



UNIVERSITI PUTRA MALAYSIA

**YOUTH DEVELOPMENT COMPETENCIES AS PREDICTORS
OF PERCEIVED INTER-ETHNIC TOLERANT BEHAVIORS AMONG
UNDERGRADUATES**

WENDY YEE MEI TIEN

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By

WENDY YEE MEI TIEN

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

May, 2008



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment
of the requirement for the degree of Doctor of Philosophy

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Chair: Professor Hj. Azimi Hamzah, PhD

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Youth are important assets for the continuous development of a nation. Therefore, many youth development programmes have been conducted to help youth to develop. Positive youth development, an approach that emphasizes the positive aspects of youth development is based on developing their health and physical competence, personal and social competence, cognitive and creative competence, vocational competence and citizenship competence. Having these competencies are very essential especially among youth living in a multi-ethnic society, Malaysia. Therefore, to avoid conflict, there is a need to be tolerant towards different cultural, religious practices, beliefs and ethnic differences. Despite many initiatives taken by the government to ensure such positive development among the youth, inter ethnic conflict is still an issue especially with the outbreak of the Kampung Medan incident in 2001 where most of the culprits involved were youth. Thus, the focus of this study is to identify the levels of youth development competencies among the undergraduates in Malaysia. Besides, based on the Theory of Planned Behavior the



occurrence of a specific behavior of a person can be predicted with the presence of attitudes, subjective norms, perceived behavioral control and behavioral intentions. Incorporating both the theory of positive youth development and Theory of Planned Behavior, this study also aimed to determine the potential predictors for perceived inter ethnic tolerant behavior and to determine the level of inter-ethnic tolerance among the undergraduates. Using a self administered questionnaire, data were collected from 1086 undergraduates. Analysis was conducted to compare between undergraduates from the Public (PuIHE) and Private Institution of Higher Learning (PrIHE) and from five different programs of studies; namely, Bioscience, Social Science, Business Studies, Technical Studies and Information Technology Studies. The results indicated that students from both the institution of higher learning and across the five programs of study have the highest level of strength in vocational competence. In order to determine the predictor variables for inter ethnic tolerant behavior, a four predictors multiple linear regression model was used. The findings of this study indicated that there was a difference in prediction variables for inter-ethnic tolerant behavior between the PuIHE and PrIHE undergraduates. The results also indicated that not all the youth development competencies explained significantly to inter ethnic tolerant behavior (IETB) among students from the different programs of studies. However, among all the four youth development competencies, cognitive competence was the strongest estimator of inter ethnic tolerant behavior for the four out of five different programs of study. Overall, the model developed for this study based on the two main theories; youth development competencies and Theory of Planned Behavior on the prediction of behavior, was able to explain the gap in predicting inter ethnic tolerant behaviors among the youth.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falzafah

**PEMBANGUNAN KOMPETENSI BELIA SEBAGAI PREDIKTOR UNTUK
TOLERANSI DI KALANGAN MAHASISWA DAN MAHASISWI**

Oleh

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Belia adalah aset yang penting untuk pembangunan sesebuah negara. Oleh itu, banyak program pembangunan belia telah dijalankan untuk membimbing pembangunan belia ini. Pembangunan belia positif merupakan satu langkah pembangunan yang memfokus kepada aspek-aspek positif pembangunan belia seperti pembangunan kompetensi kesihatan dan fizikal, kompetensi individu dan sosial, kompetensi kognitif/kreatif, kompetensi vokasional dan kompetensi kenegaraan. Kompetensi-kompetensi ini adalah sangat penting terutamanya belia yang hidup di sebuah masyarakat yang berbilang kaum seperti Malaysia. Untuk mencegah dari berlakunya konflik perkauman, seseorang itu perlu mempunyai sikap toleransi terhadap perbezaan budaya, agama, kepercayaan dan etnik. Walaupun banyak inisiatif telah diambil oleh pihak kerajaan untuk memastikan pembangunan belia secara positif, namun, konflik perkauman masih berlaku; contoh; rusuhan kaum di Kampung Medan pada tahun 2001 dimana majoriti yang terlibat dalam rusuhan kaum itu adalah daripada golongan belia. Oleh itu, fokus kajian ini adalah untuk mengenal pasti tahap pembangunan kompetensi-kompetensi di kalangan

mahasiswa di Malaysia. Berdasar kepada Teori ‘Planned Behavior,’ kelakuan seseorang boleh dikenalpasti melalui elemen ‘attitude’, ‘subjective norms’, ‘perceived behavioral control’ dan ‘behavioral intentions.’ Melalui pergabungan teori pembangunan belia positif dan teori ‘Planned Behavior,’ kajian ini bertujuan untuk mengenal pasti prediktor-prediktor untuk sikap toleransi dan mengenal pasti tahap toleransi antara etnik di kalangan mahasiswa. Data-data telah dikumpulkan daripada 1086 mahasiswa melalui boring soal seidik. Analisis perbandingan telah dijalankan untuk membandingkan tahap-tahap yang berlainan ini di antara mahasiswa di IPTA dan IPTS dan juga di antara lima program pengajian yang berlainan (Biosains, Sains Sosial, Busines, Teknikal dan IT). Hasil kajian telah menunjukkan bahawa mahasiswa dari kedua-dua IPT and kesemua program pengajian mempunyai tahap tertinggi dalam kompetensi vokasional. Untuk menentukan prediktor-prediktor yang dapat mengenal pasti sikap toleransi, empat prediktor telah digunakan dalam model ‘multiple linear regression’. Hasil kajian ini telah menunjukkan bahawa prediktor-prediktor untuk sikap toleransi adalah berbeza untuk IPTA dan IPTS. Hasil kajian ini juga menunjukkan bahawa terdapat perbezaan dalam prediktor yang sesuai sebagai prediktor sikap toleransi untuk kelima-lima program pengajian. Walaubagaimanapun, antara keempat-empat prediktor yang dikenal pasti, kompetensi kognitif merupakan kompetensi yang paling penting sebagai prediktor sikap toleransi. Secara keseluruhannya, model yang dirangka untuk kajian ini yang berdasarkan dua teori, dapat menunjukkan peranan kompetensi-kompetensi pembangunan belia positif dalam mengenal pasti sikap toleransi di kalangan belia. Kajian ini juga telah mencadangkan beberapa aspek penting untuk kajian belia di masa depan.

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctoral of Philosophy. The members of the Supervisory Committee were as follows:

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DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.

WENDY YEE MEI TIEN

Date: 22 May 2008

TABLE OF CONTENTS

	Page
ABSTRACT	ii
ABSTRAK	iv
APPROVAL	vi
DECLARATION	viii
LIST OF TABLES	xiii
LIST OF FIGURES	xvii
LIST OF ABBREVIATIONS	xx
CHAPTER	
I INTRODUCTION	1
1.1 Introduction	1
1.2 Historical Background	2
1.3 Tolerance in a Plural Society	4
1.4 Background of the Research Problem	6
1.4.1 National Strategies in Promoting Inter Ethnic Tolerance, Peace and Harmony	6
1.4.2 Importance of Youth in Vision 2020	9
1.4.3 Youth Developmental Competencies	11
1.4.4 Youth Competencies and Inter Ethnic Tolerant Behaviors	12
1.5 Problem Statement	15
1.6 General Objective	18
1.7 Specific Objectives	18
1.8 Scope of the Study	19
1.9 Significance of the Study	21
1.9.1 Contribution to Knowledge	21
1.9.2 Contribution to Practice	23
1.9.3 Contribution to Policy	24
1.10 Limitations of the Study	26
1.11 Definition of Key Terms	28
II. LITERATURE REVIEW	
2.1 Introduction	34
2.2 Inter Ethnic Relations	34
2.2.1 Conflict in Ethnic Relations	41
2.2.2 Tolerance	45
2.2.3 Review of Theories and Inter Ethnic Studies	49
2.2.4 Inter Ethnic Tolerance Among Students in the Universities	52
2.2.5 Promoting Inter Ethnic Relations through Education	61
2.3 Youth	65
2.3.1 Youth Development	67



2.3.2	Positive Youth Development Approach	70
2.3.3	Youth Development Competencies	75
2.3.3.1	Personal/Social Competence	82
2.3.3.2	Cognitivel Competence	84
2.3.3.3	Vocational Competence	87
2.3.3.4	Citizenship Competence	89
2.4	Theory of Planned Behavior	92
2.4.1	Research Studies Related to Theory of Planned Behavior	94
2.5	Integration of Theory Planned Behavior and Positive Youth Development	99
2.5.1	Theoretical Framework	99
2.5.2	Definition for Attitude-Personal/Social Competence	102
2.5.3	Definition for Subjective Norm- Cognitive Competence	102
2.5.4	Definition for Perceived Behavioral Control-Vocational Competence	103
2.5.5	Definition for Citizenship Competence	104
2.5.6	Definition for Intention-Inter Ethnic Tolerant Behavior	105
2.6	Conceptual Framework	106
2.7	Summary	109
III. RESEARCH METHODOLOGY		
3.0	Introduction	112
3.1	Research Design	112
3.2	Conceptualization	113
3.3	Instrumentation	114
3.3.1	Instrument Development	115
3.3.2	Language Check	133
3.3.3	Pilot Testing	134
3.3.4	Reliability and Validity	136
3.3.5	Summary of Instrumentation	139
3.4	Population	140
3.4.1	Sampling	140
3.4.2	Sampling Procedures	145
3.5	Data Collection Procedures	149
3.6	Data Analysis Procedures	150
IV FINDINGS AND DISCUSSION		
4.1	Introduction	152
4.2	Demographic Profiles	153
4.2.1	Age Profile	153
4.2.2	Gender Profile	154
4.2.3	Ethnic Profile	154
4.2.4	Religion Profile	156
4.2.5	Institution of Higher Learning	157



4.2.6	Programs of Study	157
4.3	The Level of Strength for Youth Developmental Competencies by IHE	158
4.3.1	MANOVA Analysis - Assumptions	158
4.3.2	Comparing the Level of Strength for Youth Developmental Competencies by IHE	165
4.4	The Level of Strength for Youth Developmental Competencies by Programs of Study	176
4.4.1	MANOVA (Assumptions and Analysis)	176
4.4.2	Comparing the Level of Strength for Each Youth Development Competencies by Programs of Studies	179
4.4.3	The Overall Level of Strength for Youth Development Competencies	180
4.5	Levels of Inter Ethnic Tolerance Behavior by IHE	184
4.6	Levels of Inter Ethnic Tolerance behavior by Programs of Study	186
4.7	Factors Influencing Inter Ethnic Tolerant Behavior	190
4.7.1	Factors Influencing Inter Ethnic Tolerant Behavior in PuIHE	197
4.7.2	Factors Influencing Inter Ethnic Tolerant Behavior in PrIHE	204
4.7.3	Factors Influencing Inter Ethnic Tolerant Behavior by Programs of Study	214
4.7.4	Factors Influencing Inter Ethnic Tolerant Behavior for Social Science	221
4.7.5	Factors Influencing Inter Ethnic Tolerant Behavior for Technical Studies	226
4.7.6	Factors Influencing Inter Ethnic Tolerant Behavior for Business Studies	231
4.7.7	Factors Influencing Inter Ethnic Tolerant Behavior for Information Technology Studies	236
4.8	Moderating Effects of IHE between Youth Development Competencies and Inter Ethnic Tolerant Behavior	244
4.8.1	Moderating Effects of IHE between Social/Personal Competence and Inter Ethnic Tolerant Behavior	246
4.8.2	Moderating Effects of IHE between Cognitive Competence and Inter Ethnic Tolerant Behavior	252
4.8.3	Moderating Effects of IHE between Vocational Competence and Inter Ethnic Tolerant Behavior	258
4.8.4	Moderating Effects of IHE between Citizenship Competence and Inter Ethnic Tolerant Behavior	263
4.9	Moderating Effects of Fields of Study between Youth Developmental Competencies and Inter Ethnic Tolerant Behavior	270
4.9.1	Moderating Effects of Arts and Science Programs between Social/Personal Competency and Inter Ethnic Tolerant Behavior	270
4.9.2	Moderating Effects of Arts and Science Programs between Cognitive Competency and Inter Ethnic Tolerant Behavior	276
4.9.3	Moderating Effects of Arts and Science Programs between Vocational Competency and Inter Ethnic Tolerant Behavior	282
4.9.4	Moderating Effects of Arts and Science Programs between Citizenship Competency and Inter Ethnic Tolerant Behavior	289
4.10	Chapter Summary	295



V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
5.1 Introduction	301
5.2 Summary	301
5.3 Summary of Key Findings	305
5.3.1 The Level of Youth Development Competency by IHE and Programs of Studies	305
5.3.2 Levels of Inter Ethnic Tolerance Behavior by IHE and Programs of Studies	306
5.3.3 Youth Development Competencies as Predictors of Inter Ethnic Tolerant Behavior	307
5.3.4 Moderator of Youth Developmental Competencies and Inter Ethnic Tolerant Behavior	311
5.4 Conclusion	312
5.5 Implications and Recommendations	320
5.5.1 Implications and Recommendations for Practice	320
5.5.2 Implications and Recommendations for Policy Development	324
5.6 Recommendations for Future Research	325
5.6.1 Different Conceptual Models for Different IHE and Different Programs of Studies in Predicting Inter Ethnic Tolerant Behavior	325
5.6.2 Identifying Other Contributing Variables to the Developed Conceptual Model	326
5.6.3 Youth Developmental Competencies as a Measurement of Inter Ethnic Tolerant Behavior	327
REFERENCES	330
APPENDICES	353
BIODATA OF THE STUDENT	380



LIST OF TABLES

Table		Page
1	Varimax Rotation for Cognitive Competence	120
2	Varimax Rotation for Social/Personal Competence	123
3	Varimax Rotation for Vocational Competence	126
4	Varimax Rotation for Citizenship Competence	128
5	Varimax Rotation for Inter Ethnic Tolerant Behavior	131
6	Breakdown of Sample – Pilot Test	136
7	A Rule of Thumb to Interpret Cronbach’s Alpha	137
8	Alpha Cronbach Results for Pilot Test	138
9	Internal Reliability Consistency	139
10	Demographic Characteristics of Respondents	155
11	Residual Statistics	159
12	Chi Square Table	160
13	Extreme Values	160
14	Correlations between Youth Development Competencies	164
15	Multivariate Test for IHE	166
16	Mean Scores for Tests of Between IHE and Youth Developmental Competencies	168
17	Levels of Strength for Youth Developmental Competencies by IHE	172
18	Multivariate Test of Significance by Programs of Studies	177
19	Mean Scores for Tests of Between Programs of Studies and Youth Developmental Competencies	178



20	The Level of Youth Developmental Competencies by Programs of Studies	182
21	Inter Ethnic Tolerant Behavior Mean Score by IHE	184
22	Inter Ethnic Tolerant Mean Scores by Programs of Study	187
23	Estimates of Coefficient for the Model	192
24	The Multicollinearity Diagnostic for the Final Model	195
25	Estimates of Coefficient for the Model	199
26	The Multicollinearity Diagnostic for the Final Model	202
27	Estimates of Coefficient for the Model	206
28	The Multicollinearity Diagnostic for the Final Model	209
29	Estimates of Coefficient for the Model	215
30	The Multicollinearity Diagnostic for the Final Model	218
31	The Multicollinearity Diagnostic for the Final Model	223
32	The Multicollinearity Diagnostic for the Final Model	228
33	The Multicollinearity Diagnostic for the Final Model	234
34	The Multicollinearity Diagnostic for the Final Model	240
35	Model Summary for the Moderating Effects of IHE between Social/Personal Competence and Inter Ethnic Tolerant Behavior	248
36	Coefficients Values for Each Model for the Moderating Effects of IHE between Social/Personal Competence and Inter Ethnic Tolerant Behavior	250
37	Model Summary for the Moderating Effects of IHE between Cognitive Competence and Inter Ethnic Tolerant behavior	254
38	Coefficients Values for Each Model for the Moderating Effects of IHE between Cognitive Competency and Inter Ethnic Tolerant Behavior	256



39	Model Summary for the Moderating Effects of IHE between Vocational Competency and Inter Ethnic Tolerant Behavior	260
40	Coefficients Values for Each Model for the Moderating Effects of IHE between Vocational Competency and Inter Ethnic Tolerant Behavior	261
41	Model Summary for the Moderating Effects of IHE between Citizenship Competency and Inter Ethnic Tolerant Behavior	266
42	Coefficients Values for Each Model for the Moderating Effects of IHE between Citizenship Competency and Inter Ethnic Tolerant Behavior	267
43	Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Social/Personal Competency and Inter Ethnic Tolerant Behavior	273
44	Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Social/Personal Competency and Inter Ethnic Tolerant Behavior	274
45	Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Cognitive Competency and Inter Ethnic Tolerant Behavior	279
46	Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Cognitive Competency and Inter Ethnic Tolerant Behavior	280
47	Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Vocational Competency and Inter Ethnic Tolerant Behavior	285
48	Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Vocational Competency and Inter Ethnic Tolerant Behavior	287
49	Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Citizenship Competency and Inter Ethnic Tolerant Behavior	291



50	Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Citizenship Competency and Inter Ethnic Tolerant Behavior	293
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LIST OF FIGURES

Figure		Page
1	Model Theory of Planned Behavior	99
2	Theory of Planned Behavior	108
3	Positive Youth Development	108
4	Conceptual Framework – Combination of Positive Youth Development Theory and Theory of Planned Behavior	109
5	Scatter Plot for X ₁ and X ₂ for PuIHE	162
6	Scatter Plot for X ₁ and X ₂ for PrIHE	163
7	Comparing Mean Scores for Inter Ethnic Tolerant by Programs of Study	189
8	The Normal P-P Plot of the Regression Standardized Residual	195
9	The Scatterplot of Standardized Predicted Values vs. Observed Values	197
10	The Normal P-P Plot of the Regression Standardized Residual	203
11	The Scatterplot of Standardized Predicted Values vs. Observed Values	211
12	The Normal P-P Plot of the Regression Standardized Residual	211
13	The Scatterplot of Standardized Predicted Values vs. Observed Values	220
14	The Normal P-P Plot of the Regression Standardized Residual	220
15	The Scatterplot of Standardized Predicted Values vs. Observed Values	224
16	The Normal P-P Plot of the Regression Standardized Residual	225
17	The Scatterplot of Standardized Predicted Values vs. Observed Values	229



18	The Normal P-P Plot of the Regression Standardized Residual	229
19	The Scatterplot of Standardized Predicted Values vs. Observed Values	235
20	The Normal P-P Plot of the Regression Standardized Residual	235
21	The Scatterplot of Standardized Predicted Values vs. Observed Values	241
22	The Normal P-P Plot of the Regression Standardized Residual	241
23	Model for Predicting the Moderating Effects of IHE and Field of Studies (Arts/Science) between Youth Development Competencies and Inter Ethnic Tolerant Behavior	245
24	Slopes for Inter Ethnic Tolerant Behavior on Personal/Social Competence for PuIHE and PriHE based on Model 2	251
25	Slopes for Inter Ethnic Tolerant Behavior on Cognitive Competence for PuIHE and PriHE based on Model 2	257
26	Slopes for Inter Ethnic Tolerant Behavior on Vocational Competence for PuIHE and PriHE based on Model 2	262
27	Slopes for Inter Ethnic Tolerant Behavior on Citizenship Competence for PuIHE and PriHE based on Model 2	269
28	Slopes for Inter Ethnic Tolerant Behavior on Social/Personal Competence for PuIHE and PriHE based on Model 2	275
29	Slopes for Inter Ethnic Tolerant Behavior on Cognitive Competence for Arts and Science based on Model 2	281
30	Slopes for Inter Ethnic Tolerant Behavior on Vocational Competence for Arts and Science based on Model 2	288
31	Slopes for Inter Ethnic Tolerant Behavior on Citizenship Competence for Arts and Science based on Model 2	294
32	Model for Predicting Inter Ethnic Tolerant Among PuIHE Students	313



33	Model for Predicting Inter Ethnic Tolerant Among PrIHE Students	314
34	Model for Predicting Inter Ethnic Tolerant Across the Five Programs of Studies	316
35	Model for Predicting Inter Ethnic Tolerant with IHE as the Moderator between Citizenship Competence and Inter Ethnic Tolerant Behavior	317

Diagram

1	GPower – T-test Sample Size	143
2	GPower – F Test ANOVA Sample Size	143
3	GPower - F-test in Multiple Regression Sample Size	144



LIST OF ABBREVIATIONS

FIELDS	Two major fields of study (ARTS and SCIENCE)
ICT	Information and Communication Technology
IETB	Inter Ethnic Tolerant Behavior
IT	Information Technology
MMR	Moderated Multiple Regression
NEP	National Economic Plan
PrIHE	Private Institution of Higher Education
PROGRAMS	Five different programs of study (Bioscience, Social Science, Business Studies, Technical Studies, IT Studies)
PuIHE	Public Institution of Higher Education
TPB	Theory of Planned Behavior
UKM	Universiti Kebangsaan Malaysia
UM	Universiti Malaya
UPM	Universiti Putra Malaysia



CHAPTER 1

INTRODUCTION

1.1 Introduction

Malaysia is a unique multi-ethnic society. The population is a contrast of racial and cultural roots, with predominance of Malays, Chinese and Indians and diverse groups of indigenous people such as Iban, Bidayuh, Kadazan, Bajau, Melanau and Murut. For this, Malaysia boasts of rich cultural heritage, all rolled into one. Despite the differences in ethnic, religion, culture, values, beliefs, norms and practices, the people in Malaysia are able to live harmoniously compared to many other multi ethnic countries of the world. In fact, Malaysia has often been cited as an example of a plural society *par excellence* (Bee Lan, 1978). Nevertheless, Malaysia had come a long way to the stage she had reached today. Although it has been almost half a century Malaysia achieved its independence, issues of peace, inter ethnic relations, harmony and unity are still being emphasized through various channels in this plural society. This is the result of the lessons learnt from the unforgettable ethnic clashes and conflicts as part and parcel of the historical make up of the unique Malaysian society. The civil wars and bloodsheds other countries experienced as a result of inter-ethnic clashes also served as a reminder on the importance of inter ethnic tolerance and peace should not be taken for granted.



1.2 Historical Background

The making of the plural and diverse society in Malaysia was profoundly influenced by its historical background and its geographical location. Geographically, Malaysia has been the meeting point of three great civilizations. The civilization of the Malay archipelago, the Chinese civilization, and the Indian civilization confluence within the Malay Archipelago, consolidating itself in various stages with the growing importance of the Straits of Malacca as an important strait along the Silk Route. However, the historical plurality that existed in the Malay archipelago dramatically changed in the twentieth century with the arrival of European colonialism which generated an unprecedented movement of people accompanied by large scale of capitalism with the manipulation of racial identity for profit maximization (Puthucheary, 2002). Many Chinese were brought in from the main land China to work in the tin mining industries, the Indians were brought in from India to work in the rubber estates and the local Malays were left to agriculture activities in the rural areas. Hence, there was a rural – urban divide along ethnic lines and inequalities in economic distribution. This division thus had brought about much problems accompanied by racial polarization (Abraham, 1997).

Such division also became the spark that led to a succession of inter ethnic riots in 1945, 1946 and 1969. The 1969, May 13 incident, especially, had left a very sensitive and conscious mark in the lives of those who had experienced it.

According to Faaland (2003), the racial riots in 1969 were only the tip of an iceberg of a far more serious and deep-seated problem confronting the society, arising from Malaysian's past. Ethnic plurality, economic dualism and inequality were too ingrained in the fabric of the society. Malaysia being at the primary years of post Independence, still trying to stabilize the economic dualism and ethnic pluralism, finding it hard to strike a balance. Hence, politically and ethnically, the country retrogressed with racial feelings running high (Cheah, 2002). Economic disparity and social inequality between races due to geographical distribution aggravated the differences in incomes, and lifestyles between the rural and urban residences (Oo, 1991).

Tracing the causes of racial animosity after 1969, an affirmative action policy, the New Economic Policy (NEP), was formulated to reunite and rebuild the country. Its objectives were to create prosperity for all Malaysians and no community would experience a sense of loss and deprivation. In other words, economic growth alone, no matter how rapid it was, would not be enough. Distribution must be parallel, equal and no ethnic should feel threaten or neglected. The prevailing condition underlying the nature and characteristic of ethnicity rests, to a large extent, on the balance of ethnic power and social justice represented by the showcase of national development. Furthermore, the racial riots of 1969 not only produced an awareness of the importance of social equality and the equal distribution of economic wealth between different ethnic groups in Malaysia, but it



also forced the Malaysian government to take radical steps to nurture “culture pluralism” as a national quest. Thereafter, cultural pluralism was adopted by the national government as a theme to foster a philosophy that promotes “unity in diversity” (Jabatan Perpaduan Negara dan Integrasi Nasional, 2007).

1.3 Tolerance in a Plural Society

“Human diversity makes tolerance more than a virtue; it makes it a requirement for survival,” (Dubos, 1981, p. 2). Tolerance is not an end but a means; it is the minimal essential quality of social relations that eschew violence and coercion. Without tolerance, peace is not possible. With tolerance, a panoply of positive human and social possibilities can be pursued, including the evolution of a culture of peace (Towards a Culture of Peace, 1994). This principle is very critical in the context of a multi-ethnic society such as Malaysia. Therefore, to avoid conflict, there is a need to have the right attitude; liberal attitude. Tolerance towards cultural, religious, political and ethnic differences constitutes the liberal attitude. Without tolerance, there can be a lot of tension in the society. Following a comprehensive survey of the various ethnic groups conducted in Canada, Berry and Kalin (1995) concluded that “tolerant individuals” show little differential preference for various groups. Staub (1989) also argued in his book, “The Roots of Evil,” that tolerant and altruistic attitudes have an impact on support for multicultural policies that aim to bridge communities. Therefore, a disposition



towards tolerance was found to support organizational and governmental policy initiatives aimed at promoting multicultural harmony (Shalila, 1993).

