



## CHAPTER 3

### RESULT

The result will be presented in the following order.

1. Means and Standard Deviations of the three national groups.
2. Results from factor analysis of belief patterns and discussion.
3. Results of one way Analyses of Variance determining the differences between background variables and beliefs following by the Duncan's Multiple Range Test to determine the differences of all possible pairs of group means and discussion.

The following symbols will be used to make the presentation more convenient.

$\bar{X}$	=	Mean
S.D.	=	Standard Deviation
SS	=	Sum of Square
DF	=	Degrees of freedom
MS	=	Mean Square
F	=	Variance Ratio
$h^2$	=	Communality

Means and Standard Deviations of the three National groups are presented in table 18.

Table 18  $\bar{X}$  and S.D. of THAI, SINGAPOREAN AND AMERICAN SUBJECTS.

Scale No.	THAI SUBJECTS		SINGAPOREAN SUBJECTS		AMERICAN SUBJECTS	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
1.	2.56	.85	3.91	1.05	4.35	.75
2.	2.85	.91	3.39	.65	3.83	.50
3.	2.61	.83	3.43	.97	3.97	.72
4.	2.74	.63	2.84	.64	2.77	.67
5.	2.58	.56	2.48	.63	2.82	.56
6.	3.25	.63	2.89	.60	2.93	.67
7.	3.60	.55	3.50	.50	3.26	.50
8.	2.94	.37	2.82	.50	3.08	.57
9.	2.52	.52	2.10	.71	2.08	.70
10.	2.86	.52	2.72	.43	2.09	.44
11.	2.94	.60	2.85	.66	3.35	.61
12.	3.00	.52	3.06	.60	3.54	.71
13.	3.06	.52	2.98	.43	3.20	.49
14.	3.54	.51	3.16	.49	3.45	.55
15.	2.35	.50	2.51	.45	2.93	.84

Table 18 shows us a nature of subjects' overall response. It gives us an idea of the degree of agreement and disagreement with the belief issues being studied before the data is treated and will help the reading of the result to be more thorough.

Results from factor analysis of belief patterns.

In conducting factor analysis there are three ordinary steps which are

1. the preparation of the correlation matrix, (2) the extraction of the initial factors, the exploration of possible data reduction

and (3) the rotation to a terminal solution, the search for simple and interpretable factors. In the present study raw data were put directly into the computer and the correlation matrix was produced for the further steps.

For the factoring method, the researcher chose to use the method of principal factoring with iteration or PA 2. Then, for the final step, the rotation method of orthogonal by varimax was used. After the data of all the national groups, Thai, Singaporean and Americans, were extracted and rotated the results are presented in the following tables.

TABLE 19 : VARIMAX ROTATED FACTOR MATRIX OF THAI SUBJECTS.

BELIEF ISSUES	FACTORS					h <sup>2</sup>
	1	2	3	4	5	
1. Existence of God	0.60	-0.07	-0.07	-0.19	0.04	0.41
2. Existence of Soul	0.75	-0.02	0.19	0.09	-0.15	0.62
3. Existence of Heaven	0.81	-0.17	-0.02	0.10	0.09	0.71
4. Existence of super natural spirits	0.64	-0.30	-0.08	-0.06	-0.01	0.51
5. Human being has free will	0.00	-0.13	-0.06	0.65	0.14	0.47
6. Human being as being controlled by environment	-0.14	0.04	-0.35	0.21	-0.04	0.19
7. Human being as being controlled by psychological forces	0.04	-0.06	0.09	-0.19	0.64	0.46
8. Human Nature as good	-0.05	0.19	0.47	0.31	0.08	0.37
9. Free sex	0.08	-0.06	0.18	-0.05	-0.20	0.08

TABLE 19 : VARIMAX ROTATED FACTOR MATRIX OF THAI SUBJECTS  
(CONTINUED)

BELIEF ISSUES	FACTORS					h <sup>2</sup>
	1	2	3	4	5	
10. Adolescent Independence	0.03	0.65	-0.18	-0.17	0.01	0.49
11. Sexual equality	-0.18	0.45	-0.22	0.03	0.07	0.29
12. Racial Equality	-0.02	0.42	0.08	0.07	-0.06	0.19
13. Social Change	-0.15	0.46	-0.05	0.02	0.03	0.24
14. Democracy	-0.11	0.40	0.12	-0.11	0.00	0.20
15. Free Enterprise	-0.09	-0.08	0.48	-0.02	-0.03	0.24
Percentage of Variance	44.6	19.9	14.6	13.8	7.2	

The determining value of factor loading at .30 was adopted for the factor matrix<sup>1</sup>

TABLE 20 : BELIEF PATTERNS HELD BY THAI SUBJECTS

FACTOR	PATTERNED BELIEFS	FACTOR LOADING
1	Existence of God	0.60
	Existence of Soul	0.75
	Existence of Heaven	0.81
	Existence of Super natural Spirits	0.64
11	Adolescent Independence	0.65
	Sexual Equality	0.45
	Racial Equality	0.42
	Social Change	0.46
	Democracy	0.40
11.1	Human being as being controlled by environment	-0.35
	Human Nature as good	0.47
	Free Enterprise	0.49

<sup>1</sup> Andrew & Comrey, A First Course in Factor Analysis  
(New York : Academic Press 1973), p.225

FACTOR	PATTERNED BELIEFS	FACTOR LOADING
IV	Human being as free will	0.65
V	Human being as being controlled by psychological forces	0.64

From table 3 we can see that 5 factors were found.

Factor I is composed of all the beliefs under the category of metaphysical and supernatural issues. Believing in existence of God, Soul, Heaven and Supernatural spirits were the patterned items.

Factor II seems to center around the idea of human rights. In agreeing with adolescent independence, sexual equality and social equality indicates that human of all age, sex and race should have equal rights. Then, to have social change and democracy as parts of this cluster indicates the belief that there are ways to achieve such ideal. Through social change and democratic rule, the expression of desire for equal rights can be honored. Therefore, adolescent independence, sexual equality, racial equality, social change and democracy weave into a very reasonable pattern.

Factor III seems to indicate the belief that human has good nature. By disbelieving that human is being controlled by his or her environment but agreeing that human nature is good and further more to believe in free enterprise which shows the respect to human freedom. Trusting that human nature is good and can function freely without restrictions confirms the positive attitude toward human nature.

Factor IV is independent from other factors. It shows the belief of human as being free, human has free will to decide and to live independently of all the pressure and corruption around him.

Factor V, Human as being controlled by psychological forces is also an independent factor. This seems to contradict with the idea of free will, but it may imply the subjects' belief that human is free to choose, but they also recognize that human has needs he must fulfill.

The issue of free sex is not included in any of the factors, therefore the subjects responses to the idea of free sex does not have statistical meaning when conducted factor analysis.

