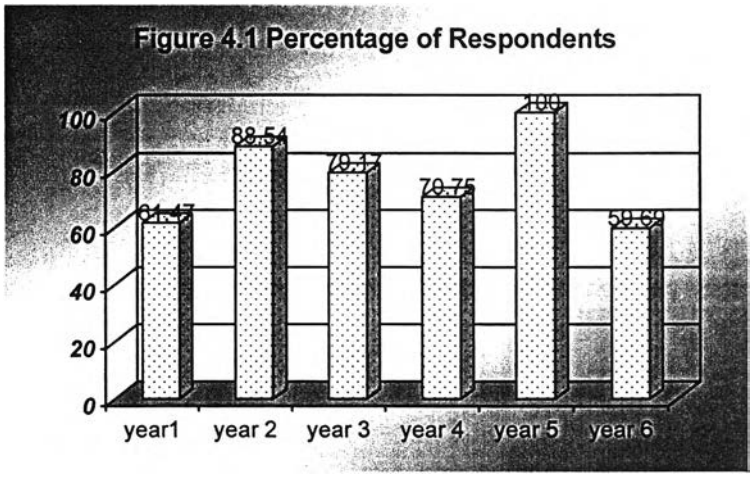
CHAPTER IV

RESULT

456 questionnaires out of 604 questionnaires were returned from the 1st to 6th year dental students of Chulalongkorn University, which counted for a response rate of 75 percent. The details of total cases recruited and number of cases in each year and the percentage of the respondent were demonstrated in Table 4.1 and in Figure 4.1.

Table 4.1 Number of cases and the percentage of the respondent

Year	Total students	Response	Percent response
1	109	67	61.47
2	96	85	88.54
3	96	76	79.17
4	106	75	70.75
5	93	93	100
6	104	60	57.69
Total	604	456	75



The statistical analyses used in this study comprised two main parts. The first part contained statistical methods for questionnaire development that was stated before. The other comprised of the statistical tests for analyzing the obtained data.

4.1 BASELINE DATA OF THE SUBJECTS

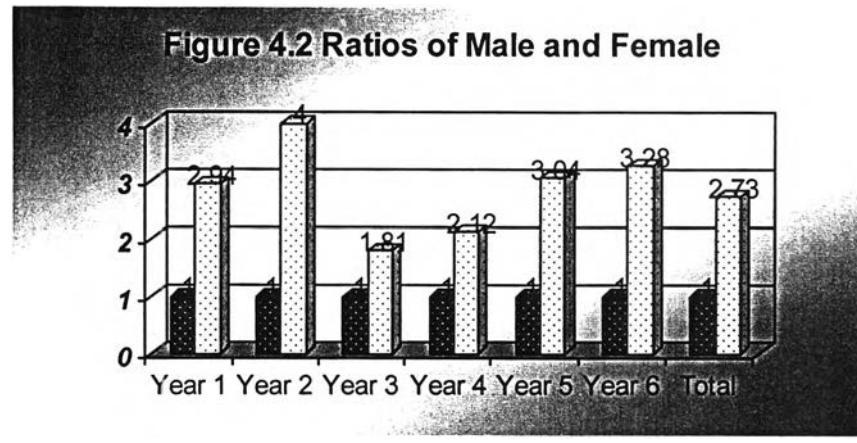
The categorical data such as sex, class, chronic diseases, the consultation, exercising habit, smoking habit, drinking habit will be described in terms of frequency and percentages. The details of all baseline data are presented as followed:

4.1.1 GENDER

The ratios of female were higher than male in every class year. In 2nd class year, the ratio of male and female was the most different (Male: Female = 1: 4.00). And the least ratios are in the 3rd class year. The details are shown in Table 4.2 and Figure 4.2

Table 4.2 The frequency and percentage of gender

Class	Male	% Male	Female	% Female	Male : Female
1	17	25.4	50	74.6	1 : 2.94
2	17	20.0	68	80.0	1 : 4.00
3	27	35.5	49	64.5	1 : 1.81
4	24	32.0	51	68.0	1 : 2.12
5	23	24.7	70	75.3	1 : 3.04
6	14	23.3	46	76.7	1 : 3.28
Total	122	26.8	334	73.2	1 : 2.73