For that reason, in order to prevent inter ethnic conflict from happening in the future, the government has also taken various steps to promote inter ethnic tolerance and understanding among different races. According to Oo (1991, p.8), such efforts are a philosophy that “acknowledges the contribution of different races and ethnic idiosyncrasies,” and which is an “impetus for the growth of a multi-racial and multi-lingual society.” This is especially important for Malaysia, which was invented by a shared common experience without existing common nationalism and without common ethnicity. Therefore, the efforts for national integration through tolerance and understanding became a national pursuit in bringing together culturally and discrete groups into a single territorial unit and establishment of national identity (David, 1997). This process reflects a deep recognition and commitment to the idea that racial harmony in plural societies is of paramount importance to national peace and stability. Hence, the racial riots of 1969 had brought about an important lesson that led to changes in the fundamental policies, changes in the socio economic climate and inter ethnic relationships in Malaysia. These mark the unique and significant differences of inter ethnic relationships in Malaysia as compared to the neighboring plural societies. Proudly though, all these had added a very significant page to the Malaysian history book.



1.4 Background of the Research Problem

1.4.1 National Strategies in Promoting Inter Ethnic Tolerance, Peace and Harmony

The legacy of the successive Prime Ministers of Malaysia have testified the importance of inter ethnic tolerance and unity in the country. Since Tunku Abdul Rahman's epoch, known as the Father of Independence; his efforts in overcoming the country's political problems by way of cooperation among the various ethnic groups saw the birth of the Alliance Party in 1955 and this unity has led to Malaya's Independence from the British in 1957. Tun Abdul Razak the second Prime Minister of Malaysia, renowned for launching the New Economic Policy (NEP) in 1971 to tackle vigorously the economic and social disparities, which fuelled racial antagonism; mainly to reduce and eventually eradicate poverty, and to reduce and eventually eradicate identification of economic function with race. Tun Hussein Onn was Malaysia's third prime minister, renowned for stressing on the issue of unity through policies aimed at rectifying economic imbalances between the communities. For his efforts in promoting goodwill among the various communities, Tun Hussein Onn is remembered as the Father of Unity. Tun Dr Mahathir Mohamad, Malaysia's fourth prime minister, launched Vision 2020 in 1990 – a nine-sided objective that defined a goal that Malaysia and its people should be heading to. It serves as a guide for integration of the various ethnic groups into one united Malaysian community. In summary, achieving unity and inter ethnic tolerant have always been the backbone in all policies, philosophies and activities development in Malaysia to ensure a peaceful and harmonious nation.

Another very good example would be the National Education Policy, which is based on the National Ideology or commonly referred to as the "Rukunegara" and hold fast to Malaysia's Vision 2020, which adhered to Malaysia's aspiration of unity and development. In formulating the policies, the Ministry of Education has always dealt with the fine act of balancing the needs of the different races and religious backgrounds. It encouraged the younger generation to know that in a multi-racial and multi religious society, such as Malaysia, the need to be tolerant cannot be emphasized enough. Hence, among the many aims of government educational programmes are; to design the education system to inculcate and nurture national consciousness by promoting common ideals, values, aspirations and loyalties to foster national unity and national identity.

In year 2005, the Racial Integration and Malaysian Unity Programme (RIMUP) or otherwise known officially as "Rancangan Integrasi Murid Untuk Perpaduan" was launched. RIMUP involved grouping together Tamil and Chinese schools with National schools to allow students to conduct join co-curricular, sports and academic related activities together. The key objectives of RIMUP are to encourage teachers and students from pre-school to pre-university to participate in these activities to instill a sense of co-operation and understanding. This programme also aimed to help students to learn how to share and create tolerance and understanding among the students from different ethnic and religious backgrounds (Ming & Tony, 2005)



Going a step further to materialize the government's vision to ensure peace and harmony in the country especially among the undergraduates, a recent initiative was taken to introduce a new subject, "Ethnic Relations," at the university level. The aim of this subject is to help students understand the major concepts, mechanisms and dynamics in successfully sustaining peace and stability in the nation (Shamsul Amri Baharuddin, 2007). It also aimed to nurture and strengthen the spirit of citizenship, to cultivate, instill and foster patriotism, tolerance and respect, to understand and appreciate the history of the nation and to build a national identity among the diverse ethnic groups in Malaysia. In other words, it aimed to reinforce the positives. Consequently, all youth who have been through the national education system, from preschool, secondary schools right up to the university level will benefit from the noble education philosophy and initiatives.

Another classic example of the government's initiatives aimed at promoting inter ethnic tolerance and harmony are the annual multiracial celebrations such as the Festivals of Malaysia, which includes cultural festivals, religious festivals, songs and dance festivals. In these festivals, participants from different ethnic groups, youth especially come together to perform, wearing various costumes depicting the different cultures in Malaysia. Props and musical instruments from the different cultures are usually played together to symbolize their unique yet beautiful characteristics. Such combinations and exchanges of cultures are also frequently highlighted in the national celebration such as 'Hari Merdeka', 'Citrawarna' and

even in the opening ceremony of the Malaysian Games (SUKMA). Hence, multiracial celebrations based on the exchanged of culture in order to promote tolerance and understanding have been an annual affair in Malaysia. The exchange of culture can play an important role in enabling people to overcome mistrust, stereotyping and prejudice but to build peace instead (Ikeda, 2007). Kobayashi (2003) also believes that cultural exchange is a gradual, unsung process that may appear circuitous, but it is actually the surest path to mutual understanding and peace.

1.4.2 Importance of Youth in Vision 2020

The former Prime Minister of Malaysia, Tun Dr. Mahathir Mohamad put forth an ambitious program, “Vision 2020” for his nation; Malaysia is to achieve a fully develop nation state by year 2020. In his working paper, “The Way Forward,” he defined a fully developed nation as

Fully developed along all the dimensions: economically, politically, socially, spiritually, psychologically and culturally. We must be fully developed in terms of national unity and social cohesion, in terms of our economy, in terms of social justice, political stability, system of government, quality of life, social and spiritual values, national pride and confidence (Mahathir Mohamad, 1991, para. 5).

This indicates the importance of national unity as the ingredient of a fully developed nation. To be truly united then, different ethnic groups need to be understanding and tolerant towards each other. The proverbial give and take must precede sentiments and emotions. This is especially crucial for the youth because

youth tend to be more aggressive and act before considering the consequences of their acts. Therefore, again in 1992, Tun Dr. Mahathir Mohamad, delivered a speech titled “A United Malaysian Nation by the Year 2020” where the theme of tolerance is distinct in the following extract of the speech

Building a nation out of a diverse of people with differing historical, ethnic, linguistic, religious, cultural and geographical backgrounds is something more than just fostering consensus on the basic character of a state or nation. It involves the fostering of shared historical experiences; shared values; a feeling of common identity and shared destiny that transcends ethnic bounds, without undermining ethnic identity; loyalty, commitment and emotional attachment to the nation and the flowering of a distinctly national ethos. The emergence of all these factors in turn involves other prerequisites (Mahathir Mohamad, 1992, para. 10).

It is obvious that the challenge for Vision 2020 was a call for all Malaysians to be united, to be tolerant of one another and to work together towards developing the nation in all aspects. Though vision 2020 is a long-term nation-building plan, but fifteen years have passed since the launched in 1991; at the beginning of the Sixth Malaysia Plan. Malaysia has just launched its Ninth Malaysian Plan (2006 – 2010) and it is just another decade to go before the dawn of 2020. Ultimately, the vision’s ideals are highly dependent on the younger Malaysians, who will be the leaders of the country when the Vision comes to pass in 2020 (Lateef, 2005). Therefore, preparing the youth today is so crucial in preparing and ensuring a better tomorrow.

1.4.3 Youth Developmental Competencies

Sensing the importance of youth, over the past several years, there were increased interests in preventing youth problems and promoting healthy youth development. Thus, a wide range of approaches based on various theoretical frameworks was developed. Among them, a fairly recent approach to problem prevention that emphasizes the positive aspects of youth development and health has emerged. This approach emphasizes the promotion of positive development to prepare youth for successful adulthood and not just simply preventing problems from occurring, which is not enough. Drawing on the work of scholars in this area (Connell, Gambone, & Smith, 1998; Pittman & Irby, 1996; Pittman & Zeldin, 1995 & Roth, 1998), the positive youth development approach is based on the assumption that helping youth achieve their full potential is the best way to prevent them from experiencing problems; hence to develop their competencies. The five basic areas of youth development competencies have been developed based on a review of the youth development areas that are seen as being important in order for them to be successful as adults (Pittman, 1991) include, health and physical competence, personal and social competence, cognitive and creative competence, vocational competence and citizenship competence. As youth move towards mastering these areas, they also progress in their feelings of achievement and self esteem (Edginton & Edginton, 1994). Hence, in launching the recent Ninth Malaysian Plan (2006 – 2010), Yang Amat Berhormat Dato' Seri Abdullah Ahmad Badawi, the present Prime Minister of Malaysia too put great emphasis on the development of human

capital as the core priority for the national development in preparation for a truly developed nation by year 2020. It is insufficient for the nation to boast of development solely based on the number of skyscrapers and the advancement of science, information and technology. The Prime Minister wishes all Malaysians to be first class in their outlook and way of thinking. Hence, the young Malaysians especially, need to develop their competencies to face many challenges, both the challenges of localization and globalization. It is not too exaggerating to say that it is utmost necessary for all the youth in Malaysia to be ever competent to ensure the nation achieve her goal of a developed nation successfully by year 2020 and a sustainable development thereafter.

1.4.4 Youth Competencies and Inter Ethnic Tolerant Behaviors

According to Shamsul Amri (2005, p. 5), ‘Malaysia is a plural society that exhibits stability but not without its own problems...Malaysia is a ‘State in Stable Tension’ or indeed a country that has always been ‘in the State of Stable Tension’. Having a heterogeneous society,

The Malaysian society too suffers from serious social divisions and tensions generated by factors such as class, gender, regional economics, religion and a number of others. Based on our past experience, any of these has the potential to develop into an open conflict, along ethnic, class or cultural lines (Shamsul Amri, 2005, p. 6).

Hence, in the name of becoming a developed nation, it is also important to develop understanding, tolerance, respect and a common sense of national identity to prevent inter ethnic conflicts in this plural society.

Building human capital means building capable people. The main target would be the youth because in Malaysia, youth is defined as those between the ages of 15 and 40, which comprised over 40% of the population in 2000 (Department of Statistic, 2005). Therefore, they are indeed a great force that can greatly influence the development and the entire backdrop of Malaysia in the coming years. As Griffin (1995) aptly put it,

Youth is treated as a key indicator of the state of the nation...it is expected to reflect the cycle of booms and troughs in the economy; shifts in cultural values, changes in ethnic relations, concepts of nationhood and in occupational structures. Young people are assumed to hold the key to the nation's future and the treatment and management of youth is expected to provide the solution to a nation's problems (Griffin, 1995, p. 30).

Therefore, all national strategies and initiatives are aimed to develop capable people because a capable person would be competent in all aspects; cognitively, in their personal and social attitude, having the proper skills or vocational competence and a sense of shared value as a citizen. Cognitive competence refers to the knowledge, wisdom and ability to think and differentiate right from wrong and the willingness to understand differences, personal and social competence refers to the proper behavior in readiness to accept differences and different characteristics in

inter personal relations. Vocational competence refers to the awareness of the different behavioral options and choices available to inter ethnic behavior.

Theoretically, these competencies are necessary for the youth to engage in a continuous process of negotiation in their everyday social interaction with people especially with people from the different ethnic groups. It is also important for the youth to search for a common ground in order to coexist peacefully, tolerating the differences that they have and understanding the differences as the product of the Malaysian history without stereotyping or prejudices. The shared national identity or having a strong citizenship competence among the youth of different ethnic groups too would help to bridge the differences as all shared the same sense of belonging to the nation. They would share the sense of wanting to contribute to the nation for the betterment of the society regardless of ethnic differences.

Therefore, to build the infrastructure of a developed nation is not too difficult and can be easily accomplished over night but building human capital in a heterogonous society to ensure a peaceful and stable nation, would require time, patience, proper education and continuous efforts. One of the unique challenges outlined in the Ninth Malaysian Plan (2006 – 2010) which has not been the focus of other Malaysian Plans is the development with a human touch or people-centered development (Zainuddin & Arifin, 2006). Hence, the crucial task at hand is to help the youth to live a healthy lifestyle, manifesting their fullest potential; develop

understanding and tolerant behaviors. Thus, developing their competencies would be vital. This corresponds with the famous quotation made by Franklin Roosevelt in 1945 (as cited in Suren, 1997, p.5), “We cannot always build the future for our youth, but we can build our youth for the future.”

1.5 Problem Statement

As one moves away from 1969, many hold the view that the interethnic problem is decreasing. Such views were strengthened with the implementation of various programmes, activities, festival celebrations and policies such as the government’s affirmative action, NEP, which have brought about a successful improvement of the socio-economic position of different ethnics. Unfortunately, such views were dashed when the unexpected inter ethnic riot broke out at Kampung Rawa, Penang in 1998 and again at the dawn of the new millenium, March 2001 in Kampung Medan, Kuala Lumpur. Majority of the 170 people arrested after four days of violence during the Kampung Medan incident were under 25 years of age. These inter ethnic riots were evidence of unresolved ethnic tensions in the country since 1969 despite the implementation of NEP (Heufers, 2002) and other activities such as educational and inter culture exchanges. Though these conflict were not as serious as the previous riots as they were localized (only a small district in the country was affected), this ‘small’ and continued disturbance (Ramasamy, 2004) frighteningly reveal the frailty of our politico-social fabric. Here lies a gap between

the policies and programmes implemented with the status of inter ethnic relationships among the youth.

Another common discourse often contested is about the behavior of students in the Public Institution of Higher Learning (PuIHE) and Private Institution of Higher Learning (PriHE) where it is a common scenario for students grouping according to their ethnic groups in the classrooms, common rooms, food court and for course work discussions (K. K. Khoo, personal communication, July 26, 2004). Although Malay, Chinese and Indians students coexisted in the same class, they do not really mix (Shamsul Amri, 2004). Such ethnic identification often influences communication between ethnic groups because many false assumptions about others' ways based on own limited experiences were made – stereotyping and ethnocentrism. Each ethnic group tend to use their cultural norms to make generalization about other people cultures and customs and often without a conscious awareness, they use their culture as a universal yardstick which can be way off base to judge other people (Culbertson, 2001).

Similarly, on 13 August 2002, when opening the new University Tunku Abdul Rahman, our former Prime Minister, Tun Dr. Mahathir Mohamad, noted that young Malaysians were not mixing well and thus he expressed concern at the growing racial polarization among the younger generation (Lee, 2004). In year 2005, another youth study was carried out by Azimi Hamzah, in UPM to understand the

climate of ethnic sensitivity among the youth in Malaysia. It was found that a majority of young people in tertiary institutions demonstrated low levels of tolerance in their daily dealings with those from other ethnic groups (Azimi Hamzah, 2005). On further analysis, cutting across fields of study, of those indicating high practice of ethnic tolerance, the percentages of students pursuing Information Computer Technology (ICT), Economics and Engineering program were found to be on the lower extreme (Azimi Hamzah, 2005). Hence, there is a gap between the forefathers' vision (Azimi Hamzah, 2005) in ensuring solidarity through celebrating diversity; a gap between the government's initiatives and aspiration to develop competent youth with the actual inter ethnic tolerant behavior among the multi racial youth.

Thus, with the amount of efforts put in by all sectors, through various activities and channel to achieve tolerance and unity among the different races in Malaysia, especially among the youth, why is racial polarization still a common sight? Why these youth despite having achieved a higher academic level are still not mixing with one another? Are they not competent enough to deal with ethnic, cultural and religion differences? Are there any differences between the youth from the Public and Private Institution of Higher Learning in terms of tolerant behaviors? Would the different program of studies actually influence their developmental competencies and tolerant behaviors? This study attempts to answer these questions.



1.6 General Objective

This study aims to determine the level of inter-ethnic tolerant behavior and if youth developmental competencies are predictors for inter ethnic tolerant behavior for youth in PuIHE and PriHE. This study also seeks to explore the moderating effects of types of IHE and Program of Studies on relationship between youth developmental competencies and inter ethnic tolerant behavior.

1.7 Specific Objectives

The specific objectives of the study are to:

1. Determine the levels of inter ethnic tolerant behavior among the undergraduates of both PuIHE and PriHE and across the five different programs of studies;
2. Determine the level of strength for youth development competencies among the undergraduates of both PuIHE and PriHE and across the five different programs of studies; Bioscience, Social Science, Technical Studies, Business Administration and Information Technology Studies;
3. Determine among the four identified youth development competencies, (Social/Personal Competence, Cognitive Competence, Vocational Competence and Citizenship Competence), that explains the inter-ethnic

tolerant behavior among the undergraduates of both PuIHE and PriHE and across the five different programs of studies;

4. Explore the moderating effects of Institution of Higher Education (IHE) and the two major Fields of Study (Arts and Science) between youth development competencies and inter ethnic tolerant behavior.

1.8 Scope of the Study

This study focuses on the PuIHE and PriHE students because these are the youth who obtain the highest level of education and thus assumed to be most competent. A comparison between the PuIHE and PriHE was conducted because these two types of tertiary education operate on very different modes and medium. For example, most of the subjects or programs conducted in the PriHE are based on foreign curriculum and syllabuses (twining programs) while the subjects and programs conducted in the PuIHE are based on the local curriculum and syllabus (local degrees). Therefore, it is unsure if such differences affect the level of inter-ethnic tolerant between the different ethnic groups. Besides, students from both these universities are the cream of the nation and will be the next in line to join the work forces and will be playing very important and influential roles in the society. This study also made a comparison between the different programs of study because based on an earlier research conducted by Azimi (2005), students from the



different program of study seem to demonstrate a different level of tolerance in the daily dealings between the different ethnic groups.

This study uses the questionnaire developed by a group of experts who conducted a national research on the level of inter ethnic tolerant behavior over the entire youth population in Malaysia. However, only several sections of the questionnaire were selected to be used in this study based on the conceptual and theoretical framework developed. The main theory used in this study was positive youth development theory that focused on helping youth achieves their full potential through developing their competencies in order for them to be productive and effective at tasks and activities that are valued within legitimate social institutions (Pitman 1991). The five crucial competencies Pittman (1991) highlighted that youth should master are health and physical competence, personal and social competence, cognitive and creative competence, vocational competence and citizenship competence. However, the scope for this study will only focus on the four competencies that is personal and social competence, cognitive competence, vocational competence and citizenship competence and their relationship with the inter ethnic tolerant behavior among the PuIHE and PriHE youth. This was also based on the second theory, the Theory of Planned Behavior (TPB) (Ajzen, 1991) used in this study. According to the TPB, the occurrence of a specific behavior of a person can be predicted with the presence of four variables namely, attitude, subjective norms, perceived behavioral control and behavioral intentions. Hence,

with the combination of both these main theories, the conceptual framework for this study was developed. The personal and social competence explained the attitude variable in the TPB model while the cognitive competence explained the subjective norms and vocational competence explained the perceived behavioral control in the TPB model. Finally, an additional construct, citizenship competence was added to the TPB model to predict inter ethnic tolerant behavior. As the conceptual framework for this study aims to identify youth development competencies as predictors for inter ethnic tolerant behavior, the basic aim is to bring about desirable behavioral changes which include changes in knowledge, attitude and practice (KAP). Hence, the fifth competency (health and physical competence) in youth development theory was not included in this study.

The current study did not intend to produce definitive conclusion about the relationship between youth development competencies and inter ethnic tolerant behavior but rather as exploratory in drawing on a predictive model in explaining inter ethnic tolerant behavior as a foundation on which future studies can build on.

1.9 Significance of the Study

1.9.1 Contribution to Knowledge

As Malaysia aspires to be a developed nation by year 2020 with her youth at the forefront, more researches will be needed to review the success or failure of the many programs conducted. To identify the successes or failures of the programs

and activities conducted, there is a need to study about the youth developmental competencies, as the youth are the product of these programs and activities. Besides, the aims of all the initiatives were to develop and equip the youth to be competent; especially cognitively and socially competent. Hence, in response to such a need, this study identifies the level of four of the five basic youth development competencies among the youth in the Institution of Higher Learning and from the different programs of study. Such a result would be a good indication and important data for the nation on the effectiveness of all the initiatives combined.

Based on the literature search, most of the research conducted on youth development competencies over the past few decades, the focus was mostly on how well the youth have mastered each one of those competencies individually. However, this research looked into the relationship between four youth developmental competencies and their inter-ethnic tolerant behavior. This indeed is very significant in adding to the body of knowledge, as this study provided insights and a new way of indicating the importance of youth developmental competencies in relation to other aspects of the social reality the youth lives in. Accordingly, this study also aimed to contribute to the body of knowledge by presenting the snowballing effect of the youth developmental competencies towards predicting other youth positive development, for instance, behavior as explained in the TPB by Azjen (1991).



The second major area of contribution to the body of knowledge for this study was the identification of the status of inter-ethnic tolerant among the youth. Understanding the level of inter ethnic tolerant would be an important indicator for “where do we go from here?” In the first semester of the 2006/2007 academic year, a new subject entitled, “Ethnic Relations” has been introduced to all the undergraduate students in the Public Universities. This subject will also be introduced to all the undergraduates in the Private Universities as well at a later stage. Hence, the results of this study will be added as one of the reference for the use of reviewing the curriculum and subject contents to further enhance the effectiveness of this new subject in the universities.

1.9.2 Contribution to Practice

This study aimed to contribute to youth workers, NGOs, schools and Government agencies in planning and taking suitable actions for positive youth development. As indicated in the nine challenges of vision 2020, the first among the challenges is to establish a united Malaysian nation with a sense of common and shared destiny. This must be a nation at peace with itself, territorially and ethnically integrated, living in harmony with full and fair partnership, made up of one 'Bangsa Malaysia' with political loyalty and dedication to the nation. Secondly, is the challenge to establish a matured, liberal and tolerant society in which Malaysians of all colors and creeds are free to practice and profess their customs, cultures and religious beliefs and yet feeling that they belong to one nation and thirdly, is the challenge to

establish a fully caring society and culture, which is built up by compassion towards others who appear to be less fortunate than one self and a social system in which society will come before self (Mahathir Mohamad, 1991). Hence, possessing a tolerant behavior towards each other's differences is of utmost important. It is only by being tolerant, differences or diversity of culture, religion, beliefs and lifestyles can be celebrated. Also, in that mental attitude of tolerance, lies the secret of the strength of a harmonious Malaysia.

Therefore, this study is significant in that the competencies that influence the tolerant behaviors among the youth and the strength of their relationship will be identified. Such research findings could provide the research base benchmark for the future in determining the most suitable actions to be taken for the maximum benefits or outcomes for the youth workers, youth organizations, NGOs, schools and Government agencies in helping the youth to unleash their fullest potential.

1.9.3 Contribution to Policy

The research findings of this study aimed to be the basis for policy development especially in developing the National Youth Development Policy and the Policy for National Unity. This would be in line with the Government's objective to

“...establish a holistic and harmonious Malaysian youth force imbued with strong spiritual moral values, who are responsible, independent and patriotic; thus serving as a stimulus to the development and prosperity of the nation in consonance with the Vision 2020” (Ministry of Youth and Sports, 1997, p. 11).

There were many reports on the rising number of youth involved in racial clashes in school, outside school and in the housing areas. Though the cause of the conflicts were unconfirmed, but whatever the cause was, the consequences would lead to open ethnic conflict, which would be very disastrous to the stability of the country. Hence, with each rising ethnic conflict, the authority would implement certain policies or recommend new policies to curb the problems. However, most attempts have not been supported by empirical findings on the causes. Therefore, this study aimed to contribute to policy development by strengthening the understanding on the status of inter ethnic tolerant among the youth and how the basic youth developmental competencies can play a role in it. Thus future policies could focus on building the competencies through many ways and channels to enhance the inter-ethnic relationships among the youth.

Recommending the right policies and implementing them is not an easy task for the authority in a multi racial country. There are many considerations one has looked into and be sensitive not to take sides, stereotyped or being biased. Hence, developing policies and implementing policies based on hard facts and research evidence is foremost important for such a heterogeneous society in order to maintain peace and order. In this way, this study aimed to make a humble contribution towards the future formulation of policies that will directly and indirectly help the nation to achieve its vision of building a peaceful and harmonious developed nation with many capable youth united for the same goal.

1.10 Limitations of the Study

As this is a maiden study in youth development competencies and inter ethnic tolerant behavior among the youth in Malaysia, there are several limitations that cut across all sections of the study that has to be mentioned.

Firstly, the limitation lies in the sampling methodology and the size of the sample. As this study focus on the inter ethnic tolerant behavior among the youth in Malaysia, the sample for the study, however, only includes youth from the three major ethnic groups in Malaysia, namely Malay, Chinese and Indian. The main focus were only on youth in the Peninsula Malaysia, hence, youth from the other ethnic groups especially from East Malaysia were not included as they were assumed to be the minority. This obvious limitation was due to the constraint of time and resources. Secondly, based on the population in Malaysia, the ratio for the three main ethnic groups is 5:3:2. Hence, the study sample size also fell short of its original sample size goal of achieving a ratio of 5:3:2 in determining its ethnic combination. It was not easy to achieve the above stated ratio because other constraints were also taken into consideration.

The third limitation regarding the sampling methodology and sample size lies in the inability to do a perfect randomized sample for the study. Given the main objective of the study is to compare the level of competencies and inter ethnic tolerant behavior between the youth in PuIHE and PriHE, only universities listed as

'Perdana Universities' were selected. Though a randomized sampling method was conducted initially to pick and select the universities, not all were willing to participate in the study. Hence, those selected in the first round of randomized sampling but rejected to participate in the study were omitted. Samples were then selected again from the pool of 'Perdana Universities'. Finally, there were imbalances in the number of students from the PuIHE and PriHE; there were more PuIHE students in the sample of the study. Similarly, the study also aim to compare the level of inter ethnic tolerant and level of youth development competencies among the students from the five different fields of studies. Randomized sampling was conducted to determine the sample size but due to unforeseen circumstances, not all the students turned up to participate in the study as promised. Hence, the sample size for each of the field of study was different as planned. This is a common dilemma in social science research as it involves people. It is usually impossible to obtain a perfectly randomized sample for analysis (Blaikie, 2003).