TABLE 21 : VARIMAX ROTATED MATRIX OF SINGAPOREAN SUBJECTS

BELIEF ISSUES	FACTORS						h <sup>2</sup>
	1	2	3	4	5	6	
Existence of God	0.75	-0.12	-0.10	0.12	0.05	-0.11	0.62
Existence of Soul	0.83	0.02	-0.26	-0.02	-0.00	0.13	0.75
Existence of Heaven	0.67	-0.16	-0.13	-0.06	-0.11	-0.07	0.50
Existence of Spirits	0.06	0.28	-0.08	-0.26	0.06	0.09	0.17
Human being as free will	-0.24	0.14	0.83	-0.26	0.04	0.12	0.85
Human being as being controlled by environment	-0.03	-0.01	0.02	-0.01	0.06	0.68	0.47
Human being as being controlled by psychological forces	-0.03	-0.08	-0.02	0.03	0.78	0.07	0.62
Human Nature as good	-0.08	0.05	0.33	0.12	-0.04	-0.01	0.13
Free sex	-0.33	0.56	-0.04	-0.27	-0.04	0.08	0.51
Adolescent Independence	-0.10	0.55	0.16	-0.01	-0.04	-0.04	0.34
Sexual Equality	-0.03	0.35	-0.05	0.31	-0.19	-0.04	0.26
Racial Equality	-0.02	-0.07	0.05	0.56	0.00	-0.14	0.34
Social Change	0.17	0.00	-0.24	-0.02	-0.17	0.16	0.14
Demoncracy	0.06	-0.03	-0.03	0.34	0.01	0.11	0.14
Free Enterprise	-0.01	0.23	0.17	-0.02	-0.01	-0.02	0.08
Percentage of variance	44.3	16.0	14.8	11.4	8.3	8.1	

TABLE 22 : BELIEF PATTERNS HELD BY SINGAPOREAN SUBJECTS

FACTORS	PATTERNED BELIEFS	FACTOR LOADING
I	Existence of God	.75
	Existence of Soul	.83
	Existence of Heaven	.67
II	Sexual Morality ; free sex	.56
	Adolescent Independence	.55
	Sexual Equality	.35
III	Human being has a free will	.83
	Human Nature as good	.33
IV	Racial Equality	.56
	Democracy	.34
V	Human as being controlled by psychological forces	.78
VI	Human as being controlled by environment	.68

From table 5, factor I is similar to factor I of the Thai subjects that they both consisted of the issues of metaphysical and supernatural beliefs. The difference is that it disregarded the existence of supernatural spirits.

Factor II involves the ideas of freedom. Free sex, adolescent independence and sexual equality indicate the desire to be free to act regarding sexual practice, free to be a young adult and free as a woman (or a man). The statements in the questionnaire did stress, the freedom to work as a youngster and as a woman, as well as freedom to decide for oneself, all the way to freedom to indulge sexual pleasure.

Factor II of Singaporean subjects is similar to factor II of Thai subjects that they both show desire for rights and freedom. However, factor II of Singaporean subjects is narrower. As I have discussed before factor II of Singaporean subjects only focused on freedom to do in certain way and be certain thing while factor II of Thai subjects is more involved with ideology and human rights.

Factor III consists of the beliefs that human has free will and the nature of human is basically good. These two beliefs show a very positive outlook on human being.

Factor IV included racial equality and democracy. As the Singaporean Government has tried to make Singapore a multi-racial nation, this feedback should be much appreciated. The responses show the desire for equality of all the races as well as democracy where the aim is to give power to the people. This factor has linked together the socio-political issues that are very relevant to the Singaporean subjects.

Factor V shows the belief that human is being controlled by psychological forces.

Factor VI also implies that human nature is not all that free but is being controlled by the environment.

The issues of the existence of supernatural spirits, free enterprise and social change are not included in any of the six factors. This finding indicates that for the Singaporean subjects, the issues mentioned above did not have statistical significant when conducted factor analysis.



TABLE 23 : VARIMAX ROTATED FACTOR MATRIX OF AMERICAN SUBJECTS

BELIEF ISSUES	FACTORS						h <sup>2</sup>
	I	II	III	IV	V	VI	
Existence of God	0.04	-0.01	0.67	-0.02	-0.30	0.04	0.54
Existence of Soul	-0.07	0.14	0.42	0.27	-0.15	-0.10	0.30
Existence of Heaven	0.01	0.02	0.17	0.07	-0.44	-0.27	0.30
Existence of Supernatural spirits	-0.41	-0.24	0.14	0.20	0.10	0.16	0.33
Human has a free will	0.47	0.02	0.03	0.11	0.16	-0.03	0.26
Human being as being controlled by environment	-0.08	-0.07	-0.04	0.40	-0.11	0.04	0.19
Human being as being controlled by psychological forces	-0.13	-0.02	0.09	0.33	0.08	0.02	0.14
Human Nature as good	0.48	0.10	-0.13	-0.01	0.35	-0.32	0.49
Free Sex	0.01	-0.05	-0.15	0.09	0.40	-0.01	0.19
Adolescent Independence	0.10	0.11	0.03	0.52	0.12	-0.01	0.31
Sexual equality	0.06	0.67	-0.09	0.21	-0.16	0.14	0.54
Racial equality	0.02	0.78	0.36	-0.30	0.10	0.05	0.85
Social change	-0.03	0.09	0.01	0.04	0.05	0.46	0.22
Democracy	0.59	0.07	0.04	-0.11	-0.01	0.13	0.38
Free Enterprise	0.32	-0.08	-0.00	-0.07	-0.09	-0.04	0.12
Percentage of variance	28.3	26.0	16.2	14.7	7.8	7.1	

TABLE 24 : BELIEF PATTERNS HELD BY AMERICAN SUBJECTS.

FACTORS	PATTERNED BELIEFS	FACTOR LOADING
I	Existence of supernatural spirits	-0.41
	Human being as free will	0.47
	Human Nature as good	0.48
	Democracy	0.59
	Free Enterprise	0.33
II	Sexual Equalit	0.67
	Racial Equality	0.78
III	Existence of God	0.67
	Existence of Soul	0.42
IV	Human as being controlled by environment	0.40
	Human as being controlled by psychological forces	0.34
	Adolescent independence	0.52
V	Existence of heaven	-0.44
	Sexual Morality ; free sex	0.40
VI	Social change	0.46

From Table 24 we can see that the way the belief issues are grouped together is quite different from the first two groups. Factor I for the American subjects shows that there was a negative relationship between the belief of existence of supernatural spirits and the other four beliefs which are human being as free will, human nature is good, democracy and free enterprise. This belief pattern implies that the subjects disbelieve in supernatural spirits while they believe that human has free will and the nature of human is good. From this outlook it seems like the following issues, democracy and free enterprise are merely expression of their attitude toward human nature that human is good, free, therefore they desire to have democratic society and free enterprise where business has freedom to trade without restriction.

Factor II consists of sexual equality and racial equality. These two issues of human rights has been a long battle for the Americans. From the civil war, the fight for racial equality has continuing effect on the American political and social system. Then, the women's liberation movement became stronger and wide spread. This feedback implies that those who agree with sexual equality also agree with racial equality.

Factor III included the beliefs of existence of God and existence of soul. This group of beliefs only shows the religious belief that there is God and also shows the belief that human beings do have souls.

Factor IV is a rather odd combination. It consists of the belief that human is controlled by environmental and psychological forces. These two forces express the belief that human nature is not free. But the other issue included is the issue of adolescent independence.

Factor V show the negative relationship between existence of heaven and the belief of free sex. For both Thai and Singaporean subjects, the existence of heaven was included with other metaphysical belief like existence of God and existence of soul. But it is not the same with the American subjects. What could be the possible link between existence of heaven and free sex. The result seem to suggest that the subjects who agree with free sex do not believe in the existence of heaven.

Factor VI is an independent factor of social change. This only shows that the subjects agreed with social change independently from the other issues.



### Discussion

The grouping of the belief issues through factor analysis of each national group differs in terms of the factorized items. There is no definite pattern of the differences among the obtained factors. For the three national groups the patterns of the groups are unique to their own. The issues of existence of God and existence of soul are the only two items that are grouped in the same factor consistently. The issue of free sex is not included in any factor of the Thai subjects while it is included in Factor 11 of the Singaporean and in Factor V of the American subjects. In the same way, the issue of existence of supernatural spirits, free enterprise and social change are not included in any factorized pattern for the Singaporean subjects while they are included in different factors of the Thai and the American subjects.

