

Chapter IV

Research Finding

In this study, the respondents answered the same self-reported questionnaire for three times; pretest one time and post-test two times. For simplification, the results was divided into five parts;

1. The difference of responses between groups (i.e. morning and afternoon shifts at each test (pre and post-test)).
2. The difference of responses within groups in each shift.
3. The change of responses within group and the difference of changes in response between group.
4. The correlation between two variables at each test.
5. The relationship between the independent variables and the dependent variables at each test.

Note: The number of respondents in each part of questionnaire were not equal because in each part, the incomplete answers were deleted from the questionnaire and

from the comparison.

1. The Difference of Response between Groups at Each Test

1.1. The Demographic Characterization Part:

Table 5: The difference between groups in the demographic characteristic at pretest.

** = $P < 0.05$

Characteristics	Afternoon (n = 191)		Morning (n = 222)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
- Age	16.74	0.78	16.77	0.84	0.7
- Last term grade average	2.61	0.49	2.72	0.54	0.03 **
- Student's salary	1,141.4	528.4	1,263.8	702.3	0.04 **
	n	%	n	%	
<u>Living Pattern</u>					
- With parent or relatives	189	98.9	210	94.6	> 0.2
- Alone	2	1.1	12	5.4	
<u>Media Use During the Last 4 wks.</u>					
- Newspaper					
.Everyday	28	14.7	27	12.2	
.Almost everyday	56	29.3	85	38.3	
.Once/wk.	49	25.7	48	21.6	> 0.3
.< once/wk.	36	18.8	43	19.4	
.None	22	11.5	19	8.6	

Table 5: The difference between groups in the demographic characteristics at pretest (continue).

Characteristics	Afternoon (n = 191)		Morning (n = 222)		P-value
	n	%	n	%	
- Radio					
.Everyday	96	50.3	105	47.3	> 0.3
.Almost everyday	56	29.3	92	41.4	
.Once/wk.	15	7.9	7	3.2	
.< once/wk.	10	5.2	9	4.1	
.None	14	7.3	9	4.1	
- Television					
.Everyday	148	77.5	154	69.4	> 0.2
.Almost everyday	36	18.8	51	23.0	
.Once/wk.	3	1.6	9	4.1	
.< once/wk.	2	1.0	5	2.3	
.None	2	1.0	3	1.4	
<u>Source of AIDS</u>					
<u>News</u>					
- Teacher					
.Get much	93	48.7	101	45.5	> 0.47
.A little	88	46.1	103	46.4	
.Never get	10	5.2	18	8.1	
- Friends					
.Get much	43	22.5	40	18.0	> 0.052
.A little	119	62.3	125	56.3	
.Never get	29	15.2	57	25.7	

Table 5: The difference between groups in the demographic characteristics at pretest (continue).

Characteristics	Afternoon (n = 191)		Morning (n = 222)		P-value
	n	%	n	%	
- Family					
.Get much	53	27.7	46	20.7	—
.A little	95	49.5	110	49.7	> 0.12
.Never get	43	22.5	66	29.7	—
- Health personnel					
.Get much	79	41.4	84	37.8	—
.A little	75	39.3	93	41.9	> 0.76
.Never get	37	19.4	45	20.3	—
- Magazine					
.Get much	97	50.8	112	50.5	—
.A little	74	38.7	81	36.5	> 0.69
.Never get	20	10.5	29	13.1	—
- Television					
.Get much	158	82.7	183	82.4	—
.A little	32	16.8	32	14.4	> 0.13
.Never get	1	0.5	7	3.2	—
- Radio					
.Get much	119	62.3	117	52.7	—
.A little	55	28.8	84	37.8	> 0.12
.Never get	17	8.9	21	9.5	—

Table 5: The difference between groups in the demographic characteristics at pretest (continue).

Characteristics	Afternoon (n = 191)		Morning (n = 222)		P-value
	n	%	n	%	
- Newspaper					
. Get much	116	60.7	117	52.7	> 0.22
. A little	61	31.9	82	36.9	
. Never get	14	7.3	23	10.4	
<u>Entertaining Places Visit</u>					
- Gay bar	2	1.0	5	2.3	0.5
- Prostitute work place	13	6.8	25	11.3	0.2
- Night club	34	17.8	65	29.3	0.01 **
- Massage	6	3.1	20	9.0	0.02 **
- Discotheque	68	35.6	92	41.4	0.2

** = P < 0.05

Table 5 showed the results of students' characteristics. Comparisons were made to detect the differences between the students in the morning shift and the students in the afternoon shift at pretest.

Age: The data showed that the age average of the students in the afternoon shift and the morning shift were 16.74 ± 0.78 years old, and 16.77 ± 0.84 years old respectively. There was no significant difference of age

between shift.

Living Pattern: Most of the students in both shifts stayed with their parents or relatives. Only 1.1% of the students in the afternoon shift and 5.4% of the students in the morning shift stayed alone or with their friends. There was no significant difference of living pattern between shifts.

Medias Use During the Last Four Weeks: The three medias were asked to assess the frequency in use during last four weeks.

- Newspaper: Many students in both shifts read the newspaper almost everyday (twenty nine percent in the afternoon shift and 38.3% in the morning shift). There was no significant difference between shift in reading newspaper during the last four weeks.

- Radio: Most of the students in both morning (47.3%) and afternoon shift (50.3%) listened to the radios everyday. There was no significant differences between shifts.

- Television: High percentages of students watching television everyday were observed in the morning shift (69.4%) and the afternoon shift (77.5%). There was no significant differences between both shifts.

Sources of AIDS News:

- Teachers: In the afternoon shift, the students received much of the information about AIDS from the teachers (48.7%). In the morning shift, the highest percentage of students reported that they received little information about AIDS from the teacher (46.4%). There was no significant difference between both shifts.

- Friends: The students in both shifts received a little information about AIDS from their friends (i.e. afternoon 62.3%, morning 56.3%). There was no significant difference between both shifts.

- Family: The highest percentages (49.0%) of students in both shifts received a little information about AIDS from their families. There was no significant differences between shifts.

- Health Personnel: The highest percentage of students in the afternoon shift (41.4%) received much of information about AIDS from the health personnel. A little information about AIDS from the health personnel was reported by students in the morning shift at the highest rate (41.9%). There was no significant difference between shifts.

- Magazines: About 50% of students in both shifts received much of the information about AIDS from magazines.

- Television: About 82% of students in both shifts received the information about AIDS from the television.

- Radio: The percentage of students in the afternoon and the morning shift (62.3% and 52.7% respectively) reported receiving information about AIDS by radio. There was no significant differences between shifts.

- Newspaper: Most students in both shifts received much information about AIDS from the newspaper. The percentage in the afternoon and the morning shift were 60.7% and 52.7% respectively. There was no significant differences between shifts.

Places of Entertainment Visited:

- Gay Bar: There was no significant difference between both shifts in gay bar visit. A very small group of the students in both shifts visited gay bars (i.e. morning was 2.3% and afternoon was 1.0%).

- Prostitute Work Place: Some of students in the afternoon shift (6.8%) and the morning shift (11.3%) had ever visited prostitute work places. There was no significant difference between both shifts.

- Night Club: The students in the morning shift (29.3%) had ever visited night club much more than the students in the afternoon shift (17.8%). There was a significant difference between both shifts.

- Massage: The students in the morning shift (9.0%) had ever visited massage parlors much more than the students in the afternoon shift (3.1%). There was a significant difference between both shifts.

- Discotheque: Thirty five point six percent of the students in the afternoon shift and 41.4% of the students in the morning shift had ever visited discotheque. There was no significant difference.

