of the psychological well-being of teachers residing in an area of unrest (such as evasive coping style, and confrontive coping style) as shown by expectation and evidence. From the final respecified model, sense of meaning, sense of control, social support, self-reliant coping style, and optimistic coping style had a direct effect on psychological well-being, whereas, social support had both a direct and indirect effect on psychological well-being (through optimistic coping style), optimistic coping style had both a direct and indirect effect on psychological well-being (through sense of meaning), and social support had both a direct and indirect effect on psychological well-being (through sense of meaning).

This result shows that the sense of meaning, social support, self-reliant coping style, optimistic coping style, and sense of control were significant predictors for psychological well-being. The strong predictor of psychological well-being was the optimistic coping style. Conversely, when a person experiences a more self-reliant coping style (depending themselves), a decrease in psychological well-being can occur.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the conclusion, strengths and limitations of the present study, and recommendations for implications and future knowledge development.

Conclusion

A descriptive cross sectional study was conducted with 240 teachers residing in an area of unrest. The research aimed to test the model of psychological well-being of teachers residing in an area of unrest in southern Thailand. The tentative model was synthesized based on Lazarus and Folkman's theory of stress and coping.

Five major concepts were purposed in the initial hypothesized model. A set of seven predictors was selected based on the tentative model and research evidence (the empirical data). These variables included psychological well-being, sense of control, social support, coping, and sense of meaning.

The instruments for this study were the Jalowiec Coping Scale, Meaning in Life Questionnaire, Interpersonal Support Evaluation List, Perceived Control Questionnaire, and Psychological Well-Being MIDUS II version.

The translation and back translated technique was conducted with five subscales, (Psychological Well-Being subscale, Sense of Control subscale, Social Support subscale, and Sense of Meaning subscale) by using a panel of three experts. All items were valid for the culture and context of the study. The reliability of all

scales ranged from (.74 to .91). Confirmatory factor analysis was performed to examine the structural validity of these subscales.

Confirmatory factor analysis for the initial measurement model of most of subscales demonstrated a poor fit in some fit indices. There were two measurement models (Sense of Meaning subscale and Sense of Control subscale) that demonstrated a good fit for the data in the first time. Other measurement models were respecified because modification indices suggested this. Then, the results of each measurement model showed a good fit.

When the five measurement models were put in the full model/ structural model (initial hypothesized model) and estimated, the results showed adequate fit of the model to the sample data. However, the initial hypothesized model was then modified until the data was a good fit and the hypothesized model could represent the phenomena of the psychological well-being of teachers residing in an area of unrest.

The initial hypothesized model consisted of six significant path coefficients and three nonsignificant path coefficients. One latent variable (evasive coping style) and the two nonsignificant path coefficients were dropped from the initial hypothesized model. These paths included the path of social support on confrontive coping style, and the path of evasive coping style on psychological well-being. But the path of confrontive coping style on psychological well-being remained in the structural model.

After that some paths were added to the modified model following the modification indices as suggested. Four significant paths of coefficients were added: the effect of social support on optimistic coping style, the effect of social support on sense of meaning, the effect of optimistic coping style on sense of meaning, and the

effect of sense of control on sense of meaning.

After the step of modifying the model, the best model was selected for the final model (final structural model). The best final model (final structural model) should be Model C. All fit indices (such as GFI, TLI, and CFI, RMSEA, chi square per df, and AIC) were acceptable or had reached a standard. It indicated good fit of the model to the sample data.

Therefore, the final model (final structural model) consisted of 11 path coefficients. The result of the final structural model estimation showed a fit with the data. The indices: GFI = .95; TLI = .98; CFI = .98; χ2 = 111.43; DF= 92; p = .082; χ^2/df = 1.21; AIC = 199.43; NFI = .93 and RMSEA = .030; 90 % CI [0.02, 0.05].

The final modified model (Model C) was an adequate fit and accounted for 65 % of variance in psychological well-being. There were ten significant path coefficients and one nonsignificant path. Self-reliant coping style had a negative direct effect on psychological well-being (β = -.43, p< .01). Optimistic coping style had a positive direct effect on psychological well-being (β = .53, p< .01). Optimistic coping style had a positive direct effect on sense of meaning (β = .18, p< .05). Sense of meaning had a positive direct effect on psychological well-being (β = .36, p< .01). Social support had a positive direct effect on psychological well-being (β = .25, p< .01). Social support also had a positive direct effect on optimistic coping style (β = .18, p< .05). Social support had a direct effect on sense of meaning (β = .18, p< .05). Sense of control had a positive direct effect on psychological well-being (β = .16, p< .05) and sense of control had a positive direct effect on confrontive coping style (β = .15, p< .05). Sense of control had an indirect effect on psychological

well-being through sense of meaning ($\beta = .40$, $p < .01$). Confrontive coping style did not have a positive direct effect on psychological well-being significantly ($\beta = .01$, $p > .05$).

Strength and Limitations

The strength of this study is that the theoretical testing correlated with the theoretical issues and methodology. The theoretical model proposed in this study was derived from the theoretical framework. The framework explained the relation with the psychological well-being of teachers. This present study provided support from the empirical data of the psychological well-being of Thai teachers residing in an area of unrest.

As per the literature review for choosing the variables, the important variables that highly predicted psychological well-being were found. So this study selected suitable variables in order to develop and test the model.

The methodology of this study used an appropriate sample size with a number of variables. Furthermore, the statistical analysis is SEM techniques which support the best and precise estimation of all hypothesized relationships.

The recruitment of the subjects could be one of the strengths of study. Using the posttraumatic stress disorder screening test before recruiting subjects into this study may help to decrease a bias answer that could befall when using self-reported data. Moreover, the researcher can recruit the appropriate individuals to join in this study. It should be noted that the study has some limitations. There are three limitations: methodology, questionnaires, and self–report data.

First, the methodology of this study is a cross sectional study because of the limitation of time and the severity of events/features of the unrest situation so it is difficult to collect the data. Actually, the study should be a longitudinal study because some of the factors (such as coping) can be both a process of adaptation and an outcome. Adjustments are revealed over time. Time changes and thus the adjustment may change together over time. It can change depending on time and situation. It does not represent the future, therefore, it should be a longitudinal study in a future study.

Secondly, the instrument which measures some variables (such as coping, psychological well- being) has diversity. A lack of consistency in the selection of instruments for some variables (such as coping, psychological well-being, sense of control.), may have resulted in the lack of ability to make meaning and to compare between studies.

The self-report questionnaires are long. The sample needed to spend a long time filling in the questionnaires which resulted in a response burden. Although the questionnaires have been validated, and have been widely used, the limitation is the large number of items of each questionnaire which may put the respondent off answering. Finally, the sample was not randomized because the area of study was dangerous and there were few teachers that met the criteria of the study.

Recommendations for Implication and the Future Knowledge Development

Implication

The finding of this study provides four recommendations for professional nurses and other professionals (such as those working in public health, medicine, and education), mental health teams (social worker, psychologist, psychiatric nurse, psychiatrist), and the Thai government in order to improve the psychological well-being of Thai teachers residing in an area of unrest in southern Thailand. These major recommendations include developing and designing suitable intervention programs for promoting psychological well-being, enhancing higher social support for better psychological well-being, using a more optimistic coping style, having more sense of meaning (meaning in life), having more sense of control for living in an area of unrest, and preparing health care resources for teachers residing in an area of unrest.

1. Developing and designing suitable intervention programs for promoting psychological well-being

The central finding of this study is the four predictors of psychological well-being (sense of meaning, social support, sense of control, optimistic coping style). Teachers who had high sense of meaning, high social support, high sense of control over events, and used a more optimistic coping style had better psychological well-being. So the intervention program for enhancing the psychological well-being of Thai teachers residing in an area of unrest in southern Thailand should focus on/ be specific on the four predictors. Nurses should begin to assess psychological well-being status, social support (focus on interpersonal relationships such as helping each

other), sense of meaning, sense of control, and optimistic coping style by using interviews, and questionnaires.