The fourth limitations of the study, is the challenge to measure 'Tolerant Behavior' and youth development competencies. The work to measure a person's tolerant behavior and competencies in social science is rather subjective as compared to the biosciences where laboratory experiments will definitely tell with the change of colour, weight or reaction in the elements. Furthermore, questions developed to measure a person's tolerant behavior towards another person of a different ethnic

group are very much different from the questions being used to measure the same variable in a different country or a different setting. The element of culture, sovereignty, history, political climate, policies, economic stability, exposures and personal experiences; all influences a person's behavior towards one another; influences the level of competencies and determine the status of inter ethnic tolerant behavior. Therefore, the development of a new instrument to measure inter-ethnic tolerant from the local perspective; will be subjected to many questions and considerations. In response, the instrument developed was highly dependent on the youth development theory and theoretical framework for tolerant behavior in Malaysia where factor analysis was also conducted to identify those 'measurable' areas of competencies and tolerant behavior. In this way, youth development competencies and tolerant behavior was measured to the greatest extent possible through available research methods.

1.11 Definitions of Key Terms

1. Youth Development Competencies:

A consistent theme in the research literature on youth development is that positive growth and development are fostered when the youth have developed a sense of industry and competency, a feeling of connectedness to others and to society, a belief in their control over their fate in life and a stable identity (Understanding Youth Development, 1997). As youth is a transition period to adult life, Pittman

(1991) has identified five key competencies that youth should acquire in order to be successful adults, which includes:

- a. Health/Physical Competence
- b. Personal/Social Competence
- c. Cognitive/ Creative Competence
- d. Vocational Competence
- e. Citizenship Competence

1a. Personal/Social Competence:

Theoretically, personal/social competence is defined as having the intrapersonal skills (ability to understand personal emotions, have self discipline); interpersonal skills (ability to work with others, develop friendships and relationships through communication, cooperation, empathizing, negotiation); coping/system skills (ability to adapt, be flexible, assume responsibility); judgment skills (ability to plan, evaluate, make decisions, solve problems) (Pittman & Cahill, 1992).

In the context of this study on inter ethnic tolerant behavior, if the youth are personally/socially competent, they will have the skills to make the right evaluation and judgments without prejudices and biases, they will be able to acknowledge the differences in culture and religion and they will be able to develop positive relationship based on their interpersonal and intrapersonal skills. Hence, in terms of its operational definition for the current study, personal/social competence is



operationalized as the person's views in accepting and corresponding judgment towards issues related to inter ethnic relationship.

1b. Cognitive Competence:

Cognitive competence in the youth development theory includes two overlapping but distinct sub construct (W.T. Grant Consortium on the School Based Promotion of Social Competence, 1992). The first form of cognitive competence defined as the ability to develop and apply the cognitive skills of self talk, the reading and interpretation of social cues, using steps for problem solving and decision making, understanding the perspective of others, understanding behavioral norms, a positive attitude toward life and self awareness. The second aspect of cognitive competence is related to academic and intellectual achievement; having broad based knowledge, ability to appreciate, participate in areas of creative expression, problem solving and analytical skills, interest in learning and achieving (Pittman & Cahill, 1992,).

Therefore, in this study of predicting inter ethnic tolerant behavior among the youth, the conceptual idea is that if the youth have cognitive competency, they are able to understand and interpret social norms, understand the behavioral and cultural norms of others, able to analyze, appreciate and perform creatively towards behaving tolerantly towards each other. Hence, the operational definition for cognitive competence in the context of this study is their willingness to understand



the social, politic and cultural norms in navigating their behavior tolerantly towards the different ethnic groups.

1c. Vocational Competence:

Pittman and Cahill (1992) defined vocational competence as having a broad understanding/ awareness of vocational (and avocational) options and of steps needed to act on choices; adequate preparation for chosen career, understanding of value and function of work (and leisure). Similarly, in the study of tolerant behavior in inter ethnic relations; having the awareness of the different behavioral options and choices to act is essential to avoid conflict and misunderstanding. Such awareness and understanding helps the youth to be resilient and have self confident, being in control of their actions in behaving tolerantly towards differences that bound to occur in any inter ethnic relationships.

Based on the above definition, vocational competence is operationalized in this study as having the self belief and awareness of the different behavioral options in relation to inter- ethnic tolerant behavior.

1d. Citizenship Competence:

Theoretically, citizenship competence has been defined as having the understanding of history and values of one's nation and community and the desire to be involved in efforts that contribute to the nation and community (Pittman & Cahill, 1992).



Youth with positive citizenship has the dual effect of providing needed services to the community and society, and promoting psychological, social and intellectual growth for the young citizen (Conrad & Hedin, 1982; Janoski, Musick & Wilson, 1998; Johnson, Beebe, Mortimer & Snyder, 1998).

In this current study of inter ethnic tolerant behavior, youth with citizenship competence would promote positive relationship with one another; sharing the same national values and goals and, they would be indifferent and these will be the positive forces that unite the different ethnic youth. Therefore, the operational definition for citizenship competence in this study is defined as having shared values, having the desire to contribute to the nation and being indifferent towards differences across ethnic groups.

2. Perceived Inter Ethnic Tolerant Behavior:

Tolerance calls for the cultivation of attitudes of openness, positive interest in differences and respect for diversity, sowing the seeds of the capacities for recognizing injustice, taking steps to overcome it, resolving differences constructively and moving from situations of conflict into reconciliation and social reconstruction (UNESCO, 1994). In inter ethnic relationship; tolerance is necessary because differences and diversities are present. It is only when confronting such diversities that the acceptance of others is truly tested (Robinson, Witenberg & Sanson, 2000; Vogt, 1997; Witenberg, 2000). Tolerance also

involves a conscious rejection of biased beliefs and behavior and the valuing of others irrespective of their color or creed. Acceptance of differences and diversity entails 'enthusiastic endorsement of differences' (Walzer, 1997, p.11).

Hence, perceived inter ethnic tolerance behavior in this study is operationalized as the acceptance, respect and appreciation of another ethnics' beliefs, cultures, religions and practices without necessarily being them.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Ethnic relations in Malaysia have its own characteristics quite different from those existing in other countries. Firstly, the groups concerned may be more appropriately referred to as ethnic rather than racial. This is because ethnic groups are based on socio-cultural factors while racial group more on physical ones. Secondly, the various ethnic groups in Malaysia actually belong to the same racial stock, Mongoloid. Thirdly, each ethnic group is not and cannot be regarded as homogeneous, socially, economically or politically. Socially, each group can be divided into smaller sub groups that can be distinguished from one another by the different economic and political functions that their members perform (Syed Ali Husin, 1984).

2.2 Inter Ethnic Relations

Malaysia is a society that has inter-ethnic structure, a plural society. Pluralism denotes tolerance for differences. According to Furnivall (1948), who first formulated the concept, stated plural society exists when there are

Different sections of the community living side by side but separately, within the same political unit. Each group holds its own religion, its own culture and language, its own ideas and ways...Even in the economic sphere there is a division of labor along racial line (Furnivall, 1948, p. 304-305).



However, Freedman (1960) accepts the concept of plural society but stated it does not consist of ethnic blocs as Furnivall implied but consists of ethnic categories within, which small groups emerged to form social ties inside and across ethnic boundaries. Although it may appear that each ethnic group is a homogeneous entity quite distinct from the others, closer examination reveals that the reality is not so simple. Within each group there exist differences.

According to Oo (1991), under the leadership of the first Prime Minister of Malaysia, Tunku Abdul Rahman Putra, cultural pluralism flourished. Anchored to a philosophy of unity in diversity, cultural pluralism provided the impetus for the growth of a multi racial and multi-lingual society where racial sentiments and ethnic differences were sublimated in the interest of decolonization. The process of decolonization was aimed at initiating administrative reforms, which promoted a policy of “Malayanization”. The philosophy of unity in diversity acknowledged the contributions of different races and ethnic idiosyncrasies to the post-independent development. The practice of this philosophy, however, assumed the harmonious co-existence of the various ethnic groups.

In the post-colonial period, immigrants had to undergo a process of ‘internalisation’; the willingness on the part of the ethnic minority to develop fluency in the Malay language and to acquire some knowledge of Islam and to regard the significance of certain other aspects of Malay culture (Chandra

Muzaffar, 1983). Malay culture given its historical relationship with the land will have a bigger role to play in the evolution of a national culture than the other cultures. Anyone who understands integration between indigenous and non-indigenous elements will realize the legitimacy of this position. However, the majority community must help expedite this adjustment. As the minority adjusts, the majority should remove gradually those indigenous-non-indigenous dichotomies in education, economics and politics, which tend to perpetuate the 'outside' image of the minority. At the same time, the majority must be prepared to accept certain crucial facets of the cultural life of the minority like its language and religion as legitimate dimensions of the nations' culture. It is obvious that this mutual adjustment is not taking place as harmoniously as it should (Chandra Muzaffar, 1983).

At the same time, in working towards a national identity, one cannot afford to ignore the impact of the past upon the present. Just as his background will influence an individual's identity, so a nation's identity will be determined by its history to some extent. It needs to be stressed that it should not be created artificially and must be acceptable to all the Malaysian communities. Firstly, national identity will comprise elements that all communities can identify with. Secondly, it will have some relationship with the historical background of the country just as it must be relevant to the contemporary setting. Thirdly, it must

evolve through time; as a result of inter ethnic exposure and interaction (Malaysian Identity and the Chinese Community, 1984).

Community identities will remain; though with the growth of a national identity, identification with one's community will not be as strong. Obviously the Malay, Chinese and Indian community identities will continue to exist and there is nothing wrong with this. On the contrary, community identities within a national identity may even serve useful purpose in that they provide people with a sense of emotional well being. They anchor them to a certain cultural reality, which carries deep meanings. What one should avoid, however, is a situation where practices within a certain cultural community generate suspicion and distrust among others. This is why one should explain one's culture to members of other communities. Otherwise, the impression may be created that one is trying to assert one's community identity at the expense of the national identity. The best way of avoiding this is to emphasize the underlying values rather than the outward forms. More than language, literature, drama, art, architecture, attire and food, it is the eternal values of justice, truth, freedom and equality that should determine a nation's identity (Malaysian Identity and the Chinese Community, 1984). The concept of identity should be in harmony with all the cultures present in the country.



All Malaysians generally hold to the same basic values, which in turn determine the fundamental goals of behavior (The Revolt Against Accepted Values, 2001). There are, however, individual and ethnic differences in the relative importance assigned to each value category and this results in the emergence of different hierarchies of values. The tenets of the Rukunegara are the product of one attempt to articulate certain commonly accepted values in Malaysia. These tenets are:

That the nation is dedicated to achieving a greater unity of all her peoples, to maintaining a democratic way of life, to creating a just society in which the wealth of the nation is equitably shared, to ensuring a liberal approach to the country's rich and diverse cultural traditions, and to building a progressive society oriented to modern science and technology; to attain these ends, the Malaysian people are to be guided by the principles of belief in god, loyalty to king and country, upholding the constitution, rule of law and good behavior and morality (Larson, 2000, p. 3-17).

This is the statement of basic national values. Everybody knows how he or she should act but not everybody always acts, as they should. Even though the values and objectives may be common, the means of realizing or satisfying them may be most uncommon. Finding a consensus may be impossible; it is possible by undertaking such a search to understand more about the values of others, particularly because so little is known about them at present.

On the other hand, many have argued how cultural symbols affect the ethnic identity but the counter argument states that cultural symbols are highly flexible and can be rearranged for new purposes while seeming to remain unchanged (Cohen, 1974). Under some circumstances, feelings of cultural unity and ancestral

attachment are the major source. Under other and more common circumstances in the world today, these are only weakly felt; it is the perception of shared interests that is dominant (Cohen, 1974).

There is another influence, the 'characterological' factor; where their ethnic attachments may vary widely in their feelings and attitudes, because of different individual experiences and tendencies (Yinger 1989). However, two influences are of special importance in affecting this characterological factor: the senses of being marginal to one's own group and the sense of being marginal to or alienated from the state and the larger society by politics. The marginality that other persons feel refers not to their own racial or ethnic group but to the larger society within which they live, particularly with its polity (Yinger 1989). This may be expressed by a transfer of loyalty or of its strongest expression, to the racial or ethnic group. These will make one person embrace an ethnic identity fervently, while another, similarly placed structurally and culturally, but with different life experiences, will regard his ethnic identity lightly (Yinger, 1989).

That's how some of the youth in Malaysia felt today towards their ethnic identity. For example, the Chinese and Indian youth in Malaysia now may be the 3rd or 4th generation from their ancestors who came from China and India. Through the process of assimilation, acculturation and accommodation, the nature of their ethnic identity could be different. How they embrace their ethnic identity would be

different compared to their forefathers. Thus, their inter-ethnic relationships may differ.

It is true that ‘...ethnicity emerges as the basis for collective action when there are clear advantages attached to ethnic (versus religious, kinship, class, or some other) identity’ (Olzak, 1982, p. 254). Therefore, to develop a sense of national identity is important in order to enhance the collective actions and tolerant behavior among all Malaysians especially the youth.

Ethnic relations is also influenced by the theory of rational choice which states by Banton (1983) where he developed a rational choice model of inter ethnic relations, which seeks to integrate the study of ethnicity and nationalism with the study of race relations. Its framework has four premises; firstly, men act so as to maximize their net advantage. Secondly, action has a cumulative effect, as present actions may limit or constrain subsequent actions, thirdly, actors utilize physical or cultural differences to generate groups and categories and finally, when relationships between groups which are held to be physically distinctive are determine by an imbalance of power, racial categories are created.

Viewing ethnic relations in terms of behavior, Jelinek and Brittan (1977), Davey (1982, 1983), Tomlinson (1983) and Woods (1990) have all attested to the fact that there is a lot of ethnocentric behavior among pupils which is evident from the age

of seven and becomes more ethnocentric at the secondary level. They promote their own feelings of solidarity rather than mix with other students. However, Denscombe (1983) reported in his study of friendship patterns that there was interethnic mixing. The pupils were 'equally prepared to include a pupil from a different ethnic group among their friends' (p. 106). People, when they are with their own 'crowd', feel, experience and act in ways which may be quite dissimilar from when they are with some other groups. In this sense, their 'situational selves' differ (Doherty & Weinreich, 1982). They may in this way act with alternative self-images that imply attenuated patterns of identifications with others; depending on which side of a social boundary their interactions take place. Thus, members of a subordinate group may feel confident on home territory but alienated when crossing into the territory of the institutions of the super ordinate community. Such situations are part and puzzle of inter ethnic relations in Malaysia.

2.2.1 Conflict in Ethnic Relations

Interethnic tensions within a nation's borders are a world-wide phenomenon since thousands of years ago to the present. To understand inter group relations, one must recognize that differences among various people causes each group to look at other groups as strangers. The interplay between the variables of race, ethnic group and social class is important for understanding how some problems and conflicts arise.



Social identity theory (Tajfel & Turner, 1986) holds that 'in group' members almost automatically think of their group as being better than 'out groups' because doing so enhances their own social status or social identity and thus raise the value of their personal identity or self image. This assumption that 'we' are better than 'they' are, generally results in out groups becoming objects of ridicule, contempt or hatred. Such attitudes may lead to stereotyping, prejudice, discrimination and even violence (Tajfel & Turner, 1986). Another cause of ethnic conflict is related to hidden biases. According to a report from Tolerance.Org, (a principal online destination for people interested in dismantling bigotry and creating, in hate's stead, communities that value diversity), a growing number of studies showed a link between hidden biases and actual behavior. In other words, hidden biases can reveal themselves in action, especially when a person's efforts to control behavior consciously flags under stress; low level of tolerance (Hidden Bias: A Primer the Effects of Prejudice and Stereotypes, 2003). The implication of this study would be if the youth are intolerant, they may possessed hidden biases of other ethnic groups. Therefore, prejudices and stereotypes and discrimination could exist.

Experiments were being conducted among school teachers in America to determine whether a strong hidden bias in someone results in more discriminatory behavior (Hidden Bias: A Primer the Effects of Prejudice and Stereotypes, 2003). The results indicated that those who showed greater levels of implicit prejudice or stereotypes towards black or gay people were unfriendly towards them. Secondly,



subjects who had a stronger hidden race bias had more activity in a part of the brain known to be responsible for emotional learning when shown black faces than when shown white faces. Whether laboratory studies adequately reflect real-life situations is not firmly established. But there is growing evidence, according to social scientists, that hidden biases are related to discriminatory behavior in a wide range of human interactions, from hiring and promotions to choices of housing and schools (Hidden Bias: A Primer the Effects of Prejudice and Stereotypes, 2003).

It is unrealistic to think that racial differences can be obliterated in a multi-racial and multi religious society (Oo, 1991). Necessary to identify ‘what’ (nature or form), ‘how much’ (degree or extent) and ‘where to’ (directional growth) of unity that is needed to reinforce common or shared values of commitment, sacrifice, co-existence, co-operation, and esprit de corps, apart from those that are enumerated in the five tenets of the National Ideology. This is because among the Malays as well as the Chinese; language, culture and religion serve not only as strong bonds for ethnic unity, but ironically can also be whipped up as political issues for the purpose of buttressing support for the political elites, although with possible divisive consequences inter ethnically (Syed Ali Husin, 1984).

Under the calm surface of the plural society, feelings of frustration and discontent are always present among various ethnic groups, no matter whether they are big or small but very often being voiced by a variety of educational, cultural and welfare

organization as well as political parties that are communal in practice (Banton, 1983). Apart from colonialism and the implementation of citizenship laws in the past, the government's ethnic policies and competition between Malay and non-Malay elements in the middle class are partly responsible. More important perhaps is the influence of vested interests in the economy and politics, which benefit from the perpetuation of ethnic policies. Almost every issue and institution is perceived along ethnic lines (Chandra Muzaffar, 1983). Therefore, if the Indian majority learns Malay, it is mainly because of economic and educational requirements. Similarly, if the Malay majority is aware of an Indian presence it is largely because the need to co-exist (Chandra Muzaffar, 1983). Therefore, the Malays, the Chinese and the Indians are, and are perceived by one another as separate, though not completely compartmentalized social entities because there are social ties between groups and individuals, derived from and strengthened by economic and political institutions and associations which link them inter ethnically (Syed Ali Husin, 1984).

The reported existence of racial polarization and its gradual deterioration especially in educational institutions throughout the country, attests to the rising spectra of inter racial hostility (Oo, 1991). The pervasiveness of this hostility however remains pure conjecture at this point in time. Unless the phenomenon of racial polarization and its associated manifestations particularly in the forms of sponsored mobility, preferential treatment, tokenism, '*bumiputeraism*' and gender, race,



ethnic, employment, doctrine stereotypes are taken seriously, the resurrection of inter racial conflict in any guise is likely to have damaging consequences for the country (Oo, 1991). The likely consequences are setting the country's clock back to the infamous racial riots of May 13, and perhaps the demise of parliamentary democracy (Oo, 1991). These speculative conjectures however should not detract from the bottom line of affirmative action. Ethnocentric interests are not all right and plural interests are not all wrong, especially in a multi racial and multi religious country where mutual respect for individual racial identity and idiosyncrasy and ethnic sensitivities is a crucial key to national unity and political stability.

2.2.2 Tolerance

It cannot be emphasized enough the importance of promoting tolerance in this century and for centuries to come. Since the end of the cold war, there has been a steady increase in social, religious and cultural conflicts (UNESCOSHS, 2007). Too many have quickly turned into full scale armed conflicts; too many fundamental human rights have come under direct assault, too many lives have been lost. A close examine into the historical facts, what does the revival of historical grudges and armed conflict in the Balkans have in common with the alarming increase in the number of racial assaults in Western Europe? What formal relationship, if any, exists between extremist or supremacist groups around the world? What does genocide in Rwanda have to do with wars led by extremist religious groups in other parts of the world? Is there any link between the violence



that targets writers, journalists and artists in one country and discrimination against indigenous people in another country? The only immediate available answer is that intolerance is on the increase everywhere and that it is killing on a massive scale (UNESCOSHS, 2007). Intolerance raises many moral questions. Intolerance is increasingly seen as a major threat to democracy, peace and security. Understandably, the issue is alarming governments and the public. Yet, any talk of intolerance raises more questions than it answers. It is obvious that intolerance has been ever present in human history. It has ignited most wars, fuelled religious persecutions and violent ideological confrontations (UNESCOSHS, 2007). Hence, the elimination of all forms of discrimination and intolerance including those based on race and colour is one of the main aims of the United Nations Culture of Peace Declaration (UNESCOSHS, 2007). Reducing discrimination based on race and culture is an important matter in a world where monoculture societies are virtually extinct today.

As an outcome of changing geographical and political realities everyone lives in a complex world that is racially and culturally diverse but not necessarily harmonious. Tolerance is only necessary when difference or diversity is present because it is only when confronting diversity that our acceptance of others is truly tested (Robinson, Witenberg & Sanson, 2000; Vogt, 1997; Witenberg, 2000). “Toleration makes difference possible, difference makes toleration necessary” (Walzer, 1997, p.12). Clearly understanding tolerance and acceptance as applied to



race and culture is becoming an important research goal both theoretically and practically (Witenberg, 2000).

Tolerance can be defined as the absence of prejudice if what is disliked, towards those “whose practices, race, religion, nationality, etc., different from one’s own” (Robinson et al., 2000 p. 3). Burwood and Wyeth (1998) argue that one should reach an intentional position where each one disapproves of fewer things. Otherwise tolerance without conscious deliberation and intentions is mindless. Tolerance is that it involves a conscious rejection of prejudiced attitudes, beliefs and responses. “One’s own negative stereotypes are recognized, judged against experiential knowledge or value systems, and rejected” (Robinson et al., 2000, p. 4). Recognizing and rejecting prejudicial views moves a person from simply being a narrow-minded bigot who shows restraint (Burwood & Wyeth, 1998) to a person who is tolerant both in judgments and conduct.

Perhaps the strongest and most ideal way to think of tolerance hinges on full acceptance of others whilst differences between the ‘others’ and oneself are recognized (Witenberg, 2000). This involves a conscious rejection of biased beliefs and behavior and the valuing of others irrespective of their colour or creed. Acceptance of differences and diversity too entails “enthusiastic endorsement of difference” (Walzer, 1997, p.11). However, there is little research that has specifically addressed such a definition of tolerance (Robinson et al., 2000).



Is tolerance affected by what one asked to tolerate and to whom one is asked to extend their toleration? It appears that the expression of tolerance can vary across different domains and across contexts (Vogt, 1997). Several studies have shown that tolerance and intolerance coexist in individuals of all ages including children and adolescents (Witenberg, 2000). It appears that people are selective about whom and what they will tolerate and under what circumstances they are prepared to be tolerant. Hence it is argued that tolerance cannot be conceptualized as a global structure and should be viewed as multifaceted and context sensitive (McColsky & Brill, 1983, Sigelman & Toebben, 1992; Wainryb, Shaw & Maianu, 1998). Similarly, racial tolerance is contextual in nature and level of tolerance depends on whom and what we are asked to tolerate.

“Focused Tolerance” have its origin in contact and experiences with people. It appears that personal experiences can colour and influence some of the attitudes and help to shape their prejudices and beliefs (Witenberg, 2000). As noted in the Declaration of Principles on Tolerance (1995), among other things, the declaration affirms that laws are necessary but not sufficient for countering intolerance in individual attitudes.

Intolerance is very often rooted in ignorance and fear: fear of the unknown, of the other, other cultures, nations and religions. Intolerance is also closely linked to an exaggerated sense of self-worth and pride, whether personal, national or religious, which are taught and learnt at an early age (UNESCOSHS, 2007, para. 18).



2.2.3 Review of Theories and Inter Ethnic Studies

Knowing the importance of inter ethnic tolerance, social interactions among students of different ethnic groups has been a major focus of study in the United States, the United Kingdom, Canada and Australia. Many schools in these countries have students from a variety of ethnic, religious and cultural backgrounds. Therefore, there is immense value of looking at social relationships in schools because it has often been said that the schools can be viewed as a society in miniature, both reflecting and affecting the wider society of which it is a part (Ford, 1969). Thus one might hypothesize that peer social organization of the school would tend to incorporate the class stratification of the larger society (Ford, 1969). In Malaysia, a multi ethnic society, universities have a crucial role to play in promoting social cohesion, nurturing national consciousness and achieving national unity and integration. It is in the universities where the students get to mix with people from different ethnic, coming from the different states in the country, bringing with them the different cultural practices and beliefs; a Malaysian society in miniature. Hence, the social organization and patterns of socialization in the universities will have a deep impact towards the socialization behavior in the bigger Malaysian society as these students graduate and move into the society for employment.

Most research conducted in Britain since the 1970's suggested that pupils prefer to mix with others in their own ethnic group (Woods, 1990). Jelinek and Brittan

(1977), Davey et al. (1982, 1983), Tomlinson (1983) and Woods (1990) have all attested to the fact that there is a lot of ethnocentric behavior among pupils which is evident from the age of seven and becomes more ethnocentric at the secondary level. They promote their own feelings of solidarity rather than mix with other students. Denscombe (1983) found that primary school students exhibited ethnic bias in their friendship choices. Similarly, Santhiram (1999) had studied friendship patterns among students of different ethnic groups in some Malaysian secondary schools. Their results revealed that there is a high level of polarization and the students were extensively using racial and ethnic distinctions in their relationships. It suggested that students' self esteem, ethnic identity, level of linguistic competence in Bahasa Malaysia and their primary school background were the main factors that influenced their choice of friends in schools.

In 2004, a study was conducted by a group of researchers on the friendship patterns, social interactions, ethnic stereotypes, prejudice and name calling among the three major ethnic group in Malaysia, namely the Malay, Chinese and Indian students in a multicultural social environment in schools (Hazri Jamil, Lee, Santhiram, Hairul Nizam Ismail, Nordin Abd. Razak, Subadrah & Najeemah Md Yusuf, 2004). In relation to the friendship patterns, the results indicated that the Indian students were most likely to report ethnically diverse friendship choices. About 49.5% of the Indian students chose friends that were from different ethnic groups as compared to 16.6% among the Chinese students and only 11.2% among

the Malay students. The Chinese and Malay students were more likely to report ethnically homogenous friendship choices (Hazri Jamil et. al, 2004). The reasons for these choices were unclear.