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1.2. The Knowledge Part:Table 6: The difference between groups in the knowledge scores at pretest (total score = 17).

Test	Afternoon (n = 191)		Morning (n = 218)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
- Pretest	12.4 (6-15)	1.75	12.6 (4-16)	1.74	0.5

The scores of the knowledge part at the pretest in both shift were similar. The score in the afternoon shift was 12.4 ± 1.75 . The score in the morning shift was 12.6 ± 1.74 . There was no significant difference.

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Table 7: The difference between groups in the knowledge scores at the first post-test (total score = 17).

Test	Afternoon (n = 195)		Morning (n = 170)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
- 1st Post-test	14.2 (9-17)	1.73	12.1 (4-16)	1.82	0.00 **

** = P<0.05

After giving the AIDS education programme to the students in the afternoon shift, the score of knowledge part for the first post-test (14.2 ± 1.73) was higher than the score of this part in the morning shift (12.1 ± 1.82). There was a significant difference between shifts. The minimum score to the maximum score in the afternoon and the morning shift were 9-17 and 4-16 respectively.

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Table 8: The difference between groups in the knowledge scores at the second post-test (total score = 17).

Test	Afternoon (n = 144)		Morning (n = 178)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
- 2nd Post-test	14.5 (0-17)	2.25	11.9 (3-17)	3.06	0.00 **

** = P<0.05

This table showed the score of the knowledge part at the second post-test. The score of the students in the afternoon shift (14.5 \pm 2.25) was higher than the score of the students in the morning shift (11.9 \pm 3.06). There was a significant difference between shifts.

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1.3. The Attitude Part: The following are abbreviations of parameters about attitude

TA1 = the attitude towards self-prevention in HIV infection (total score = 35)

TA2 = the attitude towards AIDS patients (total score = 10)

TA3 = the attitude towards condom use (total score = 30)

TA4 = the attitude towards sexuality in teenager (total score = 15)

TA5 = the attitude towards government health service about AIDS (total score = 20)

TA6 = the attitude towards college's AIDS education and promotion (total score = 10)

TA = the total attitude (total score = 120).

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Table 9: The difference between groups in the attitude scores at pretest.

Test	Afternoon (n = 191)		Morning (n = 218)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
TA1	28.39	2.83	28.22	2.82	0.5
TA2	5.86	1.94	5.85	1.98	0.9
TA3	25.81	3.26	25.56	3.16	0.4
TA4	10.96	1.96	10.72	1.75	0.2
TA5	17.33	2.36	17.29	2.03	0.8
TA6	8.73	1.31	8.70	1.21	0.8
TA	97.08	8.28	96.34	7.53	0.3

This table showed the scores of the attitude part at the pretest. There was no significant difference between both shifts. The average score of the total attitude in the afternoon shift was 97.08 ± 8.28 . For the morning shift, the average score of the total attitude was 96.34 ± 7.53 .

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Table 10: The difference between groups in the attitude score for the first post-test.

Test	Afternoon (n = 195)		Morning (n = 170)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
TA1	29.02	2.39	28.50	3.33	0.09
TA2	6.17	1.69	6.03	2.08	0.5
TA3	25.66	3.08	25.31	3.46	0.3
TA4	11.16	1.83	10.63	1.78	0.01 **
TA5	17.07	2.07	17.37	2.18	0.2
TA6	8.81	1.12	8.73	1.24	0.5
TA	97.91	7.86	96.59	8.97	0.1

** = P<0.05

After the students in the afternoon shift received the AIDS education programme, the first post-test was implemented. The scores of the attitude toward sexuality in teenagers in the afternoon shift was higher than the morning shift. There was a significant difference of this attitude between shifts.



Table 11: The difference between groups in the attitude scores at the second post-test.

Test	Afternoon (n = 144)		Morning (n = 178)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
TA1	28.26	4.08	26.80	3.54	0.00 **
TA2	6.05	1.85	5.45	1.78	0.00 **
TA3	24.35	4.69	23.19	4.58	0.04 **
TA4	10.86	2.42	10.38	1.93	0.07
TA5	16.26	2.97	16.06	2.76	0.5
TA6	8.50	1.55	8.28	1.63	0.2
TA	94.30	13.62	90.18	11.58	0.01 **

** = P<0.05

This table showed the score of the attitude at the second post-test. The average scores of the total attitude of the students in the afternoon shift (94.30 ± 13.62) was higher than the average score of the total attitude of the students in the morning shift (90.18 ± 11.58). There was a significant difference. When looked at the details, the three items of the attitude part (i.e. the attitude toward self-prevention of HIV infection, the attitude toward AIDS cases and the attitude toward condom use) in the afternoon shift were higher than the score of the students in the morning shift. There were significant differences of all three items.

1.4. The Behaviour PartTable 12: The difference between groups in the sexual behaviour part at pretest.

Behaviour	Afternoon (n = 191)		Morning (n = 216)		P-value
	n	%	n	%	
<u>What Did They Do When Wanted to Have Sex</u>					
- Masturbation	120	62.8	137	63.4	0.9
- Prostitute visit	3	1.6	8	3.7	0.3
- Sexual contact with girlfriend	21	11.0	24	11.1	1.0
- Sexual contact with other girls	8	4.2	13	6.0	0.5
- Playing sport	100	52.4	97	44.9	0.2
- Book, radio	89	46.6	100	46.3	1.0
<u>Ever Had Sex With</u>					
- Ever had sexual contact with male	4	2.1	5	2.3	0.8
- Ever had sexual contact with female	40	20.9	66	30.6	0.04 **

** = P<0.05

Most of the students in both shifts masturbated themselves when they wanted sex (i.e. 62.8% in the afternoon shift and 63.4% in the morning shift). The next highest percentage of the students in the afternoon shift was playing sports (52.4%). For the morning shift, the

next highest percentage from masturbation was reading books and listening to the radio (46.3%). There were no significant difference at all.

There were 2.1% of the students in the afternoon shift who had ever had sexual contact with male. The 2.3% of the students in the morning shift also had ever had sexual contact with male. There was no significant difference. The students in the morning shift had ever had sexual contact with female much more than the students in the afternoon shift by a significant difference (i.e. 30.6% and 20.9% respectively).



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Table 13: The difference between groups in the first time sexual experience among the respondents who had ever had sexual contact reported at pretest.

Behaviour	Afternoon (n = 40)		Morning (n = 66)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
- Age at the first sexual contact	15.6	1.22	15.22	1.3	0.1
	n	%	n	%	
<u>Ever Had Sexual Contact With:</u>					
- Prostitute	14	35.0	36	54.5	0.07
- Girlfriend	31	77.5	40	60.6	0.1
- Other girls	20	50.0	25	37.8	0.3
- Sexual contact during the last six months	28	70.0	40	60.6	0.4

Among those who ever had sexual experience, both the students in the morning and the afternoon shift the similar average ages at the first time that they had sexual contact. The average age of the students in the afternoon shift was 15.6 ± 1.22 years old, and the morning was 15.22 ± 1.30 years old.

Among those who ever had sexual experience, most of the students in both shifts had sexual contact with their

girlfriends (the morning shift was 60.6%, the afternoon shift was 77.5%). There was no significant difference. The students in the afternoon shift had sexual contact with prostitutes (35.0%) relatively less than the students in the morning shift (54.5%), but the students in the afternoon shift had sexual contact with other girls (50.0%) relatively much more than the students in the morning shift (37.8%). There were no significant difference in both cases.

Among those who ever had sex contact, 70% in the afternoon shift had sexual contact in last six months while 60.6% in the morning shift had sex in the last six months. There was no significant difference.