2. Enhancing higher social support for better psychological well-being

In order to improve and maintain psychological well-being, nurses should encourage teachers to increase their social support such as interpersonal relationships, and self-help groups.

An interpersonal relationship is the part of social support that helps a person to feel comfortable in their mind and have self–esteem (emotional support). Especially emotional support as it is supported by using encouragement, caring, understanding, getting help, advice and so on. These supports can be performed by the family, friends, and loved ones.

A self-help group also should be established in order for the members to help each other (such as give encouragement, advice).

In addition, institutions (Mental Health Department, Ministry of Public Health, Ministry of Education, government sector) should help these teachers earlier and provide continuum treatment and/or support. If teachers acquire social support such as advice from others, getting help early after an attack, they will have perceived social support for a long time and then have better psychological well-being.

3. Encouraging teachers to use more optimistic coping style

Nurses should assist teachers to use an optimistic coping style to deal with problems in a correct way. Although looking on the positive side is a form of coping, it can be ineffective if the negative aspects of a stressful situation are ignored (Ignatavicious, 1991). So the teachers who reside in an area of unrest must know about the real negative effects in order to protect themselves from negative events

(unrest situation) correctly such as being more careful.

Furthermore, person who has positive outlook in the future should spend life style under the assumption that the best is going to happen. Positive outlook involves intentional positive behaviors and thoughts, such as performing acts of kindness, expressing gratitude, meditating on positive feelings towards others, and expressing one's "best possible self".

4. Increasing teachers' sense of meaning

Nurses should assist the teachers to have a sense of meaning (meaning in life)/to use sense of meaning to create more benefit in their lives especially in difficult times/ difficult circumstances. Nurses should help these teachers to seek what is the first motivation of their life, to find positive experiences, and learn from the experience to have the best future. In other words, they should choose appropriate ways to make meaning in life from individual attitude and decisions because this involves their life directly. They need to find purpose in their life by themselves. So, nurses are of guidance to help teachers to think and reflect. For example, life is maintained in the right way in order to important task. In short, nurses should help teachers to view and learn from their experiences.

5. Increasing teachers' sense of control for living in an area of unrest

Nurses should assist and support teachers to have a control belief (having ability to manage their life) for living in stressful events or areas of unrest. Teachers need to learn how to manage their life with the help of security provided by armed forces or others. So the government sector should support safety in both a direct and indirect way such as providing a security team, and information. This security team can protect teachers when they face a situation. Giving information raises their

awareness in regards to personal safety. Also policies for safe living need to be implemented to provide support for teachers from the government sector.

6. Preparing health care resource for teachers residing in an area of unrest.

Psychological well-being is part of quality of life and reflects mental health. It is important for those facing an unrest situation. The health care system in these areas has to change to be able to manage the fallout from the unrest. So the primary, secondary and tertiary care setting in the three provinces deep southern Thailand need to have more action in mental health care. These settings need to have mental health teams who have an ability in mental health care in regards to treating victims of unrest situations (traumatic person).

Psychiatric nurses for traumatic persons from unrest events need to manage care in the area of unrest in order to improve the psychological well-being of teachers residing in an area of unrest. Educational programs for advanced posttraumatic care is needed to prepare psychiatric nurses with nursing competencies for the future maintenance, and promotion of psychological well-being among Thai teachers who reside in an area of unrest.

The Future Knowledge Development

The future development of knowledge is recommended based on the empirical model tested in order to provide the ground knowledge focusing on sense of meaning, social support, optimistic coping style, and self-reliant coping style to enhance psychological well-being of teachers residing in an area of unrest.

1. All variables in this study need to be replicated, and further investigation of

the dynamics underpinning these associations to verify the fit of the model.

2. The causal model of psychological well-being of teachers residing in an area of unrest should be validating before designing interventions and experimental research is needed to test the outcomes of social support, sense of meaning, sense of control, optimistic coping style, and self-reliant coping style on psychological well-being.

3. A longitudinal study should be conducted to confirm the causal relations among the set of five variables. It is recommended that the measurement of psychological well-being should be recorded at one, six months and one year to compare with the base line data.

4. Some variables (such as optimism, hope) should be explored because these factors may be related to coping (in previous study). This study used an optimistic coping style or positive reinterpretation (some authors use this term) which looks like a part of coping. Actually, this should be studied in the multidimensional construct as optimism which will be helpful for developing more specified detail.

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APPENDICES

APPENDIX A

EXAMPLE ITEMS OF RESEARCH INSTRUMENTS

แบบสอบถาม (แบบประเมิน) เพื่อคัดกรองความเครียดที่ผิดปกติภายหลังจากการได้รับบาดเจ็บ

(The PTSD Screening Test)

คำชี้แจง แบบสอบถามนี้มีวัตถุประสงค์เพื่อสอบถามถึงความคิดความรู้สึกพฤติกรรมที่เกิดขึ้นกับ
ผู้ประสบภัยพิบัติ (เช่น สถานการณ์ความไม่สงบ , ภัยจากธรรมชาติ) ซึ่งเป็นปัญหาที่นำไปสู่อาการ
ผิดปกติทางจิตใจ ที่พบในช่วง 2-3 สัปดาห์ที่ผ่านมา

　　　　　　การตอบมีตัวเลือก 2 ตัวเลือก

　　　　　　ถ้าตอบ ไม่ใช่ = คะแนน 0

　　　　　　ถ้าตอบ ใช่   = คะแนน 1

　　　　ให้ท่านคิดและระบุว่าในระยะ　1　เดือนที่ผ่านมามีเหตุการณ์　(อาการ/　ความรู้สึกและ
พฤติกรรม) เหล่านี้เกิดขึ้นกับตัวท่านบ้างหรือไม่

　　　　โปรดทำเครื่องหมาย √ ลงในช่องที่ท่านเห็นว่าเป็นความจริงกับท่านมากที่สุดในแต่ละข้อ
คำถามให้ท่านเลือกตอบเพียงข้อเดียวที่ตรงกับความคิดเห็นของท่านมากที่สุด　　(โปรดตอบทุกข้อ
คำถาม)

1. การรับรู้ต่อสิ่งรอบข้างของคุณลดลงใช่หรือไม่

　　　□ ใช่　　　□ ไม่ใช่

2. คุณมักจะคิดถึงเหตุการณ์ภัยพิบัติ (สถานการณ์ความไม่สงบ) นั้นทั้งที่ไม่ได้ตั้งใจใช่หรือไม่

　　　□ ใช่　　□ ไม่ใช่

3. ภาพที่เกี่ยวกับเหตุการณ์ภัยพิบัติ　(สถานการณ์ความไม่สงบ)　นั้นมักจะผุดขึ้นมาในใจคุณโดยที่
　คุณไม่ได้ต้องการใช่หรือไม่

　　　□ ใช่　　　□ ไม่ใช่

4. คุณนอนหลับยากหรือหลับไม่สนิทเพราะเกิดภาพหรือความคิดเกี่ยวกับเหตุการณ์ภัยพิบัตินั้น
ผุดขึ้นมาในใจใช่หรือไม่

　　　□ ใช่　　　□ ไม่ใช่

5. คุณพยายามหลีกหนีจากสิ่งกระตุ้นที่ทำให้คิดถึงเหตุการณ์ภัยพิบัติ　(สถานการณ์ความไม่สงบ)
　นั้นใช่หรือไม่

　　　□ ใช่　　　□ ไม่ใช่

6. คุณรู้สึกกังวลกระวนกระวายและเครียดอยู่ตลอดเวลาใช่หรือไม่

　　　□ ใช่　　　□ ไม่ใช่

7. คุณรู้สึกจิตหม่นหมองเกือบตลอดวันใช่หรือไม่

        ☐ ใช่   ☐ ไม่ใช่

8. คุณรู้สึกว่าตนเองไม่มีคุณค่าใช่หรือไม่

        ☐ ใช่   ☐ ไม่ใช่

รวมคะแนน = ...คะแนน

แบบบันทึกข้อมูลส่วนบุคคล (The Personal Information Questionnaire)

