

CHAPTER 4

RESULTS AND DISCUSSION

This research was conducted into two main phases:

Phase 1: Determine the stress situation of elementary teachers in private schools

1.1 The Baseline Data:

The baseline data to determine the stress situation of elementary teachers in private schools were obtained from a survey conducted on 23 schools (88.5 % out of 26 schools) , 429 teachers (68.8 % out of 624 teachers) of schools under the jurisdiction of the second Patumthani officer of Education Service Area.

The results were presented in 4 parts as followed:

1.1.1 Part 1 Demographic characteristics

1.1.2 Part 2 Results of stress levels

1.1.3 Part 3 Association between demographic characteristics and stress of elementary teachers

1.1.4 Part 4 Results of stress levels of the administrators

The details of each part were presented as followed:

Part 1 demographic characteristics of elementary teachers in private schools

Table 5 showed majority of the teachers were 369 females (86 % out of 429 teachers), the rest were males 60 (14 %). **Age** majority of the teachers (161 teachers = 39.6 %) were less than 30 years old, the rest were 30-39 and more than 39 (21.1 % and 39.3 %). **Religions** majority of the teachers (406 teachers = 94.6 %) were Buddhists, the rest were Islamic and Christianity (3 % and 2.4 %). **Education** majority of the teachers (385 teachers = 89.7 %) had bachelor degree, the rest had higher than bachelor degree, diploma and secondary school (4.4 %, 4 % and 0.5 %).

Apart from gender, age, religions and education, majority of the teachers (313 = 73.0 %) were teaching in accordance with their majoring educational background. Most of the teachers (259 teachers = 67.45 %) had extra responsibility, but the rest (125 teachers=32.6 %) were not giving extra activities. Those extra activities were assignment extra actives, school administrating committee and head of interval levels (41.3 %, 8.8 %, and 8.8 %) respectively. Addictions majority of the teachers (372 teachers = 90.1 %) had never used any addictions, the rest (41 teachers = 9.9 %) had ever used addictions. Those addictions were alcohol, caffeine and tranquilizer barbiturate and anti-headache-drug (31.7 %, 29.3 % and 22 %) respectively.