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Table 14: The difference between groups in sexual behaviour during the last six months among the respondents who had sexual contact during the last six months reported at pretest.

Behaviour	Afternoon (n = 28)		Morning (n = 40)		P-value
	\bar{X}	S.D.	\bar{X}	S.D.	
- Frequency of sexual contact	4.2	4.5	5.2	6.8	0.4
	n	%	n	%	
- Using condom when having sexual contact	17	60.7	22	55.0	> 0.9
- Did not use condom	11	39.3	18	45.0	
- Sexual contact during the last two months	15	53.6	22	55.0	0.9

In last six months, the frequency of sexual contact of students in the afternoon shift was 4.2 ± 4.5 . The frequency of sexual contact of students in the morning shift was 5.2 ± 6.5 . There was no significant difference.

Sixty point seven percent of the students in the afternoon shift who had sexual contact at last six months used condoms when they have sexual contact. The students in the morning shift who had sexual contact at the same

period of time as the afternoon shift used condoms when they have sexual contact by 55.0%. There was no significant difference.

The students in the afternoon shift who had sexual contact during the last six months and did not use condoms was 39.3%. The students of the morning shift who did not use condoms when having sex during the last six months was 45.0%. There was no significant difference.

During the last two months, 55% of the students of the morning shift who had sexual contact at last six months had sexual contact with female. The figure was 53.6% for the morning shift. There was no significant difference.



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Table 15: The difference between groups in condom use behaviour during the last six months among the respondents who used the condom during last six months reported at pretest.

Behaviour	Afternoon (n = 17)		Morning (n = 22)		P-value
	n	%	n	%	
- Using condom everytime when having sexual contact	5	29.4	11	50.0	> 0.3
- Using condom sometime when having sexual contact	12	70.6	11	50.0	
- Have problems of condom use	7	41.2	14	63.6	0.3

For the pattern of condom use (i.e. used every time when they had sexual contact or used sometime) reported at the pretest, there were no significant difference between students in both shifts. The students in morning shift had problems about condom use more than the students in the afternoon shift. There was no significant difference.

Table 16: The difference between groups in the reasons for sometime using condom among the respondents who sometime used the condoms during last six months reported at pretest.

Reasons	Afternoon (n = 12)		Morning (n = 11)		P-value
	n	%	n	%	
- Unavailable	3	25.0	4	36.4	0.7
- Difficulty in using	1	8.3	2	18.2	0.6
- Embarrassed	1	8.3	1	9.1	1.0
- Not having pleasure	4	33.3	6	54.5	0.4
- Afraid partner will upset	2	16.7	1	9.1	1.0
- The partner was not a prostitute	7	58.3	5	45.5	0.8
- Use other contraception	3	25.0	3	27.3	1.0

This table showed the reported reasons of students who used condoms sometime in the last six months. The highest percentage in the afternoon shift was "their partners was not a prostitute" (58.3%). The highest percentage in the morning shift was "not having pleasure" (54.5%). There were no significant difference at all.

Table 17: The difference between groups in the reasons of not using the condom among the respondents who did not use the condom reported at pretest.

Reasons	Afternoon (n = 11)		Morning (n = 18)		P-value
	n	%	n	%	
- Unavailable	6	54.5	10	55.6	1.0
- Difficulty in using	1	9.0	0	00.0	0.4
- Embarrassed	2	18.2	3	16.7	1.0
- Not having pleasure	6	54.5	5	27.8	0.2
- Afraid partner will upset	2	16.7	4	22.2	1.0
- The partner was not a prostitute	7	63.6	8	44.4	0.5
- Use other contraceptions	4	36.4	6	33.3	1.0
- Did not know how to use condom	1	9.0	0	00.0	0.4

The most frequently reported reason of the students in the afternoon shifted who did not use condom at last six months was "their partners were not prostitutes" (63.6%). As high as 55.6% of the students in the morning shift did not use condom because condoms were "unavailable". There were no significant difference.

Table 18: The difference between groups in the problems about the condom among the respondents who used the condom in last six months reported at pretest.

Problems	Afternoon (n = 7)		Morning (n = 14)		P-value
	n	%	n	%	
- Broken condom	3	42.9	3	21.4	0.4
- Rarely available	1	14.3	1	7.1	1.0
- Difficult to carry	0	00.0	3	21.4	0.5
- Difficulty in using	2	28.6	3	21.4	1.0
- Embarrassed	0	00.0	2	14.3	0.5
- Not having pleasure	2	28.6	5	35.7	1.0
- Afraid partner will ^{be} upset	3	42.9	1	7.1	0.1
- Less lubrication	2	28.6	4	28.6	1.0
- Waste the time	4	57.1	2	14.3	0.1

The most frequently reported problems concerned with the condoms for students in the afternoon shift was waste the time (57.1%). The next highest percentage was the "broken condom" (42.9%), and "afraid their partners will upset" (42.9%). The most frequently reported problems about the condom use for students in the morning shift was "not having pleasure" (35.7%). The next highest percentage

was less lubrication (28.6%). There were no significant difference.



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Table 19: The difference between groups in sexual behaviour during the last two months among the respondents who had sexual contact in last two months reported at pretest.

Behaviour	Afternoon (n = 15)		Morning (n = 22)		P-value
	n	%	n	%	
<u>Sexual Partners</u>					
- Prostitute	2	13.3	7	31.8	0.3
- Girl friend	11	73.3	15	68.2	1.0
- Other girls	6	40.0	7	31.8	0.8
	\bar{X}	S.D.	\bar{X}	S.D.	
<u>Frequency of sexual contact with:</u>					
- Prostitute	1.5	0.7	1.3	0.7	0.7
- Girl friend	3.4	3.0	5.9	5.3	0.1
- Other girls	1.5	0.5	1.5	0.8	0.9
	n	%	n	%	
<u>Using Condom Everytime When Have Sexual Contact With</u>					
- Prostitute	2(n=2)	100.0	5(n=7)	71.4	1.0
- Girl friend	2(n=11)	18.2	2(n=15)	13.3	1.0
- Other girls	3(n=6)	50.0	3(n=7)	42.9	1.0

This table showed the sexual behaviour of the students who had sexual contact during the last two months.

Most of them in both shifts had sexual contact with their girlfriends. There were no significant difference. The frequency of sexual contact with their girlfriends among the students in the afternoon shift was 3.4 ± 3.0 , and among the students in the morning shift was 5.9 ± 5.3 . There were no significant difference between shifts.

The highest frequently reported percentage of using condom every time was when they had sexual contact with the prostitutes. This was reported most frequently by students in both shifts. There were no significant difference.



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Table 20: The difference between groups in sexual behaviour during the last two months among the respondents who had sexual contact in last two months reported at the first post-test.

Behaviour	Afternoon (n = 11)		Morning (n = 13)		P-value
	n	%	n	%	
<u>Sexual Partners</u>					
- Prostitute	2	18.2	5	38.4	0.3
- Girl friend	9	81.8	8	61.5	0.3
- Other girls	2	18.2	3	23.1	1.0
	\bar{X}	S.D.	\bar{X}	S.D.	
<u>Frequency of Sexual Contact With:</u>					
- Prostitute	0.4	0.9	0.4	0.6	0.9
- Girl friend	3.0	2.5	3.6	5.8	0.7
- Other girls	0.3	0.6	0.3	0.6	0.8
	n	%	n	%	
<u>Using Condom Everytime When Have Sexual Contact With</u>					
- Prostitute	1(n=2)	50.0	4(n=5)	80.0	1.0
- Girl friend	0(n=9)	0.0	1(n=8)	12.5	0.5
- Other girls	1(n=2)	50.0	2(n=3)	66.7	0.4

This table showed the sexual behaviour of the students who had sexual contact during the last two months reported at the first post-test. Most of them in both shifts had sexual contact with their girlfriends. There were no significant difference. The frequency of sexual contact with their girlfriends among the students in the afternoon shift was 3.0 ± 2.5 and in the morning shift was 3.61 ± 5.8 . There was no significant difference.