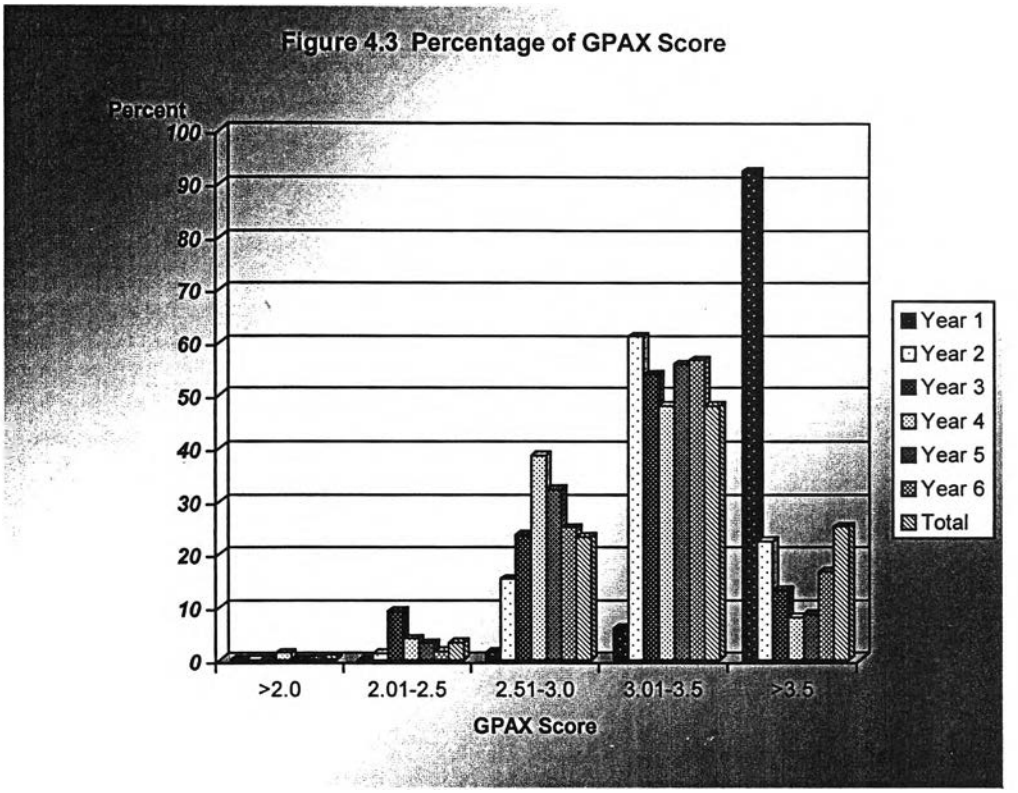


4.1.2 GPAX SCORE

Most of the students have GPAX score in between 3.01-3.5. Most of the 1st class year have GPAX score more than 3.5 which is the GPAX of the Secondary school. The details are shown in Table 4.3 and Figure 4.3

Table 4.3 The frequency and percentage of GPAX score

Class year	<2.0		2.01-2.5		2.51-3.0		3.01-3.5		>3.5	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	-	-	-	-	**1**	1.5	**4**	6.0	**62**	92.5
2	-	-	**1**	1.2	**13**	15.3	**52**	61.2	**19**	22.4
3	-	-	**7**	9.2	**18**	23.7	**41**	53.9	**10**	13.2
4	**1**	1.3	**3**	4.0	**29**	38.7	**36**	48	**6**	8.0
5	-	-	**3**	3.2	**30**	32.3	**52**	55.9	**8**	8.6
6	-	-	**1**	1.7	**15**	25.0	**34**	56.7	**10**	16.7
Whole student	**1**	0.2	**1.5**	3.3	**106**	23.2	**219**	48.0	**115**	25.2

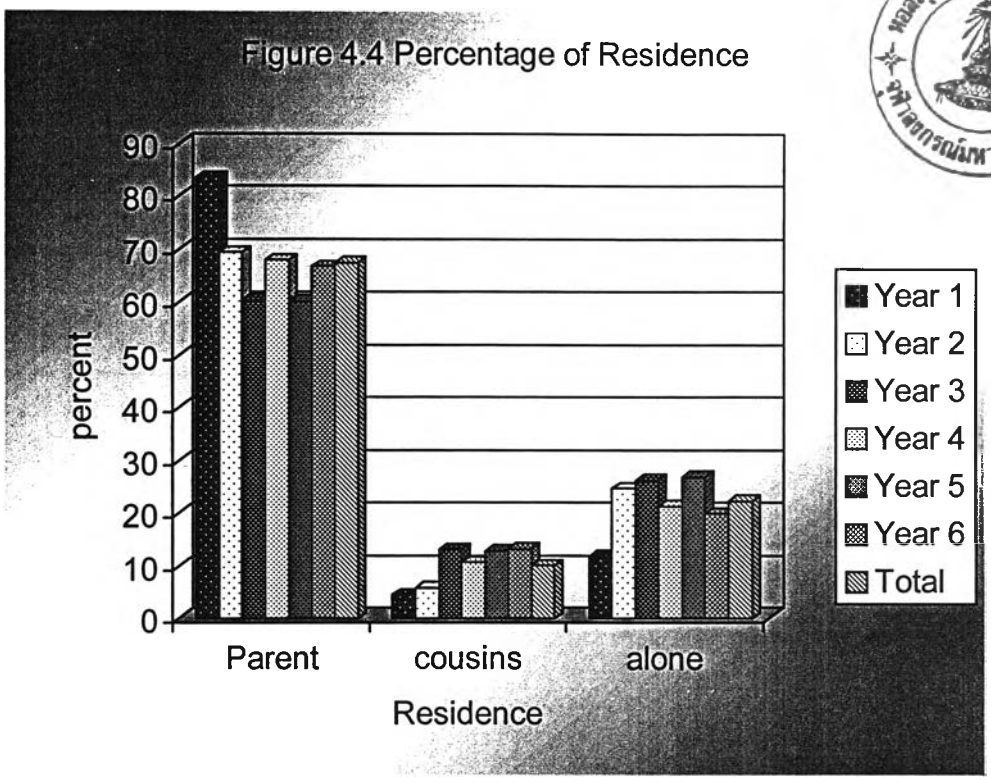


4.1.3 RESIDENCE

More than 60 percent of the students stay with their parents and 10.1 percent stay with their cousins. Students 22.4 percent are living alone. The detail are shown in Table 4.4

Table 4.4 The frequency and percentage of residence

Class	parents	%parents	cousins	%cousins	alone	%alone
1	56	83.6	3	4.5	8	11.9
2	59	69.4	5	5.9	21	24.7
3	46	60.5	10	13.2	20	26.3
4	51	68.0	8	10.7	16	21.3
5	56	60.2	12	12.9	25	26.9
6	40	66.7	8	13.3	12	20.0
Total	308	67.5	46	10.1	102	22.4



4.1.4 EXERCISING HABIT

83.1 percent of the students exercise less than 3 times a week.

4.1.5 SMOKING HABIT

98.5 percent of the students do not smoke.

4.1.6 DRINKING HABIT

95.6 percent of the students do not drink.