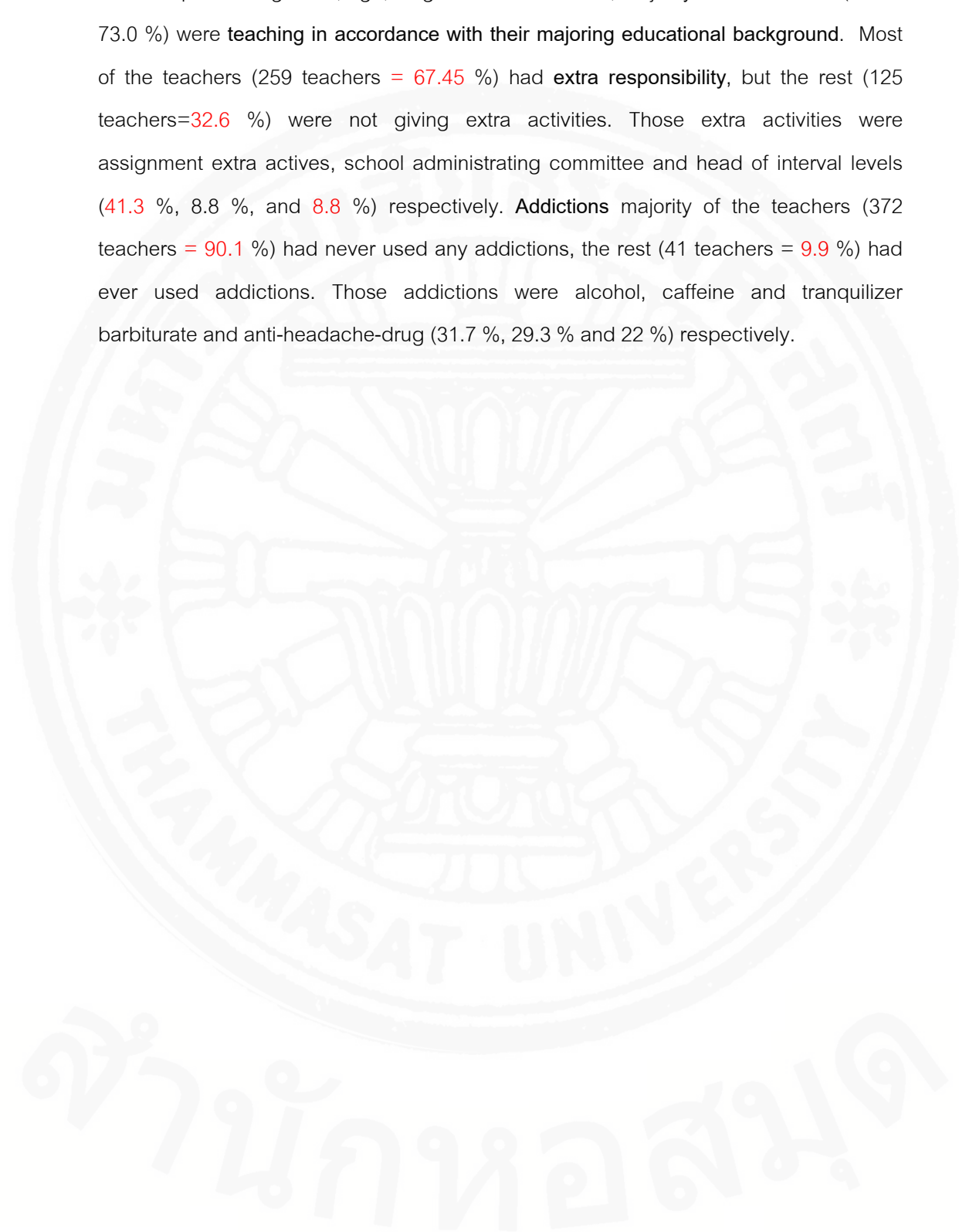


Table 5
Frequency and percentage distribution of subjects

Demographic characteristics of subjects	Number	Percent
Gender		
Female	369	86
Male	60	14
Total	429	100
Age		
< 30 years	161	39.56
30-39 years	86	21.13
> 39 years	160	39.31
Total	407	100
Religions		
Buddhism	406	94.60
Islam	13	3.00
Christianity	10	2.40
Total	429	100
Education		
Secondary school	2	0.47
Diploma	17	3.96
Bachelor degree	385	89.74
Higher than bachelor degree	19	4.43
Total	423	100
Majoring of Education in teaching		
Yes	313	72.96
No	66	15.38
Total	379	100

Table 5 (Continued)

Demographic characteristics of subjects	Number	Percent
Extra responsibility		
No	125	32.55
Yes	259	67.45
Total	384	100
Use addict substance		
No	372	90.07
Yes	41	9.93
Total	413	100

Part 2

Results of stress levels of elementary teachers in private schools

Table 6 showed most of the elementary school teachers, (40.79 % and 40.56 %) had moderate level of susceptibility to stress and factors of stress. In the other hand, most of the elementary , (36.13 %) had severe level of symptoms' stress.

Table 6
Frequency and percentage distribution of results of stress levels of elementary school teachers in private schools

Stress levels	Number	Percent
Susceptibility to stress		
Severe	34	7.93
High	97	22.61
Moderate	175	40.79
Mild	123	28.67
Total	429	100

Table 6 (Continued)

Stress levels	Number	Percent
Factors of stress		
Severe	41	9.56
High	130	30.30
Moderate	174	40.56
Mild	84	19.58
Total	429	100
Symptoms of stress		
Severe	155	36.13
High	147	34.27
Moderate	101	23.54
Mild	26	6.06
Total	429	100

Table 7 showed result of stress levels, which could be concluded as followed:

Stress due to the job mater, most of the teachers had moderate level of stress, 158 teachers (37.5 % out of 429 teachers). The rest had mild, high, and severe levels stress, 36.8 %, 21.2 % and 4.4 % respectively.

Stress due to the personal mater, most of the teachers had mild level of stress, 189 teachers (44.06 % out of 429). The rest had moderate, high and severe levels of stress, 38 %, 14.9 % and 3 % respectively.

Stress due to the family mater, majority of the teachers had moderate level of stress, 195 teachers (45.45 % out of 429 teachers). The rest had high, severe and mild levels stress, 31.5 %, 12 %, and 11.2 % respectively.

Stress due to the social mater, most of the teachers had moderate level of stress, 195 teachers (45.45 % out of 429 teachers). The rest had mild, high and severe levels stress, 30.8 %, 21 % and 3 % respectively.

Stress due to the environment mater, most of the teachers had high level of stress, 194 percents (45 % out of 429 teachers). The rest had moderate, severe and mild levels stress, 39 %, 8.2 % and 8 % respectively.

Stress due to the financing mater, most of the teachers had high level of stress, 143 teachers, (35 % out of 429 teachers). The rest had moderate, severe and mild levels stress, 33 %, 16 % and 15.3 % respectively.