The percentage of students in the afternoon shift who used condom every time when they had sexual contact with the prostitutes was similar to percentage of using condom every time when they had sex with the other girls. For the students in the morning shift, the highest reported percentage of using condom every time was when they had sex with prostitutes. In both shifts, the lowest percentage of using condom every time was when they had sexual contact with their girlfriends. There was no significant difference.

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Table 21: The difference between groups in sexual behaviour during the last two months among the respondents who had sexual contact in last two months reported at the second post-test.

Behaviour	Afternoon (n = 13)		Morning (n = 23)		P-value
	n	%	n	%	
<u>Sexual Partners</u>					
- Prostitute	4	30.8	2	8.7	0.1
- Girl friend	12	92.3	15	65.2	0.1
- Other girls	4	30.8	8	34.8	1.0
	\bar{X}	S.D.	\bar{X}	S.D.	
<u>Frequency of Sexual Contact With:</u>					
- Prostitute	0.6	1.1	0.2	0.6	0.2
- Girl friend	6.5	6.7	3.3	4.1	0.1
- Other girls	0.5	0.7	0.6	1.2	0.6
	n	%	n	%	
<u>Using Condom Everytime When Have Sexual Contact With</u>					
- Prostitute	1(n=4)	25.0	2(n=2)	100.0	0.4
- Girl friend	4(n=12)	33.3	0(n=15)	0.0	0.02 **
- Other girls	1(n=4)	25.0	3(n=8)	37.5	1.0

** = P<0.05

This table showed the sexual behaviour of the students who had sexual contact during the last two months reported at the second post-test. Most of students them in both shifts had sexual contact with their girlfriends. There were no significant difference between shifts. The frequency of sexual contact with their girlfriends of the students in the afternoon shift was 6.5 ± 6.7 , and in the morning shift was 3.3 ± 4.1 . There was no significant difference between shift.

There was a significant difference between shift in using condom every time when they had sexual contact with their girlfriends. The students in the afternoon shift used condom every time more than the students in the morning shift when they had sexual contact with their girlfriends.

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Table 22: The difference between the sexual contact behaviours classified by the living pattern variable reported at pretest. (All of sampled students, both afternoon and morning shift).

Characterization	Never had sexual contact (n = 302)		Ever had sexual contact (n = 106)		P-value
	n	%	n	%	
<u>Living Pattern</u>					
- Stay with parent or relations	292	74.3	101	25.7] > 0.7
- Stay alone or with friends	10	66.7	5	33.3	

This table showed the relationship between ^{the} living pattern and sexual contact behaviour of the sampled students reported at pretest. The result showed that the frequency of sexual contact among students who lived with their parents or relatives was not difference from the frequency of sexual contact among students who lived with their friends or alone.

Table 23: The pattern of visits of "pleasure center" of students who reported ever had sexual contact as reported at pretest.

Pleasure Centers	Never had sexual contact (n = 302)		Ever had sexual contact (n = 106)		P-value
	n	%	n	%	
- <u>Gay bar</u>					
.Ever visited	1	14.3	6	85.7	>0.00**
.Never	301	75.1	100	24.9	
- <u>Night club</u>					
.Ever visited	48	48.5	51	51.5	>0.00**
.Never	301	75.1	100	24.9	
- <u>Massage Parlor</u>					
.Ever visited	3	11.5	23	88.5	>0.00**
.Never	299	78.3	83	21.7	
- <u>Discotheque</u>					
.Ever visited	90	56.6	69	43.4	>0.00**
.Never	212	85.1	37	14.9	

** = P<0.05

This table showed that the students who had ever visited gay bar had a higher percentage of ever had sexual contact than the students who had never visited gay bar. This pattern was similar for visiting night club, massage parlor, discotheque. There were significant difference in the pattern of use of "Pleasure Center" between those who ever and never had sexual contact.



Table 24: The difference in the average salary between subgroups classified by sexual contact, experience with each of their partners as reported at pretest. (All of sampled students, both afternoon and morning shifts).

Sexual contact behaviour	Students' salary				P-value
	Ever had		Never had		
	\bar{X}	S.D.	\bar{X}	S.D.	
- Sexual contact	1,321	727.6	1,159	582.8	0.04 **
<u>Had sexual contact</u> <u>With:</u>					
- Prostitute	1,322	794.5	1,321	669.5	0.9
- Girl friend	1,291	600.7	1,383	941.3	0.6
- Other girl	1,400	727.1	1,264	728.4	0.3

** = P<0.05

This table showed that the groups of students who had ever had sexual contact with female had the mean of salary much more than the group of the students who had never had sexual contact. There was a significant difference between groups. When looked at the details about sexual partners, there was no significant difference in the mean of salary between the students who had ever had sexual contact with the prostitute, girlfriend, other girl and the students who had never has such contacts.

Table 25: The difference in the sexual contact with the girl friend classified by the living pattern variable as reported at pretest. (All of sampled students, both afternoon and morning shift).

Characteristics	Never had sexual contact with the girl friend (n = 35)		Ever had sexual contact with the girl friend (n = 71)		P-value
	n	%	n	%	
<u>Living Pattern</u>					
- Stay with parent or relations	34	33.7	67	66.3] > 0.8
- Stay alone or with friends	1	20.0	4	80.0	

The result from this table showed that the students who stayed with their parents or relatives had lower percentage of ever having sexual contact with their girlfriends than those who stayed alone or with friends. However, there was no statistical difference of the behaviour between the two groups.

Table 26: The pattern of visits of "pleasure center" of students who reported having sexual contact with the girlfriend reported at pretest.

Pleasure Centers	Never had sexual contact with girl friend (n = 35)		Ever had sexual contact with girl friend (n = 71)		P-value
	n	%	n	%	
- <u>Gay bar</u>					
.Ever visited	1	14.3	6	85.7	> 0.3
.Never	34	34.3	65	65.6	
- <u>Night club</u>					
.Ever visited	16	31.4	35	68.6	> 0.9
.Never	19	34.5	36	65.6	
- <u>Massage Palor</u>					
.Ever visited	10	43.5	13	56.5	> 0.3
.Never	25	30.1	58	69.9	
- <u>Discotheque</u>					
.Ever visited	19	27.5	50	72.5	> 0.1
.Never	16	43.2	21	56.7	
- <u>Prostitute</u>					
.Ever visited	14	40.0	21	60.0	> 0.4
.Never	21	29.6	50	70.4	

There was no significance difference in the pattern of use of "pleasure centers" between those who ever had sexual contact with their girlfriends.

Table 27: The difference between the sexual contact with the other girls behaviour in the living pattern variable for pretest. (All of sampled students, both afternoon and morning shift).

Characterization	Never had sexual contact with other girls (n = 61)		Ever had sexual contact with other girls (n = 45)		P-value
	n	%	n	%	
<u>Living Pattern</u>					
- Stay with parent or relations	60	59.4	41	40.6] > 0.2]
- Stay alone or with friends	1	20.0	4	80.0	

The result from this table showed that the students who stayed with their parents or relatives had a lower percentage of ever had sexual contact with other girls than those who stayed alone or with friends. However, there was no statistical difference of behaviour between the two groups.

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Table 28: The pattern of visits of "pleasure center" of students who reported having sexual contact with the other girl reported at pretest.