The details of exercising, smoking and drinking habit are presented in Table 4.5

Table 4.5 The frequency and percentage of exercise, smoking and drinking habit

Class year	Exercise				Smoking				Drinking			
	No		Yes		No		Yes		No		Yes	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	**45**	67.2	**22**	38.2	**66**	98.5	**1**	1.5	**64**	95.5	**3**	4.5
2	**75**	88.2	**10**	11.8	**85**	100	**-**	-	**84**	98.8	**1**	1.2
3	**61**	80.3	**15**	19.7	**73**	96.1	**3**	3.9	**71**	93.4	**5**	6.6
4	**60**	80.0	**15**	20.0	**74**	98.7	**1**	1.3	**71**	93.3	**4**	5.3
5	**83**	89.2	**10**	10.8	**91**	97.8	**2**	2.2	**90**	96.8	**3**	3.2
6	**55**	91.7	**5**	8.3	**60**	100	**-**	-	**57**	3.0	**95**	5.0
Whole student	**379**	83.1	**77**	16.9	**449**	98.5	**7**	1.5	**437**	95.6	**19**	4.2

4.1.7 CONSULTATION

96.7 percent of the students seek for consultation when they have problem. The detail are shown in Table 4.6

Table 4.6 The frequency and percentage of consultation

Class year	Have not	% Have not	Have	% Have
1	-	-	67	100
2	2	2.4	83	97.6
3	1	1.3	75	98.7
4	3	4.0	72	96.0
5	6	6.5	87	93.5
6	2	3.3	58	96.7
Total	14	3.1	441	96.7

4.1.8 CHRONIC DISEASE

The problem of chronic disease mostly occurred among these students is allergy (31.1 percents). The percentage of all other diseases is less than 15. Examples of other disease such as autoimmune disease bone disease, chronic sinusitis, dyspepsia, enteritis, hypertension, hypotension, irritable bound syndrome, mitral valve prolapse, SLE, urticaria in few of them. The details are shown in Table 4.7 ,4.8 and 4.9

Table 4.7 The frequency and percentage of asthma, allergy and Diabetes Mellitus

Class year	Asthma				Allergy				Diabetes Mellitus			
	No		Yes		No		Yes		No		Yes	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	**67**	100	**-**	-	**43**	64.2	**24**	35.8	**67**	100	**-**	-
2	**82**	96.5	**3**	3.5	**48**	56.5	**37**	43.5	**85**	100	-	-
3	**73**	96.1	**3**	3.9	**47**	61.8	**29**	38.2	**75**	98.7	**1**	1.3
4	**75**	100	**-**	-	**55**	73.3	**20**	26.7	**75**	100	**-**	-
5	**92**	98.9	**1**	1.1	**74**	79.6	**19**	20.4	**92**	98.9	**1**	1.1
6	**55**	91.7	**5**	8.3	**47**	78.3	**13**	21.7	**60**	100	**-**	-
Whole student	**444**	97.4	**12**	2.6	**314**	68.9	**142**	31.1	**454**	99.6	**2**	0.4

Table 4.8 The frequency and percentage of other chronic diseases

	count	percent
Have **no** other chronic disease	438	96.1
Have other chronic disease	18	3.9

Table 4.9 The frequency and percentage of arthritis, migraine and peptic ulcer

Class year	Arthritis				Migraine				Peptic ulcer			
	No		Yes		No		Yes		No		Yes	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	**66**	98.5	**1**	1.5	**61**	91.0	**6**	9.0	**58**	86.6	**9**	13.4
2	**82**	96.5	**3**	3.5	**84**	98.8	**1**	1.2	**72**	84.7	**13**	15.3
3	**75**	98.7	**1**	1.3	**70**	92.1	**6**	7.9	**67**	88.2	**9**	11.8
4	**74**	98.7	**1**	1.3	**70**	93.3	**5**	6.7	**67**	89.3	**8**	10.7
5	**91**	97.8	**2**	2.21	**91**	97.8	**2**	2.2	**83**	89.2	**10**	10.8
6	**60**	100	**-**	-	**60**	100	**-**	-	**52**	86.7	**8**	13.3
Whole student	**448**	98.24	**8**	1.8	**436**	95.6	**20**	4.4	**399**	87.5	**57**	12.5

4.2 RESULT OF THE POTENTIAL STRESSORS

From the result of the factor analysis with Principal Component Analysis as extraction method and Varimax with Kaiser Normalization as rotation method revealed seven components similar to the result from pretest but different in details. The details are shown in table 4.10. The result shows that Item 1-2 and item 10-11 should be in the same dimension of item 6-9, while item 29 should be in the same dimension as item 12-14. However, all items except item 29 could be group in the same dimension as the data from the pretest but not quite well. The component in each dimension was rearranged and renamed for the better result.

Table 4.10 Demonstrate the result of factor analysis

Item	component						
	1	2	3	4	5	6	7
1. I feel that nobody likes me.	0.578		0.360			0.363	
2. I feel that my friends are not interested in me.	0.520		0.300			0.391	
6. I have conflicts with my family member.	0.813						
7. My family expected me to get high score.	0.630				0.340		0.372
8. My family does not understand when I got low score.	0.677						
9. There are conflicts among my family members	0.799						
10. When I have troubles, I cannot consult my friends.	0.720						
11. I can't get along with my classmates.	0.746		0.360				
3. I feel that my instructors are not interested in me.						0.724	
4. I cannot consult instructor when I have problems in my practice.						0.812	
5. I cannot consult instructor when I have problems in my study.						0.788	
12. My classmates are cheating in their work and get higher score than me.					0.769		
13. My classmates are cheating in their examination and gets higher score than I am.					0.799		
14. I'm afraid that my friends will get higher score than me.					0.636		
29. My grade is lower than my expectation.					0.634		0.343
15. Computer's efficiency is poor.				0.720			
16. Computer room opens in an inappropriate time.				0.833			
17. There are not enough seats in the library.				0.801			
18. There are not enough books in the library.				0.695			
19. Instructor teaches too fast.				0.338			0.630
20. The lecture is boring.				0.318			0.693
21. The media is not appropriate to the lesson.				0.353			0.565
22. There are too frequent examinations.			0.536				0.438
23. Assignments are too difficult.			0.751				
24. There are too many assignments.			0.758				
25. My work is not counted in the requirement.			0.634				
26. I cannot make my work as well as I expect.		0.308	0.608				
27. I cannot finish my work in time.		0.308	0.675				
28. I cannot do well in the examination.			0.346		0.481		0.444
30. Unit is out of order.		0.815					
31. Wasting time in queuing.		0.827					
32. Inappropriate instruments.		0.830					
33. My patient comes late.		0.774					
34. Instructor comes to clinic late.		0.819					