As far as comparing the obtained factors from the three national groups is concerned it is difficult to pinpoint the difference. The difference can be seen by studying each group's patterned beliefs to see how the same item is grouped into different factors of the three groups and to see the common meaning behind the grouped items.

The results of one-way **Analyses** of Variance of the beliefs by background variables on the belief patterns.

The results of one-way **Analyses** of Variance of the beliefs by background variables will be presented according the belief scales. Since there were 60 one-way **Analyses** of Variance tests : quired in this study, only the significant results will be presented.

In interpreting the results from Duncan's Multiple Range Tests, the scores were converted from five point rating scale into three point scale according to the following criterions : 3.50 and above indicated agree, from 2.51 to 3.49 indicated **unsure** and 2.50 and below indicated disagree.

1. One-way Analyses of Variance of Scale 1, Existence of God by sex, economic status, nationality and religious background have results as follow :

1.1 Existence of God by sex, male and female yields no significant result.

1.2 Existence of God by economic status, high, middle and low income, has significant result as presented in Table 25.

Table 25. One-way Analysis of Variance of Existence of God by economic status.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	15.89	7.94	5.82	.01
Within groups	447	609.69	1.36		
Total	449	625.58			

The result from table 25 indicates the significant difference among the responses of the subjects from different income levels in their belief about the Existence of God. This result can not yet tell us that between which groups the difference is significant. In order to test for the significant difference between each pair of group means, Duncan's Multiple Range Test is employed.

The Duncan's Multiple Range Test is obtained by the use of the computer through the SPSS program for posteriori tests. The Duncan's procedure is a systematic procedure for comparing all possible pairs of group means. The groups are divided into homogeneous subsets, where the difference in the means of any two groups in a subset is not significant at some precribed level. The interpretation of the Duncan's Multiple Range Test will be based on this explanation through out the chapter.

The results of the comparisons of group means among the different income levels are presented in Table 26.

Table 26. Comparisons of group means among the different income levels from the Duncan's Multiple Range Test at .01 level.

groups	group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
High income	3.87	1.14	0.10	1
Middle income	3.57	1.14	0.07	1,2
Low income	3.28	1.29	0.15	1

<sup>a</sup>The meaning of subset is defined as follow:

subset 1 = Middle income and Low income

subset 2 = High income and Middle income.

Table 26 indicates that high income subjects agreed with the existence of God significantly more than the low income subjects, but the differences between middle income and low income, and between middle income and high income are not significant.

The group means suggest that the high income and middle income subjects believed in the Existence of God, but the low income subjects were unsure about the issue.

1.3 Existence of God by nationality, Thai, Singaporean and American has significant result as presented in Table 27.

Table 27. One-way Analysis of Variance of Existence of God by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	259.78	129.89	158.43	.001
Within groups	446	365.65	0.82		
Total	448	625.43			

The result from table 27 shows the significant difference among nationality groups in their belief about the existence of God. Further comparisons of group means are presented in table 28.

Table 28. Comparison of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.57	.85	0.07	1
Singaporean	3.91	1.05	0.08	2
American	4.35	.79	0.06	3

<sup>a</sup>The meaning of subset is defined as;

subset 1 = Thai

subset 2 = Singaporean

subset 3 = American

Table 28 indicates that the American subjects agreed with the Existence of God significantly more than the Singaporean and the Thai subjects, and the Singaporean subjects scored significantly higher than the Thai subjects.



The group means indicate that the American and the Singaporean subjects agreed with the Existence of God, but the Thai subjects were unsure about the issue.

In testing the differences among the religious groups, the extreme differences of group size among the Muslims (6 subjects) and the No-religions (42 subjects) when compare to the Buddhists (162 subjects) and the Christians (241 subjects), will violate the limitation of Analysis of Variance and Duncan's Multiple Range Test, which will distort the result. To avoid this problem, only the Buddhist and Christian groups will be tested by one-way Analysis of Variance.

1.4 Existence of God by religious background, Buddhism and Christianity has significant result as presented in Table 29

Table 29. One-way Analysis of Variance of Existence of God by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	304.00	304.00	444.85	.001
Withing groups	401	274.04	0.68		
Total	402	578.04			

Table 29 indicates the significant difference between the religious groups in their belief about Existence of God. The group means (Christain  $\bar{X} = 4.35$ , Buddhist  $\bar{X} = 2.58$ ) show that only the Christian subjects believed in the Existence of God. The Buddhist subjects were unsure about the issue.

The F Prob. at 0.0000 from computer printout is considered as F Prob. at .001 consistently.

2. One-way Analysis of Variance of scale 2, Existence of Soul by background variable of sex, economic status, nationality and religious background have results as follow.

2.1 Existence of soul by sex, male and female, yields no significant result.

2.2 Existence of soul by economic status high, middle and low income, yields no significant result.

2.3 Existence of soul by nationality, Thai, Singaporean and American, has significant difference as presented in Table 30.

Table 30. One-way Analysis of Variance of Existence of soul by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	71.63	35.81	70.63	0.001
Within groups	446	226.14	.51		
Total	448	297.77			

Table 30 indicates that there is a significant difference among the three national groups in their belief about the Existence of soul. Further comparisons of group means are presented in table 32.

Table 31. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.86	0.91	0.07	1
Singaporean	3.39	0.65	0.05	2
American	3.84	0.51	0.04	3

<sup>a</sup>The meaning of subset is defined as;  
 subset 1 = Thai  
 subset 2 = Singaporean  
 subset 3 = American

The result from Table 31 indicates that the American subjects agreed with the Existence of soul significantly more than the Singaporean and the Thai subjects. Also, the Singaporean subjects scored significantly higher than the Thai subjects.

The group means indicate that the American subjects believed in the Existence of soul, but the Singaporean and the Thai subjects were unsure about the issue.

2.4 Existence of soul by religion, Buddhism and Christianity has significant result as presented in table 32.

Table 32. One-way Analysis of Variance of Existence of soul by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	87.14	87.14	190.00	.001
Within groups	401	183.91	0.46		
Total	402	271.04			

Table 32 indicates the significant difference between the religious groups in their belief about Existence of soul. The group means (Christian  $\bar{X} = 3.78$ , Buddhist  $\bar{X} = 2.83$ ) show that only the Christian subjects believed in Existence of soul, but the Buddhist subjects were unsure about the issue.

3. One-way Analyses of Variance of scale 3, Existence of heaven by background variables which are sex, economic status, nationality and religion have results as follow.

3.1 Existence of heaven by sex, male and female, yields no significant result.

3.2 Existence of heaven by economic status, high, middle and low income, has a significant result as presented in table 33.

Table 33. One-way Analysis of Variance of Existence of heaven by economic status.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	7.40	3.70	3.79	0.05
Withing groups	447	436.05	0.97		
Total	449	443.44			

Table 33 indicates the significant difference among the income levels in their belief about the Existence of heaven. Futher comparisons of the group means are presented in table 36.

Table 34. Comparisons of group means of different income levels from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
High income	3.41	1.03	.09	2
Middle income	3.38	0.95	.06	2
Low income	3.04	1.03	.12	1

<sup>a</sup>The meaning of subset is defined as;  
 subset 1 = Low income  
 subset 2 = High income and middle income

Table 34 indicates that the high income and the middle income subjects scored on the existence of the Existence of heaven significantly higher than the low income subjects. The difference between the high income and the middle income subjects is not significant.

The group means show that all the groups were unsure about the existence of heaven.

3.3 Existence of heaven by nationality, Thai, Singaporean and American, has significant result as presented in table 35.

Table 35. One-way Analysis of variance of Existence of Heaven by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob
Between groups	3	180.33	60.11	101.84	0.001
Within groups	445	282.66	.59		
Total	448	442.99			

Table 35 indicates the significant difference among the nationality groups in their belief about the Existence of heaven. Further comparisons of group means are presented in table 36.