The polarization of friendship choices were further supported in a similar study conducted on the students' perception on studying and discussing learning materials according to ethnic groups. The results revealed that Malay students preferred to study and make discussion with their friends from the same ethnic group with only 1.4% reported they have never studied or discussed with other Malay students. This followed by the Chinese students; 61.1% of the Chinese students always studied together while only 4.2% never studied with their Chinese friends. The Indians have often studied and discussed with different ethnic students with as many as 7.1% reported they have never studied with their Indian friends.

In year 2005, a study was conducted to measure the national unity index in the state of Penang with total respondents of 1441 age 15 and above (Mohamad Zaini Abu Bakar, 2006). The overall unity index obtained for the state of Penang was 3.39 with 5 being the maximum index. The Chinese community obtained the highest index value of 3.43 as compared to the Indian Community with an index of 3.39 and lastly, the Malay Community at 3.32. However, when compared the index of national unity against income, it was found that those with higher income has a slightly higher index value (3.51) as compared to those in the lower income group



(3.35). The index of national unity was also higher when compared between respondents with a higher level of education (3.51) and respondents with only the primary level of education (3.23). Lastly, when compared between youth of the three major ethnic group, the national unity index were generally higher among the Chinese youth (3.46) followed by the Indian youth (3.43) and finally followed by Malay youth (3.38). Though these results were obtained only from the Penang island, it gave a general idea on the climate of national unity in Malaysia but how competent are the youth in facing the on going challenges of inter ethnic relations and the study on their level of inter ethnic tolerant are still lacking.

2.2.4 Inter Ethnic Tolerance among Students in the Universities

In the past ten years, there has been an increase in the number of institutions of higher learning in the country. This was the result of the government's efforts to improve the literacy rate and to increase the number of graduates in the country. As the world is moving towards globalization, it is imperative to develop the k-economy, knowledge and cognitive ability as well. Therefore, many private colleges and university colleges, public universities and semi government universities were established. Youth who have completed their form five education have more choices to further their education through various colleges and universities. In other words, more opportunities for education, cognitive development, were created especially among the youth.

A striking transition that occurs during youth is the shift in cognitive development from concrete to formal logical thought (Furth, 1969; Piaget, 1965). With formal-logical thought, the individual moves from thinking about real or known objects to ‘thinking about thinking.’ This enables an individual to construct various logical possibilities (e.g. “what if...”) or formulate cause and affect hypotheses (e.g. “if...then...”) about possible relationships in the physical or social world (Furth, 1969 & Piaget, 1965). Such development is predicated on individuals’ abilities to reflect on their interactions with others and construct meaning from these interactions based on logical possibilities. Hence, youth in the institution of higher learning, being in the highest seat of education, believed to have developed such logical thought cognitively. It is of great interest of this study to evaluate its effect towards interactions of inter ethnic relationships.

Piaget (1991) is sometimes called a constructivist, because in his theory, children and youth mentally ‘construct’ concepts through the process of active experimentation and reasoning. He saw humans as highly motivated to organize the experiences they have into concepts and theories of how the world works. One of the implications of Piaget’s ideas is that young people learn best on their own or with peers – knowledge that is taught to them lacks the depth of understanding that comes from this process of figuring things out. Youth learn by doing, including learning from their mistakes. Piaget would say that this type of development is superior because it was derived from active experience. Constructivist theories,



suggest that youth have the powerful natural tendencies to develop and to organize their experiences into understanding. The experiences the youth have in the university setting provided input for them to organize their thoughts about the ‘other’ ethnic groups.

Another sociologist, Vygotsky (1962, 1978), suggested that one should stop thinking of development as something that happens inside a young person’s mind as his key idea. While Piaget pictured development as coming from the child, Vygotsky (1962, 1978) saw it as coming from interactions between a child and other people. To understand development, he argued the focus should not be the solitary individual, but rather on this shared interaction. Children and youth gradually internalize what they gain from these interactions, but learning starts with the interactions not the individual. Development is a collaborative process. Hence, the environment and peer groups are very important elements that influence the youth perceptions of inter ethnic relations and thus influence their toleration.

Dworkin, Larson and Hansen (2002) conducted a research to identify the developmental processes that occur during youth participation in extracurricular and community based activities. The youth reported both personal and interpersonal processes of development. The inter-personal experiences included experiences of forming new peer relationships, and in the process, developing a deeper understanding of their peers especially peers of different race. Experiences



of interethnic affiliation however, were mentioned by several youth in the sample. They also reported experiencing increased empathy and understanding towards peers of different ethnic groups. Both the public and private institutions of higher learning in Malaysia accommodate youth from a range of ethnic groups and backgrounds. There are many extra curricular and community based activities in these institutions as well. Hence, youth studying in these institutions of higher learning have lots of opportunities to experience interaction with peers from different ethnic background through such extra curricular and community based activities. Based on the literature review, these youth should demonstrate a higher level of understanding and greater level of tolerance with each other. In reality however, these youth are not 'really mixing' (K. K. Khoo, personal communication, May 12, 2005).

From the perspective of Inter-group Contact theory (Allport, 1958), it is believed that continuous interactions among members of different ethnic groups would lead to improvement in relationships among them (Garcia, Castillo & Umpierrez, 1997). According to Allport (1958), this expectation will have a positive result if certain conditions prevail. He has formalized the theory stating that inter-group contact would lead to reduce inter group prejudice if the contact situation embodies four conditions. Firstly, equal status between the groups in the situation; secondly, common goals; thirdly, no competition between the groups; and finally, authority sanction for the contact. Nevertheless, Allport (1958) emphasizes that cooperative



interracial interaction aimed at attaining shared goals must be promoted to ensure positive inter group relations.

Woods (1990) studied the social interaction among pupils and postulated that a variety of factors contributed towards the types of interethnic social interaction. In some cases the classroom life of ethnic minority children is conflictual due to teachers' attitudes and expectations. Some teachers' remarks and prejudices had led to ethnically homogenous group formations to promote their own feelings of solidarity. In his study, the pupils had talked freely about insults, criticisms that seem to make up the content of their school experience. Informal but pervasive derogatory stereotyping has led to ethnocentric groupings as a form of coping strategy of the pupils. Therefore, behavior is seen as the results of interaction between a set of structural conditions and individual preferences (Hechter, 1986 & Banton, 1983). When people work together in a structured environment to solve shared problems through community service, their attitudes about diversity can change dramatically (Teaching Tolerance, *Hidden Bias: A Primer*, 2003). By including members of other groups in a task, youth begin to think of themselves as part of a larger community in which everyone has skills and can contribute. Such experiences have shown to improve attitudes across racial lines and between young and old.



In the current study, the focus is on youth studying in the Institutions of Higher Learning because in these educational setting, the youth have many opportunities to work with each other from different ethnic backgrounds in such structured environment. Hence, their attitude towards friends or people of different ethnic groups is deemed tolerable (Teaching Tolerance, *Hidden Bias: A Primer*, 2003).

In a nutshell, it cannot be emphasized enough that the internal sources of strength or weakness of ethnic attachments cannot be separated from the interactions with and the influences of the surrounding society. Some tend to draw the boundary between a racial or ethnic group and the larger society more sharply, thus reinforcing any inclinations towards separatism. Under some circumstances, other lines of differentiation that cut across racial and ethnic boundaries are strong. The influences that accentuate racial and ethnic distinctions are inevitably an abstraction from the larger empirical picture. For instance, prejudice and discrimination were cultural phenomena. To some, these were expressions of ethnocentrism, of 'dislike of the unlike'. In almost all societies, if not in all, each new generation is taught 'appropriate' beliefs regarding other groups (Levine & Campbell, 1972; Brewer & Campbell, 1976). On a second level of analysis, inter racial and inter ethnic relations, with their accompanying patterns of dominance and oppression are expressions of the struggle for power, income and prestige, just as how Marxist interpreted that capitalist societies create 'racism' to assist exploitation.



Similarly, in the Malaysian society, lack of higher education opportunities had been a major source of non Malay grievance in the past (Lee, 2004). This came about from the implementation of a quota system which ensures that the Bumiputera enter universities in greater numbers (Asrul Zamani, 2002). It goes without saying that with such a quota system in place, Bumiputera students with poorer results vis a vis their Chinese or Indian counterparts, would have easier access to the universities (Asrul Zamamani, 2002). This has created a gap among the Bumiputera and non Bumiputera. Such patterns of competition and expressions of the strength for a place in the higher education could have affected the inter-ethnic relations among the youth in the local universities. This is because people tend to be more hostile towards others when they feel that their security is threatened; thus many social scientists conclude that competition and conflict breed prejudice (Parrilov, 1999). Certainly, considerable evidence shows that negative stereotyping; prejudice and discrimination increase markedly whenever competition increases (Parrilov, 1999). Such phenomena may breed intolerance among the youth from different ethnic groups as well.

There is a powerful influence from how other people exert on an individual's beliefs, attitudes, and behaviors which became the guiding principle in the field of social psychology (Allport, 1935; Asch, 1952; Berscheid & Meyers, 1996; Deutsch & Gerard, 1955; Festinger, 1957; Hardin & Higgins, 1996; Kelman, 1961; Lewin, 1952; Newcomb, 1943; Sherif, 1936; Turner, 1991). Stereotypes and prejudice are



developed and changed both as a result of information that comes from indirect sources such as parents, peers and the media and through direct contact with members of stereotyped social groups (Parrilov, 1999). Although both direct and indirect sources have been acknowledged as determinants of stereotyping and prejudice, most models of stereotype formation (Eagly & Kite, 1987; Hamilton & Gifford, 1976; Hewstone & Brown, 1986) and stereotype change as well as current reviews of the stereotyping and prejudice literature (Brewer & Brown, 1998; Fiske, 1998; Hamilton & Sherman, 1994), have primarily focused on the influence of direct inter-group contact. Theorists have proposed that stereotypes develop through direct observation of the behaviors of members of different social groups (Eagly & Kite, 1987; Hamilton & Gifford, 1976; Hoffman & Hurst, 1990). Research has also demonstrated that inter group contact is successful in changing stereotypes under certain conditions, especially if inter group cooperation and successful goal relevant to both groups are present (Aronson, Blaney, Stephan, Sikes, & Snapp, 1978; Brewer & Miller, 1984; Gaertner, Dovidio, Anastasio, Bachman & Rust, 1993; Hewstone & Brown, 1986; Sherif, Harvey, White, Hood & Sherif, 1961). Therefore, it would be a good study on the inter ethnic tolerant behavior among the public and private universities' students because these group of students have many opportunities for direct contact and direct interactions and observation with friends from different ethnic groups. They have many opportunities to work in the same study group, research assignments and group's



discussions. Hence, research on whether such cooperation influenced their behavior and perceptions towards each other in the Malaysian context is essential.

On the other hand, another research has demonstrated that stereotypes and prejudice can be developed about groups with which the individual has had very little or even no direct contact (Maio, Esses, & Bell, 1994) and that there is frequently only a very low correlation between contact and inter-group attitudes (Katz & Braly, 1933). Therefore, it is difficult to assume that inter-group attitudes are formed and changed primarily through direct contact with members of the out group. In this case, this study aims to explore if there is any significant difference between the inter ethnic tolerant behavior of youth from the private institution of higher learning as compared to the public institution of higher learning. It is with the assumption that the ethnic composition in the private institution of higher learning is more homogenous as compared to the public institution of higher learning.

An initial study was conducted by Zaharah Hassan, Bahaman Abu Samah and Abu Daud Silong (2006) to identify the perceptions of students from both the public (PuIHE) and private (PriIHE) institution of higher learning towards the definition of national unity. Indeed, there are some distinctions in the results obtained between these two groups of students. The results revealed that generally, the level of 'One National Identity' is high among all the students. Students from the PuIHE



however, scored significantly higher than the students from the PrIHE. Being “Proud of Malaysia” has also been ranked highly by the students. Similarly, students from the PuIHE scored higher than students from the PrIHE. Nevertheless, the sense of ‘Patriotism towards the Country’ scored slightly lower comparatively. But still the students from the PuIHE scored significantly higher than the students from the PrIHE.

2.2.5 Promoting Inter Ethnic Relations through Education

Education is a very important tool for development. After a decade of violent conflicts, the Balkans restored multicultural tolerance and cooperation, which was once well developed in times of second Yugoslavia, but destroyed by nationalists and aggressive military at the beginning of 1991, and nearly forgotten in the past ten years of armed conflict through education (UNESCOSHS, 2007). The ideas were targeted to all citizens and the education systems gave the opportunities for mutual disputes or understanding. On one hand, education can be regarded as a background for conflict (Strazzari, 2002) but on the other hand, the global ecumenical patriotism and acceptance of the other can also be promoted through education. As a result, the School of Peace was established. This was an inner state institution belonging to the war torn Bosnia-Herzegovina that promotes tolerance among the three major Bosnia-Herzegovina nations. The programs in the school were designed for young people, generations of those who will take over responsibility for living in multicultural societies or with different neighbors.



Through the education system, ideas of inter ethnic tolerance were able to transform into practice. Malaysia may not have experienced such tragic inter ethnic conflict as Bosnia-Herzegovina, but learning from her experience, the education system in Malaysia too are deemed to play a very important role in educating the younger generation to be tolerant to each other.

In Malaysia, education was one of the key areas addressed in the post-1969 period because national integration and unity became, in the government's own words, 'the over-riding objective' of the education system (Malaysia, 1976). Political theorists concerned with multicultural societies broadly concur that education – particularly the fields of citizenship and history – plays a vital role in promoting good inter ethnic relations (Brown, 2005). The Malaysian government dealt with issues of ethnicity and ethnic relations within the content of the education curricula at the primary and secondary level. By the time the students have completed their primary and secondary schooling, they were expected to have a high level of understanding and tolerance towards people of different ethnic.

In year 2006, a budget of 29 billion Malaysian Ringgit or 21% of the 2006 budget was allocated to increase the human capital potential through education and training to about 5.7 million students in the Ninth Malaysian Plan (Maria Salih, 2006). This was to ensure that Malaysian citizens were excellent in acquiring knowledge and skills as well as having unique characteristics through education.



Sustainable development in higher education thus signals a commitment to produce integrated human capital, educated individuals who contribute to the development of a quality living society and also to a harmonious nation environment (Maria Salih, 2006). The current Prime Minister of Malaysia, Yang Amat Berhormat Dato' Seri Abdullah Ahmad Badawi has also addressed that human capital development should be holistic. Holistic in this sense emphasized the development of knowledge, skills, as well as inculcation of progressive attitudes, high ethical and moral values.

Following the racial riot in 1969, several subjects were introduced to the national education system to help enhance national unity and inter ethnic tolerant in Malaysia. Teaching of the 'Rukun Negara' was made compulsory in the primary and secondary school and a course for civic education was also introduced to instill its values (Fatimah Hamid Don, 1977). Later, the civic education was replaced with a broader course called 'Moral Education', which covers the main areas of citizenship education. The Moral Education curricula in the primary school were organized around five 'fields' of values, which were (Ministry of Education, 2000b):

- i. Values relating to self- development
- ii. Values relating to self and family
- iii. Values relating to self and society
- iv. Values relating to self and the environment

v. Values relating to self and country.

From the first year of primary school, the Moral Education curriculum was focused on the role and responsibilities of the individual in a multi ethnic society through activities such as singing songs themed on ‘unity’ and talking about friends from other ethnic groups (Ministry of Education, 2000b). By middle school, a whole field of values was dedicated to peace and harmony, but aspects of multiculturalism were promoted throughout the curriculum such as sections on ‘tolerance’ and ‘moderation’ in the field of self-development (Ministry of Education 2000a). Besides, ‘patriotism’ was included in the Local Studies and History Studies where every topic and subtopic was explained in terms of its contribution to patriotism (Ministry of Education, 2002). Later, in year 2006, to further enhance the spirit of multiculturalism and to develop a deeper understanding of each ethnic group, the subject of ‘Ethnic Relations’ was implemented as a compulsory subject at the university level.

In summary, this research aims to examine the status of inter ethnic tolerance among the students in the universities because research have suggested that schools must become proactive in creating more tolerant individuals (Godwin, Ausbrooks & Martinez, 2001). Schools that had the most successes in fostering students’ tolerance were those that supported more opportunities such as group contacts for students to develop inter ethnic friendships (Godwin, Ausbrooks & Martinez,



2001). According to this research, more tolerant individuals perceived less threat from other groups and express a higher level of support for democratic norms. Henze (2001) noted that though many researchers question whether schools can play a role in improving students' racial tolerance; her research have shown that school-based programs indeed can promote racial tolerance among students.

2.3 Youth

The United Nations General Assembly defined 'youth', as those who are between the ages of 15 and 24 years inclusive (United Nations Division for Social Policy and Development, n.d.). However, the national youth development policy of Malaysia defines youth as people aged between 15 and 40 years (Ministry of Youth and Sports, 1997). It further stipulates that the main focus of youth development programmes and activities in the country should be young people aged between 18 and 25 years (Ministry of Youth and Sports, 1997). Statistically, in 2005, youth aged between 15 and 39 years made up 41.5% of the total population in Malaysia, which is the largest group as compared to those below 15 years or above 40 years of age. This proportion of youth increased about 2.4% a year from 9.85 million in year 2000 to 11.1 million in year 2005. It is projected by year 2010, the population of youth at this age group will increase to 11.65 million (Ninth Malaysia Plan, 2005). However, a further break down on the youth population according to the age, the statistic in year 2000 showed the proportion of youth in the population aged 15 and 24 years increased from 18.8% to approximately 19.9% from 1991 to



2000. On the other hand, the population between 25 and 40 years age group grew slightly from 23.4% to 23.6% of the total population (A Review of the Youth Situation, 2006). Hence, the major population growth of the country is among the youth between the ages of 15 and 24. Subsequently, the positive development of this group of youth will create a strong impact towards the development of the nation as well.

Youth often seek opportunities to explore new ideas, relationships with others, and meaning within the context of the society as a whole. Youth seek to develop their knowledge, skills and competence in preparing for life. Youth also need opportunities to fail, as well as a framework for development, which provides challenges of increasing complexity and support. In summary, youth require opportunities that enable them to progressively develop their abilities to function successfully in society. Edginton and Jiang (2000, p. 143) has stated that youth are “...capable of learning, growing and perfecting themselves.” In fact, to live and learn is to always be in the process of becoming; it is a continuous process that will be experienced throughout the growing of the youth life.



2.3.1 Youth Development

Over the past decade in the United States of America, there has been a significant growth in literature detailing the implementation of youth development programs and the underlying philosophies and principles on which these programs are based.

Just as Pittman (1993) defined,

The ongoing growth process in which all youth are engaged in attempting to (1) meet their basic personal and social needs to be safe, feel cared for, be valued, be useful, and be spiritually grounded, and (2) to build skills and competencies that allow them to function and contribute in their daily lives (Pittman, 1993, p. 8).

In March 2000, the Australian Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) too endorsed her National Youth Development Strategy. The Strategy adopted the definition of youth development as a process which prepares young people to meet the challenges of adolescence and adulthood through a coordinated, progressive series of activities and experiences which help them to become socially, morally, emotionally, physically and cognitively competent (Ministerial Council on Education, Employment, Training and Youth Affairs, 2000).

Integrated views of youth suggested that there is a reciprocal influence between the social environment and the individual. Not only do individuals shape their own development, but they are also influenced by the context of the culture within which they exist. In other words, youth not only shape their own development but

are also shaped by the environment and in turn influences it. Therefore, youth is often seen as a metaphor for social change; youth are viewed as “the advance party where innovation and alteration in the values of society are concerned” (Coleman & Hendry, 1990, p. 203).

Similarly an assumption that appears to persist in the common beliefs about youth is the idea that, “ a pre-social self exists within the individual, but that it must be found and developed” (Wyn & White,1997, p. 53). The belief in the existence of a “pre-social self,” a self independent of social relations or social circumstances, is critical because it is this notion that youth workers, educators and other professionals focused on youth development use to justify their existence in the lives of young people. From this perspective, young people are qualitatively different from adults in that they have yet to discover who they are. Youth are thought to be actively involved in the process of trying out a variety of different, often competing, selves in the hope of finding their ‘true’ self (Wyn & White, 1997). Hence, in the process of socialization, the youth too develop their relationship with people of different ethnic but in order to develop a healthy relationship, they have to be guided and moderated.

Politz (1996) has suggested that youth development, is an approach framework, a way to think about young people that focus on their capacities, strength, and developmental needs and not on their weaknesses and problems. All young people



have basic needs that are critical to survival and healthy development. They include a sense of safety and structure; belonging and membership; self worth and an ability to contribute; independence and control over one's life, closeness and several good relationships; competency and mastery. Based on an occasional paper prepared by AusYouth entitled, "The Concept of Youth Development: Preview of Literature from the USA," (2001), it was stated that from all the elements and characteristics identified in the discussions about youth development, three key themes emerge that typified the programs and activities associated with youth development. They were personal development, including teamwork and leadership skills; skill development through activities that were structured and sequential in their learning outcomes and strengthened connection with community through relationships, participation and contribution to community.

This corresponded with the development of their basic core competencies such as personal/social competence, vocational competence and citizenship competence. Hence, youth development aimed to help young people develop the inner resources and skills they need to cope with pressure that might lead them into unhealthy and antisocial behaviours (Politz, 1996). It aimed to promote and prevent, not to treat or remediate. Prevention of undesirable behaviours is one outcome of healthy youth development, but there are others: the production of a self-reliant, self confident adult who can take their place as responsible members of society (Carnegie Council on Adolescent development, 1992). Nevertheless, in some



instances, indeed, there have been considerable claims about the impact that youth development programs and activities have on reduction of antisocial and other ‘problem’ behaviours. These claims were indeed very encouraging for a multi ethnic society like Malaysia.

In the United States of America, the traditional juvenile justice system does not routinely recognize the strengths of youth, nor does it often seek to build on these strengths. Rather, it concentrates on deficits. It asked what was wrong with youth and tried to fix it (Schartz, 2000). But in the early 1990’s, this traditional “deficit based” approach to juvenile justice was challenged by a new positive approach to delinquency prevention. This new approach, positive youth development, gave priorities to the development of competencies that improved a juvenile’s ability to be productive and effective at tasks and activities that others value. However, it is recognized that research about the various aspects of youth development is still urgently needed to advance a science of youth development and without this, the conceptual terrain for youth development [will remain] murky (Patterson, 2001).

2.3.2 Positive Youth Development Approach

Young people have a tremendous potential for growth. Humans, especially children and youth are highly motivated to develop. They have natural dispositions to learn and to grow (Csikszentmihalyi, 1990). However, this growth needs to be moderated. Therefore, the reason people in youth development sometimes add the



word “positive” to development is to emphasize the goal of mobilizing these natural processes in youth (Larson, 2000).

Increasingly, youth development is being framed as a positive way to work with youth. In fact, the term ‘positive youth development’ is found frequently in the literature (National Collaboration for Youth, 2001). The concept of positive youth development is one that suggests that attention should be paid to the broader developmental needs of youth rather than focusing on at risk youth or what is defined as a deficit-based model. In support of this concept, the National Collaboration for Youth (2001) has suggested that positive youth development addressed the broader developmental needs of youth, in contrast to a deficit based model that focused solely on youth problems.

The first challenge in developing a positive approach in dealing with young people is to see them as assets, not liabilities (Aubrun & Grady, 2000). If one does not help young people develop their full potential, they will not be able to maximize their contributions to the society and act as nurturers and supports for the generations who will come after them. However, in order to develop the youth, it depends a lot on a range of supports their families, communities and other institutions that can touch their lives. “When supports and opportunities are plentiful, young people can and do thrive; when their environments are deficient or depleted, youth tend not to grow and progress” (Gambone & Arbreton, 1997, p. 1-



2). A positive youth development philosophy and approach reflects, according to Nixon, a “desire for positive outcomes in the development process and ... (results in) purposeful efforts to design services that will continue outcomes” (Nixon, 1997, p. 571). Similarly in Malaysia, many activities were designed by the Ministry of Youth and Sports (for example: PLKN, RIMUP, Rakan Muda, Sports Complexes, Recreation, Cultural Exchanges), to create opportunities and enriching environment for the youth to participate, grow and progress. These supports acted as a step towards practicing the positive youth development approach in Malaysia.

Approach to youth development also encompassed opportunities and experiences for young people to contribute in a meaningful way to their community and to believe that their contributions are respected and valued. The activities and programs in which young people involved must have a ‘positive’ influence that is; the notion of youth development is one of ‘positive’ youth development. Therefore, youth development does not occur in isolation from family, community and country. Young people’s maturation process is influenced by their surroundings and affected by relationships with key people, such as parents, teachers and peers. Youth development is dependent on family and community development (US Department of Health and Human Services, 1996).

A growing body of evidence suggested that youth development programs can produce individual protective factors that increase successes and decrease problem behaviors (Benson & Saito, 2000). For instance, two of the first researchers (Conrad & Hedin, 1981) to study the impact of positive youth development, studied 4,000 youth in 30 experiential education programs, using survey data. Six programs had comparison groups composed of students in non-experiential programs. The researchers found that students in the treatment group demonstrated improvement in personal and social development, moral reasoning, self-esteem, and attitudes toward community service and involvement. Other researches on positive youth development demonstrated improved ego, moral development (Cognetta & Sprinthall, 1978), and sense of social responsibility and competence (Newman & Rutter, 1983).

The process of youth development involved many forms of pathways, and some particular experiences or events may be viewed as turning points for individuals during which new directions may be taken. Research findings (Understanding Youth Development: Promoting Positive Pathways of Growth, 1997) indicated that positive developmental pathways are fostered when adolescents have developed the following:



1. A sense of industry and competency
2. A feeling of connectedness to others and to society
3. A belief in their control over their fate in life and
4. A stable identity

Youth who have developed these characteristics appear to be more likely than others to engage in pro social behaviors, exhibit positive school performances, and be members of non-deviant peer groups.