The dimension "interpersonal relationship" consists of items 1-2 and 6-11. The dimension "student-instructor relationship" consists of items 3-5. The dimension "peer pressure and competition" consists of items 12-13 and 29. The dimension "facilities" consisted of items 15-18. The dimension "learning environment" consists of items 19-21. The dimension "workload" consists of items 22-28. The dimension "clinical environment consists of items 30-34.

The data obtained from the population, which was regrouped as suggestion from the factor analysis, was analyzed for reliability by estimating its internal consistency. The internal consistency of the scale was determined by Cronbach's coefficient alpha. Total number of data was 456.

The result shows the internal consistency of this scale to be high as demonstrate in Table 4.11 and Table 4.12. There is no negative correlation with the overall scale. The result from the pretest and the population show in the same way.

Table 4.11 Demonstrate the result of Cronbach's coefficient alpha.

N= 456

Dimension	Item	Cronbach's coefficient alpha
Interpersonal relationships	1-2,6-11	0.887
Student-instructor relationships	3-5	0.763
Peer pressure and competition	12-14,29	0.779
Facilities	15-18	0.826
Leaning environment	19-21	0.820
Workload	22-28	0.911
Clinical environment	30-34	0.870

Table 4.12 Demonstrate the item-total statistics N = 456

Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
1. I feel that nobody likes me.	9.41	23.60	0.64	0.874
2. I feel that my friends are not interested in me.	9.50	24.72	0.59	0.879
6. I have conflicts with my family member.	9.45	22.24	0.72	0.867
7. My family expected me to get high score.	9.98	25.04	0.57	0.881
8. My family does not understand when I got low score.	10.00	24.53	0.59	0.879
9. There are conflicts among my family members	9.57	23.04	0.65	0.874
10. When I have troubles, I cannot consult my friends.	9.45	22.31	0.72	0.866
11. I can't get along with my classmates.	9.34	21.86	0.79	0.859
3. I feel that my instructors are not interested in me.	2.43	2.09	0.49	0.830
4. I cannot consult instructor when I have problems in my practice.	2.04	1.49	0.68	0.625
5. I cannot consult instructor when I have problems in my study.	2.22	1.63	0.70	0.607
12. My classmates are cheating in their work and get higher score than me.	3.02	2.82	0.68	0.642
13. My classmates are cheating in their examination and gets higher score than I am.	3.04	2.66	0.71	0.618
14. I'm afraid that my friends will get higher score than me.	3.30	3.50	0.49	0.764
29. My grade is lower than my expectation.	2.53	3.23	0.44	0.776
15. Computer's efficiency is poor.	3.18	4.55	0.59	0.806
16. Computer room opens in an inappropriate time.	3.18	4.03	0.70	0.757
17. There are not enough seats in the library.	3.06	3.82	0.68	0.767
18. There are not enough books in the library.	3.14	4.45	0.64	0.787
19. Instructor teaches too fast.	2.80	2.32	0.65	0.777
20. The lecture is boring.	2.69	2.02	0.69	0.736
21. The media is not appropriate to the lesson.	2.9	2.22	0.69	0.741
22. There are too frequent examinations.	10.67	14.29	0.49	0.871
23. Assignments are too difficult.	10.75	13.05	0.71	0.843
24. There are too many assignments.	10.60	13.09	0.71	0.843
25. My work is not counted in the requirement.	10.87	12.86	0.70	0.844
26. I cannot make my work as well as I expect.	10.76	13.33	0.68	0.847
27. I cannot finish my work in time.	10.62	13.01	0.70	0.844
28. I cannot do well in the examination.	10.89	14.01	0.53	0.866
30. Unit is out of order.	6.57	9.01	0.79	0.889
31. Wasting time in queuing.	6.83	9.23	0.77	0.892
32. Inappropriate instruments.	6.70	9.12	0.81	0.834
33. My patient comes late.	6.63	9.00	0.73	0.901
34. Instructor comes to clinic late.	6.71	9.05	0.77	0.892

The result of four-pointed scale (0, 1, 2 and 3) was used in presenting the average stress score of each dimension. In the identification of the potential stressors, the score was divided into 2 groups: "stress" and "non-stress". What the students perceived as moderately and very stressful scored 2 and 3 accordingly, and were categorized as "stress"; where as what the students perceived as not stressful and slightly stressful scored 0 and 1 accordingly, and were categorized as "non-stress".

4.2.1 THE AVERAGE SCORE OF EACH DIMENSION

The average score in each dimension is calculated from the total sum of score divided by the number of item in that dimension. Whereas the overall average score of each dimension is calculated from the total sum of the average score per student in every dimension divide by the total number of students. In case of any missing items, the average score of the student was calculated by summing the scores in that dimension and dividing by the number of that exist item. The dimension that has the most score shows most effect to the students. The analysis was also performed separately in each class year.

Workload obtains the most score from the whole research populaiton, the 1st year students, the 2nd year students, the 3rd year students the 4th year students and the 5th year students. Clinical environment obtains the most score from the 6th year students.

