# CHAPTER 2

# LITERATURE REVIEW

This research applied and combined concepts of participation and concepts of problem analytical process by using the applied group process (informal and formal group meeting) to develop a model for reducing and preventing stress among the elementary school teachers of private schools. In this chapter, various scientific works, concepts, and theories including documents and relevant research studies were critically reviewed and summarized to provide the conceptual framework for the research. The presentation was organized into five parts as follows:

1. Stress and teacher

2. Stress management

3. Participatory action research

4. Analytical problem solving process

5. Group process

## 1. Stress and teacher

### 1.1 Stress

#### 1.1.1 Meaning of stress

Selye (1956, p.54) defined the meaning of stress as the physical and mental state responding to the outer and inner stimulants threatening and obstructing the people's working, growing and needs. Stress caused the change of structure and chemical reaction in the body in order to resist the threat, and keeps physical and mental balances shown by non-specific physical syndromes called General Adaptation Syndrome (GAP).

Lazarus and Folkman (1984, pp.179 - 180) mentioned that stress was the relationship between the individual and environment causing a situation that the individual evaluated as a life non-escaping threat and how an individual would react to each situation differently depended on the balance evaluation of demand, resource and cognitive appraisal.

In short, stress is the reaction of the body, mind, thoughts and behaviors to the inner and outer stimulants; people, feeling, situations or surroundings. When people oppress, threatened or press, can adapt themselves and are satisfied, there will be briskness and energy to manage things, supporting physical and mental strength. But if not satisfied or not adapted then loss balance in social life causing negative physical, mental, and behavioral changes.

### 1.1.2 Response to stress

When there is stress, a physical reaction will occur with the hypothalamus keeping physical balance and then the sympathetic nervous system, the pituitary gland and the adrenal gland are stimulated to respond as follows: (Selye, 1983 ; Siripun Bootsri, 2001)

1) The response of the sympathetic nervous system, the response of this system occurs quickly but for a short time. When this system is roused, epinephrine and nor-epinephrine will gush. The important organs will function more and all the organs are roused such as a faster heart beat, the contraction of the peripheral blood vessel, high blood pressure, and a increases reduction of blood circulation to the stomach, causing the body to use more energy and the hole of iris to expand in order to make the body active and sensitive. The function of this system can be divided as follows:

1.1) The function of the sympathetic nervous system and inner adrenal gland:- when stress occurs at the first stage, the sympathetic nervous system will stimulate the inner adrenal gland to eject epinephrine and nor-epinephrine into circulation system.

1.2) The function of the hypothalamus will discharge the hormone of corticotrophrine releasing factor to rouse the anterior pituitary gland to release the adrenocorticotropin hormone to rouse the outer adrenal gland so as to eject glucocorticoid and cortisone. The cortisone will accelerate the sugar producing process to support the physical immune system, too. If so a lot of hormones are released, it will stop the breathing system of the wound and then the lymphocyte is destroyed, decreasing antibody ability, reduces anti-infection ability, so it is easily

infected. In the stressed state, phacozyte T cell and B cell also function inefficiently, while being stress, more antidiuretic hormone and aldosterrone will be released causing more water and sodium absorption, increasing blood circulation in the body. Since there is close relation between mind and body, the response of one dimension can rouse the others as shown below :

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                  ┌─────────────────────────┐
                  │     External stress      │
                  └─────────────────────────┘
                               │
                               ▼
        ┌──────────────────────────────────────────┐
        │            Internal stress               │
        ├──────────────────────────────────────────┤
        │                    ──────────►            │
        │  Physical      ◄──────────   Psychological│
        └──────────────────────────────────────────┘
                               │
                               ▼
                  ┌─────────────────────────┐
                  │   Behavioral   response  │
                  └─────────────────────────┘
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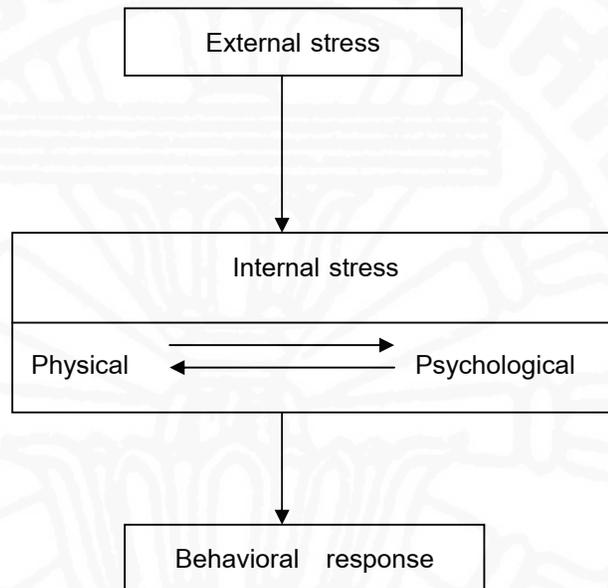
Figure 2 :  Showing  the  response  to  the  stress

(Siripun Bootsri, 2000, p. 28)

The  result  of a stress  reaction  deals  with  the  brain  action  and  other  systems  in  the  body. The  biochemical  changes  during  stress  are as  follows:

1. Physical  and  psychological  stress  stimulates  the  amicdala,  known  as  being  part  of the emotional  data  system  in  the  brain.  The  data  transferred  from  the  high  center  in  the  front  brain  will cause an emotional to response  the  stress.  When the  amicdala  is  stimulated  by  stress,  it  will  convey  a  nervous  signal  to  stimulate  the  gland  to  release  cordicothrophic  hormone  into  the  blood. Later it  will  stimulate  the  adrenal  gland, which  is  a  very  small  gland  at  the  top  two  sides  of  the  kidney.

2.The  adrenal  gland  consists  of  two  parts: the inner  part  or  medalla,  which  produce  the  adrenal  hormone  and  noradrenaline,  while  the  cortex  of  the  gland  or

cortex has the duty of releasing hormones of the minerals corticosteroid and glucocorticoid.

3. The result from the said stimulation, will cause the body to be ready to fight or escape through two systems. They are, the response system of the nervous system, which results in a period and the response of ductless gland system which will result in a longer period.

It can be concluded that the response to stress, when a person copes with stress, he/she will be able to respond in many ways, the main characteristics, are a physical response, a spiritual and a behavioral response.

### 1.1.3 Levels of stress

It can be concluded that the levels of stress can be classified into main four groups. They consist of a group using a period as a criteria, a group using an interaction between the quantity of stress and the outcome of the work of each person, and group using the impact of stress, and a group using the perception of each to stress. These are the main four groups and may be briefly described as follows:

**1) Group using a period of time of stress**

This criteria is divided into three levels which Janis (1952, p.13) described as follows:

1.1) Mild stress, a little time (a minute to an hour) is spent forming in stress. It is caused from dialy activity such as traffic jams going to work.

1.2) Moderate stress, it is more than mild stress (many times a day) such as stress from workload, from a continuous or a long time at work, from conflicts with colleagues, and chronic stress.

1.3) Severe stress, it the severe of this group, symptoms of stress spend long time (a week to a year) such as from illness and the loss of respect person in the family.

**2) Group used interaction between the quantity of stress and outcome of work in each person**

This criteria is divided into three levels, which can be briefly described as follows: (Dubrin, 1952 ; Altman and et al, 1985).

2.1) Mild stress, it is lack of challenge at work, it is boring and not interesting. there is no stimuli for the quality of work. Therefore, it reduces the efficiency of working levels.

2.2) Moderate stress, it is adding stimuli or challenges in work. It increases the level of stress to more than the mild stress level. But, it makes for an increase in work efficiency to more than mild, high or severe levels of stress. It can be concluded that moderate stress is the most proper stress.

2.3) Severe stress, is more than moderate stress and spend many times with this level, is power used reduce to resist external pressure. Therefore, it reduces working efficiency. Consequently, it reduces efficiency in problem solving, too.

**3) Group using impacts of stress**

This criteria is divided into four levels which Savery (1989, pp.17-20) described as follows:

3.1) The first stress level, is temporary stress. Consequently, there are many symptoms such as increased of heart rate, respiratory rate, increase blood circulation, and metabolic energy of body.

3.2) The second stress level, is stress more than the first . Consequently, there are many symptoms such as anxiety, restlessness, and the symptoms last a long time.

3.3) The third - stress level, is stress more than the second. The symptoms of this level are headaches, chest pain and tympani. When one has these symptoms one should go to see a doctor to alleviate them.

3.4) The fourth - stress level, is the most severe of the group. The symptoms of this level are peptic ulcers, syncope, alcoholism and drug addiction. There are symptoms of psychosis and anxiety which indicates severe stress and may lead to cardiac arrest. At these levels one must go to see a doctor or psychologist to alleviate them.

**4) Group using the perception of each person to stress**

This criteria is divided into four levels which Suwat., et al.,(1997, p.3) describe as follows:

4.1) Mild stress, is a little stress and occurs in daily activities. This level of stress is no threat to the life style of each person. This is stress which each person is able to automatically adapt.