Another famous theory that explains about the different stages of youth development is Erikson's Psychosocial Theory (1964). Before the child reaches puberty or the adolescent stage, they passed the stage of industry versus inferiority. According to Erikson (1964), the successful resolution of this stage will lead to the 'ego' strength called 'competence', the free exercise of intelligence and skill in the completion of tasks, unimpaired by excessive feelings of inferiority. On the contrary, if they fail to develop these competencies, they will have a problem as they move into the next stage of identity versus role confusion in their youthful years. At this stage (12 to 18 years old), youth are usually disturbed and confused by new social conflicts and demands. Erikson believed their new primary task is establishing a new sense of ego identity. Their identity became a social matter and is overwhelmed by the countless options and alternatives. They are so uncertain about whom they are; so they anxiously tend to identify with 'in groups.' They can



‘become remarkably clannish, intolerant and cruel in their exclusion of others who are different’ (Erikson, 1959, p.92). In their hurry to find some identity, they stereotype ‘themselves, their ideals, and their enemies’ (Erikson, 1959, p. 92). Therefore, unless the child has developed their competencies, they will end up having problems identifying with themselves as well as with other people in the society. Such intolerant behavior will jeopardize relationships especially inter ethnic relationships and thus threatening the stability of the society. Therefore, positive youth development approach that focuses on developing youth competencies is so important in helping the youth to develop a healthy and positive identity for inter ethnic relations in the society. Hence, with this understanding, the current study intends to use the positive developmental approach to predict its relationship towards inter ethnic tolerant behavior.

2.3.3 Youth Development Competencies

Youth development refers to the process all young people undergo as they build the individual assets or competencies needed to participate in adolescence and adult life (Sullivan, Edwards, Johnson, & McGillicuddy, 2000). Ideally, young people receive support from their peers, families, caring adults, schools and community institutions, thereby increasing the likelihood of positive youth development and improved life outcomes. Even under the most ideal circumstances youth is a turbulent time, yet for young people growing up in a multiethnic society; the



prevalence of prejudices and racism can be threatening (Sullivan, Edwards, Johnson, & McGillicuddy, 2000).

To understand the importance of positive youth development in the United States of America, a research was conducted to evaluate the effectiveness of its programs towards the change of negative behavior among the youth and development of positive youth development competencies (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 1998). The study concluded that a wide range of positive youth development approaches could result in positive youth behavior outcomes and the prevention of youth problem behaviors. Nineteen effective programs showed positive changes in youth behavior, including significant improvements in interpersonal skills, quality of peer and adult relationships, self control, problem solving, cognitive competencies, self efficacy, commitment to schooling and academic achievement. Twenty four effective programs showed significant improvements in problem behaviors, including drug and alcohol use, school misbehavior, aggressive behavior, violence, truancy, high risk sexual behavior, and smoking. Although a broad range of strategies produced these results, the themes common to success involved methods to strengthen social, emotional, behavioral, cognitive and moral competencies; build self efficacy, shape messages from family and community about clear standards for youth behavior; increase healthy bonding with adults, peers and younger children, expand opportunities and recognition for youth, provide structure and consistency in program delivery and intervene with



youth for at least nine months or more. Although one third of the effective programs operated in only a single setting, it is important to note that for the other two thirds, combining the resources of the family, the community and the community's schools were the other ingredients of success. This study clearly indicated the importance of developing competencies in youth and the significant role the communities including the academic settings played in such development.

Past research has suggested that more assets lead to fewer risk behaviors and more positive outcomes such as school success and physical health (Scales, 1999). Hence, while a variety of opportunities and experiences shape the development of young people, the core of youth development approach is to focus on the combined effects of development in all competency areas on youth outcomes. In particular, Pittman (1991) has identified five key competency areas which were necessary for a successful transition to adult life. They are health/ physical competence, which means good current health status and evidence of appropriate knowledge, attitudes, and behaviors that, will assure future health. Secondly, personal/ social competence, refers to the intrapersonal skills, interpersonal skills, coping/system skills and judgment skills. Thirdly, cognitive/ competence, referring to the broad base of knowledge, ability to appreciate and participate in creative expression; good oral and written language skills, problem-solving and analytical skills, ability to learn, interest in learning and achieving. Fourthly, the vocational competence, which means having broad understanding and awareness of vocational options,



knowledge and concrete steps needed to realize choices, adequate preparation for chosen career, understanding of the value and function of work (and leisure). Finally, citizenship competence that is the understanding of history, challenges, and values of the nation, community, and culture; respect for differences in each community and culture, desire and commitment to be involved in efforts that contribute to the broader good.

It was also based on a research finding (Kress, 2003) that all youth need to know they are cared about by others (attachment, belonging, connection), which referred to the importance of personal/social competence; to feel and believe they are capable and successful (achievement, mastery, competence), to be cognitively competent; to know they are able to influence people and events (autonomy, power, confidence), having vocational competence and finally to practice helping others through their own generosity (altruism, purpose, contribution), which referred to citizenship competence.

In 1989, the Carnegie Council on Adolescent Development described a well-developed youth as one possessing “five characteristics associated with being an effective human being, he or she will be an intellectually reflective person, a person en route to a lifetime of meaningful work, a good citizen, a caring and ethical individual, and a healthy person” (Pittman, Irby, & Ferber, 2000, p. 18). Other researcher noted that late youth and young adulthood – from approximately age 16 to age 24 – is a pivotal time in the lives of young adults (Furstenberg, Kennedy,



McCloyd, Rumbaut, & Settersten, 2003). The transition from youth to young adulthood involved changes in areas of cognitive, emotional, interpersonal, and physical development. For most, the period represents the merger of a number of developmental milestones and challenges directly connected to adult life.

The major milestones commonly cited in the literature (Osgood, Foster, Flanagan, & Ruth, 2004; Furstenberg, Kennedy, McCloyd, Rumbaut, & Settersten, 2003; National Federation for Catholic Youth Ministry, 2001; Shelton, 1983; Carnegie Council on Adolescent Development, 1995) to characterize this phase of development include development of competencies, building supportive relationships, community engagement, establishing independence, and youth leadership and development. In addition, Furstenberg et al. (2003) suggested that to function successfully as adults, young people must be given a fair chance to develop the knowledge, attitudes, skills and behaviors that will make the successful transition to adulthood possible. According to Furstenberg et al. (2003), youth must become educated to their highest potential, be able to foster a positive identity, have a personal sense of well-being and self efficacy and develop the habits associated with good citizenship. Thus, the goal of providing supports and opportunities for young people should be more than keeping them off the streets, entertained, and out of trouble. One must move beyond simply supplying 'fun and games', to a purposeful strategy of helping young people develop the foundation they need to fully function as adults. Such foundations will ensure the youth to be



competent especially in achieving the basic competencies; cognitive, affective, practice and behavior in being a good citizen (Furstenberg et al., 2003).

Another reason for youth to develop their basic competency was because it was not unusual for people living in a multiethnic society to be ethnocentric. Ethnocentrism leads people to consider their way of life as the best and most natural (Owen, 2006). Their culturally defined perceptions of others often lead to suspicion and differential treatment of other groups. In effect, each group constructs myths about other groups and supports those myths through in group solidarity and out group hostility. From family, friends, school, mass media and all other sources of informational input, values, attitudes and beliefs were learnt. Learned prejudices may be incorporated in own attitudes and actions. As each group's attitudes and actions towards other groups continued, the vicious circle phenomenon plays out. In such instances, people create a culturally determined world of reality and their actions reinforce their beliefs (Burke, 2004). Therefore, all basic youth development competencies are important for youth to develop the correct understanding and learn to behave tolerantly and peacefully towards people of different ethnic groups with different cultures, values and beliefs.

The theoretical basis for youth competency development borrowed heavily from the control theory (Hirschi, 1969). Unlike other criminological theories, which assumed that people naturally want to do the right thing but are prevented by



circumstances from doing it, the control theory suggested that it is first necessary to explain why anyone should want to do the right thing (Hirschi, 1969). In short, control theory hypothesized that social controls prevented one from committing crimes. Whenever these controls break down or weaken, deviance is likely to occur. The theoretical context for youth development programs followed similar logic. Youth development programs were not concerned with why youth commit delinquent acts. Rather, the youth development approach was more concerned with the basic needs and stages of youth development than with simply “fixing problems” (Leadership and Youth Development, 2004). It seek to provide youth with skills and social competencies in order for them to be productive and effective at tasks and activities that were valued within legitimate social institutions (e.g., work, family, community).

In summary, youth is a period of transition between childhood and adulthood. It is a period that varies from culture to culture, and is a time when individuals learn to be socially responsible for themselves and for their actions. There is no rigid boundary line that denotes the end of childhood or the beginning of youth. But youth is the transitory phase in the life of a child when she or he passes from childhood and enters adulthood. It is compose of a set of transitions which gradually touch upon many aspects of the individual’s behavior, development and relationships. Hence, suddenly the carefree child becomes self conscious, sometimes self centered individual with developing physique and mental changes.



These transitions are biological, cognitive, social and emotional. Therefore, the positive developmental process seeks to prevent problem behaviors by preparing young people to meet the challenges of youth through a series of structured, progressive activities and experiences that help them obtain social, emotional, ethical, physical, and cognitive competencies. This “asset based” approach views youth as resources and builds on their strengths and capabilities for development within their own community (Bazemore & Terry, 1997). It emphasizes the acquisition of adequate attitudes, behaviors, and skills as a buffer against delinquent behavior (Bazemore & Terry, 1997).

2.3.3.1 Personal/Social Competence

Personal/social competency can be defined as having the right attitude to be socially and personally competent to build relationship between people especially people of different ethnic groups (Pittman & Cahill, 1992). The lack of social competencies has shown to become one of today’s major problems in society throughout the world and is somehow a 21st century disease (Julliard & Schwab, 2000). Therefore, the study of inter group relations is both fascinating and challenging because relationships continually change. Changes in the world’s economical systems for example, coupled with new technical possibilities such as global networking and e-commerce have induced deep changes in the social structures (Julliard & Schwab, 2000). Thus, the patterns of relating to each other



may change for many reasons: industrialization, urbanization, shifts in migration patterns, social movements, upward or downward economic trends and so on.

Such changing relationships sometimes reflected in changing attitudes. Hurst (2003) defined social interaction as action with one another as a means of communication both verbally and non-verbally. He further suggested that social interaction can be affected by several factors such as ethnicity, gender and social class. He also believed many attitudes were also situational responses to socioeconomic status; a change in status or opportunities will bring about a change in those values and then attitude. Other social demographic variables such as language, culture, religion or social custom were also valued either positively or negatively by group members. Thus, attitudes in relating to differences may differ.

Another challenging attitude in inter ethnic group relations is people's tendency to identify with their own ethnic or national group as a means of fulfilling their needs for group belongingness and security (Basirico & Bolin, 2000). As a result, people usually view their own cultural values as somehow more real and therefore superior to those of other groups, and they prefer their own way of doing things (Basirico & Bolin, 2000). Unfortunately for human relations, such ethnocentric thought is often extended until it negatively affects attitudes and emotions about those who are perceived as different. Hence, prejudice, discrimination and intolerance emerged as major problems and need considerations in understanding inter group relations.

Wirth (1945) described prejudice as an attitude with an emotional bias. Because feelings shape our attitudes, they reduced one's receptivity to additional information that may alter those attitudes. Rosnow (1972) had this fact in mind when he broadened the definition of prejudice to encompass any unreasonable attitude that is unusually resistant to rational influence. Therefore, having personal/social competency, which referred to the ability to understand personal emotions, ability to work with others, develop friendships through communication, cooperation, empathizing, negotiating, ability to plan, evaluate, make decisions and problem solving is vital in an ever changing multi ethnic society (Pittman & Cahill, 1992).

2.3.3.2 Cognitive Competence

Another area of interest in positive youth development is the development of cognitive competence. Scientific research has demonstrated that bias thoughts that were absent or extinguished will remain as mental residue in most people (Hidden Bias: A Primer About Stereotypes and Prejudices, 2005). Studies have shown that people can be consciously committed to egalitarianism, and deliberately work to behave without prejudice, yet still possessed hidden negative prejudices or stereotypes (Hidden Bias: A Primer About Stereotypes and Prejudices, 2005). However, one would like to believe that when a person has a conscious commitment to change, the very act of discovering one's hidden biases can propel one to act to correct it. It may not be possible to avoid the automatic stereotype or



prejudice, but it is certainly possible to consciously rectify it (Hidden Bias: A Primer About Stereotypes and Prejudices, 2005). Therefore, in the case of ethnic relations, it is essential that youth are well informed about the differences and similarity between different ethnic cultures, religion and values yet they all deserved the same respect as one would towards one's own culture, religion and values to avoid prejudices and stereotypes. Such knowledge will help develop the conscious mind.

Kramer (1949) suggested that prejudice existed on three levels: cognitive, emotional and action orientation. He further explained, the cognitive level of prejudice encompassed a person's beliefs and perceptions of a group as threatening or non threatening, inferior or equal, seclusive or intrusive, impulse-gratifying, acquisitive or possessing other positive or negative characteristics. The emotional level of prejudice on the other hand, referred to the feelings that aroused in an individual. Although these feelings may be based on stereotypes from the cognitive level, they represented a more intense stage of personal involvement. The emotional attitudes may be negative or positive, such as fear, envy, distrust, trust, disgust, admiration or contempt, empathy. These feelings, based on beliefs about the group, may be triggered by social interaction or by the possibility of interaction. Thirdly, the action orientation level of prejudice referred to the positive or negative predisposition to engage in discriminatory behavior (Kramer, 1949). A person who harbors strong feelings about members of a certain racial or ethnic



group may have a tendency to act for or against them. So it all starts from the head, how one view things cognitively will ultimately affects them emotionally and finally manifests in their actions.

Thus, understanding made people receptive to some, though not all; just as strangers required knowledge to understand how culture and social structure affected his perceptions and response patterns towards an out group (Wenzlaff & Wegner, 2000). Prejudice at the cognitive level often arised from false perceptions that were enhanced by cultural or racial stereotypes (Wenzlaff & Wegner, 2000). A stereotype is an over simplified generalization by which one attributed certain traits or characteristics to a group without regard to individual differences. Stereotypes distort socio-cultural truths but nevertheless are socially approved images held by one group another (Parrillov, 1999). Once established, stereotypes are difficult to eradicate, even in succeeding generations.

Similarly, values were the primary motivating variables in almost all human systems, from the material to the spiritual. Values influenced human behavior and condition what the individual will think and do in particular situations (Yinger, 1989). Therefore, in order for the youth to behave in a tolerant manner, one must ensure they have the right values; they must be informed and have knowledge about the 'other' because if little is known now, virtually nothing is known of the 'other' in the future. In Malaysia, all Malaysians generally hold to the same basic



values, which in turn determined the fundamental goals of behavior (Fontaine, 2007). There were however, individuals and ethnic differences in the relative importance assigned to each value category, and this resulted in the emergence of different hierarchies of values. Therefore, finding a consensus may be possible by undertaking such a search to understand more about the values of others, particularly because so little is known about them at present. In the same vein of inquiry, it must be asked how much is understood about the valued behaviors and valued goods of the different ethnic groups (Larson, 1978). The W.T. Grant Consortium (1992) defined the first form of cognitive competence as the "...ability to understand the values, perspective of others, understanding behavioral norms..." (p. 136). This indicated the importance of having more knowledge and being cognitively competent to ensure tolerant behaviors among the youth.

2.3.3.3 Vocational Competence

Tolerance or intolerance, acceptance or rejection of others depended on whether others were perceived as threatening or non-threatening, assimilable or non-assimilable, worthy or unworthy. Though actual differences may support conflict, the key to harmonious or disharmonious relations lies in the definitions or interpretations of those differences. According to Parrilov (1999), people with low self-esteem or low self-efficacy were more prejudiced in their interpretations of others. Parrilov (1999) had argued that individuals with low self-esteem deprecate others to enhance their feelings about themselves. Low self-esteem individuals also



seemed to have a generally negative view of themselves, their in group, out group and perhaps the world, and thus their tendency to be more prejudiced was not due to rating the out group negatively in comparison to their in group (Parrilov, 1999).

As a result, in order to ensure the youth to behave tolerantly in a multi ethnic society, they must have the awareness of the different behavioral options and choices to act to avoid being prejudiced and biased. Such awareness helps the youth to be resilient and have self confident, being in control of their actions in behaving tolerantly towards differences. Thus, having vocational competence is crucial. Many held the belief that vocational competence referred to the adequate preparation for youth for a chosen career but there was a newer and growing interest in defining, tracking, measuring and understanding vocational competence (Pittman & Cahill, 1992). As the youth matures and start to socialize in the society, vocational competence became a necessary component of adulthood.

Dworkin, Larson and Hansen (2003) conducted a study on 10 focus groups of high school students to understand the competencies development (descriptions of their 'growth experiences') as a result of participation in extracurricular and community based activities. The results of the study indicated that after participating in those activities, the youth managed to learn how to regulate their emotions by reacting in alternative ways. They learnt how to block out negative things and used positive emotions constructively. An important insight in emotional development is that



emotions can disrupt and interfere (Harris, 1981) but youth having involved in such activities felt that those activities provided valuable context for developing competencies for limiting the disruptive effect of emotions and deliberately used the experienced of relaxation in youth activities to counteract the stress they experienced in school life and also in relationships. Such positive emotions and competency in reacting positively using the alternative strategies have promoted self confidence; self esteem and enhanced the youths' flexibility to act on alternative choices. Just as Fredrickson (2001) theorized that positive emotions can serve to broaden and build personal resources, which is the essential element in inter ethnic relationships.

2.3.3.4 Citizenship Competence

Youth have the capacity to be positive citizens in their communities (Zaff, Malanchuk, Michelsen & Eccles, 2003). Therefore, the promotion of citizenship competence is essential because youth with positive citizenship has dual effect of providing needed services to the community and society, and promoting psychological, social and intellectual growth for the young citizen (Aguire International, 1999; Conrad & Hedin, 1982; Janoski, Musick & Wilson, 1998; Johnson, Beebe, Mortimer & Snyder, 1998).

Factors that existed within the youth, such as values, and external to the youth, such as socializing agents, that act to promote or deter civic engagement will then play a



very important role (Zaff et al. 2003). Little is known about the specific causal processes involved in promoting civic engagement but based on the results of a research conducted by Zaff et al. (2003) on youth between 8th and 11th grades focusing on expanding the theoretical perspective on how social interactions in youths live such as interactions with parents and peers; neighborhoods and schools on promoting positive citizenship; the results indicated that individual and social contextual variables in early youth promoted civic participation in late youth. Other significant early youth factors predicting late youth civics participation include higher parental education, parent participation in civic activities, youth participation in religious activities, positive characteristics of peers and social support from adults in school. Hence, in order to ensure the youth in Malaysia to develop a positive citizenship, tolerant and a united spirit, all concerned adults and support systems have a role to play. Therefore, the current study aimed to identify how the different social support system; Institution of Higher Learning, both public and private with two different learning environments influence the level of citizenship competence among their students.

Another aspect of learning citizenship competence followed the thoughts of Aristotle said, “We like those who resemble us, and are engaged in the same pursuits,” (Aristotle, 1932, p.103). Social observers were aware of this theory of similarity attraction relationship. Considerable evidence showed that there was greater human receptivity to strangers who were perceived as similar to those who

were perceived as different (Parrilov, 1999). Cross cultural studies also supported this conclusion. In Malaysia too, the Malays have increasingly begun to accept the non Malays as part of the Malaysian nation; the alternative was not an option. More recently, the acceptance of the non Malays has been even more inclusionary as part of the Bangsa Malaysia, or Malaysian race as mooted by the fourth Prime Minister, Dr. Mahathir Mohamad (as cited in Zakaria and Kadir, 2005, p. 58). As he clarified,

Bangsa Malaysia means people who are able to identify themselves with the country, speak Bahasa Malaysia and accept the Constitution. To realize the goal Bangsa Malaysia, the people should start accepting each other as they are regardless of race and religion.

Hence, in order for the youth in a plural society to live harmoniously and tolerantly, it is important for them to have shared values and emotional attachments to the nation. Research have also identified that in times of war, national identity tend to dominate over stratified, subculture and personal social identities. Thus, common or shared values, and other neutral values, would be ideal elements of unification. However, one cannot wait for the nation to go into war before tolerance or unification is exercised. Therefore, these values must be inculcated among the youth. The sense of citizenship or citizenship competence thus became very important for the youth of different ethnic groups to identify with each other and be tolerant of one another.

2.4 Theory of Planned Behavior

Fishbein's Theory of Reasoned Action (Fishbein & Ajzen, 1975) has been one of the most influential social-psychological accounts of behavior for several decades. According to this theory, the proximal determinant of whether or not a person performs a behavior is her intention to do so; people do things that they intend to do and do not do things that they do not intend. Thus, intentions are determined by two constructs; attitude and subjective norm. However there is one limitation of the theory of reasoned action that it only predicts voluntary behaviors or behaviors' over which the individual has a good deal of control (Ajzen, 1985). On the other hand, a person may strongly intend to perform a behavior, but not perform it because she does not possess the requisite ability, resources or opportunity.

To address this issue, Ajzen (1991) added the construct of perceived behavioral control (PBC) to the Theory of Reasoned Action. PBC is the person's perception of the extent to which performing a behavior is under her control. The revised model, 'Theory of Planned Behavior' proposed that PBC was an additional predictor of intention alongside attitude and subjective norm and that in certain circumstances, PBC could also directly predict behavior (over and above the effects of intentions). However, PBC should be associated with intention because a person is unlikely to intend to perform a behavior that is outside her control (Sheeran, 2002). Conversely, a person is more likely to perform a behavior when she believes she has the ability and resources to perform it (Eagly & Chaiken, 1993).



Meta-analytic reviews have supported the PBC intention relation. For example, Godin and Kok (1996) found a sample weighted average correlation $r = .46$ between PBC and intention. Across 76 applications of the Theory of Planned Behavior that they examined, PBC predicted intention in 65 cases (86%) after controlling for the TRA, and explained an additional 13% of the variance on average. Similar findings too were obtained in meta-analyses by Sheeran and Taylor (1999) as well as Armitage and Conner (2001). This showed the importance of being competent; believing that one has the ability and resources to perform a certain behavior. If the youth feels competent to perform a behavior he or she will likely to perform it. Hence, this study examined the possibilities of substituting youth development competencies in predicting the intention of inter ethnic tolerant behavior.

Perhaps because the TPB has provided a useful framework for understanding and predicting a wide variety of behaviors, the reasoned action and planned behavior approach has stimulated a great deal of interest and research. Many investigators (Eagly & Chaiken, 1993; Kiesler, 1981; Petraitis) have noted that the Theories of Reasoned Action and Planned Behavior have produced very encouraging results, providing “the most complete informational analysis of attitudes and of equal importance...a coherent and highly useful model of the relationships among beliefs, attitudes and behaviors” (Petty & Cacioppo, 1981, p. 204).



2.4.1 Research Studies Related to Theory of Planned Behavior (TPB)

Many research findings have shown potential important implications for the TPB. One of which have included the cross-cultural aspect; according to Trafimow, Triandis and Goto (1991) and Triandis (1989), there were differences between individualistic and collectivistic cultures and one such difference might be the degree of emphasis placed on norms by these two types of societies. In fact, Trafimow et al. (1991) showed that thoughts about group membership were more accessible in collectivistic cultures like the Malaysian culture than in individualistic ones (western culture). Consequently, it is possible that there are more normative control behaviors in collectivistic cultures than in individualistic ones. If so, then manipulations of subjective norms should generally be more effective in collectivistic cultures (Trafimow & Fishbein, 2001). Hence, understanding how the social and culture norms bonded by the religious and traditional beliefs in the Malaysian society have affected the youth's intention to behave in a multi ethnic society is very important and local. Also if there is any lesson to be learned from the history of social psychology, it is that attitudes change not so much through persuasive appeals from others or even from direct experience but from perceptions and beliefs in the importance of in group members (Festinger, 1954; Gibbons, Gerrard, Lando & McGovern, 1991; Goethals & Darley, 1977; Lewin, 1952). Therefore, it was not unreasonable to consider the potential that stereotypes and prejudice were the result, at least in good part, of perceptions of in groups' norms. As discussed in the research problems earlier in chapter one, many students in the

universities were still mingling only among the same ethnic groups and they did not really mixed. Hence, there is a need as to understand their perceptions of in-group norms.

In the similar research conducted by Sechrist, Gretchen, Stangor and Charles (2001) on the *Perceived Consensus Influences Inter-group Behavior and Stereotype Accessibility*, the results indicated that perceptions of consensus between one's own beliefs and those of others increased the magnitude of the attitude-behavior relationship. In other words, prejudicial or stereotype attitudes were strengthened when there was consensus from others about their beliefs. Individuals would likely turn to others for information about appropriate beliefs and behavior towards out group. If there is consensus, they will most likely perform the behavior as belief (Sechrist, et al. 2001). Hence, the risks for students mingling only among the same ethnic group are; they may share the same negative beliefs about out group members and if these beliefs are agreed upon among the in-group members, it may influence their inter-ethnic relationship and behavior. On the other hand, if they have a positive perception towards members of the out-group, it will similarly influence the other members of the in-group to behave tolerantly as well. Therefore, it is important to understand the real pattern of inter ethnic tolerant behavior among the youth in both the private and public institutions of higher learning before any new policies can be implemented or recommended to improve the current situation. If this theory is true in the Malaysian context, interventions

designed to modify negative beliefs by providing accurate information about the out-group may provide a direct and potentially effective method of stereotype change.