Workload and clinical environment show the most effect to the students. The details of score in each dimension from the whole population and from each separated class year were shown in Figure

4.5. Ranking score of each dimension from the whole population and each separated class year were shown in Figure 4.6.

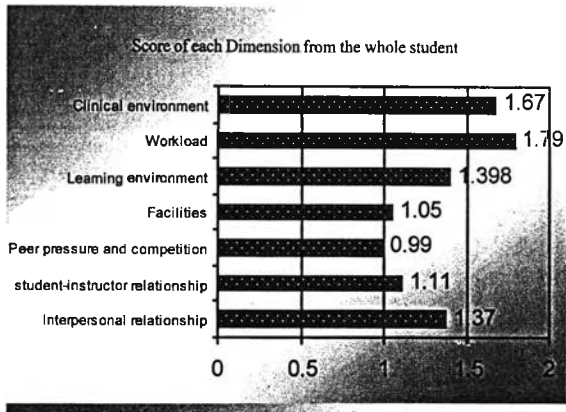
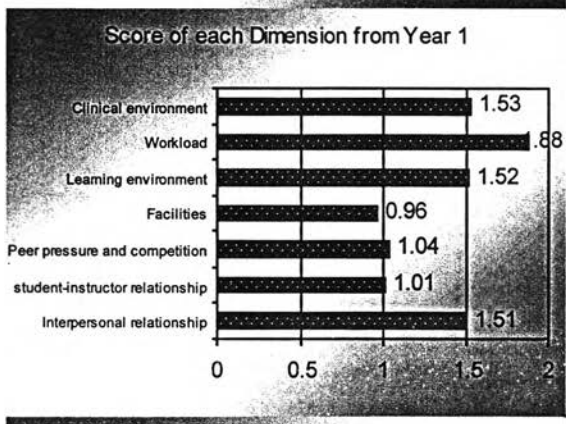
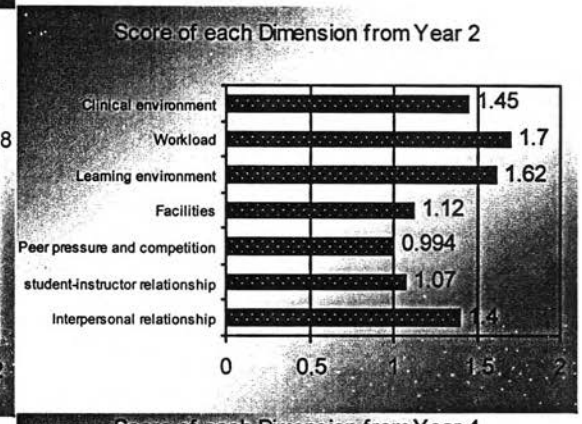
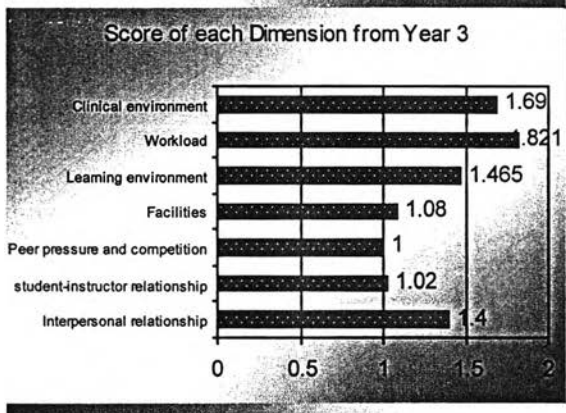
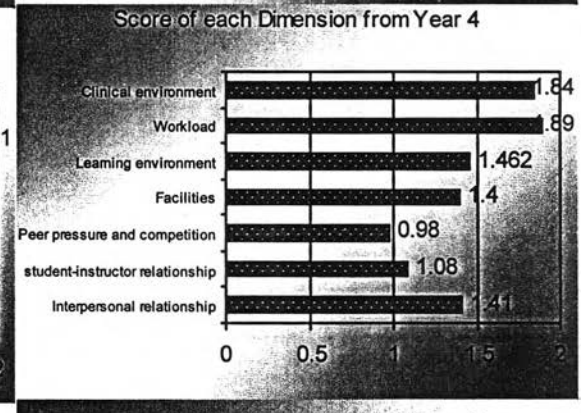


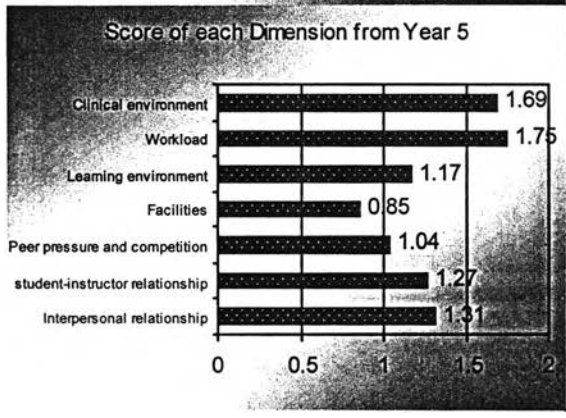
Figure 4.5 Demonstrate Score of each dimension from the whole population and each separated class year