4.2) Moderate stress, occurs in daily activities. Because  there is a link to stimuli or important events in life. Consequently, a person responds to this stress through anxiety and fear. This stress is normal, in addition, it makes for increased emotions at work.

4.3) High stress, is stress that a person can not adapt  in a short period. It  sends a signal of danger to a person that is having a high level of stress, If a person does not care or cure this stress, that person may develop chronic stress.

4.4) Severe stress, it is the most severe of this group. It occurs continuously. Consequently, It has a negative affect on a person such as failure to adapt, bored on exhaustion, no - self regulation, and there are many diseases. At this level of symptoms one must go to see a doctor or psychologist to alleviate these symptoms.

From the revision of the levels of stress, it can be concluded that stress for each  person  is a different  level of stress,  based  on  the  realization  and  adaptation  to the  oppressors. Apart from, above mentioned criteria, Suwat., and et al.,(1997, p.3)  divides level of stress  into  four  stages : Mild stress,  Moderate stress,  High stress,  and  Severe stress. Later, he developed progressive appraisal  and  self-stress  analysis  for  Thai people.  In  this  study also used four stages division for the stress appraisal and analysis of  each sampling group. They are both in phase 1 and 2 of the research.

### 1.1.4 Related stress theories

#### 1.1.4.1 Selye's  stress  theory

Selye mentioned that  when  the  people  are  oppressed, there  occurs physical  stress,  good  or  bad,  causing  a  change  of  physical  balance.  When  there  is physical  oppression,  there  occurs  reaction,  causing  physical, bio-chemical  and behavioral  changes.  These  changes  are  called  General  Adaptation  Syndrome  which has  three  stages:  (Selye., 1975 ; Feldman., 1993)

It can be concluded from Selye's theory that when  the  body  gets  oppress  and stress, there will occur bio-chemical-physiological and behavioral changes called general adaptation syndrome  which  have  three  stages:

1. Alarm reaction stage, the stage of the beginning of oppression. There is a short reaction  to  oppressors. The physical processes are used to adapt and to balance.

<span style="color:red">2. Persistence stage. It is the stage of full adaptation to the oppressors in many ways in order to get to a better state. If The body is still oppressed, it comes to the third stage.</span>

<span style="color:red">3. Exhaustion stage. It is the stage of adaptability because of chronic high stress, exhaustion, adaptive failure, and physical and mental diseases. The aim of the study is to develop health promotion and prevent mental diseases. Therefore, the research method emphasizes the sampling groups who have above normal stress in the stages of the alarm reaction, persistence and exhaustion. These people, with different stress stages, will get knowledge and gradually reduce their stress by themselves.</span>

### 1.1.4.2) Lazarus's stress theory

Lazarus and Folkman regarded stress as the transaction between humans and their environments. (Lazarus and Folkman., 1984, pp. 141-239)

The state of stress is assessed as people's events influencing their own welfare and all existing resources have to be used for self adaptation. The relations between people and environment is called Lazarus' coping model, which consists of two processes: coping with stress and appraisal.

Appraisal is a cognitive process to appraise situations as to whether or not they are dangerous, we analyze the problems and manage, control or reduce the strength of the situations, and also the use of useful resources to cope with situations. There are three stages of appraisal:

**1) Primary appraisal.** Intelligence, knowledge, and experiences are used for appraisal in three ways as follows:

1.1) Irrelevant. The people consider that the situation is not related to their own welfare or they do not have any interest in the situation.

1.2) Benign positive. To consider that the situation is useful for their own welfare, the people do not try to adapt themselves.

1.3) Stressful. To consider the situations the people must use useful resources for adaptation at their utmost or beyond their ability. The stressful appraisal has three kinds:

1.3.1) Danger and loss. The people's appraisal of their own situations such as illness, no satisfaction with themselves or society, and loss of a beloved.

1.3.2) Threatened. It is to appraise the dangers and losses in the future, which will cause difficulties and troubles.

1.3.3) Challenge. It is to appraise that the situations may be dangerous but people manage or control them. If the situation are useful to themselves, they will support or improve their moral. The behaviors shown by appraisal are eagerness, excitement, joy and so on.

It can be concluded that the primary appraisal is the conception of dangerous situations. But the irrelevant or bad-relevant situations do not cause stress.

**2) Secondary appraisal.** The people use their intelligence, knowledge and experiences to appraise the useful resources and their own choices in order to cope with dangers from the new appraised situations. This is to review whether or not the primary appraisal is corrected and whether or not coping with stress in the primary appraisal is efficient.

From Lazarus and Folkman's research, it is found that the situation appraisal influences coping with stress. Mostly people cope with stress temporarily for the situations they can not change. For the situations that can be changed and need more information, people mostly cope with stress reasonably.

It can be concluded that the situation appraisal is the important stage, influencing the coping with stress.

**3) Reappraisal.** After trying to get rid of dangers, the reappraisal is used to consider whether the dangers remain are reduced or eradicated. This stage is the primary reappraisal if the results of the reappraisal restrain the dangers or cause a new danger.

From Lazarus's view point, stress is the feeling, physical and mental reaction stimulated by undesirable things or situations. The state of stress appraisal the people's situation, how it affects them and how they will adapt themselves. This is called the stress-facing process which consists of two processes: appraisal and coping with stress. The situation appraisal is considered an important stage influencing the coping with stress. The correct and proper knowledge of appraisal is inserted and applied before the

second phase research in order that the elementary teachers have right  knowledge,  face stress  and  cope  with  it  rightly  and  properly.


### 1.1.5 Method of measuring stress

In  reviewing  literature about ways of measuring stress found that there are many methods,  but  the  most  fashionable  methods  used  are  three  methods  :  1) Physiological measurement, 2) Life event and 3) Stress symptom, each method has detailed references able to be presented as follows :


**1) Physiological  measurement.**

It  is  a  concept  that  describes  the  belief  of  releasing  hormones  such  as caticolamine hormone, consequently it is a changeable  body when a person has stress. Consequently, stress is able to be reflected from the levels of hormones  or  blood pressure. Tools of this physiological measurement are aspects which are composed of things which can be measured such as blood pressure, heart rate and skin response (Galvanic Skin Response  :  GSR)  and  hormone  levels  of  corticosteroids,  especially  cortisol  and catecholamines.


**2) Life events measurement**

These  methods  believe  that  some  life  events,  especially  stressful-life  events lead to chronic stress. Tools of this life event measurement are aspects about stressful life events  such  as  the  death  of  close  family  or  divorce.  The  tools  used  were  Social Readjustment  Rating  Scale  (SRRS),  formulated  by  Holme  and  Rahe.  There  were  many weak points and unclear items in the questionnaire.

After  the  questionnaire  of  Holme  and  Rahe,  other  academics  tried  to  further develop the questionnaire of Holme and Rahe composed of The Life Experience Survey (LES), a total of 57 items in the questionnaire (Sarason, Johnson & Siegel, 1978), The PERI Life  Events  Scale,  a  total  102  items  in  the  questionnaire.  (Dohrenwend,  Karasnoff,  A skenasy  &  Dohrenwend,  1978),  and  the  Unpleasant  Events  Schedule  (UES),a  total  320 items in the questionnaire (Lewinsohn, Mermelstein, Alexander, & MacPhillany, 1985).

Apart from, The Social Readjustment Rating Scales (SRRS) questionnaires of Holme, and Rahe, the Hassles Scale is another questionnaire of Richard Lazarus and friends. There are 117 events. They developed so that experience would help each person to be able to prevent bad effects and reduce the impact to health.

The overall study of life events measurement found that they were unclear, both in content and process of measurements.

### 3) Stress symptoms measurement

There are many questionnaires based on the principle or concept of response to non–specifics of a body' stress such as A Health Opinion Survey, Mental Health Inventory, General Health (McDowell and Newell, 1987) and Suan Prung 20, 60, 104 questionnaire. (Suwat Mahusnirunkun, et. al., 1997)

## 1.2 Teacher

This literature reviewed about documents and relevant research concerning teachers' stress in each school found interesting information from teachers, academic schools and administrators were as followed :

### 1.2.1 Working aspects

The fundamental education (the first to sixth levels of elementary schools) reform in 2001 divided into two main structures : the first structure is the core curriculum developed by the ministry of education, the second structure is the local curriculum. (Piyapon Tosem, 2005, p. 21) This has a direct affect on the elementary teachers responsibility in private schools, because this increase more work, resulting the stress of elementary teachers in private schools.

### 1.2.2 Equality

Besides, the reform of fundamental education, equality between public schools and private schools is another factor. There were several other factors i.e. stability, progress in work, salary, welfare, development, opportunity, and aspects of work were unequal between public schools and private schools. Public schools have special laws that promote support and a central organization for their advocacy and responsibility. On the

other hand, the conduct of private schools depends on only administrators or academic schools (Ponnipa Limpapayom, 2002, p. 95). which may affect stress of elementary teachers in private schools.