Table 36. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Group	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.62	0.83	0.07	1
Singaporean	3.43	0.92	0.07	2
American	3.96	0.72	0.06	3

<sup>a</sup> The meaning of subset is defined as;

subset 1 = Thai

subset 2 = Singaporean

subset 3 = American

The results from table 36 indicates that the American scored on the Existence of heaven significantly higher than the Singaporean and the Thai subjects, and the Singaporean subjects scored significantly higher than the Thai subjects.

The group means show that only the American subjects believed in the Existence of heaven. The Singaporean subject were unsure and Thai subjects did not believe in the issue.

3.4 Existence of heaven by religion, Buddhism and Christianity has significant result as presented in table 37.

Table 37. One-way Analysis of Variance of Existence of heaven by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	163.30	163.31	275.27	.001
Within groups	401	237.90	.59		
Total	402	401.20			

Table 37 indicates the significant difference among the religious groups in their belief about the Existence of heaven. The group means (Christian  $\bar{X} = 3.9$ , Buddhist  $\bar{X} = 2.6$ ) show that the Christian subjects believed in Existence of heaven but the Buddhist subjects were unsure about the issue.

4. One-way Analyses of Variance of Scale 4, Existence of supernatural spirits by background variables of sex, economic status, nationality and religion indicate that there were no significant result. It means that there was no significant difference among the responses of the subject in all categories in their belief about the Existence of supernatural spirits.

5. One-way Analyses of Variance of Scale 5, Human has a free will by background variables of sex, economic status, nationality and religion have significant results as follow.

5.1 Human has a free will by sex, male and female, has a significant result as presented in table 38.

Table 38. One-way Analysis of Variance of the issue of Human has a free will by sex.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	9.07	4.53	13.16	0.001
Within groups	446	153.59	0.34		
Total	448	162.66			

Table 38 indicates the significant difference between the male and female in their belief about human has a free will.

The group means show that both groups, male ( $\bar{X} = 2.70$ ) and female, ( $\bar{X} = 2.56$ ) were unsure about issue that human has a free will. However, the male subjects scored significantly higher than the female subjects.

5.2 Human has a free will by economic status, high, middle and low income, yields no significant result.

5.3 Human has a free will by nationality, Thai Singapore and American has significant results as presented in table 39.



Table 39. One-way Analysis of Variance of the issue of Human has a free will by Nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	9.07	4.53	13.16	.001
Within groups	446	153.59	0.34		
Total	448	162.66			

Table 39 indicates the significant difference among the three national groups in their belief about Human has a free will. Further comparisons of group means are presented in table 40.

Table 40. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.58	0.59	0.04	1
Singaporean	2.48	0.63	0.05	1
American	2.82	0.56	0.04	2

<sup>a</sup> The meaning of subset is defined as;  
 subset 1 = Thai and Singaporean  
 subset 2 = American

Table 40 indicates that the American subjects scored significantly higher than the Thai and the Singaporean subjects. The difference between the Thai and the Singaporean subjects is not significant.

The group means indicate that the American and the Thai subjects were unsure about Human has a free will but the Buddhist subjects disagreed with the issue.

5.4 Human has a free will by religious background, Buddhism and Christianity, yields no significant result.

6. One-way Analyses of Variance of Scale 6, Human as being controlled by the environment by background variables of sex, economic status, nationality and religion, have results as follow.

6.1 Human as being controlled by the environment by sex, male and female, yields no significant result.

6.2 Human as being controlled by the environment by economic status of high, middle and low income yields no significant results.

6.3 Human as being controlled by the environment by nationality, Thai, Singaporean and American has significant results as presented in table 41.

Table 41. One-way Analysis of Variance of Human as being controlled by the environment by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	11.12	5.56	13.86	.001
Within groups	446	178.82	0.40		
Total	448	189.94			

Table 41 indicates the significant difference among the three national groups in their belief about of Human as being controlled by environment. Further comparisons of group means are presented in table 42.

Table 42. Comparisons of group means among the nationality groups from Duncan's multiple Range Test at .01 level.

Group	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	3.25	0.63	0.05	2
Singaporean	2.89	0.60	0.05	1
American	2.94	0.66	0.05	1

<sup>a</sup> The meaning of subset is defined as;  
 subset 1 = Singaporean and American  
 subset 2 = Thai

Table 42 indicates that the Thai subjects scored significantly higher than the American and the Singaporean subjects. The difference between the American and the Singaporean subjects is not significant.

The group means show that all of the groups were unsure about Human as being controlled by the environment.

6.4 Human as being controlled by environment by religious background Buddhism and Christianity, has significant result as presented in table 43.

Table 43. One-way Analysis of Variance of Human as being controlled by the environment by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	5.33	5.33	12.75	.001
Within groups	401	167.66	.42		
Total	402	172.99			

Table 43 indicates the significant difference between the religious groups in their belief about Human as being controlled by the environment. The group means (Christian  $\bar{X} = 2.95$ , Buddhist  $\bar{X} = 2.18$ ) show that the Christian subjects were unsure about Human as being controlled by the environment but the Buddhist subjects disagreed with the issue.

7. One-way Analyses of Variance of Scale 7, Human as being controlled by psychological forces by background variables, sex, economic status, nationality and religions have results as follow.

7.1 Human as being controlled by psychological forces by sex, male and female, yields no significant result.

7.2 Human as being controlled by psychological forces by economic status, high, middle and low income, yields no significant result.

7.3 Human as being controlled by psychological forces by nationality, has significant results as presented in table 44.

Table 44. One-way Analysis of Variance of Human as being controlled by psychological forces, by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups *	2	8.46	4.23	25.77	.001
Within groups	446	119.67	0.27		
Total	448	128.14			

Table 44. indicates the significant difference among the nationality groups in their belief about Human as being controlled by psychological forces. Further comparisons of group means are presented in table 45.

Table 45. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Group	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	3.59	0.55	0.04	2
Singaporean	3.50	0.49	0.04	2
American	3.26	0.53	0.04	1

<sup>a</sup> The meaning of subset is defined as;

subset 1 = American

subset 2 = Thai and Singaporean

Table 45 indicates that the Thai and the Singaporean subjects scored significantly higher than the American subjects. The difference between the Thai and the Singaporean subjects is not significant.

The group means show that the Thai and the Singaporean subjects agreed with the issue of Human as being controlled by psychological forces, but the American subjects were unsure about the issue.

7.4 Human as being controlled by psychological forces by religious background, Buddhism and Christianity has significant result as presented in table 46.

Table 46. One-way Analysis of Variance of Human as being controlled by psychological forces by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob
Between groups	1	4.44	4.44	15.64	.001
Within groups	401	113.88	.28		
Total	402	118.32			

Table 46 indicates the significant difference between the religious groups in their belief about Human as being controlled by psychological forces. The group means (Buddhist  $\bar{X} = 3.58$ , Christian  $\bar{X} = 3.36$ ) show that the Buddhist subjects agreed with Human as being controlled by psychological forces, but the Christian subjects were unsure about the issue.

8. One-way Analyses of Variance of scale 8, Human nature as good by background variables which are sex, economic status, nationality and religious background have results as follow.

8.1 Human nature as good by sex, male and female, yields no significant result.

8.2 Human nature as good by economic status high, middle and low income, yields no significant result.

8.3 Human nature as good by nationality, Thai, Singaporean and American, has significant result as presented in table 47.