Table 7
 Frequency and percentage distribution of each factor affecting stress levels
 of elementary teachers in private schools

Factors	Levels of stress									
	Mild		Moderate		High		Severe		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Job	161	37.53	158	36.83	91	21.21	19	4.43	429	100
Person	189	44.06	163	37.99	64	14.92	13	3.03	429	100
Family	48	11.19	195	45.45	135	31.47	51	11.89	429	100
Society	132	30.77	195	45.45	90	20.98	12	2.80	429	100
Environment	34	7.93	166	38.69	194	45.22	35	8.16	429	100
Finance	62	15.30	135	33.30	143	35.30	65	16.00	429	100

Part 3

Association between demographic characteristics with stress
of elementary teachers in private schools

Table 8 showed that there were significant difference in association between education with stress at 0.05 level ($P < 0.05$).

Table 8
Percent severity of stress by demographic characteristics

Demographic characteristics	All population	Levels of stress				P-value
		Mild to moderate		severe		
		Number	Percent	Number	Percent	
Gender						
Female	360	216	60	144	40	0.47
Male	60	33	55	27	45	
Age						
< 30 years	161	84	52.17	77	47.83	0.07
30-39 years	86	55	63.95	31	36.05	
> 39 years	160	102	63.75	58	36.25	
Religions						
Buddhist	397	234	58.94	163	41.06	0.38
Islam	13	7	53.85	6	46.15	
Christianity	10	8	80.00	2	20.00	

Table 8 (Continued)

Demographic characteristics	All population	Levels of stress				P-value
		Mild to moderate		Severe		
		Number	Percent	Number	Percent	
Education						
< bachelor degree	396	231	58.83	165	41.17	0.04*
> bachelor degree	18	15	83.33	3	16.67	
Majoring of Education in teaching						
Yes	307	183	59.61	124	40.39	0.34
No	64	34	53.13	30	46.87	
Additional work						
Yes	129	73	56.59	56	43.41	0.45
No extra	291	176	60.48	115	39.52	
Addictions						
Never used	364	219	60.17	145	39.83	0.35
Ever used	56	30	53.57	26	46.43	

* Significant 0.05

Part 4

Results of stress test of school administrators in private schools

Table 9 showed most of the school administrators, (70 % and 45 %) had **mild** level of susceptibility to stress and factors of stress. **In the other hand**, most of the school administrators, (45 %) had **severe** level of symptoms' stress.

Table 9
Frequency and percentage distribution of the results of stress levels of **school administrators** in private schools

Stress levels	Number	Percent
Susceptibility to stress		
Severe	-	-
High	3	15.00
Moderate	3	15.00
Mild	14	70.00
Total	20	100

Table 9 (Continued)

Stress levels	Number	Percent
Factors of stress		
Severe	1	5.00
High	5	25.00
Moderate	5	25.00
Mild	9	45.00
Total	20	100
Symptoms of stress		
Severe	9	45.00
High	5	25.00
Moderate	5	25.00
Mild	1	5.00
Total	20	100

Table 10 showed the levels of stress. It could be concluded that:

Stress due to the job mater, most of school administrators (10 = 50 %) had mild level of stress, The rest had moderate, high, and severe levels of stress, 35 %, 10 % and 5 % respectively.

Stress due to the personal mater, majority of school administrators (12 = 60 %) had mild level of stress. The rest had moderate and high levels of stress, 25 % and 15 % respectively.

Stress due to the family mater, majority of school administrators (9 = 45 %) had moderate level of stress. The rest had mild and high level of stress, 35 %, 20 % respectively.

Stress due to the social mater, majority of school administrators (10 = 50 %) had moderate level of stress. The rest had mild and severe levels of stress, 45 % and 5 % respectively.

Stress due to the environment mater, majority of school administrators (9= 45 %) had moderate level of stress. The rest had high and mild levels of stress, 30 % and 25 % respectively.

Stress due to the financing mater, most of the teachers (9= 45 %) had mild level of stress. The rest had moderate, high and severe levels of stress, 35 %, 15 % and 5 % respectively.

Table 10
 Frequency and percentage distribution of each factor of stress levels
 of school administrators in private schools

Factors	Levels of stress									
	Mild		Moderate		High		Severe		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Job	10	50.00	7	35.00	2	10.00	1	5.00	20	100
Person	12	60.00	5	25.00	3	15.00	-	-	20	100
Family	7	35	9	45	4	20	-	-	20	100
Society	9	45	10	50	-	-	1	5	20	100
Environment	5	25	9	45	6	30	-	-	20	100
Finance	9	45.00	7	35.00	3	15.00	1	5.00	20	100

Phase 2: Study the process of model development of active measures for reducing and preventing stress of elementary teachers in private schools

2.1 The baseline data

The baseline data to determine the stress situation of elementary teachers in private schools were obtained from a survey conducted on 3 schools (100 % out of 3 schools) , 21 teachers (100 % out of 21 teachers) of schools under the jurisdiction of the second Patumthani officer of Education Service Area.