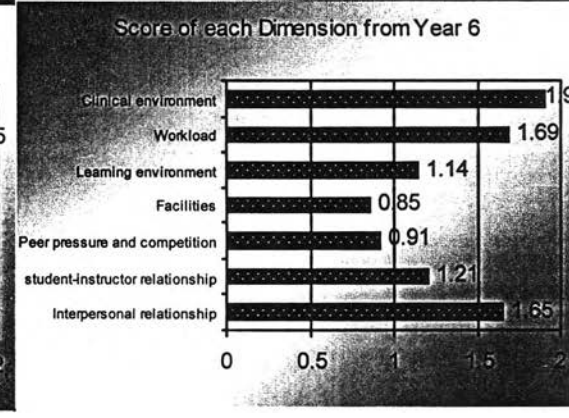
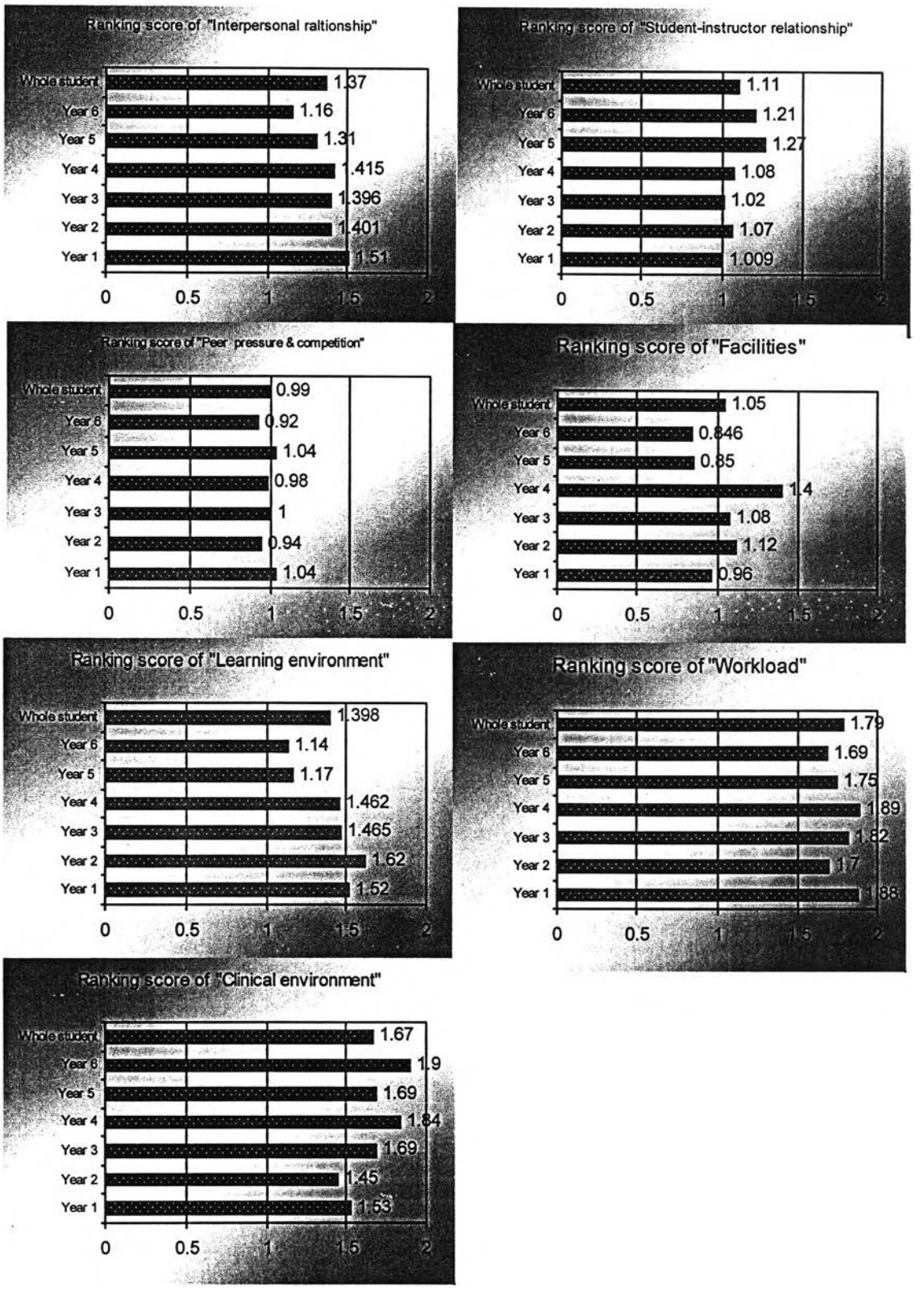


Figure 4.6 Demonstrate ranking score of each dimension in each separated class year and the whole population



In the test for equality of mean in the whole population, mean score of male and female are statistically different in Student-instructor relationships (male perceived much higher stress than female did in Student-instructor relationships). Mean score of students who stay alone are statistically different in Learning environment (students who stay alone perceived much higher stress than students who don't stay alone did in Learning environment). Mean score of preclinical and clinical students are statistically different in Student-instructor relationships, Facilities, Learning environment and Clinical environment (clinical student perceived much higher stress than preclinical students did in Facilities and Learning environment, preclinical students perceived much higher stress than clinical students did in Student-instructor relationships and Clinical environment). Mean score of smoking and non-smoking students are statistically different in Peer pressure and competition (smoking student perceived much higher stress than non-smoking student did in Peer pressure and competition). Mean score of students who have and have no consultation are statistically different in Clinical environment (students who have consultation perceived much higher stress than students who have no consultation did in Clinical environment). Mean score of students who have and have no migraine are statistically different in Student-instructor relationships, Peer competition and Clinical environment (students who have migraine perceived much higher stress than students who have no migraine did in Student-instructor relationships,

Peer competition and Clinical environment). Details were shown in Table 4.13– 4.25

Table 4.13 Demonstrate t-test for equality of Mean in gender

Dimension	Gender	N	Mean	Std. Deviation	P-value
Interpersonal relationship	male	102	1.34	.724	0.637
	female	353	1.38	.674	
Student-instructor relationship	male	102	1.21	.655	0.048
	female	353	1.08	.612	
Peer pressure and competition	male	102	1.05	.610	0.192
	female	353	0.97	.540	
Facilities	male	102	1.09	.720	0.413
	female	353	1.03	.647	
Learning environment	male	102	1.39	.717	0.881
	female	353	1.40	.708	
Workload	male	102	1.77	.657	0.830
	female	353	1.78	.599	
Clinical environment	male	102	1.60	.848	0.437
	female	353	1.53	.842	