Table 47. One-way Analysis of Variance of Human nature as good by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	4.62	2.31	9.72	0.001
Within groups	446	106.03	0.24		
Total	448	110.65			

Table 47 indicates the significant difference among the nationality groups in their belief about Human nature is good. Further comparisons of group means are presented in table 48.

Table 48. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.94	0.37	0.03	1,2
Singaporean	2.82	0.50	0.04	1
American	3.07	0.57	0.05	2

<sup>a</sup> The meaning of subset is defined as;  
 subset 1 = Thai and Singaporean  
 subset 2 = Thai and American

Table 48 indicates that the American subjects scored significantly higher than the Singaporean subjects, but the differences between the Thai and the American subjects, and between the Thai and the Singaporean subjects are not significant.

The group means show that all the groups were unsure about Human nature is good.

8.4 Human nature as good by religious background, Buddhism and Christianity, yields no significant result.

9. One-way Analyses of Variance between scale 9, free sex by background variables which are sex economic status, nationality and religious background have results as follow.

9.1 Free sex by sex, male and female has significant result as presented in table 49.

Table 49. One-way Analysis of Variance of Free sex by sex.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	4.62	2.31	9.72	.001
Within groups	446	106.03	0.24		
Total	448	110.65			

Table 49 indicates the significant difference between the responses of male and female subjects to the idea of free sex. The group means (male  $\bar{X} = 2.33$ , female  $\bar{X} = 2.14$ ) show that the male subjects scored significantly higher than the female subjects, and both groups disagreed with the issue.



9.2 Free sex by economic status of high, middle and low income, yields no significant result.

9.3 Free sex by nationality, Thai, Singaporean and American, has significant result as presented in table 50.

Table 50. One-way Analysis of Variance of Free sex by nationality

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	19.14	9.57	22.49	.001
Within groups	446	186.09	0.42		
Total	448	205.23			

Table 50 indicates the difference among the nationality groups in their belief about Free sex. Further comparisons of group means are presented in table 51.

Table 51. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.52	0.52	0.04	2
Singaporean	2.09	0.71	0.06	1
American	2.07	0.69	0.06	1

<sup>a</sup> The meaning of subset is defined as;  
 Subset 1 = Singaporean and American  
 Subset 2 = Thai

Table 51 indicates that the Thai subjects scored significantly higher than the Singaporean and American subjects, but the difference between the Singaporean and the American subjects is not significant.

The group means show that the Thai subjects were unsure about free sex, but the Singaporean and the American subjects disagreed with the issue.

9.4 Free sex by religious background of Buddhism and Christianity, has significant result as presented in table 52.

Table 52. One-way Analysis of Variance of Free sex by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	20.09	20.09	51.27	.001
Within groups	401	157.10	.39		
Total	402	177.19			

Table 52 indicates the significant difference between the religious groups in their belief about Free sex. The group means (Buddhist  $\bar{X} = 2.48$ , Christian  $\bar{X} = 2.02$ ) show that the Buddhist subject subjects were unsure about Free sex but the Christian subjects disagreed with the issue. However, the Buddhist subjects scored significantly higher than the Christian subjects.

10. One-way Analyses of Variance of Scale 10, Adolescent independence by background variables of sex, economic status, nationality and religion have results as follow.

10.1 Adolescent independence by sex, male and female yields no significant result.

10.2 Adolescent independence by edonomic status, high middle and low income, yields no significant result.



10.3 Adolescent Independence, by nationality, Thai, Singaporean and American has significant result as presented on table 53.

Table 53. One-way Analysis of Variance of Adolescent independence by nationality.

Source	D.F.	SS	MS	F Rati	F Prob.
Between groups	2	10.35	5.17	24.14	.001
Within groups	446	95.61	0.21		
Total	448	105.96			

Table 53 indicates the significant difference among the nationality groups. Further comparisons fo group means are presented in table 54.

Table 54. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.85	0.51	0.04	1
Singaporean	2.72	0.43	0.03	2
American	3.09	0.43	0.04	3

<sup>a</sup>The meaning of subset is defined as;

Subset 1 = Thai

Subset 2 = Singaporean

Subset 3 = American

Table 54 indicates that the American subjects scored significantly higher than the Thai and the Singaporean subjects, and the Thai subjects scored significantly higher than the Singaporean subjects.

The group means show that all the groups were unsure about Adolescent independence.

10.4 Adolescent independence by religious background Buddhism and Christianity yields no significant result.

11. One-way Analyses of Variance of scale 11, Idea sexual equality by background variables of sex, economic status, nationality and religious background have results as follow.

11.1 Ideal sexual equality by sex, male and female has significant result as presented in table 55.

Table 55. One-way Analysis of Variance of Ideal sexual equality by sex.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	3.18	3.18	7.38	.01
Within groups	448	193.10	0.43		
Total	449	196.28			

Table 55 indicates the significant difference between the responses of male and female subjects to the issue of Ideal sexual equality. The group means (male  $\bar{X} = 2.96$  and female  $\bar{X} = 3.13$ ) show that the females scored significantly higher than the male subjects, and that both groups were unsure about the issue.

11.2 Ideal sexual equality by economic status of high, middle and low income, yields no significant result.

11.3 Ideal sexual equality by nationality; Thai, Singaporean and American has significant result as presented in table 56.

Table 56. One-way Analysis of Variance of Ideal sexual equality by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	21.48	10.74	27.41	.001
Within groups	446	174.77	0.39		
Total	448	196.25			

Table 56 indicates the significant difference among the nationality groups in the belief about Ideal sexual equality. Further comparisons of group means are presented in table 57.

Table 57. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.94	0.60	0.05	1
Singaporean	2.85	0.67	0.05	1
American	3.36	0.61	0.05	2

<sup>a</sup> The meaning of subset is defined as;

Subset 1 = Thai and Singaporean

Subset 2 = American

Table 57 indicates that the American subjects scored significantly higher than the Thai and The Singaporean subjects, and the difference between the Thai and the Singaporean subjects is not significant.

The group means show that all the groups were unsure about the issue of adolescent independence.

11.4 Sexual equality by religious background, Buddhism and Christianity has significant result as presented in table 58.

Table 58. One-way Analysis of Variance of Ideal Sexual equality by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	4.22	4.22	10.00	.01
Within groups	401	169.03	.42		
Total	402	173.25			

Table 58 indicates the significant difference between the religious groups in their belief about Sexual equality. The group means (Christian  $\bar{X} = 3.15$ , Buddhist  $\bar{X} = 2.94$ ) show that both groups were unsure about Sexual equality. However, the Christian subjects scored significantly higher than the Buddhist subjects.

12. One-way Analyses of Variance of scale 12, Racial equality by background variables of sex, economic status, nationality and religious background have results as follow.

12.1 Racial equality by sex, male and female yields no significant difference.

12.2 Racial equality by economic status, high, middle and low income yields no significant difference.

12.3 Racial equality by nationality, Thai, Singapore and American has significant result as presented in table 59.

Table 59. One-way Analysis of Variance of Racial equality by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	26.27	13.13	33.191	.001
Within groups	446	176.49	0.39		
Total	448	202.76			

Table 59 indicates the significant difference among the nationality groups in their belief about Racial equality. Further comparisons of group means are presented in table 60.

Table 60. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	3.00	0.57	0.05	1
Singaporean	3.06	0.60	0.04	1
American	3.54	0.71	0.06	2

<sup>a</sup> The meaning of subset is defined as;

Subset 1 = Thai and Singaporean

Subset 2 = American

Table 60 indicates that the American subjects scored significantly higher than the Singaporean and the Thai subjects. The difference between the Singaporean and the Thai subjects is not significant.

The group means show that the American subjects agreed with Racial equality, but the Singaporean and the Thai subjects were unsure about the issue.