The results were presented in 4 parts as followed:

1.1.1 Part 1 Demographic characteristics

1.1.2 Part 2 Results of stress levels

1.1.3 Part 3 Association between demographic characteristics and stress of elementary teachers

1.1.4 Part 4 Results of stress levels of the administrators

The details of each part were presented as followed:

Part 1 demographic characteristics of elementary teachers in private schools

Table 11 showed majority of the teachers were 17 females (81 % out of 21 teachers), the rest were males 4 (19 %). Age most of the teachers (9 teachers = 43 %) were more than 30 years old, the rest were less than 30-39 year old and 30-39 year old (33.3 % and 24 %). Religions majority of the teachers (18 teachers = 85.7 %) were Buddhists, the rest were Islamic (14.3 %). Education-majority of the teachers (18 teachers = 85.7 %) had bachelor degree, the rest had diploma (14.3 %).

Apart from gender, age, religions and education, majority of the teachers (17 = 81 %) were teaching in accordance with their majoring educational background. Majority of the teachers (11 teachers = 52.4 %) had extra responsibility, but the rest (10 teachers=47.6 %) were not giving extra activities. Those extra activities were assignment extra activities, school administrating committee and head of interval levels respectively. Addictions majority of teachers (16 teachers = 76.2 %) had never used any addictions, the rest (5 teachers = 23.8 %) had ever used addictions. Those addictions were alcohol, caffeine and tranquilizer barbiturate and anti-headache-drug respectively.

Table 11
Frequency and percentage distribution of subjects

Demographic characteristics of subjects	Number	Percent
Gender		
Female	17	81.00
Male	4	19.00
Total	21	100
Age		
< 30 years	7	33.30
30-39 years	5	23.80
> 39 years	9	42.90
Total	21	100
Religions		
Buddhism	18	85.70
Islam	3	14.30
Total	21	100
Education		
Diploma	3	14.30
Bachelor degree	18	85.70
Total	21	100
Majoring of Education in teaching		
Yes	17	80.95
No	4	19.05
Total	21	100

Table 11 (Continued)

Demographic characteristics of subjects	Number	Percent
Extra responsibility		
No	10	47.60
Yes	11	52.40
Total	21	100
Use addict substance		
No	16	76.20
Yes	5	23.80
Total	21	100

Part 2

Results of stress levels of elementary teachers in private schools

Table 12 showed that the majority of the teachers, 14 teachers (66.7 % out of 21 teachers) had moderate level of stress, The rest had mild, high and severe levels of stress, 19 %, 9.5 % and 4.8 % respectively.

Table 12
Frequency and percentage distribution of results of stress levels of elementary teachers in private schools

Results of stress levels (Levels)	Number	Percent
Severe	1	4.80
High	2	9.50
Moderate	14	66.70
Mild	4	19.00
Total	21	100

Table 13 showed result of stress levels, which could be concluded as followed:

Stress due to the job mater, most of the teachers had moderate level of stress, 9 teachers (42.9 % out of 21 teachers). The rest had mild, high, and severe levels stress, 19 %, 33.3 % and 4.8 % respectively.

Stress due to the personal mater, most of the teachers had moderate level of stress, 8 teachers (38.1 % out of 21). The rest had high and mild levels stress, 33 %, and 28.6 % respectively.

Stress due to the family mater, most of the teachers had high level of stress, 10 teachers (47.6 % out of 21 teachers). The rest had severe, moderate and mild levels stress, 33.3 %, 14.3 %, and 4.8 % respectively.

Stress due to the social mater, majority of the teachers had moderate level of stress, 12 teachers (57.1 % out of 21 teachers). The rest had high and mild levels stress, 38.1 % and 4.8 % respectively.

Stress due to the environment mater, majority of the teachers had high level of stress, 12 percents (57.1 % out of 21 teachers). The rest had moderate and mild levels stress, 38.1 % and 4.8 % respectively.

Stress due to the financing mater, most of the teachers had high level of stress, 12 teachers, (57.1 % out of 21 teachers). The rest had moderate, severe and mild levels stress, 23.8 %, 14.3 % and 4.8 % respectively.

Table 13
 Frequency and percentage distribution of each factor affecting stress levels
 of elementary teachers in private schools

Factors	Levels of stress									
	Mild		Moderate		High		Severe		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Job	4	19.00	9	42.90	7	33.30	1	4.80	21	100
Person	6	28.60	8	38.10	7	33.30	-	-	21	100
Family	1	4.76	3	14.30	10	47.60	7	33.30	21	100
Society	1	4.80	12	57.10	8	38.10	-	-	21	100
Environment	1	4.80	8	38.10	12	57.10	-	-	21	100
Finance	1	4.80	5	33.80	12	57.10	3	14.30	21	100

Part 3

Association between demographic characteristics with stress
of elementary teachers in private schools

Table 14 showed that there were significant difference in association between religions with stress at 0.05 level ($P < 0.05$).