Several studies have also been conducted to compare the predictive power of the TPB with that of other models, including the information-motivation-behavioral-skills model (De Witt, 2000), the health belief model (Quine, Rutter & Arnold, 1998), and the integrated waste management model (Taylor & Todd, 1997). Although designed for application in specific domains, the alternative models were found to perform not much better and sometimes worse than the general, content free Theory of Planned Behavior (Ajzen, 20001). Many investigators continued to demonstrate the applicability of this theory in various content domains, including condom use (Albarracin, 1998, De Witt, 2000, Jamner, Wolitski, Corby & Fishbein, 1998, Reinecke, Schmidt & Ajzen, 1996, Sheeran & Taylor, 1999) and other safe sex behaviors (Boldero, Sanitioso & Brain, 1999 & de Vroome, 2000), smoking (Norman, Conner & Bell, 1999 & Morrison, Gillmore, Simpsons & Wells, 1996), getting hormone replacement therapy (Quine & Rubin, 1997), adhering to a medication regimen (Conner & Heywood-Everett, 1998), drinking alcohol (Morrison, 1996 & Trafimow, 1996), using illegal substances (Conner, 1998, Conner & McMillan, 1999), eating low fat food (Armitage, Conner & Norman, 1999, Pasiley & Sparks 1998), engaging in physical activity (Courneya, Bobick & Schinke, 1999, Trafimow & Trafimow, 1998), choosing a career (Vincent, Peplau



& Hill, 1998), playing basketball (Arnscheid & Schomers, 1996), wearing a safety helmet (Quine, Rutter & Arnold, 1998), using dental floss (Rise, Astrom & Sutton, 1998), exposing oneself to sunlight (Hillhouse, Adler, Drinnon & Turrisi, 1997) and composting (Kaiser, Woelfing & Fuhrer, 1999). By and large, these studies have found support for the theory. There is now little doubt that this theory can be usefully employed in various domains, but specific aspects continue to draw critical attention. The relative contribution of attitudes and subjective norms vary across behaviors and subjects, populations and other predictors may have to be added to the theory (Ajzen, 2001). Hence, as this theory has not been used to predict inter ethnic tolerant behavior, this study attempts to add on to the literature on the use of TPB in predicting inter ethnic tolerant behavior with an additional predictor, “citizenship competence” in a multi ethnic populated society, Malaysia.

Empirical support of the TPB is evident in the literature for a wide range of health and non health related behaviors over 16 years (Ajzen, Timko & White, 1982; Ajzen & Fishbein, 1980; Boldero, Moore & Rosenthal, 1992; Chan & Fishbein, 1993; Stasson & Fishbein, 1990). Researchers using this TPB were often interested in predicting and understanding performance of particular behaviors such as hiring a member of a minority group, renting an apartment to the mentally ill, using condoms to prevent AIDS and other sexually transmitted diseases, cigarette smoking and breast self examination or categories of behavior such as exercising or eating a low fat diet. Similarly, in the domain of environmental protection,

investigators were concerned with behaviors such as recycling of glass, plastic, paper or behavior such as conserving water or reducing the consumption of energy and many more.

However, in recent years a renewed challenge to the postulated relation between attitudes and behavior could be discerned, particularly in the domain of prejudice and discrimination (Fiske, 1998). A study conducted by Dovidio and Gaertner (2000) examined the prejudicial attitudes of liberal arts college students toward African Americans. The prejudicial attitudes were found to decline slightly but significantly from the 1988 -1989 to the 1998 – 1999 academic year. Though TPB has not been used to predict inter ethnic tolerant behavior but the same theoretical explanation that relates attitudes and discrimination behavior can be applied. Therefore, in order to predict the inter-ethnic tolerant behavior among the students; the current study used a broader measure with four antecedents or construct to determine one specific behavior. This study also compared the predictors for Inter Ethnic Tolerant Behavior between two different social setting, the public and private institution of higher learning.



2.5 Integration of Theory Planned Behavior and Positive Youth Development

2.5.1 Theoretical Framework

The Theory of Planned Behavior (Ajzen, 1991) appeared to be one of the preeminent social-psychological models for predicting behaviors. It proposed a model about how human action is guided. The model depicted in Figure 1 represents the three variables which the theory suggests will predict the intention to perform a behavior. Intention is the precursors of behavior (Francis, Eccles, Johnston, Walker, Grimshaw, Foy, Kaner, Smith, & Bonetti, 2004).

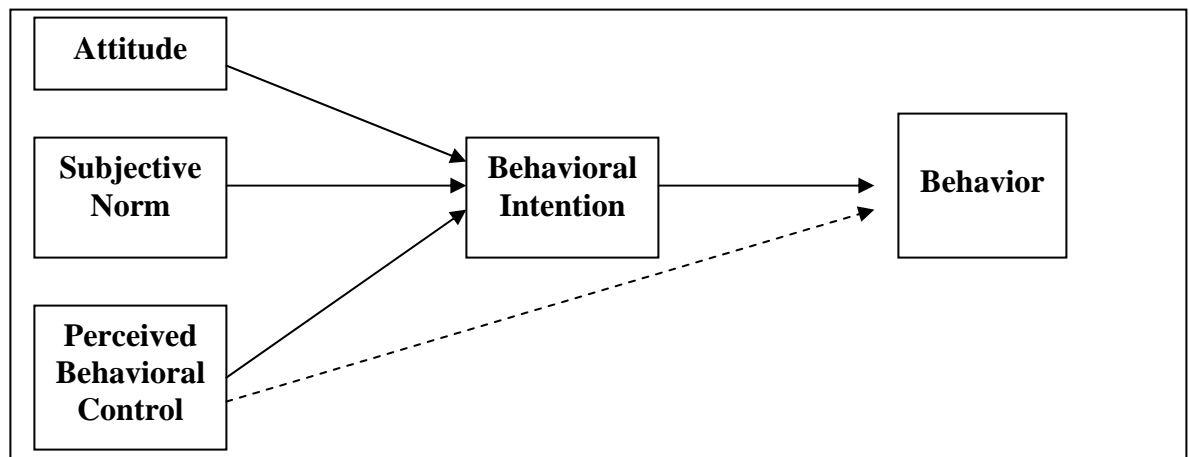


Figure 1: Model Theory Planned Behavior (Ajzen, 1991)

Although there was not a perfect relationship between behavioral intention and actual behavior, intention can be used as a proximal measure of behavior (Ajzen, 1991). This observation was one of the most important contributions of the TPB model in comparison with previous model of the attitude-behavior relationship. Thus, the variables in this model can be used to determine the effectiveness of

implementation intervention even if there was not a readily available measure of the actual behavior (Trafimow & Fishbein, 2001). For example, by changing the three 'predictors', (attitude, subjective norm and perceived behavioral control) the possibility that the person intends to do a desired action will change as well. Hence, in applying this theory to understand the inter-ethnic tolerant behavior among the youth in the institutions of higher learning in Malaysia, also depends on the intention; their intention to behave tolerantly among one another. Their intention to behave tolerantly will ultimately determine the occurrence of the actual tolerant behavior in the real social setting. Hence, adapting the similar model; attitudes, subjective norms and perceived behavioral control too are predictors for the intentions of inter ethnic tolerant behavior.

However, as this theory is being applied in the context of examining the youth in this study, incorporating the positive youth development theory in the theoretical framework as well would be essential to understand its applicability in the context of youth development and behavior prediction. One theory that relates to the basic areas of youth development or development of youth competencies which were seen as being very important in order for the youth to be successful adults is the Youth Development Competency Theory (Pittman, 1991). In this theory, five basic competencies that the youth should acquire in order to become successful adults were stated. They were health/ physical competence, personal/social competence, cognitive competence, vocational competence and citizenship competence.

However, based on the research problem posed in the frame of this study, the focus was only on four competencies; namely, personal/social competency, cognitive competency, vocational competency and citizenship competency. These competencies were selected because, a consistent theme found in the literature on youth development has indicated that positive growth and development were fostered when youth have developed a sense of industry and competency, a feeling of connectedness to others and to society, a belief in their control over their fate in life and a stable identity (Pittman, 1991). Hence, health/physical competence was not included in the current study.

Besides, the theoretical definition of the first three competencies (personal/social competency, cognitive competency, vocational competency) complemented the definition of the three predictor constructs in the TPB. The fourth competency, which is citizenship competency, will be the additional predictor added to the prediction equation of TPB, which many literature have repeatedly emphasized its importance in the study of inter ethnic tolerant behavior. Therefore, with the combination of both the TPB and Positive Youth Development Theory, the original three predictor constructs from the Theory of Planned Behavior would carry a different operational definition within the framework of this study; in the Malaysian context.

2.5.2 Definition of Attitude - Personal/Social Competence

According to the Theory of Planned Behavior (TPB), the predictor variable attitude is the attitude towards the behavior. Fishbein (1975) defined 'attitude' in the TPB as a person's overall evaluation of the behavior and the corresponding judgments about the behavior. In the same tone, Pitman (1991) referred personal/social competence as youth having the intra personal, interpersonal as well as coping and judgment skills. Therefore, if the youth were personally/socially competent, they will have the skills to make the right evaluation and judgments related to intrapersonal and interpersonal relationship without prejudices. They will be able to develop positive relationship based on their interpersonal skills. Hence, it is very important for the youth to be personally/socially competent or have the right attitude adjustment towards inter ethnic relationship in order to have a tolerant behavior.

2.5.3 Definition of Subjective Norm - Cognitive Competence

The Theory of Planned Behavior explained subjective norms as a person's own understanding and estimation of the social pressure to perform or not to perform the target behavior (Francis et. al. 2004). Similarly, cognitive competence in the youth development theory included two overlapping but distinct sub construct. The first form of cognitive competence was defined as the ability to develop and apply the cognitive skills of self talk, the reading and interpretation of social cues, using steps for problem solving and decision making, understanding the perspective of others,



understanding behavioral norms, a positive attitude towards life and self awareness (W.T. Grant Consortium on the School Based Promotion of Social Competence, 1992). The second aspect of cognitive competence was related to academic and intellectual achievement; having broad based knowledge, ability to appreciate, participate in areas of creative expression, problem solving and analytical skills, interest in learning and achieving (W.T. Grant Consortium on the School Based Promotion of Social Competence, 1992). Complex social behavior such as inter ethnic tolerant, seemed to be cognitively regulated, even if only at a low level of conscious awareness and it is, in this sense, reasoned in nature (Ajzen & Fishbein, 1991.). In fact, there was little evidence that complex sequences of behavior occur automatically or habitually without cognitive intervention (Ajzen & Fishbein, n.d.). Therefore, in this study of predicting inter ethnic tolerant behavior among the youth, the conceptual idea is that if the youth have cognitive competency, they will have broad based knowledge and the understanding and ability to interpret the social cues, understand the society norms, behavioral and cultural norms of others and behave tolerantly with each other; thus preventing misunderstanding and conflict.

2.5.4 Definition of Perceived Behavioral Control - Vocational Competence

Perceived Behavioral Control (PBC) in the Theory of Planned Behavior was expressed as the extent a person felt able to enact the behavior (Francis et al., 2004). It has two aspects, firstly how much a person has control over the behavior



and secondly, how confident a person feels about being able to perform or not perform the behavior. In other words, PBC is the perceived ease or difficulty of performing a behavior and a personal sense of control over performing it (Ajzen, 1998). Vocational competence as defined by Pittman (1991) referred to the broad awareness of vocational options and of steps to act on choices. Hence, the definition of vocational competence in this study referred to the awareness among the youth of the different behavioral options and choices they have in responding peacefully towards inter ethnic relationships and are confident to perform the behavior.

2.5.5 Definition for Citizenship Competence

Citizenship competence is an additional construct to predict the intention for inter ethnic tolerant behavior. Theoretically, citizenship competence has been defined as having the understanding of history and values of one's nation and community and the desire to be involved in efforts that contribute to the nation and community (Pittman & Cahill, 1992). Youth with positive citizenship has the dual effect of providing needed services to the community and society, and promoting psychological, social and intellectual growth for the younger citizen (Aguirre International, 1999; Conrad & Hedin, 1982; Janoski, Musick & Wilson, 1998; Johnson, Beebe, Mortimer & Snyder, 1998).



In this current study of inter ethnic tolerant behavior, youth with citizenship competence would promote positive relationship with one another; sharing the same national values and goals and, they would be indifferent and these will be the positive forces that unite the different ethnic youth.

2.5.6 Definition for Intention - Inter Ethnic Tolerant Behavior

According to the Theory of Planned Behavior, the intention to perform a behavior was basically caused by three factors. Firstly, the individual's attitude towards performing the behavior, secondly, the individual's subjective norm about the behavior and finally the individual's perceived behavioral control over performing the behavior (Ajzen, 2002). Similarly, tolerance calls for the cultivation of attitudes of openness, positive interest in differences and respect for diversity, sowing the seeds of the capacities for recognizing injustice, taking steps to overcome it, resolving differences constructively and moving from situations of conflict into reconciliation and social reconstruction (Agius & Ambrosewicz, 2003). Intentions were assumed to capture the motivational factors that influence a behavior; they were indications of how hard people were willing to try, how much an effort they were planning to exert in order to perform the behavior. As a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance. Hence, in inter ethnic relations, being tolerant entails having the intention to take positive actions, for example, valuing others, eating together, staying together, shopping together; to name a few, despite differences in culture,



religion and beliefs between people of different ethnic groups because they are able to accept, respect and appreciate differences. As intentions were assumed to be the immediate antecedents of actions, people perceived to possess inter ethnic tolerant behavior, too were assumed to be able to take positive actions in inter ethnic relations.

2.6 Conceptual Framework

A conceptual framework is a representation, either graphically or in narrative form, of the main concepts or variables and their presumed relationship with each other (Punch, 1998). The conceptual framework for this study was therefore, a combination of both the Theory of Planned Behavior (TPB) (Ajzen, 1991) as shown in Figure 2 and Positive Youth Development Theory (Pitman, 1991) as shown in Figure 3 resulting in the final model of the conceptual framework for this study as shown in Figure 4. In summary, the Personal/Social Competence explained the Attitude Component in TPB, Cognitive Competence explained the Subjective Norms, Vocational Competence explained Perceived Behavioral Control and Inter Ethnic Tolerant Behavior explained the Behavioral Intention Component in TPB. The additional dimension included in this study to predict the inter ethnic tolerant behavior was citizenship competence. It was with the understanding that these competencies, which were essential for positive youth development, would also be important; and could be possible determinants to predict, inter ethnic tolerant behavior among the youth.



Based on such conceptual framework, the more favorable the personal/social competence, cognitive competence and the greater the vocational competence, the stronger would be the person's intention to perform the inter ethnic tolerant behavior. Similarly, if the youth citizenship competency is strong that is the strong desire to contribute to the betterment of the nation, hence, the possibility of behaving tolerantly between different ethnic groups would also be higher. However, how much influence each of the competencies has towards the intention of inter-ethnic tolerant behavior is yet to be identified. Hence, the conceptual framework developed for this study helped to determine the relationship between each competency and inter-ethnic tolerant behavior. Besides, the conceptual framework for this study helped to identify how the youth competencies from both the public and private universities influence the intention of inter-ethnic tolerant behavior. The results obtained from this study based on this conceptual framework enabled the development of a new model that would provide answers to how well both the theories of youth development and planned behavior can be combined to predict inter ethnic tolerant behavior among the youth and whether the differences in universities would influence the inter ethnic tolerant behavior among the youth. Therefore, this conceptual framework is an exploratory framework to develop a new model for the study and perhaps future studies.



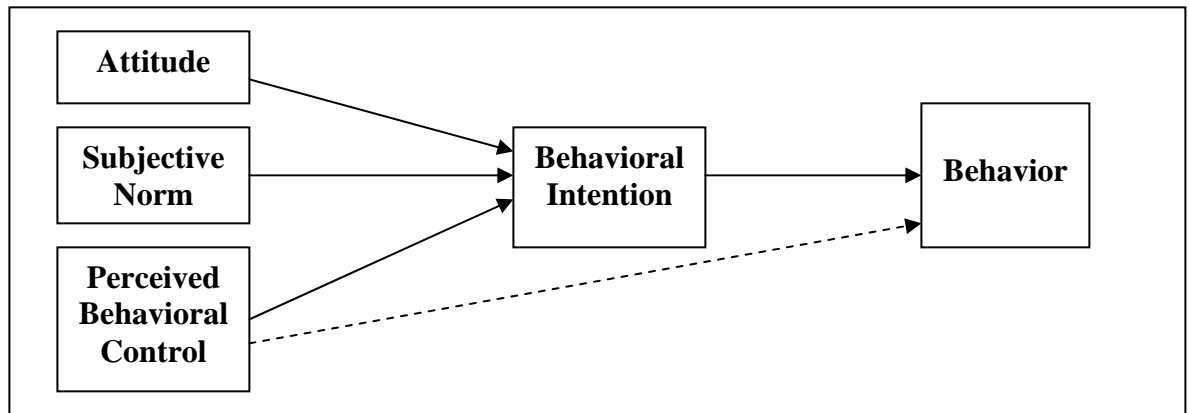


Figure 2: Theory Planned Behavior

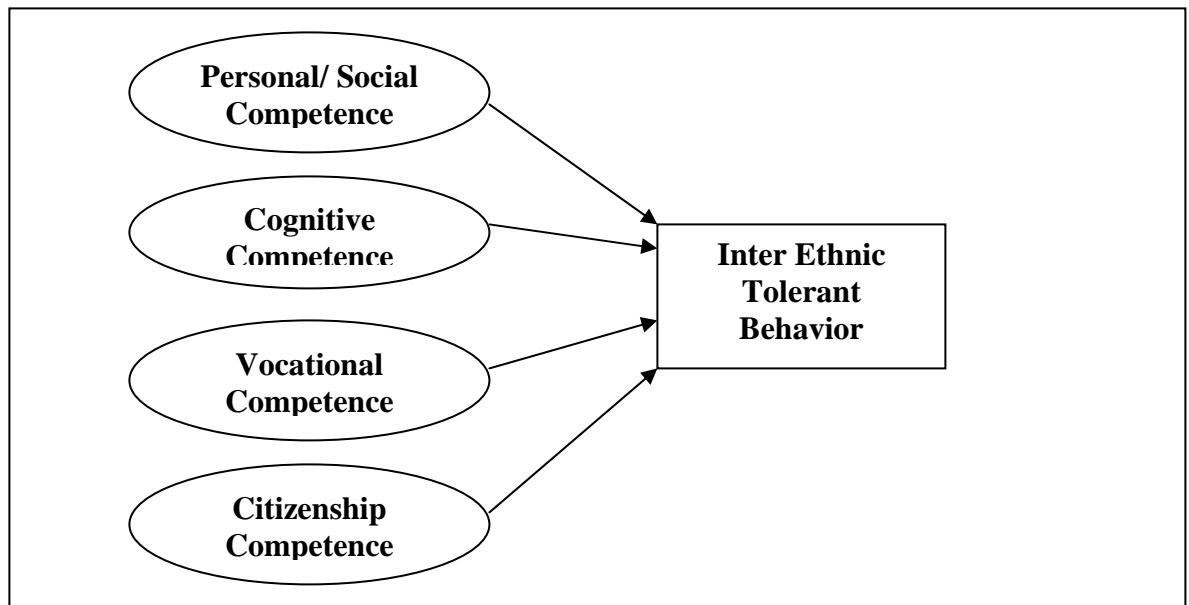


Figure 3: Positive Youth Development (Pitman, 1991)

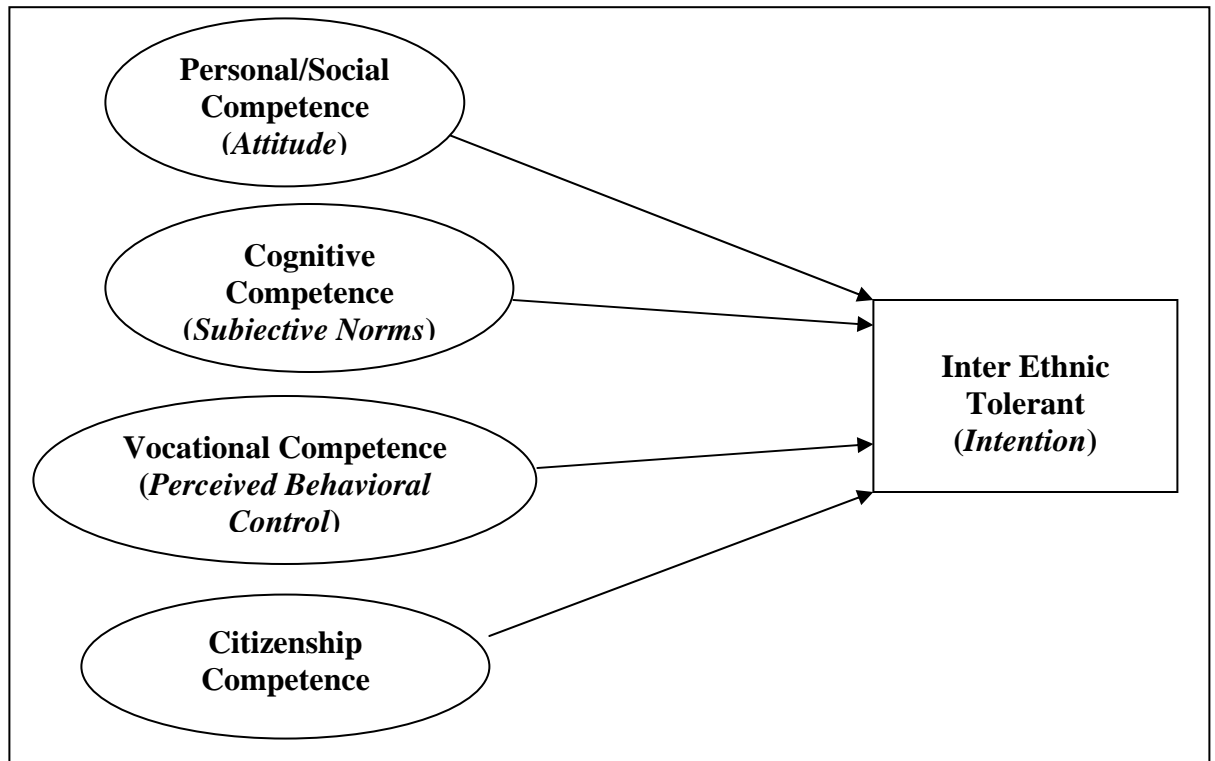


Figure 4: Conceptual Framework – Combination of Positive Youth Development Theory and Theory of Planned Behavior

2.7 Summary

Reflecting on the history of Malaysia, the making of her plural society began way back from the 14th century during the Malacca Empire. However, during the colonial ruling in the early 20th century has brought massive changes, especially to the ethnic composition in the Malaysian society today. Many immigrants were brought in from China and India to work in the mining areas as well as rubber estates. Many of these immigrants did not return to their homeland and thus, the formation of a multi racial society began to take place in a concrete manner. Today, Malaysia is one of those few nations in the world with a multi racial society

where all the three major ethnic groups, Malay, Chinese and India as well as the *Bumiputera* minority enjoy living together in one harmonious and peaceful country. Nevertheless, there were several incidents where clashes between different ethnic groups had occurred. Such incidents had claimed many innocent lives and affected the stability of the country economically as well as politically. In order to ensure history does not repeat itself, the government has taken a lot of initiatives to promote understanding and tolerance among the people especially the youth. Tolerance is necessary because there is diversity in a multi ethnic society. Therefore, it is only when confronting diversity that our acceptance of others is truly tested (Robinson, Witenberg & Sanson, 2000; Vogt, 1997; Witenberg, 2000). Therefore, in a multi racial society like Malaysia, being tolerant and accepting diversity is one very important element for inter ethnic tolerance.

Youth are future leaders and the hope of the nation. This is particularly true for the undergraduates in both the Public and Private Institutions of Higher Learning. They are the cream of the nation. Hence, preparing them today will ensure a peaceful nation in the future. The positive youth development approach that emphasizes on developing youth competencies; bringing out their inherent potential in preparing them to meet challenges in the future indeed promises positive behavioral outcome if the youth are fully competent.

Similarly, in the study of social behavior, Azjen (1988) has developed a theory that predicts behavior, the Theory of Planned Behavior. According to this theory, there were three variables involved in predicting the intention to perform a behavior. Applying the same theory, in order to prepare the youth to meet the challenges of differences and diversity in inter ethnic relations; to predict if they would behave tolerantly with people of different ethnic groups, culture and background, it is essential to identify how these variables would influenced their inter ethnic tolerant behavior. Therefore, this study has integrated the Positive Youth Development Theory; using its competencies as variables in predicting youth inter ethnic tolerant behavior, with the Theory of Planned Behavior. Applying such behavioral prediction model would helped to fill the gaps in the literature for both youth development as well as social behavior.



CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This chapter described the methods and procedures used to achieve the objectives of the research as discussed in chapter one. The discussions in the following sections include research design, research framework employed to carry out the study, instrumentation, procedures for population determination and sampling, data collection procedures and finally data analysis procedures.

As the general aim of the current study was to identify the youth developmental competencies as predictors for inter ethnic tolerant behavior among the youth in the Institutions of Higher Learning (PuIHE and PriHE) and to determine the level of inter ethnic tolerance among these youth; the research method undertaken was survey using a self-administered questionnaire.

3.1 Research Design

A research design can be defined as an action plan for getting from here to there, where here may be the initial set of questions to be answered, and there is the set of answers or conclusions about these questions (Babbie, 2001). The present study used quantitative survey method to gather data. A quantitative study is defined as an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers and analyzed with statistical procedures, in order



to determine whether the predictive generalizations of the theory hold true (Creswell, 1994). However, merging youth development competency theory with Theory of Planned Behavior to predict inter ethnic tolerant behavior is still new in Malaysia and probably little has been written on it (Neuman, 2000). The conceptual framework was developed based on the exploration of both the Theory of Planned Behavior and Positive Youth Development Theory from the literature review. The instrument used was then adapted from the instrument developed by the group of researchers headed by Azimi Hamzah (2005) who pioneered the research on inter ethnic tolerance among the youth in Malaysia.

This study used the three-phase process of measurement, which began with the conceptual definition of youth development and inter ethnic tolerance, followed by instrument or measurement development (operationalization), which involved testing and its application and finally, analyzed data to produce results. This was closely related to the three-phase model outlined by Punch (1998) that includes: (1) defining the concept; (2) selecting measures for the concept; and (3) obtaining empirical information from the measures regarding the concept.