Pleasure Centers	Never had sexual contact with other girl (n = 61)		Ever had sexual contact with other girl (n = 45)		P-value
	n	%	n	%	
- <u>Gay bar</u>					
.Ever visited	2	33.3	4	66.6	> 0.4
.Never	59	59.0	41	41.0	
- <u>Night club</u>					
.Ever visited	28	54.9	23	45.1	> 0.7
.Never	33	60.0	22	40.0	
- <u>Massage Palor</u>					
.Ever visited	11	47.8	12	52.2	> 0.4
.Never	50	60.2	33	39.8	
- <u>Discotheque</u>					
.Ever visited	37	53.6	32	46.4	> 0.4
.Never	24	64.8	13	35.1	
- <u>Prostitute</u>					
.Ever visited	18	51.4	17	48.6	> 0.5
.Never	43	60.6	28	39.4	

There was no significance difference in the pattern of use of "pleasure centers" between those who ever had sexual contact with other girl.

Table 29: The difference in the sexual contact with the prostitute classified by the living pattern variable as reported at pretest. (All of sampled students, both afternoon and morning shift).

Characterization	Never had sexual contact with the prostitute (n = 56)		Ever had sexual contact with the prostitute (n = 50)		P-value
	n	%	n	%	
<u>Living Pattern</u>					
- Stay with parent or relations	54	53.5	47	46.5] > 0.9 [
- Stay alone or with friends	2	40.0	3	60.0	

The result from this table showed that the students who stayed with their parents or relatives had a lower percentage of ever had sexual contact with prostitute than those who stayed alone or with friends. However, there was no statistical difference of behaviour between the two groups.

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Table 30: The pattern of visits of "pleasure center" of students who reported having sexual contact with the prostitute reported at pretest.

Pleasure Centers	Never had sexual contact with prostitute (n = 56)		Ever had sexual contact with prostitute (n = 50)		P-value
	n	%	n	%	
- <u>Gay bar</u>					
.Ever visited	1	16.7	5	83.3	 > 0.2
.Never	59	59.0	41	41.0	
- <u>Night club</u>					
.Ever visited	28	54.9	23	45.1	 > 0.8
.Never	28	50.9	27	49.1	
- <u>Massage Palor</u>					
.Ever visited	3	13.0	20	86.9	 > 0.00**
.Never	53	63.8	30	36.1	
- <u>Discotheque</u>					
.Ever visited	36	52.2	33	47.8	 > 1.0
.Never	20	54.0	17	45.9	

** = P>0.05

There was no significance difference in the pattern of use of "pleasure centers" between those who ever had sexual contact with prostitute, except those who had ever visited the massage palor. The students who ever visited massage palor had ever had sexual contact with prostitute more than those who had never visited. There was a significance difference between both groups.

2. The Difference Within Group for Each Shift:

2.1. The Knowledge Part:

Table 31: The difference in knowledge scores within group as reported at pretest and first post-test.

Group	\bar{X} at pretest	\bar{X} at 1st post	S.D. of differen	S.E.M.	P-value
- Afternoon (n = 131)	12.48	14.31	2.3	0.20	0.00 **
- Morning (n = 158)	12.45	12.10	0.6	0.04	0.00 **

** = $P > 0.05$

After the students in the afternoon shift received the AIDS education programme, the average scores of the knowledge part at the first post-test was higher than the average scores at the pretest. There was a significant difference. The students in the morning shift did not received the AIDS education, the score of the knowledge part at the first post-test was a little bit lower than the scores at the pretest. There was also a significant difference.

Table 32: The difference between the pretest and the second post-test in the knowledge score for each shift.

Group	\bar{X} at pretest	\bar{X} at 2nd post	S.D. of differenc	S.E.M.	P-value
- Afternoon (n = 131)	12.48	14.50	2.8	0.24	0.00 **
- Morning (n = 158)	12.45	11.91	3.3	0.26	0.04 **

** = $P > 0.05$

The score of the knowledge part at the second post test of the students in the afternoon shift was higher than the score at the pretest. There was a significance difference. The score of the knowledge part at the second post-test of the students in the morning shift was lower than the score at the pretest. There was a significance difference.

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Table 33: The difference between the first post-test and the second post-test in the knowledge score for each shift.

Group	\bar{X} at 1st post	\bar{X} at 2nd post	S.D. of differen	S.E.M.	P-value
- Afternoon (n = 131)	14.31	14.50	2.29	0.20	0.3
- Morning (n = 158)	12.10	11.91	3.37	0.26	0.5

After the students in the afternoon shift discontinued the AIDS education programme, the score of the knowledge part at the at the second post-test was not difference from the score at the first post-test. The students in the morning shift was the same.

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2.2. The Attitude Part:

· Table 34: The difference between the pretest and the first post-test in the attitude score for each shift.

Group	\bar{X} at pretest	\bar{X} at 1st post	S.D. of differen	S.E.M.	P-value
- Afternoon (n = 131)	97.43	98.24	9.1	0.79	0.3
- Morning (n = 158)	96.85	96.73	5.7	0.45	0.8

There was no significance difference in the score of the attitude part between the pretest and the first post test in both shifts.

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Table 35: The difference between the pretest and the second post-test in the attitude score for each shift.

Group	\bar{X} at pretest	\bar{X} at 2nd post	S.D. of differen	S.E.M.	P-value
- Afternoon (n = 131)	97.43	94.30	15.0	1.31	0.02 **
- Morning (n = 158)	96.85	90.17	10.2	0.81	0.00 **

** = $P > 0.05$

For both shifts, the score of the attitude of the second post-test was lower than the score of the attitude at the pretest. There was a significance difference.

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Table 36: The difference between the first post-test and the second post-test in the attitude score for each shift.

Group	\bar{X} at 1st post	\bar{X} at 2nd post	S.D. of differen	S.E.M.	P-value
- Afternoon (n = 131)	98.24	94.30	12.9	1.13	0.00 **
- Morning (n = 158)	96.73	90.17	12.1	0.96	0.00 **

** = P>0.05

For both shifts, the score of the attitude part of the second post-test was lower than the score of the attitude of the first post-test. There was a significance difference.

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2.3. The Behaviour Part:Table 37: The sexual behaviour during the last two months as reported by students in the afternoon shift.

Behaviour	Had sexual contact during last 2 months					
	Pretest (n =15)		1st Post (n =11)		2nd Post (n = 13)	
	n	%	n	%	n	%
<u>Sexual Contact With</u>						
Prostitute	2	13.3	2	18.2	4	30.8
Girlfriend	11	73.3	9	81.8	12	92.3
Other girl	6	40.0	2	18.2	4	30.8
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.
<u>Frequency of Sexual Contact With</u>						
Prostitute	1.5	0.7	0.4	0.9	0.6	1.1
Girlfriend	3.4	3.0	3.0	2.5	6.5	6.7
Other girls	1.5	0.5	0.3	0.6	0.5	0.7

The students in the afternoon shift increased their sexual contact with the prostitutes and their girlfriends through the duration of this study. For the sexual contact with the other girl, the students in the afternoon shift had the highest percentage reported at the pretest and the

lowest percentage reported at the first post-test. The highest frequency of the sexual contact during the last two months among the students in the afternoon shift was "having sexual contact with their girlfriends."



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Table 37: The pattern of condom using behaviour during the two months among the students in afternoon shift (continue).