### 1.2.3 Research

Apart from the reform of fundamental education and equality between public schools and private schools, relevant research is another factor divided into 2 types : relevant research with factors and the prevalence of teachers and academic schools or administrators as follows :

#### 1.2.3.1 Relevant research with factors and prevalence of elementary teachers

There are a little research about teacher stress, as follows :

**1)** Elementary school teacher factors and prevalence research in the international

Mclaugh lin and Shea (1960, pp. 216-224) studied, stress in elementary teachers, 348 subjects, California, in the USA found that factors of stress in elementary teachers composed of 3 factors : workload, inadequate salary, and inappropriate academic behavior, respectively.

Conley and Woosley (2000, pp. 197-201) studied, roles and outcomes of work of the elementary teacher in the south of the USA. found that the stress was related to both self-value and the organization of elementary teachers.

From these research, it can be concluded that factors influencing job stress in schools elementary teachers is composed of 4 factors : workload, inadequate salary, inappropriate behavior of study, and the role stress are related to both self-value and the organization of elementary teachers.

## 2) Elementary teacher factors and prevalence research in Thailand

Patimakorn  Chanphrakhon (2000, pp.59-81) studied, stress in elementary teachers, 384 subjects, in the education opportunity expanse  school under the jurisdiction of Buri Ram provincial primary education office found that they had a high level of stress. Factors had influence to stress composed of 5 factors : female had more stress than male, elementary teachers were over thirty-eight years old, more than fifteen years of experience in teaching, devoice status, and the majoring of graduation do not match with their teaching affect to  the most stress.

Suyarin  Sittiwong (2001, pp. 35-40) studied,  stress in  elementary teachers,  98 subjects,  in Nangdad  school  cluster  under Nongbuadang  primary  education office  at Changwat Chaiyaphum found that factors affect stress composed of 6 factors : elementary teachers had high level of stress in roles (ambiguity and conflict roles) and individual valued. Whereas, they had low level of stress in role (overload), work value states, and organizationally valued.

Wantana  Charoenrattanachote (2002, pp. 51-71) studied, stress in elementary teacher, 336 subjects, in primary school of Rattanagosin Group under Bangkok Metropolitan found that they had moderate level of stress. Factors had influence to moderate level stress composed of all age groups (20-29, 30-39, and 40-60 years), all marital status (single, double and window), all different working experience (5-13, 14-22, and 23-31 years), all among the salary, all among the different family responsibility, different interpersonal relationship between teachers and their family membership, different work atmosphere, different interpersonal relationship between teachers and their administrators.

Patcharin  Kongrasri (2003, pp. 71-83) studied, stress in elementary teacher, 216 subjects, in primary schools of Wattana district under Bangkok Metropolitan found that they had moderate level of job stress. Factors had influence to stress at moderate level consists of age groups (30-39 and 40-60 years) and marital status (single and widow).

From these research, it can be concluded that factors influencing job stress in schools elementary teachers are composed of 4 factors : sex (female had more stress than male), age groups (20-29, 30-39, and 40-60 years), marital status (single, married, devoice and widow),  majoring of graduation (invalid with them teaching affect to  the most stress),

roles (ambiguity and conflict roles), more than fifteen years of experience in teaching, different working experience (5-13, 14-22, and 23-31 years), salary, different family responsibility, different interpersonal relationship between teachers with their family members and administrators, different work atmosphere and valued perceives of each individual.

1.2.3.2  Relevant research with factors and prevalence of academic schools' stress or administrator's stress.

There have been many studies of administrator's stress as follows :

NASSP (1981, pp. 1-8) studied, stress of schools administrators and found that school administration was one type of work that has the most stress.

Hull (1984, p.231) studied, factors of stress with school administrators in secondary schools, Texas, USA, found that :

1. Administrators who were younger than fifty years old have more stress than administrators over fifty years old.

2. Administrators more experienced in work would have less stress than those with little experience in work.

3. Large size schools administrators had more stress than small size school administrators.

4. Absenteeism of teachers and crisis of finance were factors which determine the severe stress of school administrators.

Finali (1985, p. 85) studied, personal factors with related occupational stress of elementary schools administrators and found that :

1. Female  schools administrators had more stress than male administrators who  worked in the urban areas.

2. School administrators that work in rural areas had more stress than school administrators who worked in the urban areas.

Stefen (1985, p. 3507) studied, working' factors that effect occupational stress of elementary teachers found that the more an ambiguous functions  were factors increasing stress. Besides, elementary school administrators had more stress than secondary school administrators.

Woolly (1985, p. 2372) studied, occupational stress of community college administrators, Canada, found that type of personality and relations between persons were factors affecting stress.

Ericson (1986, p. 1844) studied, factors affecting stress of college and university administrators in the USA found that :

1. Factors which affect stress in administrators were number of years in management and roles in the administrative position.

2. Size of schools affect administrators ' stress.

Nelson (1986, p. 2880) studied, factors affecting stress in elementary schools, Newhamshiar found that factors affecting stress were evaluation outcomes of personnel, time management, and too many conferences.

Ritchie (1986, p. 1932) studied, occupational stress of school administrators, Germany, found that :

1. Working factors which affect stress of school administrators were comprised of solving problems in administration and relations between person.

2. Conditional working factors affecting stress of administrators were evaluation outcomes of personnel, workload, competitive time, long conferences, and participation after finishing work, and a belief of internal loss of control.

Jones S. (1987, p. 3923) studied, factors affecting stress of elementary school administrators found that age, experience of school administrators and size of school were factors which affect stress.

Wright (1987, p. 804) studied, stress of elementary teachers, Prince Gore Town, Maryland, U.S.A. found that time management was an important stress factor. Aside from, other factors such as workload, to many conferences, and external loss of control, respectively.

Lavant (1989, p. 2732) studied, stress of schools administrators, control of USA. Found that :

1. Middle age – administrators had the most stress.

2. Administrators who graduated with a bachelor's degree level had more stress than administrators who graduated with a master's or doctoral degree level.

3. The prior experience of administrators and to reduce their stress.

From these research, it could be concluded that influencing factors reducing stress of school administrators composed of 18 internal factors such as age (less than fifty years old has more stress than administrator age over fifty years old), experience (more experienced in work would have less stress than those with little experience in work), size of school (Large size schools administrators had more stress than small size school administrators), absenteeism and crisis of finance (factors that determine the severe stress of school administrators), gender (females had more stress than males that work in urban areas), site (those who work in rural areas had more stress than school administrations that work in urban areas), function ( more and ambiguous work were factors affecting stress), school levels (elementary schools had more stress than secondary), type of personality (factors which affect stress), relations between persons (factors which affect stress), number of years in management (a factor which affects stress), role in position (a factor which affects stress), evaluation outcome of personnel too many long conferences, competitive time, participation after finishing work, and belief of internal and external loss of control, solving problems, and education, (those graduated with a bachelor's degree level have more stress than those who graduated with a master's or doctoral degree), These factors were significantly related to school administrators' stress.

Apart from, these influencing factors to stress, prevalence was another study which found that school administrators had stress related to the overall level of work.

From reviewing literature about stress and teachers it can be concluded that the correlation between stress and teachers is divided into two main issues which consists of the causes and the effects of teacher's stress.

## 2. Stress management

The part reviewing relevant literature with concepts of stress management consist of 2.1 workplace, 2.2 redesign of central Demand-Control Support Model (DCSD), 2.3 coping with stress as Lazarus and Folkman and 2.4 positive thinking. The details of each concept are as follows:

2.1 <u>Workplace</u>

In reviewing literature it is found that having described the unhealthy effects of stress it is now important to consider the stress management used to identify, assess, and manage stress in the workplaces or schools. Ways of stress management may be implemented that there are both the same and different of the main three ways as follows :