3.2 Conceptualization

In the initial phase of conceptualization of the current research, in depth review of literatures was conducted as the bases to develop the concept of inter ethnic tolerance in Malaysia. The conceptual definition was developed as the basis for

devising a good operational definition. As Miller and Boster (1989, p. 23) explained, “The conceptual definition contains the seeds of clear, useful ways to operationally define the construct so as to bridge the gap between the verbal and operational universes.” Literature review was also conducted on theories that explained positive youth development and behavioral theories of the youth. Literature review was conducted comprehensively at this stage because there were indeed many theories already developed to study about behavioral outcome but how well was the literature developed in the area related to inter ethnic tolerance among the youth specifically in Malaysia is unclear. Hence, after much review, it was obvious that there was still a gap to how some behavioral theories can help predict inter ethnic tolerant behavior among the youth in Malaysia.

Therefore, this study focused on exploring how the two major theories of behavior and development - Theory of Planned Behavior and Positive Youth Development can merge to explain inter ethnic tolerant behavior among the youth in Malaysia. Detailed discussion on these theories and how these theories were integrated to form the conceptual framework to predict inter ethnic tolerant behavior has been discussed in Chapter 2.

3.3 Instrumentation

The second phase of the study involved the development of the measurement instrument to measure the variables in this study. As there were not any established

instrument measuring inter ethnic tolerant based on the Malaysian context except for the instrument developed for a national study on the subject on “Youth as a Foundation for Unity and Solidarity: A Study of Ethnic Tolerance” (Azimi et. al., 2005), with the permission from the author (refer appendix A), this instrument was adopted as the basis for measurement for this study. Besides, since several papers on the subject of inter ethnic tolerance among the youth have also been presented and published based on the findings using this instrument (refer appendix B), this instrument was deemed valid and reliable. Hence, this instrument was adopted but nonetheless, the instrument was further refined based on the conceptual framework, operational definition and literature review for this study.

3.3.1 Instrument Development

From the instrument adopted, there were a total of 17-items with five points Likert scale (ranging from 1 for *tidak mahu berusaha untuk memahami* to 5 for *usaha bersungguh-sungguh untuk memahami*) to measure the knowledge component of inter-ethnic tolerance. In addition, there was a total of 23-items, also with five points Likert scale to measure the attitude component (ranging from 1 for *tidak sedia menerima* to 5 for *sangat bersedia menerima*), 10-items to measure self-efficacy (Likert scale ranging from 1 for *sangat tidak benar* to 5 for *sangat benar*), 16-items with five points Likert scale (ranging from 1 for *sangat tidak setuju* to 5 for *sangat setuju*) to measure national ethos and finally, 19-items to measure the respondents’ practice component on inter ethnic tolerance behavior; with five

points Likert Scale (ranging from 1 for *tidak mengamalkan* to 5 for *sentiasa mengamalkan*). As the objective of the current study was not to measure these components per se (knowledge, attitude, self efficacy, national ethos and practice), the items measuring each of these components were reviewed based on the literature search and conceptual framework for this study. Finally, each of these components was redefined. The knowledge component was redefined as the cognitive competence. The attitude component was redefined as the personal/social competence while the national ethos component was redefined as citizenship competence. The self efficacy component was redefined as vocational competence and finally the practice component was redefined as the intention for inter ethnic tolerant behavior.

In term of items development (dimension development in this case), Golden, Sawicki and Franzen (1984) have listed three possible sources: theory, nomination by experts and other tests. They indicated that whatever their sources, items initially were selected on the basis of their validity; content validity and construct validity. Since the items in the instrument for this study was adopted and adapted, it is vital to conduct validity tests. Therefore, in light of the conceptual and operational definitions of the new variables for this study, each of the items adopted were checked for content validity.

3.3.1.1 Content Validity

Validity helps to determine the appropriateness of the instrument (Wiersma, 1991). It is concerned with to what extent the instrument measures what it is designed to measure (Wiersma, 1991). Content validity concerns item sampling adequacy – that is, the extent to which a specific set of items reflects a content domain (De Vellis, 2003). In other words, validity helps to determine the appropriateness of the instrument. A measure would be considered valid if the operational definition actually measures or corresponds to the conceptual definition. Hence, a group of arbiters comprising academicians with expertise in areas relating to the study content, and with expertise in the scales construction process was consulted. These arbiters were provided a summary of literature and operational definitions used for each variable in the study and encouraged to provide comments and feedbacks for every item on the survey, according to the operational definitions for each variable provided to them. A special form was also provided to record their responses and comments on each item. The arbiters included were:

1. Professor Dr. Turiman Suandi
(Deputy Dean for School of Graduate Studies, UPM)
2. Associate Professor Dr. Asnarulkhadi Abu Samah
(Deputy Dean for Graduates, Research and Innovation, Faculty of Human Ecology, UPM)
3. Professor Dr. Shamsul Amri Baharuddin
(Director of Institute of Malay Civilization and Occidental Studies, UKM)

A criterion of 70% of arbiter's consensus on a given item was used to determine whether to act on any arbiter suggestions; to either delete or revise the items (Norri,



2004). However, based on the arbiter's analysis, no items were deleted for each of the variables being studied.

3.3.1.2 Construct Validity

Although there were no changes in the number of items based on the arbiter's analysis for content validity, the items were further tested for construct validity before it is used for the current study. Construct validity focused on how well a measure conforms to theoretical expectations (Punch, 1998). In other words, construct validity focuses directly on response data variation among items to ascertain evidence that the proposed content categories actually reflect constructs which have been previously specified through the conceptual and operational definitions in the study (Gable & Wolf, 1993).

A group of 300 university students were gathered as the representative sample of respondents to answer the questionnaire. Upon completion, the questionnaires were analyzed using SPSS where factor analysis was conducted. Factor analysis was used because it is a method of identifying or verifying clusters of items that share sufficient variation to justify their existences as a factor or construct to be measured by the instrument (Gable & Wolf, 1993). Besides, exploratory factor analysis was used rather than confirmatory factor analysis because there was no hypothesis to test for the underlying construct.



3.3.1.2.1 Construct Validity for Items Measuring Cognitive Competence

All variables in the analysis had factorability value because the results indicated that Bartlett's test of Sphericity was significant at 0.0001 level ($p < .001$) and the Kaiser-Meyer-Olkin value was greater than 0.8, exceeding the recommended value of .6 (Kaiser, 1970, 1974). Using the principle component analysis with varimax rotation, results indicated that the top three factors accounted for 49.87% of the total variance. The number of factors was determined by the eigenvalue greater than one. The results showed a very 'clean' result where all variables exceeded the factor loading criteria of more than .40 in one extraction (Pallant, 2001) except for one item, "Understand that poverty reduction is the responsibility of all ethnic groups". Hence, this item was deleted because it did not load on any of the components obtained statistically. Each of the other variables loaded strongly on only one component, and each component was represented by a number of strongly loading variables. The factor loading values and variance percentages resulting from the principle component analysis with varimax rotation were listed in Table 1. The variables were arranged from high to low value and were clustered based on loading size for easier interpretation.

Table 1. Varimax Rotation for Cognitive Competence Items

Items	Factor		
	1	2	3
Understand the importance of children's playground in helping to improve inter ethnic relations	.769		
Understand the role or Rukun Tetangga to increase unity among the different ethnic groups	.752		
Understand how recreation places can play a role in helping to build inter ethnic unity	.743		
Understand the importance of inter ethnic foster families in helping to improve inter ethnic relationships	.717		
Understand the implications of having a multi ethnic neighbourhood in improving inter ethnic relationships	.546		
Understand the importance of Vision Schools in building inter ethnic relations among the different ethnic students	.489		
Understand the importance of kindergardens as a place to foster inter ethnic relations through the teaching of cross ethnic culture practices	.482		
Understand the importance of power sharing among the political parties		.750	
Understand the inter ethnic issues reported in the media		.643	
Understand the role of multi ethnic political parties in developing inter ethnic unity		.642	
Understand the effects of changing lifestyle among the youth towards inter ethnic relations		.523	
Understand how traditional costumes play a role in enhancing inter ethnic unity			.764
Understand the role of music and songs from different ethnic groups in enhancing inter ethnic unity			.721

Table 1 - Continued

Understand the importance of respecting other religions in strengthening inter ethnic relationships				.591
Understand the role of eating places in enhancing inter ethnic unity				.565
Understand the food that can be consumed and that cannot be consumed by the different religion				.506
Eigenvalue		5.661	1.478	1.339
% Variance		33.298	8.695	7.876
KMO and Bartlett's Test	0.868			
	df 0.136			
	Sig. 0.000			

Note: Only loadings above .40 are displayed

All the three factors have loading values more than .40 and this indicated that all factors showed a satisfying item variance clarification. Finally, the 17-item scales measuring respondents' cognitive competence on ethnic tolerance were reduced to a total of 16 items for this study. As discussed in the theoretical and conceptual framework for this study, the cognitive component indeed contained three constructs. Cognitive competence was defined as having broad knowledge and understanding in the social, political and cultural norms in navigating their behavior tolerantly towards the different ethnic groups. The interpretation of the three components was consistent with the conceptual framework of this study. Items for 'understanding the role and the importance of social distance' were loaded strongly on Factor 1 while items for 'understanding the role and importance of social politics' were loaded strongly on Factor 2. Items for understanding the

role and importance of cultural and intercultural exchange loaded strongly on Factor 3. Therefore, these items and clusters were suitable and valid to measure the cognitive competence in this study.

3.3.1.2.2 Construct Validity for Items Measuring Personal/Social Competence

The Bartlett's test of Sphericity for Personal/Social Competence was significant at 0.0001 level ($p < .001$) and the Kaiser-Meyer-Olkin value was greater than 0.80. This indicated that all variables in the analysis of personal/social competence too had factorability value. The results using the principle component analysis with varimax rotation indicated that the top three factors accounted for 43.50% of the total variance. The number of factors was determined by the eigenvalue greater than one. The results indicated that all variables exceeded the factor loading criteria of more than .40 in one extraction producing 'clean' results (Pallant, 2001) and the factor loading values and variance percentages resulting from the principle component analysis with varimax rotation were listed in the Table 2.

Table 2. Varimax Rotation for Social/Personal Competence Items

Items	Factors		
	1	2	3
Perception that wealth belongs to certain ethnic groups only	.762		
Perception that only certain ethnic groups are suitable to join the police/soldier forces to protect the nation	.731		
Perception that only certain ethnic groups are involved in drugs	.730		
Perception that poverty is related to only a certain ethnic groups only	.655		
Perception that Malaysia belongs to certain ethnic group only	.653		
Perception that only a specific ethnic group could contribute to the development of the nation	.643		
Perception that prejudice within the teachers towards a certain ethnic group is a common practice	.623		
Perception that certain ethnic groups are considered as second class citizen	.601		
Perception that supports the government to retain the policies that give priority to only certain ethnic group	.449		
Perception that only vernacular schools should be retained (example: SJK (T), SJK (C))	.422		
Perception that there should be an increase in the local drama that features the different ethnic groups in order to promote unity among the diferent ethnic groups		.701	
Perception that youth should be exposed to more issues related to inter ethnic relations		.685	
Perception that more patriotic songs to be aired over the private media (radio/TV) to increase ethnic unity		.619	
Perception that the needs of various ethnic groups should be taken into consideration while carrying out developmental programs		.535	

Table 2 – Continued

Perception that school co-curricular activities could promote unity among ethnic groups	.532			
Perception that each individual must have the readiness to work at a place where the majority is of other ethnic groups	.527			
Perception that each individual should have the readiness to help regardless of ethnic groups	.511			
Perception that to work fairly is important to increase inter ethnic relations	.503			
Perception that each individual has a high level of willingness to share business with other ethnic groups	.424			
Perception that wearing the traditional dress of all ethnic groups is appropriate in formal functions	.737			
Perception that music of all ethnic groups are appropriate to be performed in formal functions	.679			
Perception that martial arts of different ethnics should be recognized and used in promoting unity among ethnics	.584			
Perception that each individual should respect the right of neighbours regardless of ethnic groups	.515			
Eigenvalue	5.261	3.154	1.589	
% Variance	22.873	13.713	6.910	
KMO and Bartlett's Test	0.831			
	df 0.253			
	Sig. 0.000			

Note: Only loadings above .40 are displayed

All the three factors satisfied item variance clarification because they have loading values more than .40. As no item was deleted, the 23-item scales measuring respondents' personal/social competence on ethnic tolerance remained. Based on the theoretical and conceptual framework for this study, the personal/social



competence was defined as the person's beliefs and corresponding judgment towards issues related to inter ethnic relationship. Therefore, the interpretation of the three components was consistent with the conceptual framework of this study. Based on the different types of beliefs and judgments, the items indicating bias judgments were loaded strongly on Factor 1, while items indicating pacifist judgments were loaded strongly on Factor 2 and finally the ethnorelativist attitude towards inter ethnic tolerant loaded strongly on Factor 3. Therefore, these items and clusters were suitable and valid to measure personal/social competence in this study.

3.3.1.2.3 Construct Validity for Items Measuring Vocational Competence

All variables in the analysis for vocational competence were tested for sphericity. The Bartlett's test of Sphericity results was significant at 0.0001 level ($p < .001$) and the Kaiser-Meyer-Olkin value was greater than 0.80. Hence, all variables in the analysis of vocational competence had factorability value. Based on the results obtained using the principle component analysis with varimax rotation, the top two factors accounted for 47.88% of the total variance. There were two factors as determined by eigenvalue greater than one. The results indicated that all variables exceeded the factor loading criteria of more than .40 in one extraction except for one item, which is "It is easy for me to stick to my aims and accomplish my goals." Hence, this item was deleted. Table 3 showed the factor loading values and

variance percentages resulting from the principle component analysis with varimax rotation.

Table 3. Varimax Rotation for Vocational Competence

Items	Factors	
	1	2
Thanks to my resourcefulness, I know how to handle unforeseen situations	.739	
I am confident that I could deal efficiently with unexpected events	.691	
No matter what comes my way, I'm usually able to handle it	.677	
I can remain calm when facing difficulties because I can rely on my coping abilities	.544	
If I am in trouble, I can usually think of something to do	.530	
I can solve most problems if I invest the necessary efforts		.804
I can always manage to solve difficult problems if I try hard enough		.776
When I am confronted with a problem, I can usually find several solutions		.630
If someone opposes me, I can find means and ways to get what I want		.500
Eigenvalue	3.63	1.14
% Variance	9	9
KMO and Bartlett's Test	0.834	36.3
	df 0.45	92
	Sig. 0.000	90

Note: Only loadings above .40 are displayed

As one item has been deleted, nine items were left to measure the vocational competence. Factor analysis has generated these nine items into two constructs



which corresponded to the definition of vocational competence based on the theoretical and conceptual framework for this study. Vocational competence was defined as having the awareness of the different behavioral options and choices to inter ethnic relationship and was confident in acting accordingly. Therefore, the interpretation of the two components was consistent with the conceptual framework of this study. The items that measured self belief loaded strongly on Factor 1 and items that measured awareness of other behavioral options were loaded strongly on Factor 2. Therefore, these items were suitable and valid to measure vocational competence in this study.

3.3.1.2.4 Construct Validity for Items Measuring Citizenship Competence

All variables in the analysis had factorability value as shown in the significant results indicated that Bartlett's test of Sphericity ($p < .001$) with the Kaiser-Meyer-Olkin value greater than 0.80. Using the principle component analysis with varimax rotation, results indicated that the top two factors accounted for 43.92% of the total variance and the number of factors was determined by the eigenvalue greater than one. The results show that all variables exceeded the factor loading criteria of more than .40 in one extraction except for one item, "The historical inter ethnic clashes such as May 13, 1969 must be avoided." This item was deleted because it did not belong to any of the factors measured statistically. The factor loading values, variances and variance percentages resulting from the principle component analysis with varimax rotation were listed in the Table 4. The variables

were arranged from high to low value and are clustered based on loading size for easier interpretation.

Table 4. Varimax Rotation for Citizenship Competence

Items	Factors	
	1	2
I am confident this country will always ensure my well being	.735	
I fully accept the view that Malaysia is an Islamic country	.714	
Whatever happens to this country I will not migrate	.713	
I accept Islam as the official religion of this country	.706	
I accept the democracy system of this country	.617	
I fully accept the concepts of Vision 2020	.609	
The financial management in 1997 managed to ensure the country from being colonized by other richer countries	.605	
I will sacrifice my life and wealth for the country if my country is under attacked	.600	
The sharing of power among the different ethnic groups have ensured political stability in this country	.597	
I am proud of this multi racial, multi culture and multi religious country	.570	
I will fulfill my responsibility in helping my country to solve any problems though I do question some of the things the government does	.551	
I feel proud when Malaysians are internationally recognized for their excellences	.416	
It is not important for Malaysians to buy Malaysian made products		.798
The National Service training is not necessary		.736
I do not border if my country, Malaysia, is not respected by others		.712



Table 4 – Continued

Eigenvalue		5.376	1.651
% Variance		33.602	10.319
KMO and Bartlett's Test	0.839		
	df 0.120		
	Sig. 0.000		

Both the two factors have loading values more than .40 and this indicated that all factors showed a satisfying item variance clarification. Finally, the 16-item scales measuring respondents' citizenship competence on ethnic tolerance were reduced to a total of 15 items. As discussed in the theoretical and conceptual framework for this study, citizenship component indeed contained two construct. Citizenship competence was defined as having shared values and desire to contribute to the nation as well as being indifferent towards differences across ethnic groups. As it is shown in Table 4, the interpretation of the two components was consistent with the conceptual framework of this study. The items for shared values and desire to contribute to the nation loaded strongly on Factor 1 while items for being indifferent loaded strongly on Factor 2. Therefore, these items were suitable and valid to measure citizenship competence in this study. The items in both these factors clearly represented the operational definition for citizenship competence in this study.

3.3.1.2.4 Construct Validity for Items Measuring Inter Ethnic Tolerant Behavior

The Bartlett's test of Sphericity for Inter Ethnic Tolerant Behavior was significant ($p < .001$) and the Kaiser-Meyer-Olkin value was greater than 0.80. This indicated that all variables in the analysis of inter ethnic tolerant behavior had factorability value. Using the principle component analysis with varimax rotation, it is indicated that the top three factors accounted for 50.62% of the total variance. There were three factors based on the eigenvalues greater than one. All the three factors satisfied item variance clarification because they have loading values more than .40 except for two items; "Helping people from any other ethnic groups in solving their problems" and "Putting efforts in learning a foreign language." Hence, these two items were deleted resulting in the reduction of a 19-item scales measuring respondents' inter ethnic tolerant behavior to a 17-item scales.

Table 5. Varimax Rotation for Inter Ethnic Tolerant Behavior

Items	Factors		
	1		
Respecting the do's and don't (beliefs) of other ethnicity	.759		
Respecting the different types of places for worship	.752		
Respecting other ethnicity and their religions	.731		
Putting efforts to know about the lifestyles of other ethnicity	.654		
Making food suitable for different ethnic groups to eat	.572		
Helping poor friends without basing on their ethnicity	.552		
Cohabiting with friends from different ethnic groups		807	
Renting houses belonging to the different ethnic groups		766	
Shopping with friends from the different ethnic groups		690	
Singing songs from different ethnic groups		547	
Eating out with friends from different ethnic groups		530	
Shopping in shops belonging to the different ethnic groups		511	
Watching drama relating to the lives of the other ethnicity			685
Allowing family members to attend inter ethnic programs			680
Discuss inter ethnic issues with different ethnic groups			619
Involve in the celebration of National Day			607
Attend inter religious dialogue			579
Eigenvalue	6.460	1.768	1.391
% Variance	33.997	9.303	7.319
KMO and Bartlett's Test	0.884		
	df 0.171		
	Sig. 0.000		



Based on the theoretical and conceptual framework for this study, the inter-ethnic tolerant behavior was defined based on three constructs such as acceptance, respect and appreciation of another ethnics' beliefs, cultures, religions and practices. Therefore, the items in each of these three factors corresponded to the operational definition of inter ethnic tolerant behavior. In other words, the interpretation of the three components was consistent with the conceptual framework of this study. The items for acceptance of other ethnics' beliefs, cultures, religions and practices were loaded strongly on Factor 1 while items for respecting and being indifferent about other ethnics' beliefs, cultures, religions and practices were loaded strongly on Factor 2. Finally the items for appreciation of other ethnics' beliefs, cultures, religions and practices were loaded strongly on Factor 3. Hence, these items and factors were suitable and valid to measure inter ethnic tolerant behavior in this study.

In summary, based on the factor analysis conducted on the instrument to check construct validity to ensure the validity of this instrument to be adopted as the instrument to predict inter ethnic tolerant behavior based on the four youth development competencies for this study, the 23-item scales measuring respondents' personal/social competence on ethnic tolerance were retained. On the other hand, the 16-item scales measuring citizenship competence was reduced to 15 items while the 19-item scales measuring inter ethnic tolerant behavior were reduced to 17-item scales only. The 17 item scales measuring cognitive

competence were reduced to 16 item scales and lastly, the 10 item scales measuring vocational competence were reduced to 9 items only.

3.3.2 Language Check

In this study, all items in the instrument were checked for its accuracy of language used and to ensure each items in the instrument can be easily understood and easily answered by the respondents. This was done by conducting a ‘Language Pilot Test’ (Pra-Uji Bahasa). A group of 20 undergraduate students were gathered in a classroom and the instrument was distributed to each and every student. They were briefed by the researcher regarding the procedures for the language check. A time frame of 45 minutes to an hour was given to the students to read through all the questions to ensure their understanding of the questions. The researchers then went through each of the question again with the students to check for clarity and their feedback regarding the suitability of words used and sentences constructed. The instrument was designed in such a way that there were three columns indicating ‘Faham’ (Understand), ‘Tidak Faham’ (Do not understand) and ‘Komen’ (Suggestions) for the students to tick and give their feedback (refer appendix D). The students were asked to circle the words which they did not understand and give suggestions on a more appropriate word to be used.

Following the comments and suggestions from the students during the language check, wordings from some items in the instruments were edited for greater clarity

and specificity. Additional examples were given to some items to help the respondents achieve a higher understanding and correct interpretation of the statements.

3.3.3 Pilot Testing

A pilot test was conducted with the aim to establish the reliability for the inter-ethnic tolerance instrument used. The targeted population for the pilot study included youth from the three major ethnic groups (Malay, Chinese, and Indian) studying in their final year or in the second semester of their second year with age ranges between 18 and 28 years old from both the public and private institutions of higher learning. These groups of youth were selected because the population for this study also involved students from the institution of higher learning with the similar age group. Besides, these youth are in a transitional stage; they are energetic, idealistic and matured and are on the brink of taking the full responsibilities of adults (Azimi Hamzah et al., 1997). It was also assumed that students in the final year have almost completed their studies and have gone through all the necessary trainings and preparations for them to be fully equipped and are competent to face the challenges in the society especially in relation to inter ethnic relations. Hence, the results obtained will be an important input for nation building in understanding the relationship between youth development competencies and inter ethnic tolerant behavior.

The students from Universiti Tunku Abdul Rahman (UTAR) were selected to represent the Chinese youth while students from TAFE College Seremban were selected to represent the Indian youth and students from University College Islam Malaysia (KUIM), were selected to represent the Malay youth for the pilot study. Recruitment of the participants was conducted by contacting the organizations prior to sampling. Further arrangements were made to confirm the dates and places for the pilot test by the researcher.

At each site, the researcher acted as the facilitator and administered the surveys. Each respondent was given a pen as a souvenir as a token of appreciation upon completing the questionnaire. The introduction and instructions for completing the surveys were given at the beginning. Following that, the participants were walked through a brief demographic introduction where participants were asked for personal information, excluding their names in order to maintain anonymity and to avoid the problem of social desirability in responses. The participants were given approximately 45 minutes to an hour to complete the surveys and were instructed to complete the questionnaire independently. If they had difficulty answering any of the questions, they were asked to refer to the researcher. The breakdown of the pilot test sample is shown in Table 6: (n=77)

Table 6. Breakdown of Sample – Pilot Test

Sample	KUIM	UTAR	TAFE
n	36	27	14

The sample size of 77 was sufficient for determining reliability and for conducting item analysis, as reliability tends to increase with sample size (Statsoft, 2003). The findings from the pilot test, including the reliability test were used to further refine the instrument.

3.3.4 Reliability and Validity

The priority for the inter-ethnic tolerance pilot test was to establish high instrument reliability. In order to do that, several statistical testing methods using the Statistical Package for Social Sciences (SPSS) version 12 were conducted to analyze the data. Exploratory data analysis (EDA) was also conducted to ensure that the assumption of normality was met.

Reliability is a central concept in measurement and it basically refers to consistency; internal consistency and consistency over time (Punch, 1998). Reliability on the stability over time can be assessed using test retest reliability which requires two administrations of the measuring instrument. Internal consistency on the other



hand, concerns the extent to which the items are consistent with each other and requires only one administration of the instrument. The best known technique is using the coefficient alpha (Cronbach, 1951; Anastasi, 1988). Hence, in the current study, internal consistency was used to measure the reliability for each of the dimensions of the pilot instrument. Reliability was measured using the SPSS Cronbach alpha test because according to Miller (2002), Cronbach's alpha is one of the most widely used and appropriate reliability tool used in descriptive research. The rule of thumb to interpret Cronbach's alpha (George & Mallery, 2001), is shown in Table 7.

Table 7. A Rule of Thumb to Interpret Cronbach's Alpha

Value of Cronbach's Alpha	Reliability
$\alpha > 0.9$	Excellent
$\alpha > 0.8$	Good
$\alpha > 0.7$	Acceptable
$\alpha > 0.6$	Questionable
$\alpha > 0.5$	Poor
$\alpha > 0.4$	Unacceptable

Internal reliability test using the Cronbach's alpha analysis was conducted on each of the dimension; cognitive competence, personal/social competence, vocational competency, citizenship competence and inter ethnic tolerant behavior. After the actual data were collected, another Cronbach's alpha analysis was tested for these



dimensions. It could be observed that the α coefficients of all the scales for the pre test were in the range of .70 to .904, while for the final test they were in the range of .70 to .906. Such high α coefficient (the maximum value for $\alpha = 1$) indicated the reliability of the five dimensions was acceptable and the internal reliability of the instrument was acceptable too. Table 8 showed the summary of the results of reliability analysis for the five dimensions used in the present study.