Behaviour	Pretest (n = 15)	1st Post (n = 11)	2nd Post (n = 13)
	n	n	n
<u>Using Condom Everytime when Have Sexual Contact With:</u>			
Prostitute	2 n=2	4 n=5	1 n=4
Girlfriend	2 n=11	1 n=8	4 n=12
Other girl	3 n=6	2 n=3	1 n=4

This table showed the pattern of condom using behaviour every time when the students in the afternoon shift have sexual contact. For sexual contact with the prostitute, the results revealed that some students still did not use condom every time when they had sex with prostitutes. However, the trend of using condom every time seemed to be decreasing. For the sexual contact with their girlfriends and other girls, it was difficult to summarize any systematic trend associated with the pattern of condom use every time as reported in the pre- and post- tests.

Table 38: The difference in the condom using pattern when had sex with prostitute as reported at pretest and first post-test within the afternoon shift during the last two months.

		First post-test	
		-	+
Pretest	+	0	0
	-	0	0

(-) = Did not use condom everytime when had sex.

(+) = Use condom everytime when had sex

There was no case of the students in the afternoon shift who had sex with prostitute both pre- and post-test.

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Table 39: The difference in the condom using pattern when had sex with girl friend as reported at pretest and first post-test within the afternoon shift during the last two months.

		First post-test	
		-	+
Pretest	+	0	0
	-	1	0

(-) = Did not use condom everytime when had sex.

(+) = Use condom everytime when had sex.

There was one case of the students in the afternoon shift who had sex with girl friend and did not use condom every time both pre- and post-test.

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Table 40: The difference in the condom using pattern when had sex with other girl as reported at pretest and first post-test within the afternoon shift during the last two months.

		First post-test	
		-	+
Pretest	+	0	0
	-	0	0

(-) = Did not use condom everytime when had sex

(+) = Use condom everytime when had sex

There was no case of the students in the afternoon shift who had sex with other girl both pre- and post-test.

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Table 41: The difference in the rate of risky behaviour at pretest and the post-test within shift during the last two months as reported by the students in the afternoon shift.

Risky Sexual Behaviour of HIV Infection	Pretest (n = 191)		1st Post-test (n = 195)		P-value
	n	rate	n	rate	
<u>Did not Use Condom Everytime when Have Sexual Contact With</u>					
- Prostitute	0	0	1	0.005	1.0
- Girl friend	9	0.047	7	0.036	0.8
- Other girls	3	0.016	1	0.005	0.4

This table showed the rate of the risky sexual behaviour of HIV infection in each test of the students in the afternoon shift. The result showed that from the pretest to the first post-test, the rate of risky sexual behaviour of HIV infection of these students was decreasing in the other girls and their girlfriends when they had sexual contact with their partners. For the prostitute, these students had increasing the rate of risky sexual behaviour of HIV infection when they had sexual contact with the prostitutes. There were no significance difference between test in any cases.



Table 42: The difference within group in the last two months sexual behaviour for morning shift.

Behaviour	Had sexual contact in last 2 months					
	Pretest (n =22)		1st Post (n =13)		2nd Post (n = 23)	
	n	%	n	%	n	%
<u>Sexual Partner</u>						
Prostitute	7	31.8	5	38.4	2	8.7
Girl friend	15	68.2	8	61.5	15	65.2
Other girl	7	31.8	3	23.1	8	34.8
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.
<u>Frequency of Sexual Contact With</u>						
Prostitute	1.3	0.7	0.4	0.7	0.2	0.6
Girl friend	5.9	5.3	3.6	5.8	3.3	4.1
Other girls	1.5	0.8	0.3	0.6	0.6	1.2

The students in the afternoon shift had the highest percentage of their sexual contact with the prostitute at the first post-test. The lowest percentage of this case was at the second post-test. For the sexual contact with their girlfriend, the highest percentage was at the pretest. The lowest of the same case was at the first post-test. The students in this shift had the highest percentage of the

sexual contact with the other girl at the second post-test. The lowest in the same case was at the first post-test.

For the frequency of their sexual contact at last two months, the most frequency was the sexual contact with their girlfriends. The sexual contact with the prostitute had the similar percentage to the sexual contact with the other girl. There were no significance difference in any cases.



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Table 43: The pattern of condom using behaviour during last two months among the students in morning shift (continue).

Behaviour	Pretest (n = 22)	1st Post (n = 13)	2nd Post (n = 23)
	n	n	n
<u>Using Condom Everytime when Have Sexual Contact With:</u>			
Prostitute	5 n=7	4 n=5	2 n=2
Girl friend	2 n=15	1 n=8	0 n=15
Other girl	3 n=7	2 n=3	3 n=8

This table showed the last two months condom use pattern of using every time when they have sexual contact of the students in the morning shift. They increased their using condom every time pattern when they had sexual contact with the prostitute through three tests. And they decreased their using condom everytime pattern when they had sexual contact with their girlfriend. For the sexual contact with the other girl, the students of the morning shift had the highest percentage of using condom every time at the first post-test. The lowest percentage of the same case was at the second post-test.

Table 44: The difference within shift in last two months rate of the risky sexual behaviour of HIV infection for the students in the morning shift.

Risky Sexual Behaviour of HIV Infection	Pretest (n = 222)		1st Post-test (n = 170)		P-value
	n	rate	n	rate	
<u>Did not Use Condom Everytime when Have Sexual Contact With</u>					
- Prostitute	2	0.009	1	0.006	1.0
- Girl friend	13	0.058	7	0.041	0.6
- Other girls	4	0.018	1	0.006	0.4

This table showed the rate of the risky sexual behaviour of HIV infection in each test of the students in the morning shift. The result showed that from the pretest to the first post-test, the rate of the risky sexual behaviour of HIV infection of these students was decreasing in every group of the partner when they had sexual contact with these partners. There were no significance difference between test.

Table 45: The difference in the rate of risky behaviour during the last two months between students in the morning and afternoon shifts reported at pretest.

Risky Sexual Behaviour of HIV Infection	Afternoon (n = 191)		Morning (n = 222)		P-value
	n	rate	n	rate	
<u>Did not Use Condom Everytime when Have Sexual Contact With</u>					
- Prostitute	0	0	2	0.009	0.5
- Girl friend	9	0.047	13	0.058	0.8
- Other girls	3	0.016	4	0.018	1.0

This table showed the rate of the risky sexual behaviour of HIV infection of the students in both shifts as reported at pretest. The result showed that the students in both shifts had the highest rate of the risky sexual behaviour of HIV infection when they had sexual contact with their girlfriends. The rate of the risky sexual behaviour of HIV infection when they had sexual contact with the prostitute was similar to the rate when they had sexual contact with the other girls. There were no significant difference between shift.

Table 46: The difference between shift in last two months rate of the risky sexual behaviour of HIV infection for the students in the first post-test.

Risky Sexual Behaviour of HIV Infection	Afternoon (n = 195)		Morning (n = 170)		P-value
	n	rate	n	rate	
<u>Did not Use Condom Everytime when Have Sexual Contact With</u>					
- Prostitute	1	0.005	1	0.006	1.0
- Girl friend	7	0.036	7	0.041	0.9
- Other girls	1	0.005	1	0.006	1.0

This table showed the rate of the risky sexual behaviour of HIV infection of the students in both shifts for the first post-test. The result showed that the students in both shifts had the highest rate of the risky sexual behaviour of HIV infection when they had sexual contact with their girlfriends. The rates of the risky sexual behaviour of HIV infection of the afternoon were lower than the morning shift. There were no significance difference between shift.

3. The Changes Within Group and the Difference of Changes between Group:

3.1. The Knowledge Part:

Table 47: The change of score within group and the difference of changes between group for total scores of knowledge.