12.4 Racial equality by religious background, Buddhism and Christianity has significant result as presented in table 61.

Table 61. One-way Analysis of Variance of Racial equality by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	11.73	11.73	27.42	.001
Within groups	401	171.57	.43		
Total	402	183.30			

Table 61 indicates the significant difference between the religious groups in their belief about Racial equality. The group means (Christian  $\bar{X} = 3.35$ , Buddhist  $\bar{X} = 3.00$ ) show that both groups were unsure about the issue. However, the Christian subjects scored significantly higher than the Buddhist subjects.



13. One-way Analyses of Variance of Scale 13, Social Change by background variables of sex, economic status, nationality and religious background have results as follow.

13.1 Social chage by sex, male and female, yields no significant result.

13.2 Social chage by economic status, nigh, middle and low income, yields no significant result.

13.3 Social chage by nationality, Thai, Singaporean and American, has significant result as presented in table 62.

Table 62. One-way Analysis of Variance of Social change by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	3.44	1.72	7.348	.001
Within groups	446	101.33	0.23		
Total	448	104.77			

Table 62 indicates the significant difference among the national groups in their belief about Social chage. Further comparisons of group means are presented in table 63.

Table 63. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	3.06	0.52	0.04	1,2
Singaporean	2.98	0.43	0.03	1
American	3.19	0.49	0.04	2

<sup>a</sup> The meaning of subset is defined as;  
 Subset 1 = Thai and Singaporean  
 Subset 2 = Thai and American

Table 63 indicates that the American subjects scored significant higher than the Singaporean subjects. The difference between the Thai and the Singaporean subjects, and between the Thai and the American subjects, are not significant.

The group means show that all the groups were unsure about the idea of Social change.

13.4 Social change by Religious background of Buddhism and Christianity, yields no significant result.

14. One-way Analyses of Variance of scale 14, constitutional (Democracy) as against Totalitarian rule by background variables of sex, economic status, nationality and religious background have results as follow.

14.1 Democracy by sex, male and female, yields no significant result.

14.2 Democracy by economic status, high, middle and low income, yields no significant result.

14.3 Democracy by nationality, Thai, Singaporean and American, has significant result as presented in table 64

Table 64. One-way Analysis of Variance of Democracy by nationality.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	11.9091	5.9546	22.248	.001
Within groups	446	119.3719	0.2677		
Total	448	131.2810			

Table 64 indicates the significant difference among the nationality groups in their belief about Democracy. Further comparisons of the group means are presented in table 65.

Table 65. Comparisons of group means among nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	3.54	0.51	0.04	2
Singaporean	3.16	0.48	0.03	1
American	3.45	0.55	0.04	2

<sup>a</sup> The meaning of subset is defined as;

Subset 1 = Singaporean

Subset 2 = Thai and American

Table 65 indicates that the Thai and the American subjects scored significantly higher than the Singaporean subjects. The difference between the Thai and the American subjects is not significant.

The group means show that only the mean of the Thai subjects exceeds 3.5. According to the Duncan's Multiple Range Test, the difference between 3.54 and 3.45 is not significant, therefore the score of 3.45 can be considered the same as 3.5. This figures indicate that the Thai and the American subjects agreed with the issue of democracy while the Singaporean subjects were unsure about the issue.

14.4 Democracy by religious background, Buddhism and Christianity has significant result as presented in table 66.

Table 66. One-way Analysis of Variance of Democracy by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	1.23	1.23	4.35	.05
Within groups	401	113.82	.28		
Total	402	115.05			

Table 66 indicates the significant difference between the religious groups in their belief about Democracy. The group means (Buddhist  $\bar{X} = 3.47$ , Christian  $\bar{X} = 3.36$ ) show that both groups were unsure about Democracy. However, the Buddhist subjects scored significantly higher than the Christian subjects.

15. One-way Analyses of Variance of Scale 15, Free enterprise by background variables of sex, economic status, nationality and religious background have results as follow.

15.1 Free enterprise by sex, male and female yields no significant result.

15.2 Free enterprise by economic status, high, middle and low income, has significant results as presented in table 67.

Table 67. One-way Analysis of Variance of Free enterprise by economic status.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	2	3.60	1.80	4.128	.05
Within groups	447	194.92	0.44		
Total	449	198.52			

Table 67 indicates the significant difference among the income levels in their belief about Free enterprise. Further comparisons of group means are presented in table 68.

Table 68. Comparisons of group means among the different income levels from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
High income	2.72	0.87	0.08	2
Middle income	2.58	0.59	0.04	1,2
Low income	2.44	0.48	0.06	1

<sup>a</sup> The meaning of subset is defined as;  
 Subset 1 = Middle income and low income  
 Subset 2 = High income and Middle income

Table 68 indicates that the high income subjects scored significantly higher than the low income subjects. The difference between middle income and low income, and between the high income and the middle income are not significant.

The group means show that the high and middle income subjects were unsure about Free enterprise but the low income subjects disagreed with issue.

15.3 Free enterprise by nationality, Thai, Singaporean and American has significant result as presented in table 69.

Table 69 One-way Analysis of Variance of Free enterprise by nationality

Source	D.F.	SS	MS	F Ratio	F Prob
Between groups	2	26.93	13.46	35.07	.001
Within groups	446	171.22	0.38		
Total	448	198.15			

Table 69 indicates the significant difference among the nationality groups in their belief about Free enterprise. Further comparisons of group means are presented in table 70.

Table 70. Comparisons of group means among the nationality groups from Duncan's Multiple Range Test at .01 level.

Groups	Group $\bar{X}$	S.D.	Standard Error	Subset <sup>a</sup>
Thai	2.35	0.50	0.04	1
Singaporean	2.50	0.03	0.03	1
American	2.93	0.84	0.06	2

<sup>a</sup> The meaning of subset is defined as;

Subset 1 = Thai and Singaporean

Subset 2 = American

Table 70 indicates that the American subjects scored significantly higher than the Singaporean and the Thai subjects. The difference between the Singaporean and the Thai subjects is not significant.

The group means show that the American and the Singaporean subjects were unsure about Free enterprise but the Thai subjects disagreed with the issue.

15.4 Free enterprise by religious background, Buddhism and Christianity, has significant result as presented in table 71.

Table 71. One-way Analysis of Variance of Free enterprise by religious background.

Source	D.F.	SS	MS	F Ratio	F Prob.
Between groups	1	15.68	15.68	36.49	.001
Within groups	401	172.28	.43		
Total	402	187.95			

Table 71 indicates the significant difference between the religious groups in their belief about Free enterprise. The group means (Christian  $\bar{X} = 2.75$ , Buddhist  $\bar{X} = 2.35$ ) show that the Christian subjects were unsure about Free enterprise, but the Buddhist subjects disagreed with the issue.



Table 72. Summarizing table of all the results from one-way ANOVA tests and Duncan Multiple Rang Tests of belief issues and background variables, only significant results are presented.

Scale	Belief Issues	Background variables	ANOVA; Significant level	Comparisons of group means from Duncan's Multiple Range Test, a pair of groups underlined are homogeneous groups.	Duncan's Significant level	group means	agree, disagree or unsure
1	Existence of God	Economic Status	$P < .01$	<u>High income middle income low income</u>	.01	High income = 3.87 Middle income = 3.57 Low income = 3.28	Agree Agree unsure
		Nationality	$P < .001$	American Singaporean Thai	$P < .01$	American = 4.35 Singapore = 3.91 Thai = 2.57	Agree Agree unsure
		Religion	$P < .001$	_____*	_____*	Christian = 4.35 Buddhist = 2.58	Agree unsure
2	Existence of Soul	Nationality	$P < .001$	American Singaporean Thai	$P < .01$	American = 3.84 Singapore = 3.39 Thai = 2.86	Agree unsure unsure
		Religion	$P < .001$	_____*	_____*	Christian = 3.78 Buddhist = 2.83	Agree unsure

\*not analyzed.