### 2.1.1 Management  strategies

Management strategies which is intervention in stress management are typically classified into primary, secondary or tertiary approaches (Kendall et al, 2000). Having published a useful table summarizing preventive strategies and surveillance indicators for organizational stress process. (Quick et al. 1988)  (In Figure 3)
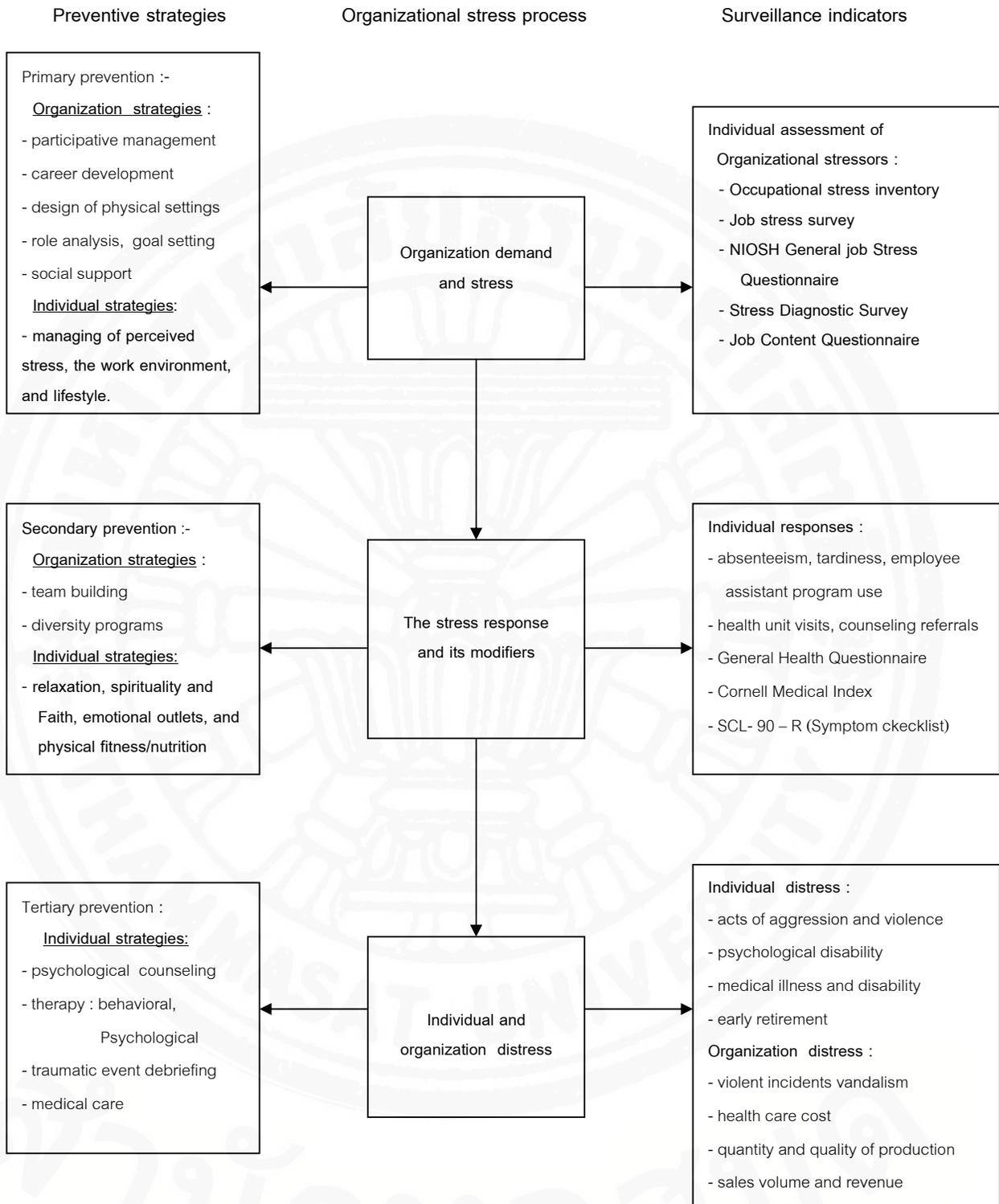
Preventive strategies          Organizational stress process          Surveillance indicators

Primary prevention :-

Organization strategies :
- participative management
- career development
- design of physical settings
- role analysis, goal setting
- social support

Individual strategies:
- managing of perceived
stress, the work environment,
and lifestyle.

Organization demand
and stress

Individual assessment of
Organizational stressors :
 - Occupational stress inventory
 - Job stress survey
 - NIOSH General job Stress
   Questionnaire
 - Stress Diagnostic Survey
 - Job Content Questionnaire

Secondary prevention :-

Organization strategies :
- team building
- diversity programs

Individual strategies:
- relaxation, spirituality and
  Faith, emotional outlets, and
  physical fitness/nutrition

The stress response
and its modifiers

Individual responses :
- absenteeism, tardiness, employee
  assistant program use
- health unit visits, counseling referrals
- General Health Questionnaire
- Cornell Medical Index
- SCL- 90 – R (Symptom ckecklist)

Tertiary prevention :

Individual strategies:
- psychological counseling
- therapy : behavioral,
              Psychological
- traumatic event debriefing
- medical care

Individual and
organization distress

Individual distress :
- acts of aggression and violence
- psychological disability
- medical illness and disability
- early retirement
Organization distress :
- violent incidents vandalism
- health care cost
- quantity and quality of production
- sales volume and revenue

Figure 3 : Preventive strategies and surveillance indicators for organizational stress.

(Quick et al. 1988, p. 259)

### 2.1.2 Primary methods

Having much to be achieved at the national policy level that can lead to organization change. Strategies at the national level include legislation, nation monitoring systems, and active transfer of knowledge.

There were studied or survey of each levels for primary methods as follows:

Kompier et al., (1994, pp.296-318) studied, analysis of five European countries regulations, policies and practices found that these countries which possessed framework legislation (Sweden, The Netherlands, UK) also had well-developed work would have been stress prevention programs for each worker.

Houtman and Kompirr (995, pp. 209-226) reported that nation monitory system were important for benchmarking and drawing attention to risky occupations.

Kompier et al. (1994) reported that active transfer of knowledge may include the use of leaflets, research reports, books, conference, training courses, video, and TV broabcasting. Found that these tools related to stress in countries that used framework of legislation to prevent stress.

### 2.1.3 Organizational methods

From the revision of the literary intervention to prevent elementary teacher stress it is found that there are four ways to prevent stress. The levels of organization comprise of sustainable organizational approaches, job redesign, secondary approaches and tertiary approaches (Dollard, Winefield, Winefield, 2003, pp.25-26)

2.1.3.1 The sustainable organization approaches focus on the analysis of all workers in preparing the model development of active measures to prevent stress.

2.1.3.2 Job redesign include strategies that aim to prevent the occurrence of work stress. Such as job redesign, occupation health and safety strategies, selection process to improve fit, job enrichment, changing work schedules

2.1.3.3 Secondary methods, these focus on reducing the impact of the stress response before they become too severe. They may include training groups or individuals to be resilient to work stressors, such as through stress inoculation training, fitness programs, and relaxation training.

2.1.3.4 Tertiary methods, these focus on the amelioration of an identified stress condition. Methods may include psychotherapy, and post-traumatic assistance programs, case management, injury management or disability management (Kendall et al., 2000).

## 2.2 Redesign central Demand-Control Support Model (DCSD)

There are several studies which have attempted to redesign central Demand-Control Support Model (DCS) dimensions as follows.

2.2.1 Increasing participation in decision making through increased staff meetings led to increased levels of both decision latitude and social support, and in turn to decreases in role conflict and role ambiguity and finally to reduced level of emotional strain, job dissatisfaction, absenteeism and intention to leave (Jackson, 1983)

2.2.2 Devolution of control over pace of work, organization of rest breaks, allocation of work assignments and overtime from supervisors to work teams (Wall and Clegg, 1981), and increased control over work arrival and departure (Pierce and Newstrom, 1983) resulted in constant benefits (Murpy, 1988).

2.2.3 Changes in decision latitude and social support led to improved cardiovascular risk pattern with regard to lipids (Orth - Gomer et al., 1994) ; a decrease in sleep disturbance and gastrointestinal complaints (Wahlstedt and Edling,1988) ; and a decrease in the prevalence of pain in the upper spine (Theorell, 1998)

Individual approaches found that it consists of support for the efficacy of cognition behavioral approaches in the alleviation of stress symptoms have been found in the literature (Bamgerg and Busch, 1996) as well as for stress inoculation training, specific cognitive-behavioral program (Saunders et al., 1997). However their efficacy is generally measured in terms of stress state reduction rather than modification of the work environment.

Finally, relative efficacy and issues in the evaluation of interventions, found that it has a study about a meta analysis by Vander Klink et al. (2001) of 48 experimental studies. They evaluated the effectiveness of individual and organizational focused intervention on health complaints, psychological resources and responses and quality of work life, and found a small but significant overall effect for the interventions as a whole, leading to the conclusion that stress management interventions are effective. The study found a moderate effect for

cognitive-behavioral interventions and multi-modal interventions. A small effect size was found for relaxation and non-significant was found for organizational focused interventions

## 2.3 Coping with stress as per Lazarus and Folkman

Apart from the stress strategies used in the  workplace, other strategies that are applied to Lazarus's  Stress  Theory, are main two methods for coping with stress as follows: (Lazarus and Folkman, 1984 ; Auerbach and Gramling, 1998)

2.3.1 Emotional - focus coping method. It means  adaptable  behavior  by a cognitive process  for appraisal and management  to  oppressive  situations  by  means  of  emotional and stress changes or adjustment. It does not solve the problems directly but  just  reduces the stress

In the other word, when the most people have a problem and react with stress.  And then they will display some of these physical and mental symptoms.  They are less likely to solve the problem that initiated the stress reaction, and that will exacerbate the situation. Because  they can not concentrate with analytical problem solving process.  Consequently, they feel like a failure to solve with many problems.