วันที่……………………………..รหัสวิจัย………………

คำชี้แจง กรุณาตอบคำถามในช่องว่าง และ /หรือทำเครื่องหมาย √ ลงในช่องสี่เหลี่ยม [ ] ที่ตรงกับ
ข้อมูลของท่าน

1. เพศ
   [ ] ชาย
   [ ] หญิง

2. ปีนี้ท่านอายุเท่าไร (นับเต็มปี) …………………………………ปี

3. สถานภาพสมรส
   [ ] โสด (ไม่เคยแต่งงาน)
   [ ] สมรส (แต่งงาน ยังอยู่กับสามี/ภรรยา)
   [ ] ม่าย
   [ ] หย่า แยกกันอยู่

4. ปัจจุบันท่านอาศัยอยู่กับใคร
   [ ] อยู่คนเดียว
   [ ] อยู่กันสองคนสามีภรรยา
   [ ] อยู่กับสามี ภรรยาและลูกหลาน
   [ ] อยู่กับลูกหลาน
   [ ] อยู่กับญาติพี่น้อง
   [ ] อยู่กับเพื่อน

5. จำนวนสมาชิกในครอบครัวของท่าน………………………..คน

6. รายได้เฉลี่ยสูงสุดต่อเดือน………………………บาทต่อเดือน

7. ท่านได้รับสวัสดิการพิเศษ
  [ ] ไม่ได้รับ
  [ ] ได้รับ (ระบุ……………………………………………….....…)

8. ท่านคิดว่ารายได้เพียงพอกับค่าใช้จ่ายหรือไม่

  [ ] เพียงพอ

  [ ] ไม่เพียงพอ/ ไม่พอใช้และมีหนี้สิน

  [ ] ไม่ค่อยพอใช้แต่ไม่มีหนี้สิน

  [ ] พอใช้แต่ไม่มีเงินออม

  [ ] พอใช้และมีเงินออม

9. ศาสนา

  [ ] พุทธ

  [ ] คริสต์

  [ ] อิสลาม

  [ ] อื่นๆ.........

10. ระดับการศึกษา

  [ ] ปริญญาตรี / เทียบเท่า

  [ ] ปริญญาโท

  [ ] ปริญญาเอกหรือหลังปริญญาเอก

11. ตำแหน่ง (ระบุ)..........................

  [ ] ข้าราชการ

  [ ] ครูจ้าง

  [ ] พนักงานราชการ

12. อายุราชการ.................. ....(ปี)

13. ท่านปฏิบัติงานอยู่ในโรงเรียนประเภทใด

  [ ] โรงเรียนสายสามัญของรัฐบาล

  [ ] โรงเรียนเอกชนสอนศาสนา

14. ท่านปฏิบัติงานอยู่ในจังหวัดใด

  [ ] ปัตตานี [ ] ยะลา   [ ]   นราธิวาส   [ ] สงขลา

15. ระยะเวลาที่ได้รับผลกระทบจากสถานการณ์........................ปี/เดือน

16. ท่านมีเหตุผลใดที่ไม่ย้ายออกจากพื้นที่

[ ] มีภูมิลำเนาในพื้นที่

[ ] ไม่สามารถขอโยกย้ายออกจากพื้นที่เพราะไม่มีตำแหน่งว่างในพื้นที่อื่น

[ ] อุดมการณ์ความเป็นครู

[ ] อื่นๆ (ระบุ……………………..)

17. ท่านมีประสบการณ์โดยตรงการถูกลอบทำร้ายจากฝ่ายตรงข้ามหรือไม่

[ ] เคยประสบเหตุการณ์

[ ] ไม่เคยประสบเหตุการณ์

18. ชนิดของประสบการณ์ตรงจากเหตุการณ์ความไม่สงบที่ท่านเคยเผชิญ

[ ] ประสบเหตุการณ์ด้วยตนเอง

[ ] ญาติพี่น้องหรือคนใกล้ชิด เช่น สามีหรือภรรยา เพื่อนสนิทประสบเหตุการณ์

[ ] มีการสูญเสียญาติหรือครอบครัวหรือคนใกล้ชิด

19. ถ้าท่านเคยมีประสบการณ์ถูกลอบทำร้าย ท่านได้รับบาดเจ็บด้านร่างกายหรือไม่

[ ] ได้รับบาดเจ็บ(ระบุ………………………………………………….…......…)

[ ] ไม่ได้รับบาดเจ็บ

20. จำนวนครั้งที่ท่านประสบเหตุการณ์ลอบทำร้ายจากฝ่ายตรงข้าม……………… ครั้ง

21. ครั้งล่าสุดที่ถูกลอบทำร้ายจากฝ่ายตรงข้ามเป็นเวลาผ่านมานาน………………….เดือน/ ปี.

22. ภายหลังจากที่ท่านประสบเหตุการณ์ลอบทำร้าย ท่านมีการเจ็บป่วยทางจิตหรือมีปัญหาทาง
สุขภาพจิต หรือไม่

[ ] ไม่มีปัญหาสุขภาพจิต

[ ] มีปัญหาสุขภาพจิต เช่น เครียด วิตกกังวล นอนไม่หลับ (ระบุ…………………………..)

23. ถ้าท่านมีปัญหาสุขภาพจิต ท่านจำเป็นต้องเข้ารักษาหรือไม่

[ ] ไม่ต้องรักษาตัว

[ ] ต้องรักษาตัว

24. หากท่านต้องรักษาตัว โดยวิธี

[ ] รับประทานยา

[ ] รับประทานยา และนอนพักรักษาตัวในโรงพยาบาล

[ ] อื่นๆ (โปรดระบุ)………………………...………)

แบบสอบถามความผาสุกด้านจิตใจ (The Psychological Well-Being--MIDUS II Version)

คำชี้แจง แบบสอบถามนี้ มีวัตถุประสงค์เพื่อประเมินความผาสุกทางจิตใจของท่าน

โปรดระบุหรือให้ข้อคิดเห็นเกี่ยวกับความรู้สึกต่อตัวท่านและชีวิตของท่านว่าเป็นอย่างไร โดยพิจารณาว่าข้อความในแต่ละข้อข้างล่างนี้ ท่านเห็นด้วยมากน้อยเพียงใดให้เลือกตอบข้อคิดเห็น ของท่านตามตัวเลือกข้างล่าง

การตอบมีตัวเลือก 6 ตัวเลือก ดังนี้

1 หมายถึงไม่เห็นด้วยอย่างยิ่ง

2 หมายถึง ค่อยข้างจะไม่เห็นด้วย

3 หมายถึง ไม่เห็นด้วยเล็กน้อย

4 หมายถึง เห็นด้วยเล็กน้อย

5 หมายถึง ค่อนข้างจะเห็นด้วย

6 หมายถึง เห็นด้วยอย่างยิ่ง

โปรดทำเครื่องหมาย ◯ ลงบนตัวเลขที่ตรงกับความคิดเห็นของท่านมากที่สุด ในแต่ละข้อคำถาม ให้ท่านเลือกตอบเพียงข้อเดียวที่ตรงกับความรู้สึกและข้อคิดเห็นของท่าน และ/ซึ่งท่านเห็นว่าเป็น ความจริงกับท่านมากที่สุด คำตอบของท่านไม่มีถูกหรือผิด (โปรดตอบคำถามให้ครบทุกข้อ)