Change of Score	Afternoon (n = 131)			Morning (n = 158)			P-value
	\bar{X} diff	S.D. diff	S.E.M	\bar{X} diff	S.D. diff	S.E.M	
- Change between the first post-test and pretest	1.83	2.30	0.2	-0.4	0.6	0.04	0.00 **
- Change between the second posttest and the first post-test	0.18	2.29	0.2	-0.2	3.4	0.26	0.3
- Change between the second posttest and the pretest	2.02	2.81	0.24	-0.6	3.3	0.26	0.00 **

** = P>0.05

The result from this table showed that the change of the average scores of the knowledge of the afternoon shift at post-tests increased from the average scores at pre-test. The scores at first post-test (after educational intervention) increased by 1.83 points, with an additional increase of 0.18 points at the second post-test (educational intervention was stopped). On the contrary, the change of

the average knowledge scores of students in the morning shift was decreased through three tests. There were significant difference between shift in the change of the average knowledge scores.



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3.1. The Attitude Part:

Table 48: The change of score within group and the difference of changes between group for total scores of attitude.

Change of Score	Afternoon (n = 131)			Morning (n = 158)			P-value
	\bar{X} diff	S.D. diff	S.E.M	\bar{X} diff	S.D. diff	S.E.M	
- Change between the first post-test and pretest	0.82	9.10	0.79	-0.1	5.7	0.45	0.3
- Change between the second posttest and the first post-test	-3.9	12.9	1.13	-6.6	12.2	0.96	0.08
- Change between the second posttest and the pretest	-3.1	15.0	1.31	-6.7	10.2	0.81	0.02 **

** = $P > 0.05$

This table showed that, in both shifts, there were decreasing changes of the average total attitude scores from the reported attitude at pre-test. For the changes between the second post-test and the pretest, there was a significant difference between shift. The decrease in the positive attitude of students the afternoon shift was smaller than the morning shift.

4. The Correlation between Knowledge and Total Attitudes in Each Test:

The scattergram was plotted between knowledge and total attitude scores for each test, showing the likelihood of a linear association between two variables. The strength of the association was, therefore, summarized by the correlation coefficient (r). This was a dimensionless quantity ranging from (-1) to $(+1)$. A positive correlation was one in which both variables increased together. A negative correlation was one in which one variable increased as the other decreased (Campbell and Machin, 1990).

In this study, the correlation between the total knowledge (TK) and the total attitude (TA) was summarized by the linear regression equation (see Figure 8 and Figure 9).

The Morning Shift:

$$\text{Pretest: TA} = 85.64 + 0.85 \text{ TK} \quad (r = 0.2468 *)$$

$$(S.E. = 0.2880)$$

The First Post-test:

$$\text{TA} = 82.65 + 1.15 \text{ TK} \quad (r = 0.2396 *)$$

$$(S.E. = 0.3695)$$

The Second Post-test:

$$\text{TA} = 67.91 + 1.87 \text{ TK} \quad (r = 0.5043 **)$$

$$(S.E. = 0.2460)$$

The Afternoon Shift:

$$\text{Pretest: TA} = 83.67 + 1.07 \text{ TK} \quad (r = 0.2301 *)$$

$$(S.E. = 0.3343)$$

The First Post-test:

$$\text{TA} = 83.41 + 1.02 \text{ TK} \quad (r = 0.1089)$$

$$(S.E. = 0.3188)$$

The Second Post-test:

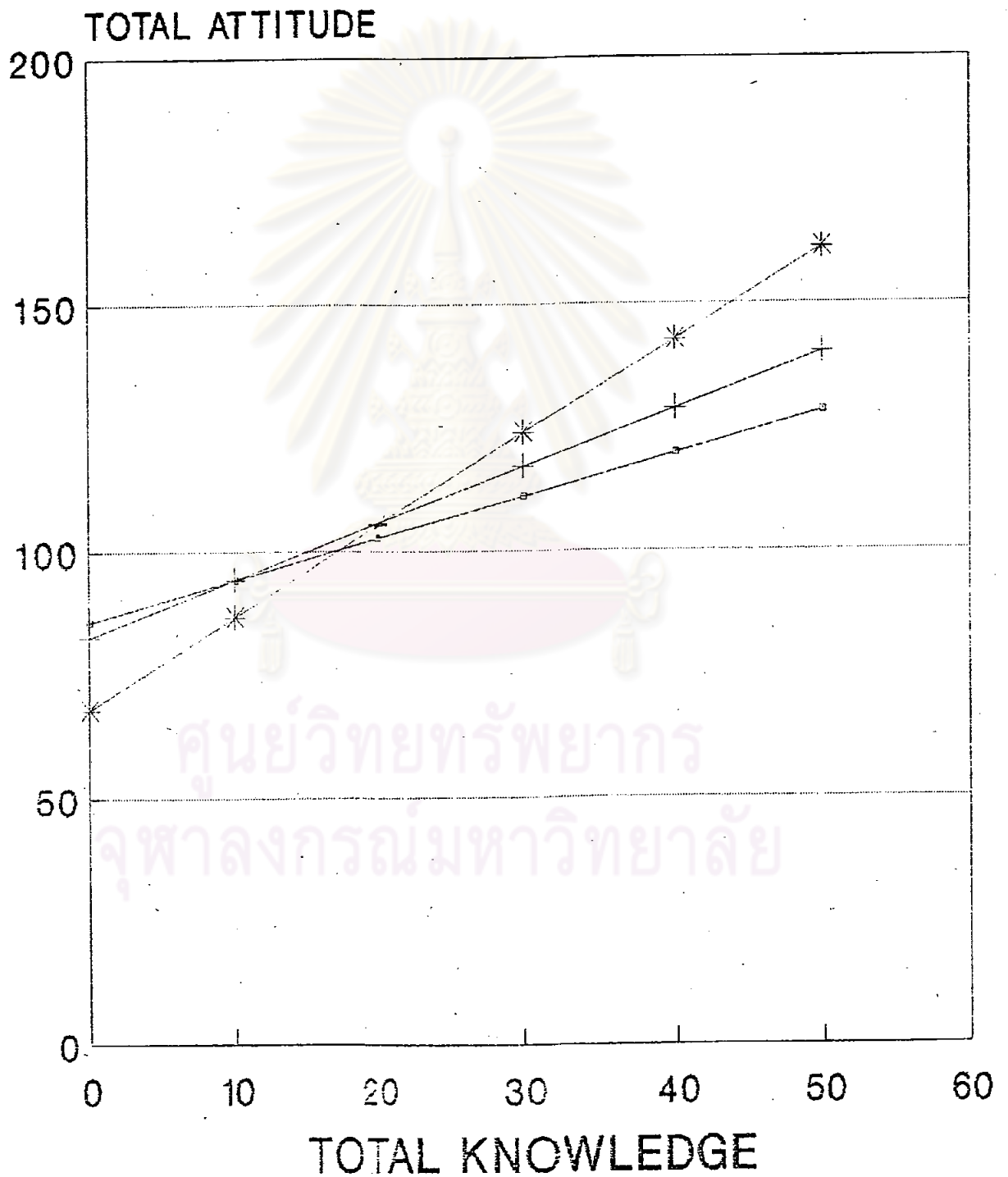
$$\text{TA} = 53.52 + 2.79 \text{ TK} \quad (r = 0.4870 **)$$

$$(S.E. = 0.4258)$$

* - 0.01, ** - 0.001

The results showed that for every test of both shifts except the first post-test of the afternoon shift there were the positive correlations. When the total score of the knowledge part increased, the total score of the attitude part also increased. Both variables increased together. The correlation coefficients obtained were all significant.