Table 14
Percent severity of stress by demographic characteristics

Demographic characteristics	All population	Levels of stress				P-value
		Mild to moderate		severe		
		Number	Percent	Number	Percent	
Gender						
Female	17	2	11.76	15	88.24	0.49
Male	4	1	25	3	75	
Age						
< 30 years	7	1	14.29	6	85.71	0.53
30-39 years	5	-	-	5	100	
> 39 years	9	2	22.22	7	77.78	
Religions						
Buddhist	18	1	5.56	17	94.44	0.04*
Islam	3	2	66.67	1	33.33	

Table 14 (Continued)

Demographic characteristics	All population	Levels of stress				P-value
		Mild to moderate		Severe		
		Number	Percent	Number	Percent	
Education						
< bachelor degree	3	1	33.33	2	66.67	0.39
bachelor degree	18	2	11.11	16	88.89	
Majoring of Education in teaching						
Yes	17	2	11.76	15	88.24	1.00
No	2	-	-	2	100	
Additional work						
Yes	10	-	-	10	100	2.14
No extra	11	3	27.27	8	72.73	
Addictions						
Never used	16	2	12.50	14	87.50	1.00
Ever used	5	1	20	4	80	

* Significant 0.05

Part 4

Results of stress test of school administrators in private schools

Table 15 showed most of the school administrators, (2 = 66.7 %) had mild level of stress. The rest had high level of stress, 33.3%

Table 15
Frequency and percentage distribution of the results of stress levels of school administrators in private schools

Stress levels	Number	Percent
Severe	-	-
High	1	33.33
Moderate	-	-
Mild	2	66.67
Total	3	100

Table 16 showed the levels of stress. It could be concluded that:

Stress due to the job mater, majority of school administrators (2 = 66.7 %) had mild level of stress, The rest had high level of stress, 33.3 %.

Stress due to the personal mater, majority of school administrators (2 = 66.7 %) had mild level of stress. The rest had moderate level of stress, 33.3 %.

Stress due to the family mater, each equal of school administrators (1 = 33.3 %) had mild, moderate and high levels of stress.

Stress due to the social mater, majority of school administrators (2 = 66.7 %) had mild level of stress. The rest had moderate level of stress, 33.3 %.

Stress due to the environment mater, each equal of school administrators (1= 33.3 %) had mild, moderate and high levels of stress.

Stress due to the financing mater, majority of school administrators (2=66.7 %) had mild level of stress. The rest had high level of stress, 33.3 %.

Table 16
 Frequency and percentage distribution of each factor of stress levels
 of school administrators in private schools

Factors	Levels of stress									
	Mild		Moderate		High		Severe		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Job	2	66.67	-	-	1	33.33	-	-	3	100
Person	2	66.67	1	33.33	-	-	-	-	3	100
Family	1	33.33	1	33.33	1	33.33	-	-	3	100
Society	2	66.67	1	33.33	-	-	-	-	3	100
Environment	1	33.33	1	33.33	1	33.33	-	-	3	100
Finance	2	66.67	-	-	1	33.33	-	-	3	100

2.2 Results of study the model development process

This phase divided into three core steps consisted of:

1. Pre-model development process:

This step was basic of the model development process that focus on both an individual and group levels. It was undertaken two main activities as followed:

1.1 **Internal personal factor preparation:** Results of activities in this phase could be divided into three ways as followed:

1.1.1 **The first way was emotional skill development** composed of emotional ventilation, psychological control, consult and ventilate with colleague, closed friend or family, to play with a pet, thinkable change writing for fell ventilation.

1.1.2 **The second way was positive thinking skill development.** It was important way, because it was a continuity of brain process that prepare to revive.

1.1.3 **The third way was clear systematical way** of preventing and reducing stress consisted of planning, implementation, monitoring and evaluation.

1.2 **External personal factor preparation:** Results of activities in this step could be divided into two core ways as followed:

1.2.1 **Finding the way of stress management together** was the same with step of emotional skill development and positive thinking. That was to confirm the way of internal personal factor preparation. Thus, this way was called **the short way** for stress management. Another way of stress management was the same with step of the clear systematic process composed of planning, implementation monitoring and evaluation. Thus, this way was called **the long way** for stress management.

1.2.2 **Priority setting of problems solving** was to selection the most important problem to reduce and prevent stress. Results of priority of problems solving could be divided in each school size as followed:

1.2.2.1 **The first of large size school** was inefficient students' assignment, the second was the more busybody or meddlesome parents of teachers's work. the third was the students were not interesting in learning, and the fourth was the student's accident from playing.

1.2.2.2 **The second of large size school** had only one problem i.e. the irresponsibility of students to assignment.