กรุณาทำเครื่องหมายวงกลมบนตัวเลข ที่ตรงกับข้อคิดเห็นปัจจุบันของท่าน มากที่สุด	ไม่เห็น ด้วยอย่าง ยิ่ง	ค่อยข้าง จะไม่เห็น ด้วย	ไม่เห็น ด้วย เล็กน้อย	เห็นด้วย เล็กน้อย	ค่อน ข้างจะ เห็น ด้วย	เห็น ด้วย อย่างยิ่ง
1. ฉันไม่กลัวที่จะแสดงความคิดเห็น แม้ว่าสิ่งที่ฉันคิดจะตรงกันข้ามกับคน ส่วนใหญ่	1	2	3	4	5	6
2. ปกติแล้วการตัดสินใจของฉันไม่ได้ ขึ้นอยู่กับคนอื่นๆ	1	2	3	4	5	6
42. ฉันรู้ว่าฉันสามารถไว้วางใจ เพื่อนๆของฉันได้และพวกเขาก็รู้ว่า พวกเขาสามารถไว้วางใจฉันได้เช่นกัน	1	2	3	4	5	6

แบบสอบถามการเผชิญความเครียด (Jalowiec Coping Scale Questionnaire)

คำชี้แจง แบบสอบถามนี้ มีวัตถุประสงค์เพื่อประเมินวิธีการเผชิญปัญหาที่ท่านเลือกใช้เมื่อเผชิญกับ
เหตุความไม่สงบ โปรดพิจารณาและระบุว่าท่านได้เลือกใช้วิธีการเผชิญปัญหาเพื่อจัดการ
ความเครียดจากเหตุความไม่สงบ ในแต่ละข้อข้างล่างนี้หรือไม่ และใช้มากน้อยเพียงใดหรือ
บ่อยครั้งแค่ไหน ให้ท่านเลือกตอบตามตัวเลือกข้างล่าง

    การตอบมีตัวเลือก 4 ตัวเลือก ดังนี้

        0 หมายถึง ไม่เคยใช้

        1 หมายถึง ใช้นานๆครั้งหรือเกือบจะไม่เคยใช้

        2 หมายถึง ใช้เป็นบางครั้ง

        3 หมายถึง ใช้บ่อยครั้ง

โปรดทำเครื่องหมาย ◯ลงบนตัวเลขที่ตรงกับความคิดเห็นของท่านมากที่สุด ในแต่ละข้อคำถาม
ให้ท่านเลือกตอบเพียงข้อเดียวที่ตรงกับความรู้สึกและข้อคิดเห็นของท่าน ซึ่งท่านเห็นว่าเป็นความ
จริงกับท่านมากที่สุด (โปรดตอบคำถามให้ครบทุกข้อ)

วิธีการเผชิญปัญหา	ท่านใช้วิธีการเผชิญปัญหาแต่ละวิธีมากน้อยเพียงใด			
	ไม่เคยใช้	ใช้นานๆครั้งหรือเกือบจะไม่เคยใช้	ใช้เป็นบางครั้ง	ใช้บ่อยครั้ง
1. วิตกกังวลเกี่ยวกับปัญหา	0	1	2	3
2. สร้างความหวังว่าทุกอย่างจะดีขึ้น	0	1	2	3
60. บอกตัวเองว่าเป็นความโชคร้ายของคุณเอง	0	1	2	3

แบบสอบถามความหมายของชีวิต (The Meaning in Life Questionnaire)

คำชี้แจง แบบสอบถามนี้ มีวัตถุประสงค์เพื่อประเมินการให้ความหมายของชีวิต
โปรดคิดพิจารณาและระบุความเห็นของท่านเกี่ยวกับความหมายในชีวิต   /ความหมายของ
ชีวิต และประโยชน์ต่อชีวิต เมื่อท่านเผชิญกับเหตุการณ์ความไม่สงบ โดยพิจารณาว่าข้อความในแต่
ละข้อข้างล่างนี้ เป็นจริงกับท่านมากน้อยเพียงใดให้เลือกตอบตามตัวเลือกต่อไปนี้
        การตอบมีตัวเลือก 7 ตัวเลือก ดังนี้
            1 หมายถึง ไม่เป็นจริงอย่างแน่นอน
            2 หมายถึง ไม่เป็นจริงส่วนใหญ่
            3 หมายถึง ไม่เป็นจริงส่วนน้อย
            4 หมายถึง ไม่แน่ใจหรือบอกไม่ได้ว่าถูกหรือผิด
            5 หมายถึง เป็นจริงส่วนน้อย
            6 หมายถึง เป็นจริงส่วนใหญ่
            7 หมายถึง เป็นจริงอย่างแน่นอน
    โปรดทำเครื่องหมาย   ปบนตัวเลือกที่ตรงกับความคิดเห็นของท่านมากที่สุด ในแต่ละข้อ
คำถามให้ท่านเลือกตอบเพียงข้อเดียวที่ตรงกับความคิดเห็นของท่าน และท่านคิดเห็นว่าเป็นความ
จริงกับท่านมากที่สุดคำตอบของท่านไม่มีถูกหรือผิด (โปรดตอบคำถามให้ครบทุกข้อ)

ประเด็น	ไม่เป็นจริงอย่างแน่นอน	ไม่เป็นจริงส่วนใหญ่	ไม่เป็นจริงส่วนน้อย	ไม่แน่ใจหรือบอกไม่ได้ว่าถูกหรือผิด	เป็นจริงส่วนน้อย	เป็นจริงส่วนใหญ่	เป็นจริงอย่างแน่นอน
1. ฉันเข้าใจความหมายของชีวิตของฉัน							
2. ฉันมองหาบางอย่างที่ทำให้ฉันรู้สึกว่าชีวิตของฉันมีความหมาย							
10. ฉันกำลังค้นหาเกี่ยวกับความหมายของชีวิตตัวเอง							

แบบสอบถาม การรับรู้ความสามารถในการควบคุม (Perceived Control Questionnaire)

คำชี้แจง แบบสอบถามนี้ มีวัตถุประสงค์เพื่อประเมินความรู้สึกการรับรู้ความสามารถในการควบคุม
        โปรดระบุความรู้สึกหรือข้อคิดเห็นของท่านเกี่ยวกับการควบคุมชีวิตของท่านหรือการ
ควบคุมสถานการณ์ที่ท่านกำลังประสบในชีวิตปัจจุบันว่าเป็นอย่างไร โดยพิจารณาว่าข้อความในแต่
ละข้อข้างล่างนี้ ท่านเห็นด้วยมากน้อยเพียงใด ให้เลือกตอบตามตัวเลือกข้างล่าง
 การตอบมีตัวเลือก   5 ตัวเลือก ดังนี้
        1 หมายถึง ไม่เห็นด้วยอย่างยิ่ง
        2 หมายถึง ไม่เห็นด้วย
        3 หมายถึง เฉยๆหรือไม่แน่ใจ
        4 หมายถึง เห็นด้วย
        5 หมายถึง เห็นด้วยอย่างยิ่ง
        โปรดทำเครื่องหมาย √ บนตัวเลือกที่ตรงกับความคิดเห็นของท่านมากที่สุด ในแต่ละข้อ
คำถามให้ท่านเลือกตอบเพียงข้อเดียวที่ตรงกับความคิดเห็นของท่าน และท่านคิดเห็นว่าเป็นความ
จริงกับท่านมากที่สุดคำตอบของท่านไม่มีถูกหรือผิด (โปรดตอบคำถามให้ครบทุกข้อ)

ประเด็น	ระดับความคิดเห็น				
	ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เฉยๆหรือไม่แน่ใจ	เห็นด้วย	เห็นด้วยอย่างยิ่ง
1. ฉันสามารถรับมือกับสถานการณ์ปัจจุบันได้					
2. ฉันสามารถทำในสิ่งต่างๆที่ฉันต้องทำให้สำเร็จได้					
20. ในสถานการณ์ปัจจุบัน ไม่มีอะไรที่แก้ไขไม่ได้					

แบบสอบถามการประเมินการช่วยเหลือระหว่างบุคคล (The Interpersonal Support Evaluation List)