2.3.2 Problem-focus  method.  It means  adaptation  by  a  cognitive  process  for appraisal and treats  the oppressive situations  by means of changes of human-environment relations in order to make a better  appraisal  or  manage  the stress stimulants by  focusing on problems.

This coping strategy is consistent with good concept of the reduction of stress is comprised of three basic elements : (1) physical alteration of environment stressors, for example, relocating a factory to an industrial zone, (2) modification of person's cognitive attributions, for example, focusing thought or reinterpreting situations as less emotionally threatening and (3) alteration of behavioral and physiological responsibility, for example, the use of various relaxation techniques or pharmacological methods (Linder, 2005, p. 84)

The interest of this research is to change both the emotions and problems of teacher's stress. By the strategy used to change the emotion of teacher's stress is the step of pre- development and is the second phase of this research.  Also, the strategy used to

change the problems of teacher's stress is the step of development and is the second phase of this research. Focus on solving the problems directly.

To prepare elementary teachers in each size of school (large middle and small sizes schools) about adapting to emotional stress, which is step in the pre - development model in the second phase of this research. It aims to reduce emotional stress of elementary teachers, before starting  the new model development for preventing and reducing stress.

Reviewing about relevant ways deal with reducing and preventing stress found that there are several methods as follows:

Peiffer (1989, pp. 60-61) suggested stress reduction strategies that focus on control breath as follows:

1. Withdraw as soon as possible and sit down somewhere.

2. Take a deep breath and hold before breathing out.

3. Take another deep breath (always through your belly) unclench your teeth.

4. Take another deep breath and drop your shoulders

5. Take another deep breath and open your hands

6. Breath in deeply, hold your breath and count to five and breath out again. Repeat last step at least five times.

This method is called first aid exercise will help the ease off the symptoms. It enables elementary teachers in private schools to think clearly simply because they calm down and permit oxygen to reach the brain. Because when they have stress it will tighten up all the muscles and organs in the body, including their breathing apparatus. This will result in shallowing breathing and therefore less oxygen intake, which reduces their brain's level of activity.

Prayot Sinsuk (1994, p. 63) suggested  stress  reduction  strategies  as  follows:

1. Concentrative  practices, contemplation, breathing, and yoga  may  make  mental peace  by  less  oxygen  consumption  and more physical  relaxation, relieving  anxiety.

2. Practices of relaxation  such as lying  on  the  floor, listening  to  light  music, and tensing  and  relaxing  face,  hand  and  foot  muscles.

3. Feedback of biological waves  such as comparing the electricity  wave  of  the stress  muscles  with  that  of  normal  ones  in order  to  see  the  electricity  waves  of

muscles on a screen or hear the sound on a loudspeaker when stress is reduced by muscle relaxation.

4. Massage can relax muscles and physical stress, for example, face massage can improve sleep.

5. Adjustment of physical postures to more comfortable positions for muscle relaxation when sitting, sleeping or working.

6. Swimming or floating in water.

7. Exercises of repetition, for example Chinese style exercise, Tikek and slow dancing.

In addition, from research deal with reduce emotional stress, meditation found that result of research had positive effects both the study of Alexander et al. 1989 and Carrington, 1993 as follows:

Alexander et al. (1989, pp. 950-964) studied, effect of meditation in elderly volunteers not only showed more improvement on measures of mental and physical health and cognitive flexibility, but also had significantly better survival rates over these year period than control subjects or those taught a mental relaxation technique.

Carrington (1993, pp. 139-168) has reviewed the research literature on the effects and effectiveness of meditation found that all of the simplified meditation techniques rapidly bring about a deeply restful state. Another without loss of alertness and decreased physiological arousal, as indicated by findings of lowered oxygen consumption, decreased heart and respiration rates, increased electrical resistance of the skin, and decreased concentration of blood lactate.

To sum up, emotional stress reduction serve as first aid against stress. Elementary teachers in private schools will not prevent stress, but they can reduce or eliminate stress when they experience it. The best action is of course to practice meditation or follow a stress management for emotional stress reduction which will put them in a better position to handle, reduce or eliminate stress.

## 2.4 Positive thinking

Recently there has been a call among psychologists to address what is called positive psychology. According to Seligman and Csikszentmihalyi they propose that psychologists should come to understand what make life worth living, not just how to cope with and heal from negative life events. Moreover, Diener recommends that nation should measure and monitor how frequently and intensely people feel satisfied and happy in various life circumstances and cross situations (Muchinsky, 2003, p. 341). One of all these ways is positive thinking or self talk.

Positive thinking is making use of the suggestibility of your subconscious mind in a positive way, is a mental attitude that admits into the mind thoughts (Peiffer, 1989, p.5 ; Sasson, 2006, p.1). This mind consists of two parts the conscious mind, which helps us with daily decision-making process and also assists us with new situations. On the other hand, there is the subconscious mind, which makes up the far greater part, just like the submerged part of the iceberg. The subconscious mind deals with the repetition of learned behavior. This can be very helpful because it enables us to deal with situations more quickly when they occur again (Peiffer, 1989, p. 5).

Both the conscious mind and the subconscious mind relate to each other strongly. That is information from the subconscious mind feeds directly into the conscious mind. There is a strong link between the two parts of the mind. Everything you have ever seen, heard or experienced is perceived by the conscious mind and then stored away into the subconscious mind as a memory. This memory is stored as the incident itself plus the feeling that went it at the time. (Peiffer, 1989, p.69)

According to mention above evolves positive thinking, it could be concluded that if each person has good thinking, the quality of thoughts affect to the quality of life. (Peiffer, 1989, p.8-9). Researchers continue to explore the effects of optimism on health, the health benefits optimism may provide are : (Mayo Clinic Staff, 2005, p.1)

1. Reduced stress

2. Greater resistance to catching the common cold

3. A sense of well-being improved

4. Decreased risk of coronary artery disease

5. Breathing easier if you have chronic obstructive lung disease, such as emphysema

6. Improved coping ability for women with high-risk pregnancies

7. Living longer

8. Better coping skills

**Practical Instruction of positive thinking**

There are many ways for developing a positive attitude that will lead elementary teachers to happiness and success: (Mayo Clinic Staff, 2005, p.2)

1. Choose to be happy

2. Look at the bright

3. Choose to be and stay optimistic.

4. Find reasons to smile more often.

5. Have faith in yourself and in the power of the universe.

6. Contemplate upon the futility of negative thinking and worries.

7. Associate yourself with happy people.

8. Read inspiring stories and quotes.

9. Repeat affirmations that inspire and motivate you.

10. Visualize only what you want to happen.

11. Learn to master your thoughts.

12. Learn concentration and meditation.

Moreover, from several scholars who are interesting to deal with positive thinking or optimism concepts pointed out that it is the best important basis of psychological development which bring to lead quality of life. (Ajara Sukharom, 2001, p.165) Thus, this concept was selected to apply for internal adaptable preparation of elementary teachers in private schools in this research.

This is advice on techniques for elementary teachers because it can be applied in daily life. Depending on the comfortable of each person for example, they can be practiced in all places such as at home, or in the workplace. Everybody can learn and practice easily. These are techniques to help relaxation and reduce emotional stress and could be a proper technique for all elementary teachers.

## 3. <u>Participatory action research</u>

Knowledge about applying the concepts of participatory action research to this research is method which provides a learning process to the teachers in addition to empowering them. As a consequence, it is necessary to familiarize them make and the understand the approach. The details of this concept is as follows: (Kraisook sinsook, 2002, pp. 25-28).

### 3.1 Definition of PAR

PAR is another conventional scientific research system for knowledge except that this method is aimed at problems solving development. The community participates in the research operation and utilizes the findings (Kanom Sutprasert, 1994, p.8)

PAR is a democratic process that individuals involved in the process make use of the findings to improve or change their society (Panthip Ramasut, 1997, p.31). Therefore, in PAR, people being researched on reverse their role to become researchers themselves throughout the entire process.

### 3.2 The ten outstanding characteristics of PAR

3.2.1. It produces knowledge with the combination of academic knowledge and folk wisdom. It is also a co-generative learning process with gradual to full participation between villagers and researchers, integrating theories with practices to bring about new knowledge.

3.2.2.The knowledge stemming from PAR is interaction and interdisciplinary derived from continuous practice and systematic work with others.

3.2.3 It transforms knowledge into a concrete form. It is transformation of understanding or knowledge into direct actions.

3.2.4. Transfer of knowledge into practice with an emphasis on actual local problems. It is adult education for the locals that focuses on critical thinking rather than theoretical knowledge.

3.2.5. PAR is an inclusive approach that effectively and efficiently makes use of resources by creating new knowledge on the existing methods or knowledge

without attempting to segregate or restrict things. Every opinion is attended to, providing a chance of learning for all.