Table 72 (continued)

scale	Belief Issues	Background variables	ANOVA; Significant level	Comparisons of group means from Duncan's Multiple Range Tests, a pair of groups underlined are homogeneous groups.	Duncan's Significant level	group means	agree disagree or unsure
3	Existence of Heaven	Economic Status	$P < .05$	<u>High income</u> <u>Middle income</u> low income	$P .05$	High income=3.41 Middle income=3.38 Low income = 3.04	unsure unsure unsure
		Nationality	$P < .001$	American Singapore Thai	$P < .01$	American= 3.96 Singapore= 3.43 Thai = 2.62	Agree unsure unsure
		Religion	$P < .001$	_____*	_____*	Christian= 3.90 Buddhist = 2.60	Agree unsure
5	Human as being free will	Sex	$P < .05$	Male Female	$P < .05$	Male = 2.70 Female = 2.56	unsure unsure
		Nationality	$P < .001$	American <u>Thai Singaporean</u>	$P < .01$	American = 2.82 Thai = 2.58 Singapore= 2.48	unsure unsure Disagree
6	Human as being controlled by environment	Nationality	$P < .001$	Thai <u>American Singaporean</u>	$P < .01$	Thai = 3.25 Singaporean=2.89 American =2.94	unsure unsure
		Religion	$P < .001$	_____*	_____*	Buddhist = 3.18 Christian = 2.95	unsure unsure

\*not analyzed

Table 72 (continued)

Scale	Belief Issues	Background variables	ANOVA; Significant level	Comparisons of group means from Duncan's Multiple Range Tests, a pair of underlined groups are homogeneous groups.	Duncan's Significant level	group means	agree disagree or unsure
7	Human as being controlled by psychological force	Nationality  Religion	P < .001  P < .001	<u>Thai Singaporean</u> American  _____*	P < .01  _____*	Thai = 3.59 Singapore = 3.50 American = 3.26  Buddhist = 3.18 Christian = 2.95	Agree Agree unsure  unsure unsure
8	Human Nature as good	Nationality	P < .01	<u>American Thai</u> Singaporean	P < .01	American = 3.07 Thai = 2.94 Singapore = 2.82	unsure unsure unsure
9	Free Sex	Sex  Nationality  Religion	P < .01  P < .001  P < .001	Male Female  <u>Thai Singaporean</u> American  _____*	P < .01  P < .01  _____*	Male = 2.33 Female = 2.14  Thai = 2.52 Singapore = 2.09 American = 2.07  Buddhist = 2.48 Christian = 2.02	Disagree Disagree  unsure Disagree Disagree  Disagree Disagree
10	Adolescent Independence	Nationality	P < .001	American Thai Singaporean	P < .01	American = 3.09 Thai = 2.85 Singapore = 2.72	unsure unsure unsure

\*not analyzed



Table 72 (continued)

scale	Belief Issue	Background variables	ANOVA; Significant level	Comparisons of group means from Duncan's Multiple Range Tests, a pair of groups underlined are homogeneous groups.	Duncan's Significant level	groups means	agree disagree or unsure
14	Democracy	Nationality	$P < .001$	<u>Thai American</u> Singaporean	$P < .01$	Thai = 3.54 American = 3.45 Singaporean = 3.16	agree agree unsure
		Religion	$P < .05$	<u>..*</u>	*	Buddhist = 3.47 Christian = 3.36	unsure unsure
15	Free Enterprise	Economic Status	$P < .05$	<u>High income Middle income low income</u>	$P .01$	High income = 2.72 Middle income = 2.58 Low income = 2.44	unsure unsure Disagree
		Nationality	$P < .001$	American <u>Singaporean Thai</u>	$P < .01$	American = 2.93 Singaporean = 2.50 Thai = 2.35	unsure unsure Disagree
		Religion	$P < .001$			Christian = 2.76 Buddhist = 2.35	unsure Disagree

\* not analyzed



## Discussion

From the presented results of one-way Analyses of Variance and Duncan's Multiple Range Tests, the **background** variable that evidently **has** the most influence on the belief is nationality. It is reasonable that nationality plays the most part in the subject's beliefs because by using the word nationality it actually includes several other background variables that the subjects share in common, such as, culture and subculture, political system, social norms, ethnic groups and so forth. It would be interesting to study in more detail about these other variables for example, ethnic groups within the same nation to see how they think and feel about the belief issues. The next influential background variable appears to be religious background. It effects not only the degree of believing in the metaphysical beliefs but it also effects the out look on human nature as well as socio-political and econmical issues. The Christian subjects did score higher when it comes to social issues (sexual equality, and racial equality) and econmic issue of free enterprise. The Buddhist subjects scored higher than other religious group on the issue of free sex and political issue of democracy. Economic status has effect on some metaphysical beliefs (existence of God and heaven) and the idea of free enterprise. The effect of economic status on the social, cultural and political issues were not significant. Sex is found to have little effect on the subject's responses. It only effects the issue of human has a free will, a cultural issue of sexual morality (free sex) and social issue of sexual equality.

The study of relationship between sex and the beliefs provides few significant results. Sex, as background variable only has significant effect on the issue of free sex, sexual equality and the issue of human has a free will. This study supports part of the research by Thomas J. Cottle and Carl N. Edwards and Joseph Pleck<sup>1</sup> reviewed previously that sex and sex role identity have significant effect on social and political attitudes. As Cottle, Edwards and Pleck reported that sex and sex role identity effect social and political attitudes in the areas of political liberalism, birth control, sex role morality, discrimination and puritan achievement,<sup>1</sup> the present study only found the significant effect of sex on the issues of sexual morality regarding free sex, and sexual equality. The items in the issue of free sex and sexual equality are very similar to the items included in the area of sex role morality in the study done by Cottle, Edwards and Pleck. The subjects responses to both studies are similar where they did not agree with sexual practice outside of marriage and they did not agree with equal status for woman. On the other social and political issues this study did not find any significant result. However, this study found that sex has effect on the outlook on human nature that human has a free will. This information is an addition to the previous study

The effect of the economic status mostly centered around the area of religious beliefs which are existence of God and the existence of heaven, where the high income and middle income subjects agreed with the issues but the low income group did not. This can be a converse effect of the influence of the religious beliefs on the economic achievement. This issue will be discussed later in this section under the effect of religious background on free enterprise.

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<sup>1</sup> Thomas J. Cottle and Carl N. Edwards and Joseph Pleck, "The Relationship of Sex Role Identity and Social and Political Attitude" Psychology & Social Issues, p.338

Nationality has significant effect on the beliefs of existence of God, existencetence of soul and the existence of heaven. The American and the Singaporean subjects believed in these issues while the Thai subjects did not. These issue are the concept. of the monotheistic religions. Because 97% of the American subjects are Christians and 55% of the Singaporean subjects are Christians, the over all answers show the beliefs of the majority. For the Thai subjects, 89% are Buddhists and only 8% are Christians, so, the scores show the belief of the majority where as Buddhist teaching did not include God. The concept of soul and heaven is consequently interpreted as unrelated to God. This results show the overlaping effects of religious membership and nationality on the beliefs.