คำชี้แจง แบบสอบถามชุดนี้ มีวัตถุประสงค์เพื่อประเมินการรับรู้เกี่ยวกับได้การช่วยเหลือระหว่าง
บุคคล โปรดคิดพิจารณาและระบุข้อคิดเห็นของท่านเกี่ยวกับการรับรู้การได้รับความช่วยเหลือว่า
ท่านได้รับการช่วยเหลือและมีสัมพันธภาพทางสังคมกับบุคคลอื่นเป็นอย่างไรโดยพิจารณาว่า
ข้อความในแต่ละข้อข้างล่างนี้ เป็นจริงกับท่านมากน้อยเพียงใด ให้เลือกตอบตามตัวเลือกข้างล่าง

       การตอบมีตัวเลือก 4 ตัวเลือก ดังนี้

          0 หมายถึง ไม่จริงอย่างแน่นอน

          1 หมายถึง ค่อนข้างไม่จริง

          2 หมายถึง ค่อนข้างจริง

          3 หมายถึง จริงอย่างแน่นอน

       โปรดทำเครื่องหมาย √บนตัวเลือกที่ตรงกับความคิดเห็นของท่านมากที่สุด ในแต่ละข้อ
คำถามให้ท่านเลือกตอบเพียงข้อเดียวที่ตรงกับความคิดเห็นของท่าน และท่านคิดเห็นว่าเป็นความ
จริงกับท่านมากที่สุด(โปรดตอบคำถามให้ครบทุกข้อ)

ประเด็น	ระดับความคิดเห็น			
	ไม่จริงอย่าง แน่นอน	ค่อนข้าง ไม่จริง	ค่อนข้าง จริง	จริงอย่าง แน่นอน
1. มีคนหลายคนที่ฉันไว้วางใจให้ช่วย แก้ปัญหาของฉัน				
2. หากฉันต้องการให้คนช่วยซ่อมเครื่องใช้ ต่างๆ หรือซ่อมรถ จะมีคนบางคนที่จะมา ช่วยเหลือฉันได้				
39. ถ้าฉันต้องการให้มีคนมาช่วยฉันย้าย ไปบ้านหรือที่พักใหม่ฉันหาคนมา ช่วยเหลือฉันได้ยาก				
40. ฉันได้อยู่กับเพื่อนๆในยามที่ ยากลำบาก				

APPENDIX B

PERMISSION OF THE INSTRUMENTS

PERMISSION OF THE INSTRUMENTS

1. Jalowiec Coping scale (JCS)

Re: request for permission to obtain the Jalowiec Co Wednesday, 10 August, 2011 6:26 AM
ping Scale

From:	"Anne Jalowiec" <ajalowiec@yahoo.com>
To:	"Chantjane Jantarapat" <chantjanejantarapat@ymail.com>

Full Headers Printable View

Dear Ms Jantarapat:

Thank you for your interest in the Jalowiec Coping Scale (JCS). Please note that there is a user's fee of $75 (in US dollars) for permission to use the JCS and to obtain the JCS packet of materials.

Along with a copy of the scale, the JCS packet contains the following materials: a description of the JCS, a list of which items belong to which subscales (for coding and scoring the instrument), directions for scoring the JCS, reliability and validity data on the JCS, and a JCS bibliography.

Therefore, if you would like to use the JCS in your project, please send a check for $75 (in US dollars) made out to my name (Anne Jalowiec) to the following address:

As soon as I receive your check, I will email the JCS packet to you.

If you have any questions, please email me at: ajalowiec@yahoo.com.

Sincerely,
Dr Anne Jalowiec, RN, PhD
Professor Emeritus, Loyola University of Chicago

JCS CHECK RECEIVED Saturday, 3 September, 2011 10:02 AM ● ☆

From: "Anne Jalowiec" <ajalowiec@yahoo.com>

To: "Chantjane Jantarapat" <chantjanejantarapat@ymail.com>

Full Headers Printable View

Dear Ms Jantarapat:

I received your JCS check for $75 today (Friday 9/2/11); thank you very much.

Attached is the JCS packet as 6 pdf files.

Good luck with your doctoral study.

Dr Jalowiec

2. Interpersonal Support Evaluation List (ISEL)

RE: Request instrument for research and your permission for using Tuesday, 23 October, 2012 6:46 PM ● ☆

From: "Sheldon Cohen" <scohen@cmu.edu>

To: "'Chantjane Jantarapat'" <chantjanejantarapat@ymail.com>

Full Headers Printable View

You are welcome to use the ISEL in your study. You can download the scale from our website: www.psy.cmu.edu/~scohen click on scales on the front page. Good luck with your work. sc

Professor Robert E. Doherty

Email :scohen@cmu.edu

3. Perceived Control Questionnaire (PCQ)

RE: request intrument for reserch and your permission for using   Monday, 29 October, 2012 10:09 AM ● ☆

| From: | "Wallhagen | Margaret" <meg.wallhagen@nursing.ucsf.edu> |
| To: | "Chantjane Jantarapat" <chantjanejantarapat@ymail.com> |

Full Headers Printable View

Dear Chadjane Jantarapat,

Thank you for your email and your interest in my instrument as well as the concept of control. I am very willing to share the instrument with you and will get a copy to you shortly but I wondered if it would be good to talk some more via email about the concept in Thai culture. It would be very nice to have this instrument tested in another country and another culture but I know that instrument translation is always difficult because we want to stay as true to the concept being explored as possible. Can you share with me a bit more about how you are viewing control in the population you will be studying? I am attaching an article on the construct as I understand it; I have been trying to develop this conceptualization for some time and continue to explore the concept in different populations.

I look forward to talking with you more about this. There is no charge for the instrument – I just would greatly appreciate having it cited and also getting feedback on your work/results if you use it because that would help me further refine my ideas and the tool itself.

Meg

Margaret I. Wallhagen, PhD, GNP-BC, AGSF, FAAN
Professor, Department of Physiological Nursing
Director, John A. Hartford Center of Geriatric Nursing Excellence
School of Nursing
University of California, San Francisco
San Francisco, CA 94143-0610

Tel: 415-476-4965
Fax:415-476-8899
Email: meg.wallhagen@nursing.ucsf.edu

4. The Psychological Well-being-MIDUS II Version (PWB)

Re: Fwd: request instrument for research   Monday, 8 August, 2011 8:05 PM ● ☆

From: "Theresa Berrie" <berrie@wisc.edu>

To: chantjanejantarapat@ymail.com

Full Headers Printable View

Greetings,

Thanks for your interest in the well-being scales. I am responding to your request on behalf of Carol Ryff. You have her permission to use the scales. They are attached in the following files: "14 Item Handout" includes all 14 items for each of the six scales of well-being (14x6=84 items), scoring information, and details about shorter options, plus a list of published studies using the scales. "Form In Word 6 Format" includes a formatted version of the full instrument with all 84 items.

Please note, Dr. Ryff strongly recommends that you NOT use the ultra-short-form version (3 items per scale, 3x6=18 items). That level of assessment has psychometric problems and does not do a good job of covering the content of the six well-being constructs. If length is a concern, the 7-item scale (7x6=42 items) is a far better choice than the 3-item scale. The attached file called "Psychological Well-Being Documentation" provides information about the 7-item scale (starting on p. 6) used in MIDUS II (for information about our MIDUS study, see http://www.midus.wisc.edu/).

We are not aware of any Thai translation of the scales. If you create your own, we would appreciate receiving a copy, along with contact information for the translator.

There is no charge to use the scales, but we do ask that you please send us copies of any materials you may publish using the scales to berrie@wisc.edu and cryff@wisc.edu.