3.2.6. PAR is an organic and on-going process without temporal restriction. It is also an open and scientifically unpredictable pattern with perpetual changes, depending on circumstances and participation of researchers with the community. It has neither fixed theories, scientific principles nor ideals as a framework.

PAR provides a change of focus from research findings and a summary to process and contexts.

3.2.7. PAR builds up self-awareness by making the community self-reliant and confident, and developing their self-concept even among the poor. Mcquire (1987) stated that the ultimate goal of PAR was dehumanization, that is, making an individual discover his inner freedom. Thinking of and undertaking activities should be done on collective terms so that individuals and groups would learn and cooperate together in order to change their society.

3.2.8. Ecological society, a community is the most essential source that individuals could relate to in the past, the present and the future together in order to plan for their ultimate goals of life. PAR would be able to create an ecological society where members are interdependent without feudalism. Co-existence between man and man, man and nature would be recreated. Such a society would exist when equal and democratic relationship among members is maintained.

3.2.9. PAR is future-oriented, thus a researcher should know how to create learning situations for his community, manage flexible programs, make the community self-reliant, set up new practical guidelines, review changes and improvement of existing systems, and develop a structure model or images of desirable futures. An ability to dream of individuals is necessary for development.

3.2.10. PAR is optimistic, which is based on a liberal principle that man is capable of dealing with all matters in his society. The approach promotes this aspect of human potential.

PAR believes that human liberty is the most essential and every man has the right and authority to quest for this freedom by self-emancipation. Genuine emancipation stems

from the participation of everyone, leading to the creation of a new society where everybody helps create, based on their own knowledge.

## 4. <u>Problem Solving analytical process</u>

This topic reviews relevant literature with the problem solving analytical process in order to search and develop ways or patterns in a new model development of a step by step process which is efficient in solving the problems for elementary teachers. Thus, from reviewing literature it is found that there are many concepts which are relevant to the problem solving analytical process, especially as each concept has similar steps or procedural aspects namely, these concepts were of interest of the most important methods which were steps or processes in solving problems together as a group that have had similar problems. Therefore, this topic presents some concepts composed of : concepts of S-T-P (The basic idea is that a problem is the gap between an unsatisfactory present situation (S) and a more desirable goal or target (T) , the problem is solved (or at least reduced) when we find a path (P) from S to T) for the several system of solving problems, systematic approach to problem solving, problem-solving training, health problem solving cycle, problem solving analytical process of Buddhism, affinity diagram, and cause and effect diagram. A selection of related studies are shown in the <span style="color:red">following table 1</span>

Table 1   Selected  studies which are related to the solving problem analytical process

| Name of concepts | Process of concepts | Goal concept  / target population |
| --- | --- | --- |
| 1.  S-T-P for systematic problem  solving.<br><br>(Schmuck and Runkel, 1985, pp. 195-199) | The six major steps in the S-T-P procedure or solving the problems in groups are as follows :<br>1. Agree on the problems<br>2. generate alternative paths<br>3. List helping and hindering  forces.<br>4. Choose action steps<br>5. Act<br>6. Monitor and recycle | Organization  development in schools  /  Teachers |
| 2. A systematic approach to problem solving in small group.<br><br>(Barker, Wahlesrs, Watson,  and Kibler, 1991, pp. 110-116) | The eight major steps in the systematic approach of agenda to problem solving in small group discussions are as follows :<br>1. Define the problem<br>2. Limit the problem<br>3.  Analyze the problem<br>4. Establish criteria<br>5. Suggest possible solution<br>6. Evaluate the solutions  in light of the criteria<br>7. Implement  the solutions<br>8. Evaluate the success of the  Solution | Step-by-step plan for approaching problem in small group discussions of agenda<br> /  General person especially in small groups |

Table 1 Con.

| Name of concepts | Process of concepts | Goal concept / target population |
| --- | --- | --- |
| 3. Problem-solving training (Lazarus, 2000, pp. 665-673) | The five main steps in the problem-solving training for coping and offers a structure and a logical sequence of stress of stress coping efforts that teach the following steps: 1. Identify the problem: 2. Generate alternative solutions 3. List and weigh the advantages of each approach: 4. Make a rational choice 5. Evaluate the desired outcome | General individuals and organizations such as schools and industries |
| 4. Health problem solving – cycle : From experience (Somboon Kietinum, 2002, - p. 31) | The four major steps in health problem solving cycle are as follows : 1. Problems Identification 2. prioritize and set action plan 3. Implement 4. Follow up | Research and development (R&D) : Academic and service quality development / Clients who derive service in the Obstetrics and Gynaecology department, Prapokklao Regional Hospital, Chantaburi province, Thailand. |

Table 1. Con.

| Name of concepts | Process of concepts | Goal concept / target population |
|---|---|---|
| | Remark : Prioritize the problems by choosing the most doable first. After finished first cycle, the next problem will be implemented continuously as second, third and so on in cycles until all problem are solved. All steps and cycles are taken by all people concern. | |
| 5. Problem solving analytical process of Buddhism<br><br>(Suwit Moonkam,2004,p. 25) | The four major steps in problem solving analytical of Buddhism are as follows:<br>1. Problem<br>2. Cause<br>3. Ways of problem solving<br>4.Implement | The problem solving is systematic process / Person who respects and believes in Buddhism |
| 6. Affinity diagram (Wannarat Jantakit, 2004, pp. 134-138) | The four major steps of the affinity diagram are as follows:<br>1.Problems selection<br>2. Data card<br>3. Grouping<br>4.Summarize issues of Problem | Helping : data collection for analytical causes of problems /All, Everyone and groups |

Table 1  Con.

| Name of concepts | Process of concepts | Goal concept / target population |
| --- | --- | --- |
| 7. Cause and effect diagram (Wannarat  Jantakit, 2004, pp. 37-46) | The six major steps of cause and effect diagram are as follows: 1. Identification of problems 2. Factorial grouping of problems 3. Brainstorming  for minor cause of each factor 4. Brainstorming  for major cause of each factor 5. Priority setting of each cause 6. Improve each minor factor of each major factor | The searching cause and effect of problems / All Everyone and groups |

From, Table 1 all concepts or techniques of problem solving analytical process found similar steps of the process in solving the problems, when consider about interesting issues of each concept there are four major steps which consists of problems and planning, implementing, monitoring and evaluation, act (improve and changing ). Their relationships are shown in Figure 4
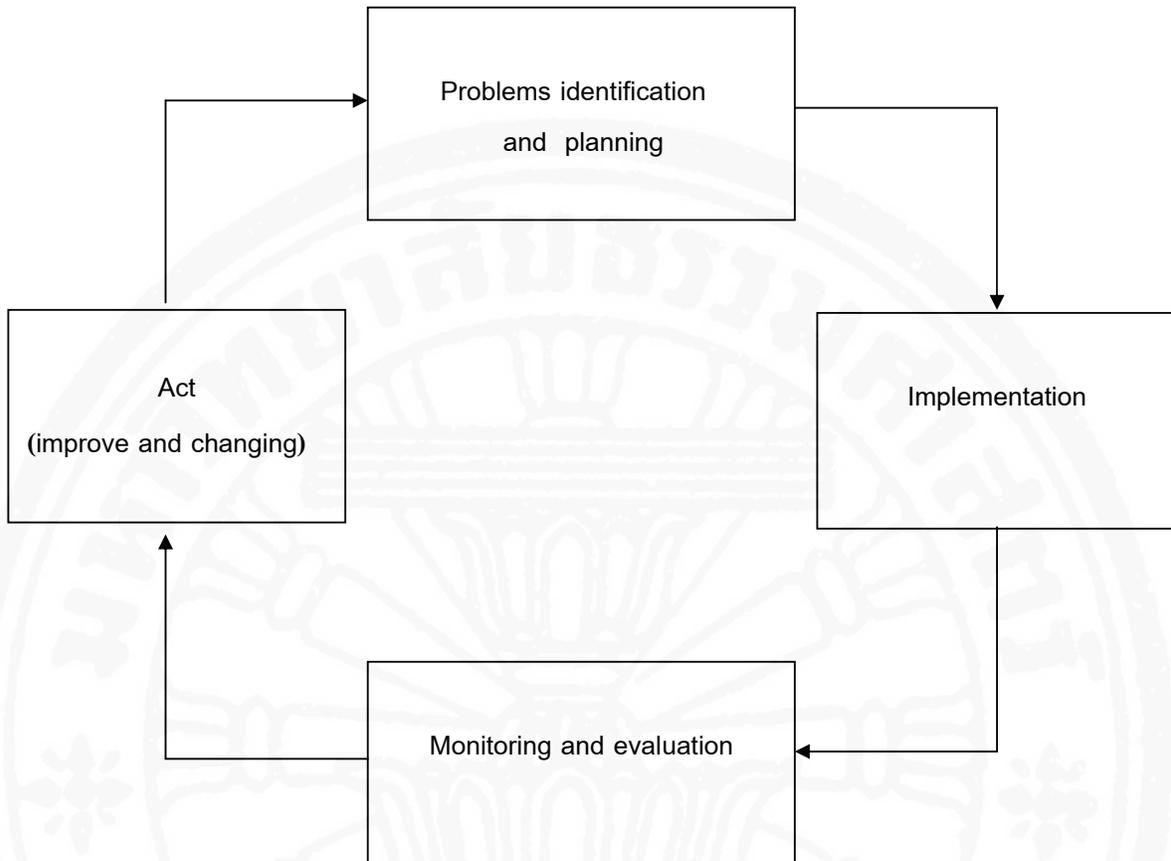
**Figure** 4 : A  model development  for the problem solving analytical process

Those  concepts  were  applied  used  for  skill  learning  or  coping  techniques increasing, it is called problem-solving training (PST). This method is specific practice to the problem type that is to be solved (Linder, 2005, p.98).