1.2.2.3 The middle size school had only one problem i.e. lack of confidence about classroom research.

1.2.2.4 The small size school had only one problem: noisy disturb in teaching from beside classroom.

2. The model development process:

This step was conducted the continuity from step of pre-model development process. It was trial about the long way for stress management that was developed together among the internal and external researchers consisted of planning implementation, monitoring and evaluation. This process was the core of the model development process to active measures for reducing and preventing stress of elementary teachers in private school. Results of the model development process, problem solving analytical process had details of each step as followed:

2.1 Planning: There were two steps of planning: the first step was data collection and causal analysis of problems that derived from priority setting problems together of each school size. This was applied to concept of the web of causation for each problem. After that it was causal selection that could be conducted or may be plausibility to subdue with problems of each school size so that internal school researchers could make a plan to solve in theirs' problems. (Appendix E)

2.2 Implementation: Results of this step was action as planned which was set together of each school size.

2.3 Monitoring: Results of this step was controlled action to a plan. All group of each school size had participated decision making to selecting applied to Cybernetics Theory, focus on direct primary control as the own problem. Result of this step found that the overall monitoring of the first and second large and small size of the school had not problem, except the middle size of school had to readjust the plan.

2.4 Evaluation: Results of this step could be subdivided into two procedure as followed:

2.4.1. The first procedure was analyzed in final step of their project. All groups of each school size had made the decision together to apply applied to

Systematic Theory, which consisted of **inputs** such as places, time table, teachers, students, and budget etc., **process** such as student responsibility development process, classroom research skill development, and moved the classroom to not avoiding disturbance classroom, **outputs** such as activities were action as planned of each school size undertaken their project, and **effects** such as changing the knowledge and practices for reducing causation of the problems.

2.4.2. The second procedure was conducted appropriate adaptation after finishing of each project. It could be divided into two activities i.e. writing the report and selected new issue or from recommendations of the member in each group which led to hypothesis to be tested in the future. The overall of new issue was the continuity from their projects. (Appendix E)

3. The post-model development process was to evaluate the impact of model development process emphasized causal correction of the problems. Results of impact evaluation could be divided into two ways as followed:

3.1 Individual level of elementary teachers in each school size

It was found that there were 18 teachers (85.7 %) out of 21 teachers from 3 schools had completed 3 times job stress evaluation, 3 teachers (14.%) resigned from the school. It could be subdivided stress into 3 levels i.e. first was able to prevent stress, second was able to reduce levels of stress 4 teachers (22.22 %) and third was unable to reduce stress 2 teachers (11.11%) as shown in table 17

Table 17

Frequency and percentage distribution of subjects by levels of stress

Levels of stress	Pre-model development		Post-model development	
	Number	Percent	Number	Percent
Stress	6	33.33	2	11.11
Non-stress				
Old cases	12	66.67	12	66.67
New cases (change from stress)	-	-	4	22.22
Total	18	100	18	100

Table 18
Results of job stress levels both pre and post model development process
of each size school

Size of schools	Code	Results of job stress levels			
		Pre-model development process (Levels)	Post-model development process		
			Immediately	The first month of after finish projects	The second month of after finish projects
The first of large school	111	moderate	mild	mild	mild
	112	moderate	mild	mild	mild
	113	high	mild	mild	mild
	114	high	high	high	high
	115	high	The resignation from school		
	116	high	mild	mild	mild
The second of large school	121	moderate	mild	mild	mild
	122	moderate	mild	mild	mild
	123	high	The resignation from school		
	124	moderate	mild	mild	mild
	125	mild	mild	mild	mild
	126	mild	moderate	moderate	moderate
The middle school	201	mild	The resignation from school		
	202	moderate	mild	mild	mild
	203	high	high	moderate	mild
	204	mild	moderate	moderate	moderate
The small school	301	mild	high	moderate	moderate
	302	severe	moderate	mild	mild
	303	high	mild	mild	mild
	304	mild	mild	mild	mild
	305	high	moderate	high	high