Best wishes for your research,

Theresa Berrie

Administrative Assistant
UW-MADISON INSTITUTE ON AGING (IOA)
2245 Medical Sciences Center
1300 University Ave.
Madison, WI 53706-1532

Phone: 608-261-1493
Fax: 608-263-6211
Email: berrie@wisc.edu

Web: http://www.aging.wisc.edu
Main IOA phone: 608-262-1818

5. Meaning In Life Questionnaire (MLQ)

From: "Steger,Michael" <Michael.F.Steger@colostate.edu>
To: Chantjane Jantarapat <chantjanejantarapat@ymail.com>
Sent: Tuesday, 23 October 2012 10:29 PM
Subject: RE: Request instrument for research and your permission for using

Dear Chantjane,

Thank you for contacting me. The Meaning in Life Questionnaire is free to use, and you have permission to translate and use it. I would ask you for one favor with regard to the translation. I would be grateful if you could send me a copy of your translation when you have completed it. In addition to the translated MLQ, I would appreciate it if the document with your translation could also include your contact information. This way, if anyone has questions about the Thai translation, they can contact you; also, you will get credit for producing the translation, avoiding a misattribution of credit to me.

Thank you,
Michael

Michael F. Steger, Ph.D.
Associate Editor, *Journal of Personality*
Counseling Psychology & Applied Social Psychology
Director, Laboratory for the Study of Meaning and Quality of Life
Colorado State University
michaelfsteger.com

APPENDIX C

PROTECTION OF HUMAN SUBJECTS' RIGHTS

CONSENT FORM

เอกสารชี้แจงผู้เข้าร่วมวิจัย (Participant information sheet)

ชื่อโครงการ แบบจำลองความผาสุกด้านจิตใจของครูที่อาศัยอยู่ในพื้นที่ความไม่สงบ ชายแดนใต้:
การศึกษาแบบจำลองเชิงโครงสร้าง

ชื่อผู้วิจัย นางสาวชัดเจน จันทรพัฒน์

  ข้าพเจ้านางสาวชัดเจน จันทรพัฒน์ ขณะนี้กำลังศึกษาระดับปริญญาเอก สาขาการพยาบาล
คณะพยาบาลศาสตร์มหาวิทยาลัยสงขลานครินทร์และทำวิทยานิพนธ์เรื่อง **แบบจำลองความผาสุก
ด้านจิตใจของครูที่อาศัยอยู่ในพื้นที่ความไม่สงบ ชายแดนใต้ : การศึกษาแบบจำลองเชิงโครงสร้าง**
  การศึกษานี้มีวัตถุประสงค์เพื่อวิเคราะห์ปัจจัยต่างๆที่มีผลต่อภาวะความผาสุกด้านจิตใจของ
ครูที่อาศัยอยู่ในพื้นที่ความไม่สงบชายแดนใต้และทดสอบโมเดลตัวทำนายความความผาสุกด้าน
จิตใจของครูที่อาศัยอยู่ในพื้นที่ความไม่สงบ ชายแดนใต้
  ท่านเป็นกลุ่มเป้าหมายจึงได้รับการติดต่อให้เป็นผู้ให้ข้อมูลในการวิจัยโดยท่านสามารถ
ตอบรับเข้าร่วมวิจัยหรือปฏิเสธการเข้าร่วมการวิจัยได้ตามความสมัครใจในการวิจัยนี้การวิจัยในครั้ง
นี้ไม่ให้ให้ประโยชน์ต่อท่านโดยตรงแต่จะเป็นประโยชน์ต่อไปในการพัฒนารูปแบบการบริการ
ด้านสุขภาพการช่วยเหลือส่งเสริมให้มีความผาสุกด้านจิตใจแก่ครูที่อาศัยอยู่ในพื้นที่ความไม่สงบ
ชายแดนใต้ อาจรวมถึงตัวท่านด้วย
 หากท่านตัดสินใจเข้าร่วมวิจัย ท่านจะได้รับการสอบถามและบันทึกข้อมูลต่อไปนี้ ได้แก่
ข้อมูลส่วนบุคคล ข้อมูลเกี่ยวกับการเผชิญความเครียดความรู้สึกว่ามีความหมาย การรับรู้
ความสามารถในการควบคุมความผาสุกด้านจิตใจ และการสนับสนุนทางสังคม และใช้เวลา
ประมาณ 40 นาที
  การศึกษาวิจัยนี้ได้ผ่านการพิจารณาอนุมัติจากคณะกรรมการควบคุมวิทยานิพนธ์และ
คณะกรรมการพิจารณาจริยธรรมในการวิจัย คณะพยาบาลศาสตร์มหาวิทยาลัยสงขลานครินทร์
อย่างไรก็ตาม ในระหว่างการตอบแบบสอบถาม ท่านอาจมีอาการเศร้า หดหู่ใจ ไม่สบายใจอย่างมาก
อยากร้องไห้เกิดขึ้นได้หากมีอาการดังกล่าวขอให้ท่านแจ้งให้ผู้วิจัยทราบโดยทันทีเพื่อหยุดการทำ
แบบสอบถาม และผู้วิจัยจะได้ให้ความช่วยเหลือท่านและ /หรือปรึกษานักจิตวิทยาหรือแพทย์ ทั้งนี้
เมื่อท่านมีอาการดีขึ้นท่านอาจจะยังคงให้ข้อมูลต่อหรือหยุดเข้าร่วมวิจัยได้ตามความสมัครใจหรือ
ท่านอาจขอนัดทำแบบสอบถามในครั้งต่อไปตามความพร้อมของท่าน
 ในการเข้าร่วมวิจัยหากท่านมีข้อสงสัยเกี่ยวข้องกับการวิจัย ท่านสามารถสอบถามผู้วิจัยได้

ทันทีท่านสามารถยกเลิกการเข้าร่วมวิจัยได้ตลอดเวลาแม้ว่าท่านจะลงนามให้คำยินยอมเข้าร่วมวิจัย
แล้วก็ตามข้อมูลของท่านจะถูกเก็บเป็นความลับในแบบสัมภาษณ์จะบันทึกเฉพาะหมายเลข
ประจำตัวที่เป็นรหัสเฉพาะประจำตัวของท่านเท่านั้นที่ผู้วิจัยทราบเพื่อเป็นกรณีในการติดต่อกลับ
หากข้อมูลบางอย่างไม่ครบถ้วนหรือกรณีที่ต้องการสอบถามข้อมูลเพิ่มเติม

ข้อมูลของท่านจะถูกเก็บอยู่ในรูปของเอกสารและฐานข้อมูลคอมพิวเตอร์ข้อมูลในเอกสาร
จะเก็บไว้ในที่เฉพาะมีเพียงผู้วิจัยและผู้ร่วมวิจัยเท่านั้นที่สามารถเข้าถึงข้อมูลของท่านอนึ่งผู้วิจัยจะ
ดำเนินการทำลายข้อมูลในเอกสารการสอบถามทันทีที่เสร็จสิ้นการวิจัยส่วนฐานข้อมูลคอมพิวเตอร์
จะเก็บไว้เพื่อการศึกษาวิจัยต่อไปซึ่งจะเก็บบันทึกเป็นภาพรวมของครูทั้งหมดโดยไม่มีการบันทึก
ชื่อนามสกุลและที่อยู่ของท่านการเสนอรายงานผลการวิจัยในวิทยานิพนธ์การตีพิมพ์เผยแพร่
บทความวิจัยและการเสนอผลการวิจัยในที่ประชุมต่างๆจะนำเสนอในทางวิชาการเท่านั้นและเสนอ
เป็นภาพรวมของผู้เข้าร่วมการวิจัยทั้งหมดโดยไม่มีการระบุหลักฐานใดๆที่เป็นข้อมูลเฉพาะตัว
บุคคล

หากท่านมีข้อสงสัยใดๆ เกี่ยวกับการศึกษาครั้งนี้ หรือหากต้องการข้อมูลเพิ่มเติม ท่าน
สามารถสอบถามผู้วิจัยและอาจารย์ที่ปรึกษาวิทยานิพนธ์ ตามที่อยู่นี้

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ขอขอบคุณ

ชัดเจน จันทรพัฒน์ (ผู้วิจัย)

หนังสือแสดงความจำนงของผู้เข้าร่วมการวิจัย ในการตอบรับหรือปฏิเสธการเข้าร่วมวิจัย

(สำหรับผู้เข้าร่วมวิจัย)