PST  has  been  used  for  a  wide  variety  of  target  problems  such  as  suicidal tendencies, depression, academic underachievement, alcoholism, stress, anxiety, marital, and family problems. Furthermore, these systematic reviews of the effectiveness of this PST reported  favorably  on  the  out  come  of  problem-solving  training  for  the  many  varied application listed above (D'Zurillia, 1998)

On top of that, PST can be considered as expansion or broadening of assertion and social skills  training  that  embeds  prescriptive  teaching  of  how-to  skills  in  reflective  set  of

process skills for planning and anticipating outcomes arising from available behavioral choices ; it adds some cognitive processing skills to purely behavioral skills (D'Zurillia and Goldfried, 1971, pp. 66-67).

Moreover, from the study of Coyne and Racioppo (2000, pp.654-655) about topic of problem solving clearly anticipated what the coping skills literature would conclude that problem-solving skills were generic abilities that transferred well from one problem situation to another problem.

When the consideration from reviewing deal with PST indicated that it has two items that related to stress management composed of the first, the definition of problem in PST is akin to emergence of a stressor in stress management literature, and, the second definition of solution is akin to a coping response. These associations have direct effects to resolution. That is, it has more position gains than negative or effects (Linder, 2005, p. 67).

Furthermore, there are many researches agreed with documented of Linder (2005, p. 67) that PST has more positive gains than negative effects as follows:

Shwart, (1998 pp.7-12) studied, participants were relatives of women recently diagnosed with breast cancer found that decreases in cancer specific and general distress were apparent in those who practiced more.

Webster-Stratton, Ricied, and Hammond (2001, pp. 943-952) studied, inappropriate behaviors of children by using PST application and 1-year follow up found that posttreatment, externalizing problem behavior was seen with peers, and more positive conflict management strategies were demonstrated, besides, at 1-year follow-up, most gains were shown to be maintained.

Allen, Shah, Nezu, Ciambrone, and Mor (2002, pp. 3089-3100) studied, diagnosed breast cancer patients that just begun chemotherapy found that the outcome was mediated by initial level of problem-solving skills such that participants with initially low skills also showed fewer benefits.

Biggam and Power (2002, pp. 678-689) studied, mental health problems such as anxiety, depression, and hopeless in a sample of young incarcerated offenders found that these mental health problems were reported reductions after posttraining, as was an improvement in self-perceived problem-solving ability.

Medalia, Reheim and Casey (2002, pp. 165-171) studied, schizophrenic patients with PST found that PST led to improvements in social skills, and the gains were maintained at 4-month follow-up.

Cameron, Shin, Williams, and Stewart (2004, pp. 1-7) studied, family caregivers to individuals with advanced cancer by using problem solving intervention found that 1-year problem solving intervention was developed for family caregivers of individuals with advanced cancer. In addition, to the 1-year intervention, participants received a detailed home care guide and completed a follow-up survey. This completed the survey reported reduced emotional tension, greater care giving confidence, and a more positive problem solving orientation.

In the overall-reviews relevant research with concepts analytical problem solving process or PST, it can be concluded that there have been many studied that were applications of problem-solving training to a wonderful scope of problem areas that are typically stress related. Moreover, PST appears that outcomes are predominantly positive.

## 5. Group process

To understand dealing with basis of group process for this research, this research divided the contents consists of definition of groups, and process, background of the group process, a model of the learning process, types of groups, stages of group development, and group decision making  as follows:

### 5.1 Definition of groups

A final category of definitions perceives the central element of a group to be interaction among its members so that the members are interdependent among themselves. It is this type of definition that Shaw and Gouran and Fisher (1984, 622-658) find most acceptable ; Shaw (1976, p. 11) defines a group as two or more persons who are interacting with one another in such a manner that each person influences and is influenced by each other person.

## 5.2 Definition of process

A dictionary provides several elements of the term that offer a starting point for such an understanding. According to any good dictionary, four elements are inherent in a process. They consist of action, act, a continuous change in time ; advancement, or progress; over time, and a goal, or result. Hence, a process clearly implies a time dimension, as well as a space dimension, in which action occurs in a continuously changing progression toward some goal. Moreover, a process involves not only structure but also how and why structure changes come about during the passage of time.

From the reviewing literature about the definition of process it can be concluded that individuals and their groups are continually changing and modifying themselves.

## 5.3 Background of the group process   (B., and Donald 1990, pp.10-11)

5.3.1. The human is indeed a social animal. Humans have developed a need for intimate social relationships. In other words, we have developed a need to belong – typically to a small group.

5.3.2. The small group is the oldest and most common of all social organizations.

5.3.3. An organization expect individuals to be competent group members. As a member of a group, you will be expected to participate, work well with others, assess leadership responsibilities, present ideas clearly, disseminate information both internally and externally, be sensitive to the decision making process, and possess good oral and writing communication skills

From the background of the group process it is found that the small group is the oldest and most common of all social organizations. Thus this study applied  concepts of small group in phase 2 of its research in order to form a model development of active measures to prevent stress of elementary teachers in private schools.  By detailing that as relevant  the concept of a small group : small group and small group communication are as follows :

### Small group

A small group is a collection of individuals, from three to fifteen in number, who meet in face-to-face interaction over a period of time, generally with an assigned or assumed leader, who possess at least one common characteristic, and who meet with a purpose in mind. Therefore the elements of a small group are composed of group size, common purpose, face-to-face interaction, shared characteristic, overtime period and leadership.

### Small group communication

The information of a small group can be basic to defining the phase small group communication, by changing emphasis from the structure of a small group to the communication process. Thus small group communication may be defined as the process of verbal and nonverbal face-to-face interaction in a small group. Moreover, it reflects an emphasis on private (not public) small group communication. Besides, an emphasis on privacy, it is concerned with intra group communication, not communicating via the group to an audience or to outside agencies.

This study applied small group communication for model development by using it to help in conducting activities in phase 2 of the research, at both informal and formal meetings or conferences. This study emphasizes more on the interpersonal than the mass because the most context in norms (privacy and working) of elementary teachers have free time and incomplete meetings and conferences. Thus, this method may be the most suitable for reducing and preventing stress among elementary teachers in private schools.

## 5.4 A model of the learning process

This process helps persons and groups to improve their effectiveness. By examining their learning  process and behavior in new situation. This process is both  active and passive, concrete, and abstract. It can be conceived of as a four – stage cycle : concrete experience is followed by, observation and reflection, which lead to, the formation of abstract concepts and generalization, which lead to, and the hypotheses to be tested in future lead to new experiences against. (In Figure 5) (Kolb, 1991, pp.59-60)
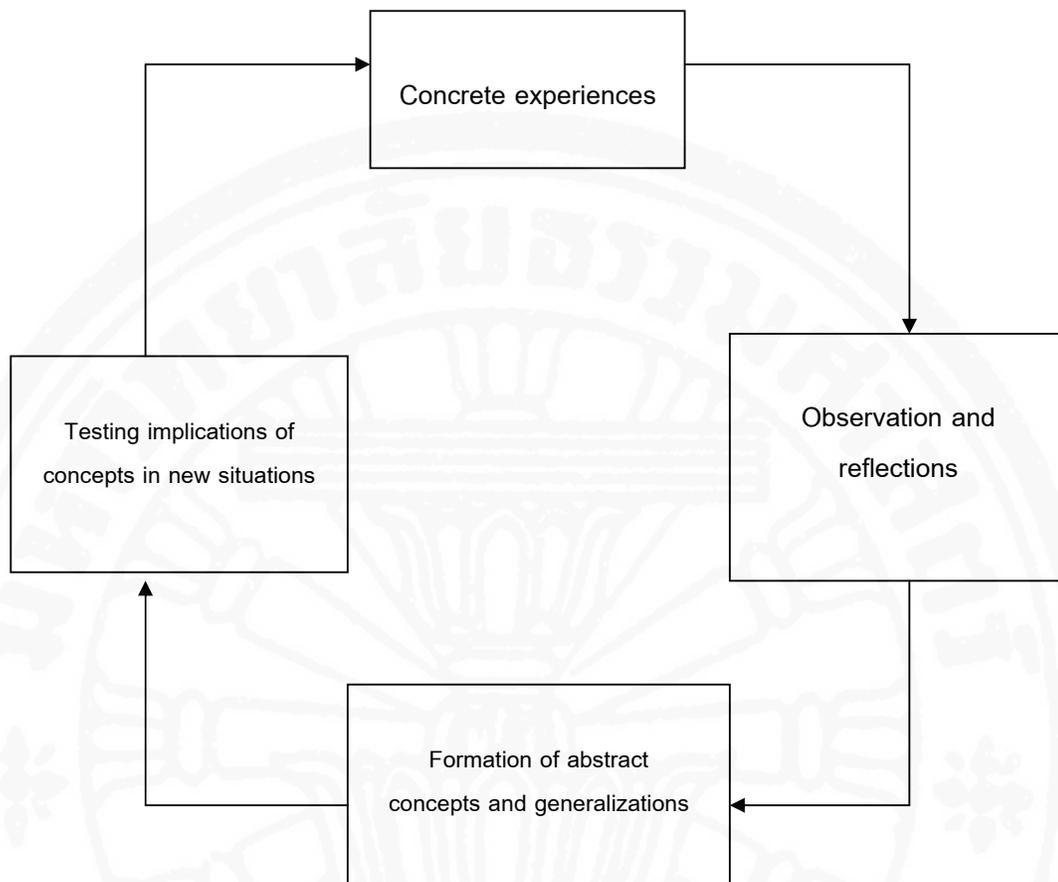
Figure 5 : A model of the learning process