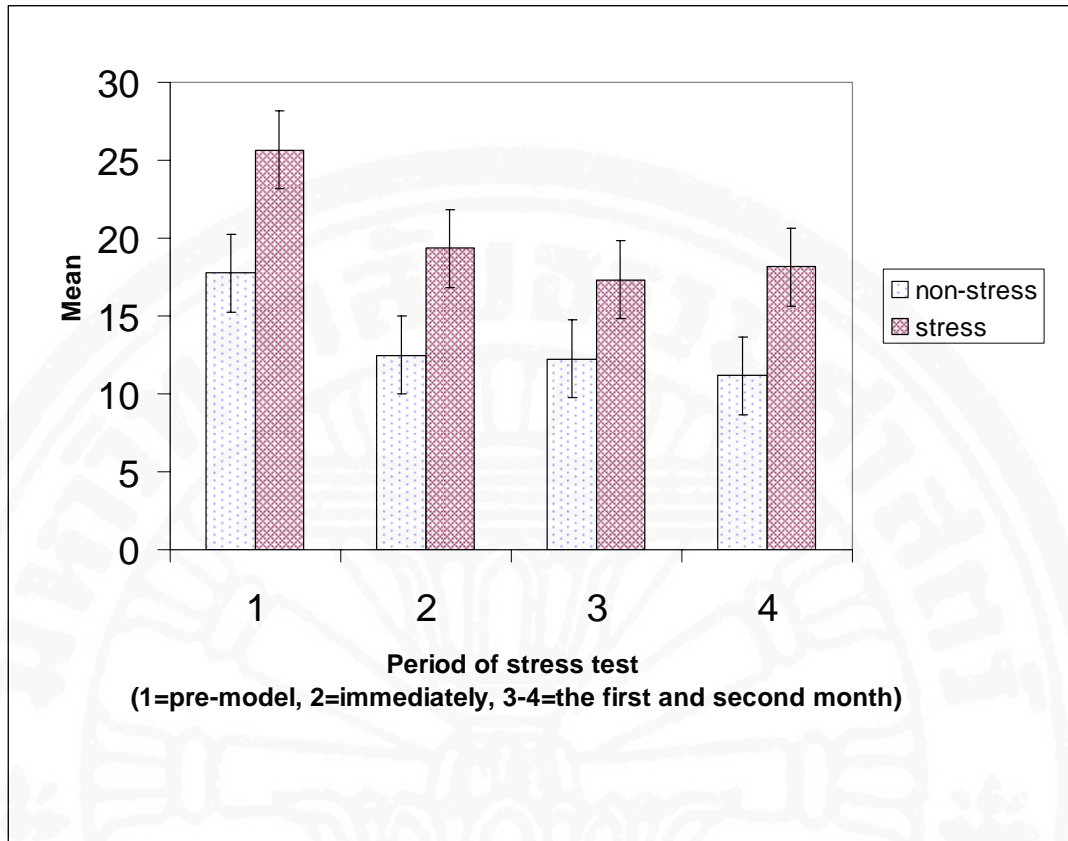


Figure 8: Comparison of average stress score by times of follow up

Discussion

The details of discussion were presented into three main areas:

1. The stress situation of elementary **school** teachers and school administrators in private schools

1.1 Elementary teachers:

From California State Department of Health Service Institute's study showed that experimental group who had good health promoting behavior had levels of susceptibility to stress lower than (control group) Those had poor health promoting behavior fundamental of health promoting behaviors of human. Daily activities composed of enough sleep, regular exercise, benefits food, no smoking, no alcohol, no tranquilizer, healthy, and positive thinking etc. which were good stress management mechanism. This study confirm that the most of the elementary teachers had moderate level of stress (40.6 %) and moderate level of susceptibility to stress (40.79 %), therefore, both result of stress test and susceptibility to stress were relevant. (Suwat Mahusurin, Vanida, Pumpaisanchai, Pimmas Tapunya, 1997, p. 7).

On the other hand, it was not consistent with level of stress' symptoms as the most (36.13 %) of them had severe level of stress. When considerable with Selye' stress theory mentioned that when the people were oppressed, there occurs the physical stress, good or bad causing the change of balance. When there was physical oppression, there occurs reaction, causing physical, bio-chemical and behavior change. These change are called General Adaptation Syndrome which have three stage : alarm reaction stage consist of 1) shock phase and 2) counter shock phase , persistence stage, and exhausting stage (Selye., 1975 ; Feldman., 1993).

1.2 School administrators:

This study showed that the majority of school administrators **had severe level of stress' symptoms** (45%). Which in consistent with study of Ritchie and Jones. From studying of **Ritchie** (1986, p. 1932) which studied, occupational stress of school administrators, Germany, found that : there were main two issue of stress of schools administrator composed of 1) working environment factors effect to the severe level of

stress of school administrators composed of solving problems and related between person and 2) conditional working factors effect to the severe level stress of administrators such as evaluating outcome of personal, workload, competitive **allocation**, long conference, and participatory after finished work, and belief internal locus of control. And It was consistent study of **Jones S.** (1987, p. 3923) which studied, factor effect to stress of elementary school administrators found that age, experience of school administrators and size of school were factors effect to stress.

On top of study of **Ritchie and Jones S.** this study was also consistent with **Lazarus' s stress theory**, 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 effects them and how the will adapt themselves. This 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. (Lazarus and Folkman., 1984, pp. 141-239).