ข้าพเจ้านาง /นางสาว/ นาย................................. (ชื่อ-สกุล) ได้รับการติดต่อจาก
ผู้วิจัย ผู้ช่วยวิจัยเพื่อขอความร่วมมือในการให้ข้อมูลในโครงการวิจัยเพื่อวิทยานิพนธ์เรื่อง
**แบบจำลองความผาสุกด้านจิตใจของครูที่อาศัยอยู่ในพื้นที่ความไม่สงบ ชายแดนใต้ : การศึกษา
แบบจำลองเชิงโครงสร้าง** ของนางสาวชัดเจน จันทรพัฒน์ นักศึกษาพยาบาล ระดับปริญญาเอก
คณะพยาบาลศาสตร์ มหาวิทยาลัยสงขลานครินทร์

ข้าพเจ้าได้รับการชี้แจงถึงวัตถุประสงค์ของการวิจัยสิทธิในการตอบรับการเข้าร่วมหรือ
ปฏิเสธการเข้าร่วมโครงการวิจัยได้ตามความสมัครใจโดยไม่มีผลใดและในการวิจัยครั้งนี้ไม่ได้ให้
ประโยชน์ต่อตัวท่านโดยตรงแต่จะเป็นข้อมูลในการพัฒนารูปแบบการจัดบริการหรือ   /และ
โปรแกรมเพื่อส่งเสริมความผาสุกด้านจิตใจของครูในพื้นที่ความไม่สงบต่อไป
 ข้าพเจ้าทราบว่าการศึกษาวิจัยครั้งนี้ได้ผ่านการพิจารณาอนุมัติจากคณะกรรมการควบคุม
วิทยานิพนธ์และคณะกรรมการพิจารณาจริยธรรมในการวิจัย คณะพยาบาลศาสตรมหาวิทยาลัย
สงขลานครินทร์

ข้าพเจ้าทราบว่าการให้ข้อมูลอาจจะทำให้มีอาการเศร้า หดหู่ใจ ไม่สบายใจอย่างมาก อยาก
ร้องไห้เกิดขึ้นได้ซึ่งข้าพเจ้าสามารถแจ้งให้ผู้วิจัยทราบโดยทันทีเพื่อหยุดการทำแบบสอบถามและ
ผู้วิจัยจะได้ให้ความช่วยเหลือตามหลักวิชาหรือปรึกษานักจิตวิทยาหรือจิตแพทย์ทันที ข้าพเจ้า
สามารถให้ข้อมูลต่อเมื่ออาการดีขึ้น หรือหยุดเข้าร่วมวิจัยได้ตามความสมัครใจ หรือนัดหมายทำ
แบบสอบถามในครั้งต่อไปตามที่ข้าพเจ้าเห็นสมควร

ข้าพเจ้าทราบว่าการให้ข้อมูลในแบบสอบถามหรือในการเข้าร่วมในการวิจัยครั้งนี้จะใช้
เวลาประมาณ 40 นาที และผู้วิจัยเข้าร่วมวิจัยจะบันทึกข้อมูลส่วนบุคคล ข้อมูลเกี่ยวกับความเจ็บป่วย
การเผชิญความเครียด ความรู้สึกว่ามีความหมาย การรับรู้ความสามารถในการควบคุม ความผาสุก
ด้านจิตใจ และการสนับสนุนทางสังคม
 ข้าพเจ้าทราบว่าผู้วิจัยจะเก็บข้อมูลของข้าพเจ้าเป็นความลับการตอบแบบสอบถามจะไม่มี
การบันทึกชื่อ นามสกุลและที่อยู่ของข้าพเจ้า มีเฉพาะหมายเลขรหัสประจำตัวเท่านั้นที่จะถูกบันทึก
ไว้ เอกสารแบบสอบถามจะถูกเก็บไว้ในที่เฉพาะและถูกทำลายทันทีเมื่อสิ้นสุดการวิจัย ข้อมูลจาก
การสอบถามจะถูกนำไปใช้ในทางวิชาการเท่านั้น จะเสนอผลในภาพรวมของครูทั้งหมด ข้าพเจ้า
ทราบว่าข้อมูลที่เก็บอยู่ในฐานข้อมูลคอมพิวเตอร์จะนำไปใช้ในการศึกษาทางวิชาการเท่านั้น

ข้าพเจ้าทราบว่าตนเองสามารถติดต่อสอบถามข้อมูลเกี่ยวกับการวิจัยได้ตลอดเวลาจาก
ผู้วิจัยและอาจารย์ที่ปรึกษาวิทยานิพนธ์ ตามที่อยู่ต่อไปนี้

    1. ผู้วิจัย: นางสาวชัดเจน จันทรพัฒน์

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    ข้าพเจ้าขอรับรองว่าข้าพเจ้าทราบถึงสิทธิในการตัดสินใจเข้าร่วมหรือไม่เข้าร่วมการวิจัยได้
ตามความสมัครใจและสามารถยกเลิกการเข้าร่วมการวิจัยได้ตลอดเวลาแม้ว่าจะลงนามให้ความ
ยินยอมเข้าร่วมการวิจัยแล้วก็ตามทั้งนี้ข้าพเจ้ารับทราบข้อมูลและเข้าใจถึงวัตถุประสงค์ของการวิจัย
และประโยชน์ในการเข้าร่วมวิจัย ตลอดจนบุคคลที่สามารถติดต่อข้อข้อมูลเพิ่มเติม

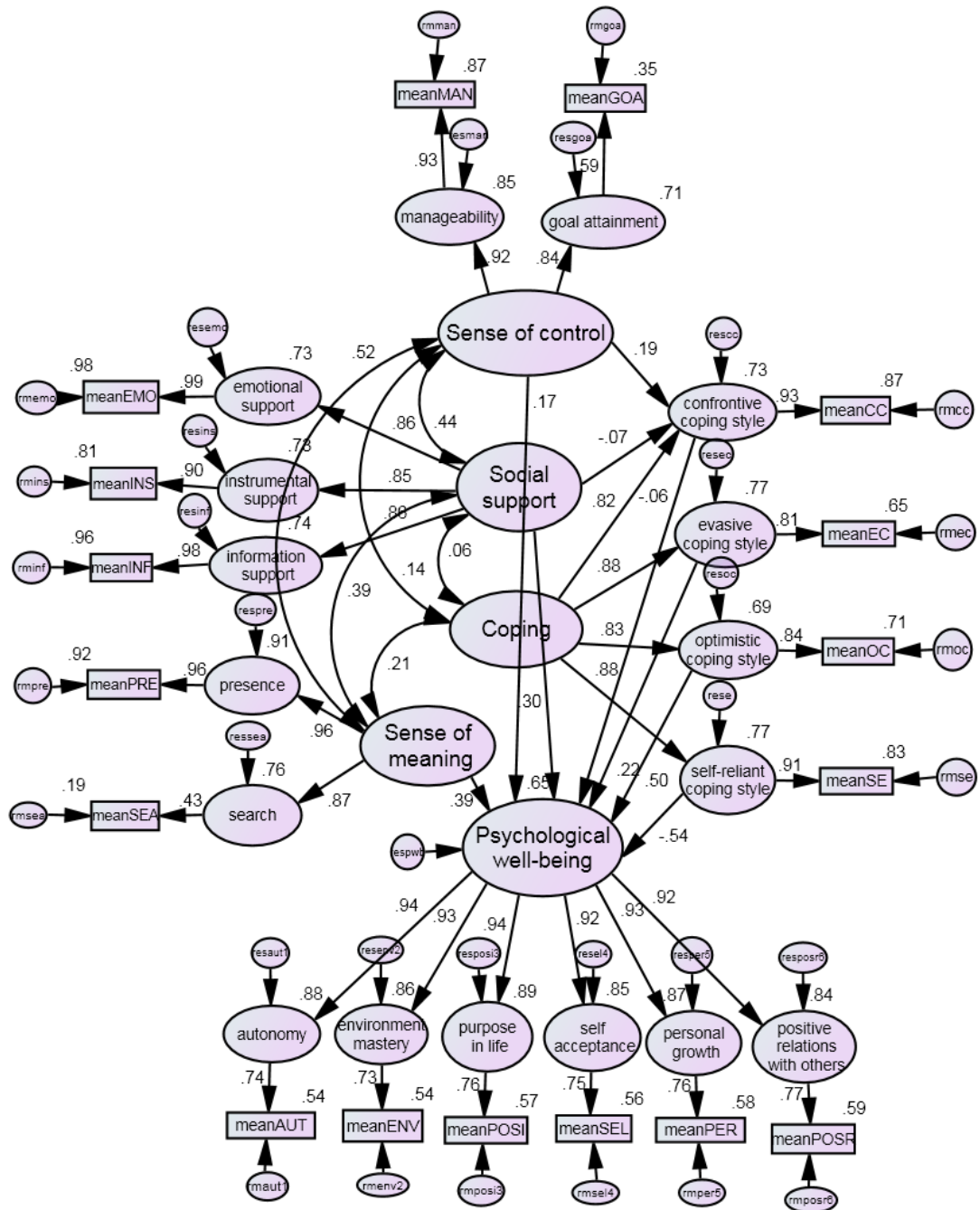   ในการนี้ ข้าพเจ้า [   ] ยินยอมเข้าร่วมการวิจัย
              [   ] ยินยอมเข้าร่วมการวิจัย