Table 4.14 Demonstrate t-test for equality of Mean in residence

Dimension	Stay alone	N	Mean	Std. Deviation	P-value
Interpersonal relationship	Yes	102	1.29	.695	0.182
	No	353	1.39	.683	
Student-instructor relationship	Yes	102	1.19	.639	0.168
	No	353	1.09	.620	
Peer pressure and competition	Yes	102	0.96	.531	0.487
	No	353	1.00	.567	
Facilities	Yes	102	1.05	.661	0.935
	No	353	1.05	.668	
Learning environment	Yes	102	1.52	.744	0.042
	No	353	1.36	.695	
Workload	Yes	102	1.80	.616	0.654
	No	353	1.77	.614	
Clinical environment	Yes	102	1.57	.817	0.715
	No	353	1.54	.851	

Table 4.15 Demonstrate t-test for equality of Mean in exercise

Dimension	Exercising	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	379	1.39	.671	0.242
	Yes	77	1.28	.751	
Student-instructor relationship	No	379	1.09	.604	0.125
	Yes	77	1.23	.712	
Peer pressure and competition	No	379	.99	.560	0.743
	Yes	77	1.01	.560	
Facilities	No	379	1.04	.651	0.691
	Yes	77	1.07	.735	
Learning environment	No	379	1.40	.713	0.723
	Yes	77	1.37	.690	
Workload	No	379	1.78	.604	0.646
	Yes	77	1.75	.663	
Clinical environment	No	379	1.53	.836	0.528
	Yes	77	1.60	.872	

Table 4.16 Demonstrate t-test for equality of Mean between clinical and preclinical student

Dimension	Student	N	Mean	Std. Deviation	P-value
Interpersonal relationship	preclinic	228	1.31	.635	0.052
	clinic	228	1.43	.729	
Student-instructor relationship	preclinic	228	1.17	.624	0.048
	clinic	228	1.06	.622	
Peer pressure and competition	preclinic	228	0.99	.572	0.983
	clinic	228	0.99	.548	
Facilities	preclinic	228	0.93	.678	0.000
	clinic	228	1.17	.631	
Learning environment	preclinic	228	1.26	.699	0.000
	clinic	228	1.54	.691	
Workload	preclinic	228	1.74	.593	0.170
	clinic	228	1.82	.632	
Clinical environment	preclinic	228	1.64	.788	0.016
	clinic	228	1.45	.884	

Table 4.17 Demonstrate t-test for equality of Mean between smoking and non-smoking student

Dimension	Smoking	N	Mean	Std. Deviation	P-value
Interpersonal relationships	No	449	1.37	.685	0.342
	Yes	7	1.13	.732	
Student-instructor relationships	No	449	1.11	.625	0.939
	Yes	7	1.10	.6861	
Peer pressure and competition	No	449	0.98	.553	0.015
	Yes	7	1.50	.791	
Facilities	No	449	1.04	.659	0.446
	Yes	7	1.36	1.019	
Learning environment	No	449	1.40	.712	0.807
	Yes	7	1.33	.471	
Workload	No	449	1.77	.607	0.453
	Yes	7	2.06	.943	
Clinical environment	No	449	1.54	.841	0.592
	Yes	7	1.71	.951	

Table 4.18 Demonstrate t-test for equality of Mean between drinking and non-drinking student

Dimension	Drinking	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	436	1.37	.682	0.519
	Yes	19	1.27	.790	
Student-instructor relationship	No	436	1.12	.624	0.573
	Yes	19	1.04	.656	
Peer pressure and competition	No	436	0.99	.554	0.777
	Yes	19	1.03	.711	
Facilities	No	436	1.06	.659	0.103
	Yes	19	0.80	.793	
Learning environment	No	436	1.41	.706	0.287
	Yes	19	1.23	.762	
Workload	No	436	1.78	.607	0.529
	Yes	19	1.69	.774	
Clinical environment	No	436	1.54	.849	0.844
	Yes	19	1.51	.658	

Table 4.19 Demonstrate t-test for equality of Mean between student that has consultant and has not consultant

Dimension	Consultant	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	14	1.24	.796	0.480
	Yes	438	1.37	.684	
Student-instructor relationship	No	14	1.07	.869	0.812
	Yes	438	1.11	.617	
Peer pressure and competition	No	14	0.93	.558	0.677
	Yes	438	0.99	.561	
Facilities	No	14	1.14	.848	0.588
	Yes	438	1.05	.658	
Learning environment	No	14	1.45	.549	0.790
	Yes	438	1.40	.712	
Workload	No	14	1.83	.675	0.777
	Yes	438	1.78	.613	
Clinical environment	No	14	1.06	1.0420	0.029
	Yes	438	1.55	.832	

Table 4.20 Demonstrate t-test for equality of Mean in asthma

Dimension	Asthma	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	443	1.37	.689	0.382
	Yes	12	1.20	.592	
Student-instructor relationship	No	443	1.12	.621	0.423
	Yes	12	0.97	.745	
Peer pressure and competition	No	443	0.99	.557	0.568
	Yes	12	1.08	.651	
Facilities	No	443	1.06	.666	0.173
	Yes	12	0.79	.531	
Learning environment	No	443	1.40	.710	0.311
	Yes	12	1.19	.643	
Workload	No	443	1.78	.619	0.692
	Yes	12	1.82	.351	
Clinical environment	No	443	1.54	.836	0.571
	Yes	12	1.68	1.046	