FIGURE 8: THE CORRELATION BETWEEN TK, TA
THE MORNING SHIFT

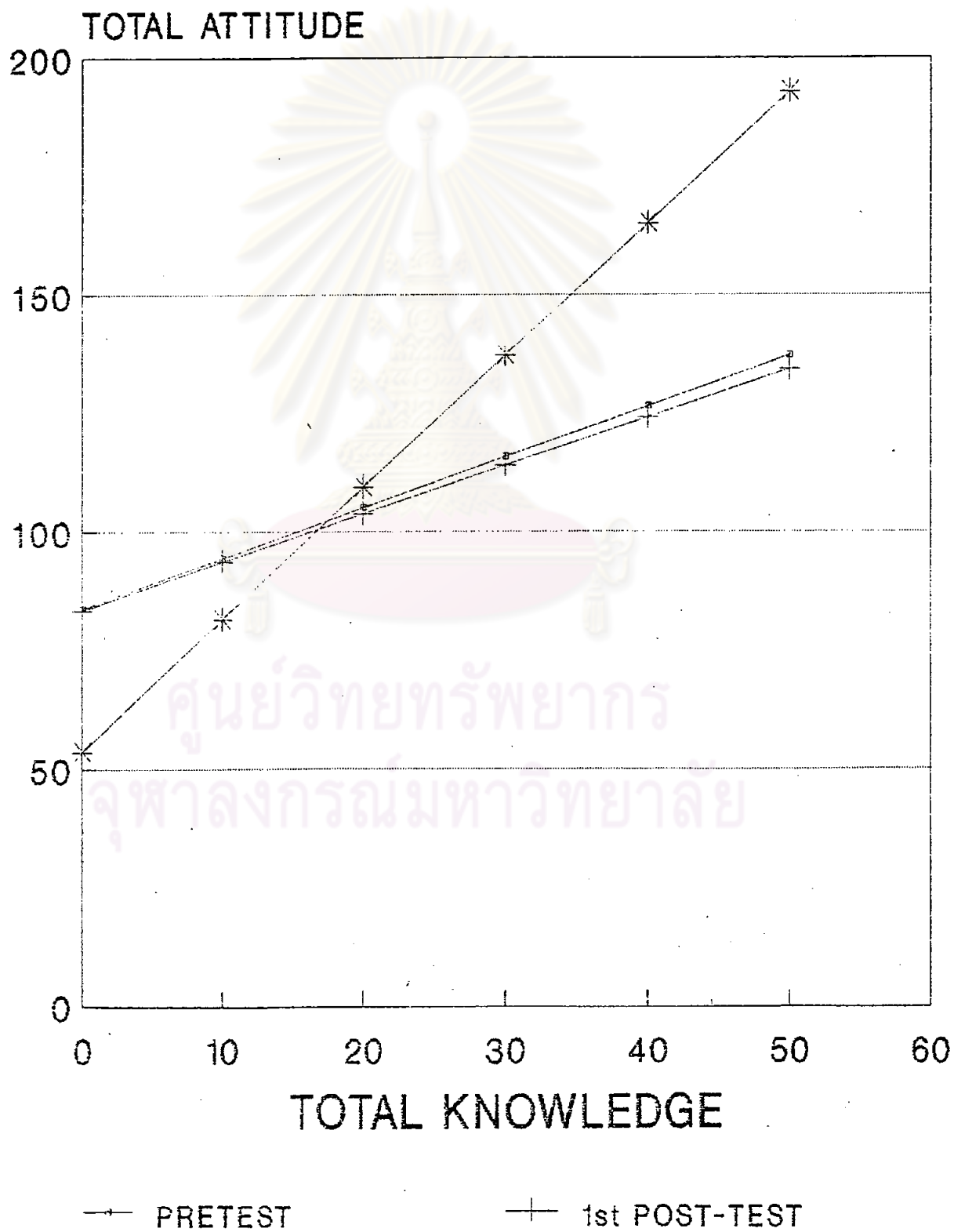


—+— PRETEST

—x— 1st POST-TEST

-*- 2nd POST-TEST

FIGURE 9: THE CORRELATION BETWEEN TK, TA
THE AFTERNOON SHIFT



In each shift, the difference of the slope of the correlation equation between test was calculated by this formula:

$$Z = \frac{(B_1 - B_2)}{\sqrt{(S.E._1)^2 + (S.E._2)^2}}$$

Table 49: The difference of the slope of the correlation equation between tests for each shift.

The Difference of the Slope of the Correlation Equation	Afternoon		Morning	
	Z	P	Z	P
- The Pretest and The First Post-test	0.06	0.48	-0.08	0.46
- The First Post-Test and The Second Post-test	-2.04	0.02**	0.45	0.32
- The Pretest and The Second Post-test	-1.96	0.02**	1.39	0.08

** = P<0.05

This table showed the result of the test of the difference of the slope of the correlation equations at various test points (ie. pre-test, first and second post-tests) within shifts. For comparison between the pretest and the first post-test, there was no significant difference in the slope of the correlation equation in both the afternoon and the morning shift. For comparison between the first post-test and the second post-test and between the

pretest and the second post-test, there were significant differences in the slope of the correlation equations in the afternoon shift. The slope of the correlation equation at the second post-test were stronger than the slope of the correlation equation at the pretest and the first post-test of the afternoon shift. For the morning shift, there were no significant difference between these tests.



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5. The Relationship between the Independent Variables and the Dependent Variables in Pretest:

The regression analysis deal with the situation in which there was one measured dependent variable and one or more measured independent variable(s). It described the strength of the relationship between the variables.

The independent variables in this study were reviewed from many previous related studies, documents and text books. These following were all of the independent variables in this study.

- The stayed pattern
- The marital status of their parents
- The occupation of their parents
- The students' salary
- The last term grade average
- The high school that the students graduated
- Media use in last four weeks
- Sources of AIDS information
- Pleasure center visiting

After calculation of the relationship between the dependent and independent variables by the SPSS programme, only

the independent variables which had significance in relationship were shown at the table 50 and 51.

Table 50: The Stepwise * multiple regression of all predictor variables influencing to the total knowledge scores at pretest.

Dependent variable : the total knowledge score.

Independent Variables	R	R ²	R ² change	F	sig F	B	beta
LGA	0.216	0.046	0.046	19.95	0.00	0.649	0.192
TA3	0.275	0.076	0.03	16.68	0.00	0.089	0.163
MMT	0.292	0.086	0.01	12.64	0.00	0.344	0.098
Constant						8.284	

LGA = The last term grade average.

TA3 = The attitude score toward condom use.

MMT = The magazine as the source of the information about AIDS.

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From table 50, the last term grade average can significantly explained the variation in the total knowledge score for 4.6%. The slope of the equation was 0.649 which means that if the last term grade average would increase by 0.649 unit for every unit increase of the total knowledge score. The score of attitude toward condom use can predict the total knowledge score for 7.6% with a given last term grade average. That was 3% increasing.

Table 51: The Stepwise multiple regression of all predictor variables that was influencing to the total attitude score in pretest.

Dependent variable : the total attitude score.

Independent Variables	R	R ²	R ² change	F	sig F	B	beta
LGA	0.219	0.048	0.048	20.62	0.00	2.922	0.191
TK	0.259	0.076	0.028	16.73	0.00	0.718	0.159
TMI	0.295	0.087	0.011	12.90	0.00	1.677	0.106
Constant						79.102	

LGA = The last term grade average

TK = The total knowledge score about AIDS

TMI = The teacher at the college as the source of AIDS information.

The interpretation of the coefficient associated with the variable last term grade average was that, the total attitude score increased by 2.92 unit of score for every unit increased in last term grade average. There was a significance that the last term grade average can predict the total attitude score for 4.8%. The total knowledge score about AIDS can predict the total attitude score for 7.6% with a given last term grade average. That was 2.8% increasing.



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