ลงนาม…………………………….. (ผู้เข้าร่วมวิจัย) ลงนาม………………………………….(ผู้วิจัย)
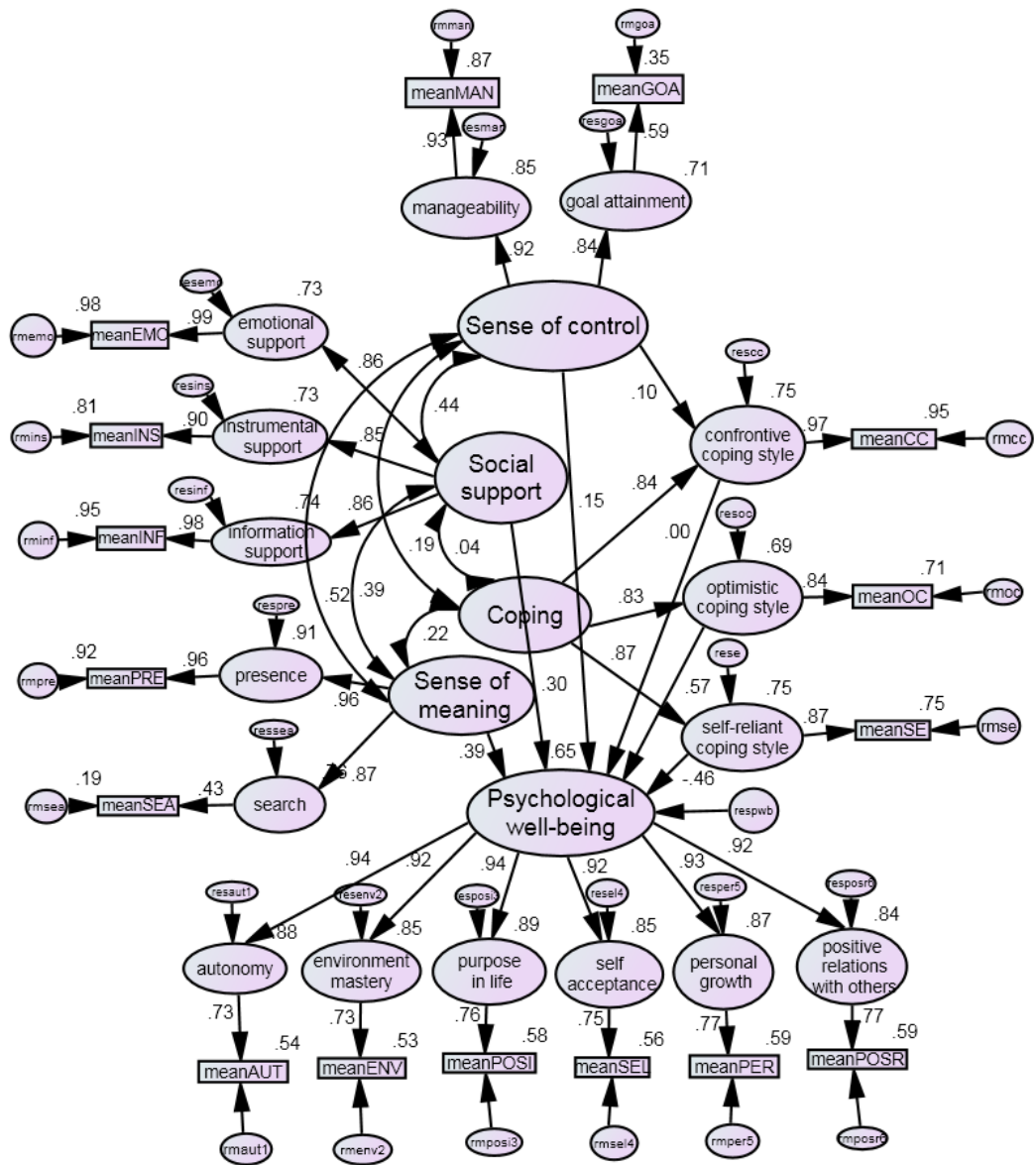วันที่………………………………..   วันที่……………………………………..

APPENDIX D

A STRUCTURAL MODEL: A, B, C

Model A

Model B

Model C

APPENDIX E

LIST OF EXPERTS

LIST OF EXPERTS

The process of the back translation technique from the original instruments (Jalowiec Coping scale (JCS), Interpersonal Support Evaluation List (ISEL), Perceived Control Questionnaire (PCQ), The Psychological Well-Being-MIDUS II Version (PWB), Meaning In Life questionnaire (MLQ) to Thai language was undertaken by three experts:

Dr. Alan Geater (Senior Lecturer, Epidemiology Unit), Faculty of Medicine,

Prince of Songkla University, Hat Yai, Songkhla, Thailand.

Dr. Weena Chanchong (Lecturer, Department of Psychiatric Nursing),

Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla,

Thailand.

Dr. Rohani Jaeasae (Lecturer), Faculty of Nursing, Prince of Songkla University,

Pattani, Thailand.

VITAE

Name	Ms. Chadjane Jantarapat
Student ID	5210430001

Educational Attainment

Degree	Name of Institution	Year of Graduation
M.N.S. (Adult Nursing)	Prince of Songkla University	1998-2000
B.P.H. (Public Health Administration)	Sukhothai Thammathirat Open University, Thailand.	1993-1995
Dip. N.S. (Nursing and Midwifery), equivalent to B. N. S.	Suratthani College of Nursing, Nursing College Division Ministry of Public Health, Thailand	1989-1993

Scholarships Awards during Enrolment

2013-2014   Visiting scholar: University of Tasmania, Center of Rural Health (Department of Rural Health), Faculty of Health Science, Launceston, Australia.

2012   Thesis Supported by a grant from the Psychological Crisis and Healing Research Unit, Faculty of Nursing, Prince of Songkla University.

2009-2012   The dissertation grant, the Faculty of Graduate Studies, Prince of Songkla University.

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List of Publication and Proceedings

Publication

Jantarapat, C., Suttharangsee, W., & Petpichetchian, W. (2014). Factors related to psychological well-being of teachers residing in a situation of unrest in southern Thailand. *Songklanagarind Journal of Nursing, 34*, 76-85.

Presentation (International)

Jantarapat, C., Suttharangsee, W., & Petpichetchian, W. (2013, May). Factors related to psychological well-being of teachers residing in a situation of unrest in southern Thailand. Oral session presented at the 2013 International Nursing Conference on Health, Healing, & Harmony: Nursing Values. Phuket Orchid Resort & Spa Phuket, Thailand.