Table 4.21 Demonstrate t-test for equality of Mean in allergies

Dimension	Allergies	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	312	1.38	.692	0.769
	Yes	142	1.36	.677	
Student-instructor relationship	No	312	1.12	.621	0.932
	Yes	142	1.12	.636	
Peer pressure and competition	No	312	0.98	.563	0.485
	Yes	142	1.02	.551	
Facilities	No	312	1.04	.665	0.726
	Yes	142	1.07	.665	
Learning environment	No	312	1.39	.709	0.520
	Yes	142	1.43	.712	
Workload	No	312	1.76	.619	0.263
	Yes	142	1.88	.604	
Clinical environment	No	312	1.53	.834	0.407
	Yes	142	1.60	.860	

Table 4.22 Demonstrate t-test for equality of Mean in Diabetes mellitus

Dimension	Diabetes mellitus	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	454	1.37	.687	0.472
	Yes	1	0.88	.	
Student-instructor relationship	No	454	1.11	.625	0.377
	Yes	1	1.67	.	
Peer pressure and competition	No	454	0.99	.558	0.071
	Yes	1	2.00	.	
Facilities	No	454	1.05	.664	0.291
	Yes	1	1.75	.	
Learning environment	No	454	1.399	.709	0.706
	Yes	1	1.67	.	
Workload	No	454	1.78	.614	0.734
	Yes	1	1.57	.	
Clinical environment	No	454	1.54	.839	0.084
	Yes	1	3.00	.	

Table 4.23 Demonstrate t-test for equality of Mean in arthritis

Dimension	Arthritis	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	447	1.37	.687	0.281
	Yes	8	1.11	.625	
Student-instructor relationship	No	447	1.11	.622	0.235
	Yes	8	1.38	.765	
Peer pressure and competition	No	447	0.99	.556	0.141
	Yes	8	1.28	.713	
Facilities	No	447	1.05	.666	0.746
	Yes	8	1.13	.598	
Learning environment	No	447	1.40	.710	0.548
	Yes	8	1.25	.661	
Workload	No	447	1.78	.612	0.525
	Yes	8	1.64	.708	
Clinical environment	No	447	1.55	.841	0.858
	Yes	8	1.60	.926	

Table 4.24 Demonstrate t-test for equality of Mean in migraine

Dimension	Migraine	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	435	1.37	.690	0.931
	Yes	20	1.36	.622	
Student-instructor relationship	No	435	1.09	.6177	0.001
	Yes	20	1.57	.613	
Peer pressure and competition	No	435	.98	.557	0.027
	Yes	20	1.26	.553	
Facilities	No	435	1.04	.666	0.195
	Yes	20	1.24	.604	
Learning environment	No	435	1.39	.714	0.161
	Yes	20	1.62	.544	
Workload	No	435	1.77	.613	0.064
	Yes	20	2.03	.578	
Clinical environment	No	435	1.53	.829	0.009
	Yes	20	2.03	.967	

Table 4.25 Demonstrate t-test for equality of Mean in peptic ulcer

Dimension	Peptic ulcer	N	Mean	Std. Deviation	P-value
Interpersonal relationship	No	398	1.36	.684	0.631
	Yes	57	1.41	.710	
Student-instructor relationship	No	398	1.12	.614	0.900
	Yes	57	1.11	.696	
Peer pressure and competition	No	398	0.99	.554	0.497
	Yes	57	1.04	.597	
Facilities	No	398	1.05	.681	0.885
	Yes	57	1.06	.539	
Learning environment	No	398	1.39	.709	0.266
	Yes	57	1.50	.702	
Workload	No	398	1.77	.624	0.395
	Yes	57	1.85	.535	
Clinical environment	No	398	1.53	.843	0.363
	Yes	57	1.64	.831	

4.2.2 IDENTIFICATION OF THE POTENTIAL STRESSOR

To describe each potential stressor, score for each potential stressor was recoded into 0 for “non-stress” (from 0:not stressful and 1: slightly stressful) and 1 for “stress” (from 2: moderately stressful and 3: very stressful). Then, response of stress was described as number and percentages for each item. Analysis was also performed separately for students in each class year. Details were shown in Appendix IV.

Ranking the percentage of stress group in each item can identify the sources of stress in Chulalongkorn University dental students.

To describe the source of stress in each class year, the recoding data have to be separated into each class year and rank by the percentage of stress group in each item. The difference among each class year could be found by comparing the sources of stress in each class year.

The first ranking in the whole student and in separate class year was occupied in workload. They are frequent examination, difficult assignments, too much assignments, and time constraint. In the preclinical student (1st to 3rd year student), the frequent examination and the difficult work are the most potential stressor. In the clinical student (4th to 6th year student) too much work and the time constraint are the most potential stressors.

In the whole student, the first rank is too many assignments. The second to the fifth rank are cannot finish work in time, too frequent examination, too difficult assignment and cannot do the good job as expected respectively. They are occupied in workload.

In the 1st year students, the first rank is too difficult assignments. The second to the fifth rank are cannot finish work in time, cannot do well in the examination, too much assignments and cannot do the good job as expected respectively. They are occupied in workload.

In the 2nd year students, the first rank is too frequent examination. The second to the fifth rank are cannot finish work in time, too difficult

assignment, boring lecture and instructor teaches too fast respectively. They are workload and learning environment.

In the 3rd year students, the first rank is too frequent examination. The second to the fifth rank are too much assignments, cannot finish work in time, too difficult assignments and the unit is out of order respectively. They are occupied in workload and clinical environment.

In the 4th year students, the first rank is too much assignments. The second to the fifth rank are too frequent examination, the unit is out of order, cannot finish work in time and cannot count the work into requirement respectively. They are occupied in workload and clinical environment.

In the 5th year students, the first rank is cannot finish work in time. The second to the fifth rank are too much assignments, the unit is out of order, patients come late, and cannot do the good job as expected respectively. They are occupied in workload and clinical environment.

In the 6th year students, the first rank is too much assignments. The second to the fifth rank are the unit is out of order, cannot finish work in time, instructor comes in clinic too late and patients come late respectively. They are occupied in workload and clinical environment.