5.5 Types of groups

      Types of groups are divided into two main types consist of formalization (formal and informal) permanence (relatively permanent or relatively temporary) (Moorhead G., and Griffin R.W., 1995, p.267). Table 2 shows this classification scheme.

**Table 2** Classification scheme for types of groups

| Formalization | Permanent | Relatively Permanent | Relative Temporary |
|---|---|---|---|
| Formal | | Command groups<br>Quality assurance<br>Department<br>Cost accounting group | Task groups<br>People 's Special<br>Council on Finances<br>Task force on new-product<br>quality |
| Informal | | Friendship groups<br>Friends who do many<br>activities together<br>(attend the theater,<br>play games, travel) | Interest groups<br>Bowling groups<br>Women's network |

From table 2. It can be concluded as follows :

1. Formal Groups are formed by the organization to do its work and usually are included in the organization chart.

2. A command group, or functional group, is a relatively permanent, formal group with functional reporting relationships.

3. A task group is a relatively temporary, formal group established to do a specific task.

4. Informal groups are established by their members.

5. A friendship group is relatively permanent and informal and draws its benefits from the social relationships among its members.

6. An interest group is relatively temporary and informal and is organized around a common activity or interest of its members.

### Informal and formal groups

A review of relevant documents about informal and formal groups which were understand as both the same and different from informal and formal groups can be summarized as follows :

1. Informal groups haven't officially prescribed goals and relations, whereas the formal one does.

2. They are both informal and formal groups coexist and are inseparable. Every formal organization has informal groups, and every informal organization ultimately evolves some appearance of formal groups.

### Norms of informal group

Many behavioral scientists make a point of distinguishing between the two unit (norms and role), but conceptually they are vary similar. It can be concluded as follows :

1. Norms are the ought of behavior. They are prescriptions for acceptable behavior determined by the group.

Besides, the meaning of norm, the strength of norms depends on or are enforced by work groups with conditions as follows :

1.1 Help in group survival and provision of benefits.

1.2 Simplify or make predictable the behavior expected of group members.

1.3 Aid the group to avoid embarrassing interpersonal problems.

1.4 Express the central values or goals of the group and clarify what is distinctive about the group's identity.

2. A role consists of a pattern of norms and is a position that can be acted out by an individual. Moreover, the content of a given role is prescribed by the prevailing norms. It can best be defined as a position that has an expectation evolving from established norms.

## 5.6 Stages of group development

The four basic group performance factors are composition, size, norm, and cohesiveness. These factors affect the success of the group in fulfilling its goals. The details of group performance factors as follows. : (Moorhead G., and Griffin R.W., 1995, pp.271-277)

### 5.6.1. Group composition

Group composition refers to the degree of similarity or difference in the characteristics of the members on factors important to the group's work. They are similarity (homogeneous group) and difference (heterogeneous group) will have different tasks. It can be concluded as per table 3

**Table 3** Task variables and group composition

| A homogeneous group is more useful for : | A heterogeneous group is more useful for : |
| --- | --- |
| Simple tasks | Complex tasks |
| Sequential tasks | Collective tasks |
| Cooperation required | Creativity required |
| Speed required | Speed not important |

(Moorhead G., and Griffin R.W., 1995, pp.272)

### 5.6.2. Group size

Group size refers to the number in members in the group and affects the resources available to perform the task.

### 5.6.3. Group norms

A group norm is a standard against which the appropriateness of behavior is measured. Hence, a norm is the expected behavior or behavioral pattern in certain situations. In generally, norms of a group usually are established during the second stage of group development (communication and decision making) and carried forward into the maturity stage. Besides, the established norm of group development, purposes of norms are divided into four items as follows :

5.6.3.1 Norms help the group survive.

5.6.3.2 Norms simplify and make more predictable the behaviors expected of group members

5.6.3.3 Norms help the group avoid embarrassing situations.

5.6.3.4 Norms express the central values of the group and identify the group to others.

### 5.6.4. Cohesiveness

Group cohesiveness is the motivation of members to remain in the group. The factors which create cohesiveness are attraction to the group, resistance to leaving the group, and the motivation to remain a member of the group.

## 5.7 Group decision making

There are four main ways to explain group decision making. They are group polarization, groupthink, group participation in decision making, and group problem solving. Each components details are as follows : (Neale, et al., 1990, pp.368-382 ;. Robbins, et al., 2005, pp. 112-117)

### 5.7.1. Group polarization

Group polarization is the tendency for a group's average post-discussion attitudes to be more extreme than its average pre-discussion attitudes. Polarization can profoundly affect group decision making. Unless group members are known to lean toward a particular decision before a discussion, it may be expected that their post – decision position will be even more extreme. Understanding this phenomenon may be useful for one who seeks     a group member's decision.

### 5.7.2. Groupthink

Groupthink is a model of thinking or groupthink process that occurs when members  of a group are deeply involved in a cohesive in-group and desire for unanimity offsets their motivation to appraise alternative courses of action.

5.7.2.1 Group characteristics

The group characteristics  that foster the development of groupthink are cohesiveness, the leader' s promotion of his or her preferred solution, and insulation of the group from expert opinions.

### 5.7.2.2 Groupthink symptoms

A groupthink which has taken hold exhibits eight well-defined symptoms : An illusion of invulnerability, collective efforts to discount warnings, an unquestioned belief in the group's inherent morality, stereotyped view of "enemy" leaders as too evil, direct pressure on a member who expresses strong arguments against and of the group's stereotypes (illusion, commitment), self-censorship of deviations from the apparent group consensus, a shared illusion of unanimity, and the emergence of self-appointed mind guards. Moreover, evidence of most of the groupthink symptom can be found in unedited transcripts of the group's deliberations.

### 5.7.2.3 Decision-making defects

When groupthink dominates group deliberations, the likelihood that decision – making defects will occur increases. The group is less likely to survey a full range of alternatives and may focus on only a few.

### 5.7.2.4 Decision outcomes

It was the final outcome of three process mentioned above

### 5.7.3. **Participation in decision making**

Participation in decision making is an important part of managing motivation, leadership, organization structure, and the decision making process.

### 5.7.4. **Group problem solving**

The review found that a typical interacting group may have difficulty with any of several steps in the decision – making process. Several types of group interactions can have this effect. In addition, the group leader may limit idea generation by enforcing requirements concerning time, appropriateness, cost, feasibility, and the like.

To improve the alternative generation process, managers may employ any of two techniques consisting of brainstorming and the nominal group technique to stimulate the group's problem – solving capabilities. Each techniques' s details are as follows :

5.7.4.1 Brainstorming

Brainstorming is a technique used in the alternative generation phase of decision making that assists in the development of numerous alternative courses of action.

5.7.4.2 The Nominal group techniques

The Nominal group techniques (NGT), group members follow a generate discussion – vote cycle unit they reach an appropriate decision. It has two principal advantages. It helps overcome the negative effects of power and status difference among group members, and it can be used in the problem exploration, alternative generation, and evaluation phases of decision making. It's primary disadvantage lies in its structured nature, which may limit creativity.

From all of the reviewed theories and concepts, the researcher determines the conceptual framework of a model development of active measures to prevent stress of elementary teachers in private schools through the application and use of concepts of participation, a model of the learning process, and a model of the solving problem analytical process.