2. Discussion based on approach and research methodology

The methodology used applied and adopted concept of participatory action research in activities, it was able to two main divided consisted of pre-model development process such as internal and external factor preparation and model development such as planning implementation monitoring and evaluation. These activities were made to reduce and prevent stress of elementary teachers in private schools.

According to the above mention, **confirm** concept of participatory action research that is method which provide 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. (Panthip Ramsut, 1997, p. 31) Besides, this research, **accepted** philosophy of participation action research emphasizes to help less opportunity group in society believe in human capacity to solve their own problem when them have to make a decision. The highest goal of participatory action research is to

community their own goal and to support the goal for individual development. (Marisa Koseyayothin, 2000, p.16)

3. Discussion based on hypothesis

There are two hypothesis of this study as follows:

3.1 Hypothesis test 1 “ This model was able to reduce severity of stress among teachers”

To test the stress due to the job among elementary teachers by using the process of with and post model development. Obviously job stress test scores of the first and second months of follow-up were significantly lower than pre-model development ($p < 0.05$), which could be interpreted as reduce stress of elementary school teachers because they passed trial or training process from program of this study. This program were fundamental preparation of them for reducing and preventing stress. It was able to divided into two main composed of 1) pre-model development process such as emotional skill development and positive thinking skill development , these steps were essential basis for helping clam stress and thinking systematic development of them. After, it was finding the procedure for analytical solving and 2) model development process such as planning, implementation, monitoring and evaluation. These steps were participated in process of the model development of active measures to reduce and prevent stress of elementary teachers. From information that mentioned above had impact to them stress namely, it was changed levels of stress, this step was able to reduce severity stress in elementary school teachers.

When comparing job stress score test in follow up period immediately after finishing this program, it was found that job stress test score of follow up period was no significantly lower than pre-model development. This can be implied that job stress of teacher samples in follow up period was indifference with job stress during pre-model development process. Obviously, after practicing a model development process till ending of program the psychological performance was adjusted until reaching stable condition. According to job stress score from this study, the score decreased gradually from ending of program but not as much as decreased from job stress score of the first and second of months after finishing program. The job stress test average score of pre-

model, post-model development (immediately, the first and second of months) were 25.25, 17.00, 12.50, 13.75 respectively. When compare these scores with Suwat Mahusnirunkun, et al. (1997, p.99) criteria which stated the level of stress that get more than 22 score do have high to severity levels of stress. These scores of post-model development lower levels of stress than score of pre-model development. Thus, it could be concluded that after passed this a model development process, stress level of elementary teacher samples decreased continuously from before passed this a model development process.

On top of that it was consistent with study of Biggam and Power (2000, 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 post-training, as was an improvement in self-perceived problem-solving ability. In addition, it was consistent with study of Medalia, Reheim and Casey (2002, pp. 165-171) studied, schizophrenic patients with PST(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) found that PST led to improvements in social skills, and the gains were maintained at 4-month follow-up.

However, some members who had not changed of level of stress namely, the same level of stress after finished model development process of the first of large and small sizes schools as followed:

Some members of the first of large size school and small size school had no changed of level of stress after finishing of it because these cases have the overall of causal of stress divided 3 the ways consist of **the first**, there was stress to perceive of responsibility to her burden consist of: agreeable preparation of integrated teaching methods and preparation about atmosphere' teaching aids and facility for form learning student and able to bring research applied to learning process of education act reform in 2002. **The second**, stress management found that there were both stress' factors and symptoms management of them consist of the ways about short and long period, and

society but no have the ways of family. **The third**, they had bad view of point to subdue problems and no core responsibility in research teams.

According to the above overall analysis, confirmed the hypothesis “this model is able to reduce severity stress in teachers.”

3.2 Hypothesis test 2 “The model development process is able to prevent non-stress teachers from stress”.

In testing job stress in the elementary teachers samples using process of a model development were composed of step of pre-model and post model development (immediately, the first and second of months after finishing this program). Obviously job stress test score of immediately, the first and second of months follow up were not significantly changed from pre-model and model development job stress score ($p < 0.05$), which cab be interpreted as prevent stress of elementary teacher samples not changed during after a model development process. Since important issue of fundamental preparation for preventing stress consist of: emotional skill development and positive thinking development, these steps were essential fundament for the new model development process because these steps help clam down stress and thinking systematic development of these members which lead to final step of internal personal factor preparation was finding the procedure solving analytical process. Another, the rest of this model was step of the model development process composed of four sub-steps such as step of planning, implementation, monitoring and evaluation. These steps were participated in process of the model development of active measures to reduce and prevent stress of elementary teachers. From information that mentioned above had impact to them level of stress namely, it was not changed levels of stress, this step was able to prevent stress in elementary teachers.

On top of that it was consistent with 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.

According to the above analysis, accepted this hypothesis “the model development process is able to prevent non-stress teachers from stress. “