Regarding human philosophy, the American subjects were unsure about all the issues (Human has a free will, Human as being controlled by the environment, Human as being controlled by psychological forces and Human Nature is good). This results could be explained through the fact that, the subjects have been exposed to variety of assumptions about human nature from educational system as well as religious teaching. Each of the different assumption, as discussed previously in chapter 2, has it's strong point. When the subjects are exposed to these different beliefs they might have recognized these various beliefs, but have not been able to decide which assumption to be the most relevent. Therefore, on most of the issues the subjects were unsure. This explanation is applicable to the Thai and the Singaporeans as well. However, there are few other variables that must be recognized in comparing the Thai and the Singaporean subjects with the American subjects. The Thai subjects were unsure about Human has a free will and Human nature is good while they agreed with Human is controlled by psychological



forces and disagreed with Human is controlled by the environment. To the Thais, the Buddhist teaching of Karma is internalized.<sup>1</sup> A person is not controlled by the environment, but is determined by Karma. At the same time, the Thai subjects agreed with the issue of Human is being controlled by psychological forces. The Buddhist teaching explains psychological forces as greed, attachment and fatuation which these three forces are recognized by the Buddhists to effect their behavior. The Singaporean subjects disagreed with the issue of Human has a free will, while they were unsure about Human as being controlled by the environment, Human as being controlled by psychological forces and Human nature is good. The general character of the Singaporeans could be described as being well diciplined by training. The idea of free will is less emphasized as they try to develop their human resource. As the massmedia reflected the vision of the bigger and better Singapore, the Singaporeans became more of manipulator and manager of their environment as well as their own needs, physically and psychologically.

On the issue of sexual morality, the Thai subjects were unsure about free sex but the American and the Singaporean subjects disagreed with the issue. As Knud S. Larsen reported that premarital sex as long as shared with love and tenderness was acceptable by his American subjects,<sup>2</sup> this study reports further that sexual activity without long term or legal commitment is not acceptable to the American, as well as the Thai and Singaporean students being studied. On the social issues, results show that the effect of nationality on the beliefs about of adolescent independence, sexual equality and social change were significant. Although the three national groups were unsure about the issues, the American

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<sup>1</sup> Niels Mulder, "The Concept of Power and Moral Goodness in the Contemporary Thai World View" Journal of The Siam Society 67 (January, 1979) p.126

<sup>2</sup> Knud S. Larsen "Premarital Sex Attitude : A Scale and Some Validity Findings" The Journal of Social Psychology, p.154

subjects scored significantly higher than the Thai and the Singaporean subjects, but there is no significant difference between the Thai and the Singaporean subjects in all the issues above. This only implies that the American subjects show a little more favor toward the issues even though they did not really believe in them. As the McConn-Erikson Hokuodo of Tokyo, reported that the Singaporean youths were not in favor of adolescent independence, premarital sex and social change,<sup>1</sup> the present study report further that not only the Singaporean youth studied previously, but the Singaporean, as well as the Thai and the American youth being studied now, did not with adolescent independence, sex without long term or legal commitment (which may include some premarital sex) and social change.

On the issue of racial equality, only the American subjects agreed with the issue. This could be because the fact that the United States government has actively tried to solve the problem of racial discrimination as Richard C. Atkinson related that,

'Our society professes to believe there should be no discrimination against an individual on the basis of race, religion or other a priori categorizations, including sex. Our accepted ethic holds that each individual should be given equal and maximum opportunity, according to his or her needs to develop to his or her potential. Surely innate differences in ability and other individual variations should be taken into account by our educational system. These difference must, however, be judged on the basis of the individual and not on the basis of race.'

This kind of declaration may have effect on the American public as it is expressed in this study.

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<sup>1</sup> McConn-Erikson Hokuodo of Tokyo "Portrait of the High Moral Singaporean Youth" The Strait Times, (19 September 1980) : 5-7

<sup>2</sup> Atkinson, Richard C. "Racial Discrimination" Contemporary Psychology (San Francisco, California : W.H. Freeman and Company, 1971) p.447

On the issue of democracy, the effect of nationality brings an interesting finding. The result shows that the Thai subjects scored the highest on the issue of democracy. This might be related to the fact that in Thailand democracy is not secured, often times the power is taken by dictaforship, so the government must struggle to maintain the ideal of democracy. This struggle, which may strengthen people's desire for democracy, is stronger than the other groups, and more idealized. While in America, democracy is their way of life, people somewhat have taken it for granted and may not even be able to imagine the government to be any other way, and also see that reality is never as good as the ideal. The Singaporean subjects scored the lowest on the issue, their group mean shows that they were unsure about the issue. This may be a reflection of the way the people are so used to the strong leadership and the government controls on their day to day affair.

The American and the Singaporean subjects were unsure about Free enterprise, but the Thai subjects disagreed with the issue. This may imply the subjects' desire to have government restrictions on the trading system and to have government involvement in making important decision about economy. This desire may lead to low scoring on Free enterprise.

Religious background definitely has an impact on the subjects faith. The Christian and the Buddhist subjects' have difference in their belief about God, soul and heaven as explained earlier in the previous section. Both the Christian and the Buddhist subjects disbelieved the issue of Existence of supernatural spirit. This finding is rather surprising because in Thailand, many people who call themselves Buddhists practice spiritual worship as there are many spirit houses (phraphum) in the country.<sup>1</sup> Such result may be suggesting that the university students are moving away from believing in supernatural spirit. The students are at the age of intellectual development,

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<sup>1</sup> Niels Mulder, "The Concept of Power and Moral Goodness in the Contemporary Thai World View" Journal of The Siam Society, p.126

so they are more persuasive to the exposure of scientific knowledge that offers a more vivid and logical explanation about human behavior.

The difference between the religious groups on the cultural and political-economic issues are not explicit. The subjects were unsure about most of the cultural and political-economic issues. However, the magnitude of their responses is significant on free sex, where the Buddhists scored significantly higher than the Christian subjects. On the issue of sexual equality, the Christian subjects scored significantly higher than the Buddhist subjects. It is difficult to offer accurate explanation because the issues are very broad and the research on these issues are not available. This findings are challenges to conduct further investigation for the explanation.

On the issue of free enterprise, the Christian subjects scored significantly higher than the Buddhist subjects. This may be related to the religious teaching about work ethics. In the system of free enterprise, business can operate freely, economic can grow as long as people are willing to work. Max Weber explained the relationships between religion and the economic and social life in modern culture in his book, "The Protestant Ethic and the Spirit of Capitalism." His theory based on Calvinism that a devout Christian should conduct his business as a calling to which Providence has summoned to the elect. Working for wealth and higher social status is being perceived as the divine calling and business success is perceived as the blessing. This teaching creates conditions favorable to the growth of a new type of economic civilization.<sup>1</sup> While this teaching has an impact on the work ethic of the Christians (Protestants), the traditional Buddhist view of society offers less incentive for economic innovation. Neils Mulder explains Buddhist ethic as "Ultimately life is conditioned by the law of Karma, and the only way to overcome this samsaric existence of birth,

<sup>1</sup> Max Weber, The Protestant Ethic and the Spirit of Capitalism, trans. Talcott Parsons (New York : Charles Scribner's Sons, 1953), p.6-7

death, rebirth is to overcome Karmic condition by the cultivation of morality and wisdom"<sup>1</sup> This basic belief of Karma does not offer any encouragement for material and wealth, instead, it emphasizes the individual's cultivation of morality and wisdom.

In brief, the findings convey rather puritanic beliefs. For those who identify with the monotheistic religion adhere to their religious ethical concepts, and the Buddhists show their traditional outlook about their social environment. The subjects seem to follow the traditional, conservative outlook as they either disagree with or are unsure about the issues of free sex, sexual equality, adolescent independence and racial equality (only the American subjects agree with racial equality). They are not too keen on social change, but the majority of the subjects agree with democracy.

<sup>1</sup> Niels Mulder, "The concept of Power and Moral Goodness in The Contemporary Thai World View" Journal of The Siam Society, p.126