Table 8. Alpha Cronbach Results for Pilot Test

Dimensions	N of Items	Cronbach's Alpha	
		Pilot	Actual
Cognitive Competence	16	.800	.802
Personal/ Social Competence	23	.737	.750
Vocational Competence	9	.718	.726
Citizenship Competence	15	.828	.834
Inter Ethnic Tolerant Behavior	17	.904	.906

It could be observed that the alpha coefficients for all the scales were greater than .70 for both the pilot and actual study. Such high alpha coefficient indicated the high internal consistency for each of the dimensions. Hence, the reliability of the instrument was acceptable. This was according to the guidelines proposed by



DeVellis (2003) regarding acceptable reliabilities for research instrument scales as shown in Table 9.

Table 9. Internal Reliability Consistency

below .60	unacceptable
between .60 and .65	undesirable
between .65 and .70	minimally acceptable
between .70 and .80	respectable
between .80 and .90	very good
much above .90	consider shortening the scale

3.3.5 Summary of Instrumentation

The entire process of instrumentation in this study incorporated the model of Measurement Development by Brown (1983). The instrumentation process started with a conceptual definition or definition development of the variables or constructs in this study. Following that was the development of the operational definitions for the dimensions in the study based on the theoretical concepts from the review of literature. Content validity was then determined by a panel of arbiters based on the given theoretical and operational definition. A group of students were also gathered to do a language check to ensure the suitability of the language used in the questionnaire for this study. Next, construct validity was conducted to ensure how well the items conforms to the theoretical expectations of the current

study before finally testing for its reliability. Reliability tests were conducted on both the pilot study and the actual study. Based on the Cronbach's alpha rule of thumb, each dimension was reviewed for its reliability. The final improved instrument was then used on the field.

3.4 Population

A population is a number of individuals or objects in a group with at least one similar characteristic (Majid Konting, 2000). According to Crocker and Algina (1986), population of interest includes a general category that one wishes to know more about through the research, to which findings can be generalized. As for this study, the targeted population of interest was the undergraduate students doing their final year in the institutions of higher learning; both the public and private universities. However, due to the large number of population, only a sample of the population was used for this study. Hence, the accessible population is the final year undergraduates from 5 selected public universities and 6 selected private university colleges.

3.4.1 Sampling

The targeted population for this study includes the final year undergraduate students from the Private Institution of Higher Learning (IPTS) and Public Institution of Higher Learning (IPTA). However, due to the diverse fields of studies, this study aimed to group the sample based on the programs of studies.



They were categorized as Business Studies, Social Sciences, Technical Studies, Biosciences and Information Technology Studies.

Also, according to the statistics from 'The Global Opportunities for Higher Education' (2007), currently there are 20 public universities and 32 private university colleges in the country. Due to such high number of institutions of higher learning, this study focused only on University 'Perdana' and College Universities because these universities have obtained an established university status and was almost at par in terms of their subject curricula. Once the samples were identified, the next step was to determine the number of respondents within each category based on Krejcie and Morgan's (1970) table. According to the Krejcie and Morgan formula, sample size was chosen due to its applicability to non-parametric tests, which require large sample sizes. Krejcie and Morgan's table for sample size thus provided a conservative estimate, which made it a favorable estimate for use with parametric tests as well (Sidek Mohd Noah, 1998).

According to Krejcie and Morgan (1970), populations of over 100,000 required a sample size of at least 384 respondents. The youth population between the age group 15 to 34 in Malaysia is approximately 9.75 million and they are around 42.5% of the total population (Doraisamy, 2002). Therefore, a minimum sample size of 384 to 400 was required for the overall sample. Isaac and Michael (1995) argued that a large sample size is essential when the total sample is to be sub-

divided into several sub-samples to be compared with one another, and when the parent population consists of a wide range of variables and characteristics, and there is a risk of missing or misrepresenting those differences (Hill, 1998). However, as there were about 86,000 students enrolled in the IPTA and IPTS in year 2005 alone (Ministry of Higher Education, 2005), and the total number of students currently studying in the IPTA and IPTS is much higher than this; therefore, this study targeted to obtain a bigger sample (> 384) in order to achieve a higher percentage of accuracy.

Besides, a large sample is much more likely to be representative of a population (Ary, 1990). According to Cohen and Cohen (1975), in determining the required sample size of a research plan, one may predetermine on the significance criterion α , and the desired degree of statistical power to be achieved. Furthermore, the expected population r , which was referred as the effect size, must also be specified. According to Cohen (1969), the larger the sample size the smaller the error and the greater the precision of the results. Thus, this will strengthen the probability of detecting the phenomena under test. By using the G-POWER proposed by Faul and Erdfelder (1992), the researcher has also calculated the required sample size for the different statistical tests that were employed in this study as shown in Diagram 1 below. For the T-test, by specifying the effect size, $d=0.5$, $\alpha = 0.05$, power = 0.95, the priori analysis calculated a total sample size of 210 for a two-tailed test.



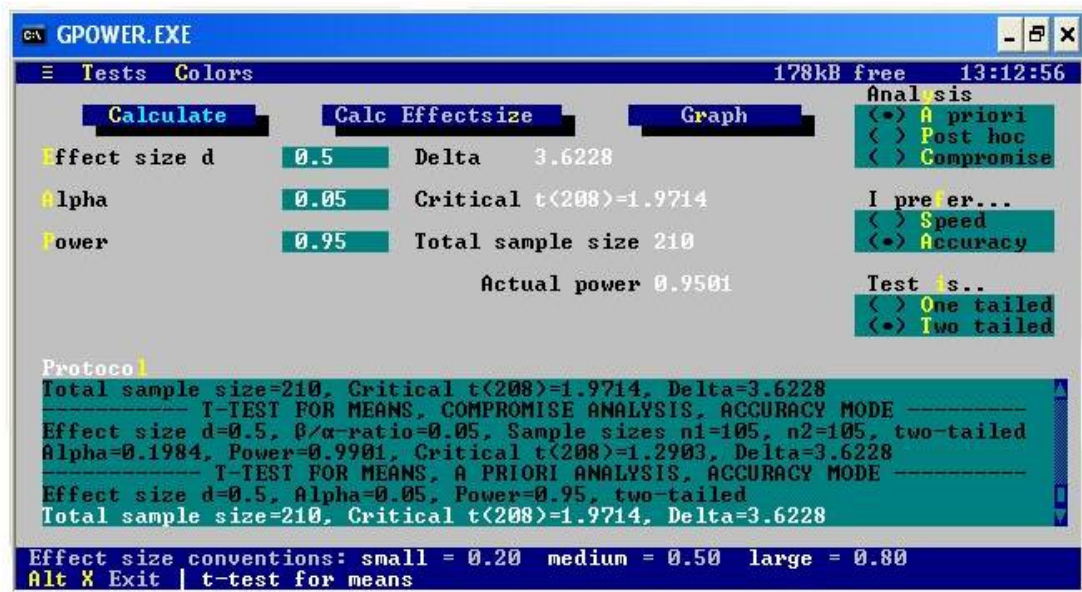


Diagram 1: GPower – T-test Sample Size

Secondly, for the F-test ANOVA, by specifying the effect size, f value = 0.25, α = 0.05, power = 0.95 and Groups = 5, a priori power analysis calculated the total sample size required was 305 as shown in Diagram 2.

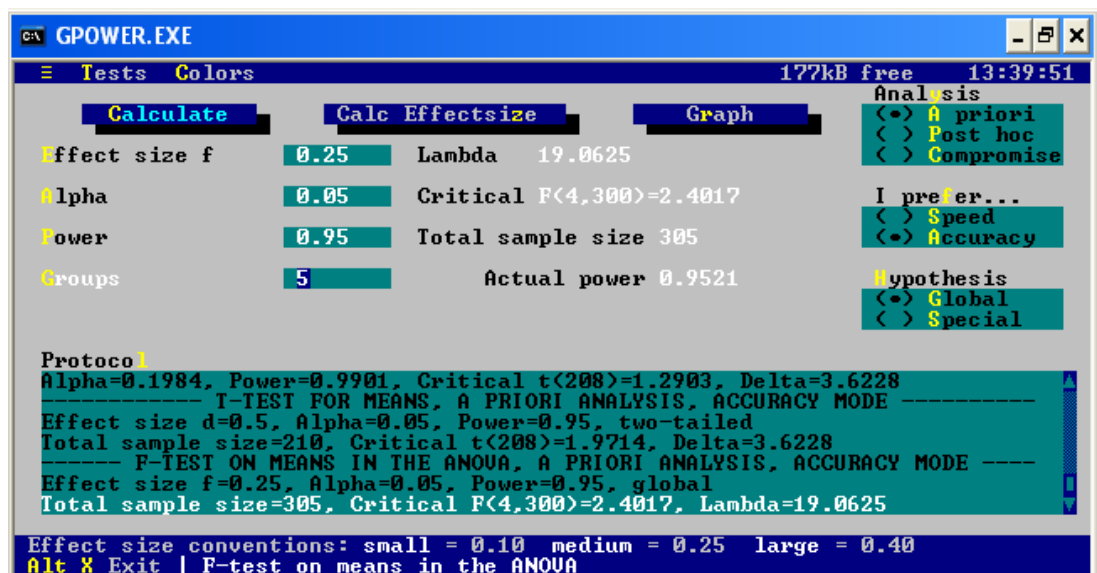


Diagram 2: GPower – F Test ANOVA Sample Size

Finally, for the F-test in Multiple Regression, by specifying the values of effect size, $f^2 = 0.15$ (Medium), $\alpha = 0.05$, power = 0.95 and number of predictors = 4, the total sample size needed was 129 as shown in Diagram 3.

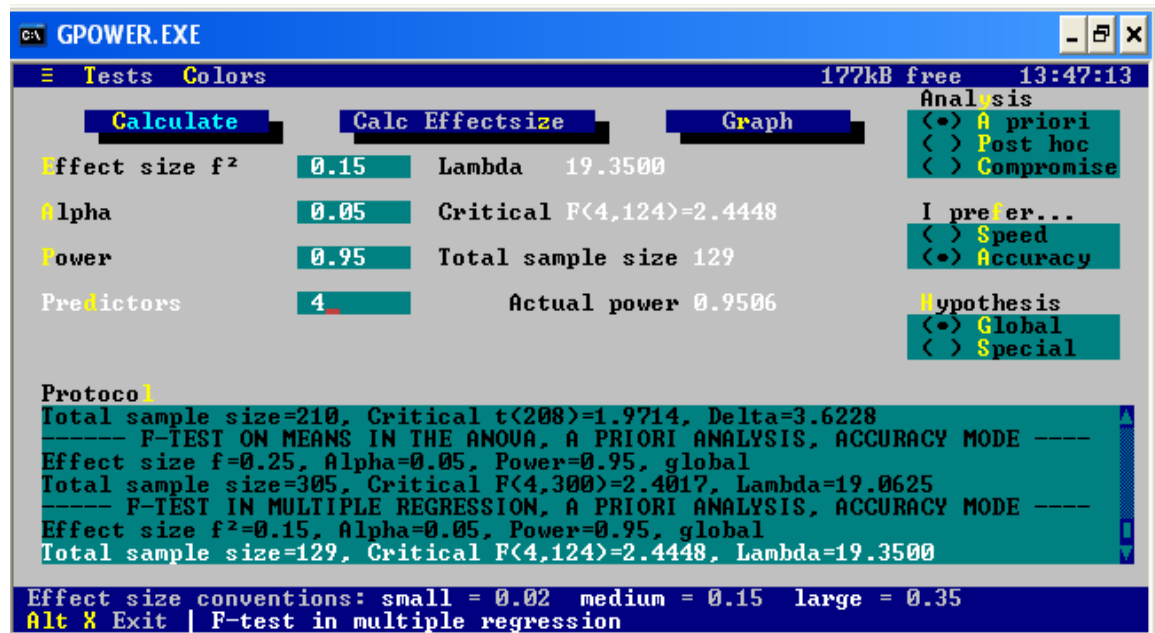


Diagram 3: GPower - F-test in Multiple Regression Sample Size

It is vital to realize that more than one analysis was conducted in this study. So, the above application has resulted in multiple sample sizes. Since a single research would have a single sample size, the sample actually needed would required reconciliation. As the decided sample size could not simultaneously meet the specifications of multiple hypotheses, the best sample size would be 305 as it was the maximum value obtained. However, in order to obtain a balance representation of the three major ethnic groups in Malaysia, a ratio of 5:3:2 for Malay, Chinese and Indian was required as well for each sampling. Therefore, the total sample size

used in this study was 1086, which was more than the maximum sample size required.

3.4.2 Sampling Procedures

There were several types of sampling design: random sampling; stratified random sampling; cluster sampling, purposive sampling and systematic sampling (Majid Konting, 2000). In order to optimize sampling of the targeted population, a variety of sampling techniques were used in this study including stratified random sampling and purposive sampling.

Stratified sample categorizes a population with respect to a characteristic a researcher considers to be important and then samples randomly from each category (Frey, Botans & Kreps, 2000). There were so many public and private universities in Malaysia and so many fields of studies. Hence, this study selected its samples only from the public universities (PuIHE) categorized as University Perdana and private universities categorized as College University (PrIHE) based on the assumption that these universities have obtained an established university status and were almost at par in terms of their subject curricula. Therefore, the samples were comparable. From the master list of 5 University Perdana in Malaysia, three 'Perdana' PuIHE institutions were randomly selected. The universities chosen were: UPM (Serdang), UM (K.L.) and UTM (Johor Bahru). However, in order to get a larger sample to represent the three major ethnic groups,



Malays, Chinese and Indians students from East Malaysia were included as well. Therefore, UMS (Sabah) and UNIMAS (Sarawak) were included in the list of PuIHE.

A list of all the faculties available in all these five PuIHE was prepared. They were randomly selected and later categorized under the five different fields of studies. From these five institutions, the following were the faculties/departments randomly selected along with the number of respondents from each of the institution. The numbers in bracket (e.g. 206) are the total number of students selected from the listed faculties/departments in that particular university.

UPM: (206)

1. Faculty of Computer Science and Technology
2. Faculty of Ecology
3. Faculty of Engineering
4. Faculty of Agriculture

UM: (233)

1. Faculty of Business and Accountancy
2. Faculty of Built Environment
3. Faculty of Economics and Administration

UTM: (68)

1. Faculty of Science

UMS: (112)

1. School of International Tropical Forestry
2. School of Engineering and Information Technology
3. School of Social Sciences

UNIMAS: (100)

1. Faculty of Resource Science and Technology
2. Faculty of Social Sciences

In each of these faculties/ departments/ schools, there were several batches of students ranging from year one to the final year. Hence, a purposive sampling was conducted to select only the final year student or students in the final semester of their second year. These students were selected based on the assumptions that since they are in their final year or at the second semester of their second year, they are actually almost at the end of their academic studies in the universities. Hence, they would have gone through all the necessary trainings required to develop their competencies in relations to inter ethnic tolerant. According to Frey, Botans and Kreps (2000), a purposive sampling is similar to a stratified sampling in that the characteristics chosen is a stratification variable but the crucial difference is that purposive sampling does not select respondents randomly from each group within the stratification categories. Instead, all available respondents who possess the characteristics are included. Hence, the total sample of final year PuIHE students from the selected universities was 719.

Based on the similar sampling methodology discussed above, stratified sampling; six '*University College*' PriHE institutions were selected from the master list of 17. The university colleges chosen were: Binary University College (Selangor), Help University College (Federal Territory), Multimedia University (Selangor), Sunway University College (Federal Territory), University College Sedaya International (Selangor) and Curtin University of Technology (Sarawak). From these six institutions, a list of all the faculties available in all these six PriHE was prepared.



They were then randomly selected and later categorized under the five different fields of studies. The following are the faculties/departments/schools chosen along with the number of respondents from each institution. Similarly, the numbers in bracket (e.g. 86) are the total number of students selected from the listed faculties/departments in that particular university.

Binary University College: (86)

1. School of Entrepreneurial Development
2. School of Information Systems

Help University College: (42)

1. Department of Law

Multimedia University: (21)

1. Faculty of Information Technology

Sunway University College: (94)

1. School of Information Technology

University College Sedaya International: (127)

1. School of Music
2. School of Social Sciences and Liberal Arts

Curtin University of Technology: (53)

1. Faculty of Engineering and Science

Similarly, a random sampling was conducted to select the final year student or students in the final semester of their second year from each of these faculties/departments/schools. The total samples of PrIHE students selected were 423.

The overall sample size for this study was 1142. However, 5% (56) of the questionnaires were considered void as they were incomplete. Hence, the final

number of respondents involved in this study was 1086, which was sufficient. According to Blaikie (2003), "...In studies with large populations, a sample of around 1000 may be satisfactory and one of 2000 will be very satisfactory" (p. 166).

3.5 Data Collection Procedures

A self administered questionnaire was used in this study to determine the Youth Development Competencies as Predictor for Inter Ethnic Tolerant Behavior among the undergraduates in both the PuIHE and PrIHE. Data collection was carried out over a seven months period, from March 2005 to October 2005. Different time-tables were allocated for the different universities and the different faculties to avoid clashes. Hence, the researcher managed to administer all the surveys in groups, which were carried out in the classrooms of each faculty. The respondents were first briefed on the objectives of the study and were advised to answer truthfully according to how they actually feel the moment they read the questions.

They were instructed to complete the questionnaire independently. However, they were allowed to ask questions if they did not understand any of the questions asked in the questionnaire. The respondents were also asked to complete their demographic details excluding their names in order to maintain anonymity. Each survey was given a maximum time of 45 minutes to complete, which was tested to

be sufficient. The researcher did not give a longer time for answering the questions to prevent the students from changing their answers following their friends’.

Each completed questionnaire submitted by the respondents was checked on the spot to identify missing information. Some students overlooked some questions and did not answer them. Hence, they were asked to complete them again before resubmitting. However, there were not many such cases; only a handful. Finally, the completed questionnaire were collected and coded. It was then analyzed using SPSS.

3.6 Data Analysis Procedures

All the data were first screened and cleaned using SPSS. Exploratory data analysis (EDA) was conducted to ensure there were no missing values in the data. All the data were normally distributed and extreme outliers were cleaned. Descriptive statistics such as frequency distribution, mean and standard deviation were then used to describe the demographic background of the respondents. Descriptive statistic were used because they were fairly straightforward and merely described the state and not attempt to explore or explain why a phenomenon occurred (Burton, 2000).

In order to answer the first objective of the study that was to identify which youth development competency was the strongest among the undergraduates of both PuIHE and PriHE and across the five different fields of studies; multivariate



analysis of variance (MANOVA) was used to identify if there was any significant difference in the mean differences of the strongest youth development competencies (social/personal competent, cognitive competent, vocational competent and citizenship competent) between the two institutions of higher learning and among the five fields of studies. Next, t-test was used to compare the levels of inter ethnic tolerant behavior among the undergraduates from the two different types of institutions while analysis of variance (ANOVA) was used to compare the level of inter ethnic tolerant among the undergraduate from the five fields of study. In order to determine which competency explained inter ethnic tolerant behavior among the undergraduates of both PuIHE and PriHE and across the five different fields of studies, multiple linear regression was used. Lastly, the final objective of the study was to determine whether the institutions of higher learning (PuIHE and PriHE) and the different fields of study (grouped into Arts and Science) moderated the relationship between inter ethnic tolerant behavior and youth development competencies. Therefore, multiple moderated regression (MMR) suggested by Aguinis (2004) was used.



CHAPTER 4

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the main findings of this study based on the interpretation and analysis of the data collected from a total sample size of 1086 youth. This chapter is divided into five main sections. The first section discussed the demographic profile of the respondents. The profiles include composition of the ethnic groups among the respondents, their religion, gender, age, types of institutions of higher learning and programs of study. These profiles were presented using the summary statistics of frequencies and percentages.

The second section presented the findings of the first objective of the study, which aimed at identifying the strength of youth developmental competencies which include social/personal competent, cognitive competent, vocational competent and citizenship competent among the undergraduates in both the Public Institution of Higher Education (PuIHE) and Private Institution of Higher Education (PriHE) and across the five different programs of study; namely Bioscience, Social Science, Technical, Business and Information Technology (BSTBIT). Multivariate analysis of variance (MANOVA) was used to identify if there were any significant difference in the mean differences on the level of strength for the youth developmental competencies between the two institutions of higher learning and among the five programs of study.



The third section discussed the findings for the second objective, which used t test to compare the levels of inter ethnic tolerant behavior among the undergraduates from the two institutions and analysis of variance (ANOVA) to compare the level of inter ethnic tolerant among the undergraduate from the five fields of study. Using multiple linear regression statistics, the fourth section focused on answering the third objective of the study; to determine which among the four identified youth development competencies, explained inter ethnic tolerant behavior among the undergraduates in both PuIHE and PriHE and across the five different programs of studies.

The final section answered the final objective where it discussed whether the type of IPT and the differing fields of study (grouped into Arts and Science) moderate the relationship between youth development competencies and inter ethnic tolerant behavior. Hence, moderated multiple regression (MMR) was used to determine the moderating effect of the IPT and the different fields of study between youth development competencies and inter ethnic tolerant behavior.

4.2 Demographic Profile

4.2.1 Age Profile

From the descriptive statistic generated in Table 10, the respondents' age ranged from minimum 20 years to the maximum of 32 years old. However, almost all (98.2%) of respondents were aged between 20 and 25, which was within the youthful age as defined in the Malaysian context as middle youth. Only 1.8% (20)

respondents' age fell between 26 and 32 years old, within the late youth age. Nevertheless they are still within the youth age range in Malaysia; therefore, they are also included in this study. This group has a higher age range probably because they started their tertiary education at a later age as compared to majority of the students.

4.2.2 Gender Profile

There were more females respondents to male respondents. Out of 1086 respondents, the majority (61.4%) were females as compared to 38.6% males. The p value for the chi square test of goodness of fit was 0.0001, indicating that there was significant difference between the proportion of female and male respondents. In other words, the female proportion was significantly larger than the male proportion. This represents very well the contemporary trend in the nation of having more females entering into institutions of higher learning every year as compared to the males.

4.2.3 Ethnic Profile

The bigger proportion (48.4%) of the respondents was Malay followed by 39.6% Chinese and 12% was Indian. The chi-square value obtained for ethnic composition was very high (390.884), while the p value was very small, 0.0001. Therefore, this indicated that there was a significant difference in the proportion of the ethnic composition. The proportion for Malay was significantly larger than the

other ethnic groups while the proportion for Indian was significantly smaller compared to the other ethnic groups. This corresponded to the sampling ratio of (5:3:2) as planned and discussed in Chapter 3.

Table 10. Demographic Characteristics of Respondents

Demographic Characteristics <i>(n= 1086)</i>	Frequency	Percentage (%)
Age (Year):		
20 - 25	1066	98.2
26 – 32	20	1.8
Gender:		
Male	419	38.6
Female	667	61.4
$\chi^2 = 56.634$ p-value = 0.0001		
Ethnic groups:		
Malay	526	48.4
Chinese	430	39.6
Indian	130	12.0
$\chi^2 = 390.884$ p-value = 0.0001		



Table 10 – Continued

Religion:		
Islam	532	49.0
Buddha	395	36.4
Hindu	92	8.5
Christianity	45	4.1
Others	22	2.0
$\chi^2 = 543.843$ p-value = 0.0001		
Institution of Higher Learning:		
IPTA	668	61.5
IPTS	418	38.5
$\chi^2 = 57.551$ p-value = 0.0001		
Fields of Studies:		
Bioscience	250	23.0
Social Science	187	17.2
Technical Studies	227	20.9
Business Studies	259	23.8
Information and Technology	163	15.0
$\chi^2 = 31.164$ p-value = 0.0001		

4.2.4 Religion Profile

Almost half (49.0%) of the respondents were Muslim while one third (36.4%) were Buddhist. The other religions affiliation of the respondents include Hinduism (8.5%) followed by Christianity (4.1%). Only 2.0% of the respondents belong to

the other faiths. This indicated that Islam, Buddhism, Hinduism and Christianity were indeed the four major religions in the country. The chi-square value was very large, ($\chi^2 = 543.843$) while the p-value was very significant ($p = 0.0001$). This suggested that there was a significant difference in the proportion of respondents in the different religion. Hence, the samples in this study were a good representation of the diverse religion and culture in a multi ethnic society, Malaysia.

4.2.5 Institution of Higher Learning

Close to two-thirds (61.5%) of the respondents were undergraduates from the PuIHE while the remaining 38.5% of the respondents were undergraduates from the PriHE. The chi-square value obtained for types of institution of higher learning was 57.551 while the p-value was 0.0001. This means that the proportion of respondents studying in PuIHE was significantly larger than those studying in the PriHE. This is a close representation of the total population in PuIHE currently, which is much larger than the population in the PriHE.

4.2.6 Programs of Study

Although the number of respondents gathered from the different fields of studies seemed to be equally distributed (23% from Bioscience, 17.2% from Social Sciences, 20.9% from Technical Studies, 23.8% from Business Studies and 15% from IT Studies), the chi-square value obtained was 31.164 with a significant p value of 0.0001. This indicated that the proportion of respondents from the

different field of studies was significantly different. Most of undergraduates were pursuing the field of Business Studies and Biosciences while only 17.2% of the undergraduates were pursuing Social Sciences followed by IT Studies (15%).

4.3 The Level of Strength for Youth Developmental Competencies by IHE

4.3.1 MANOVA Analysis - Assumptions

In order to identify and compare the different levels of strength for the youth developmental competencies among the PuIHE and PriIHE students, multivariate analysis of variance (MANOVA) was used. Before proceeding with the MANOVA analysis, several tests were conducted in order to ensure the assumptions for conducting MANOVA were met. No violation of sample size, multivariate outlier and linearity assumption were observed.

Firstly, in order to avoid violations of some assumptions, a large sample size would be ideal but the minimum required number of cases would be equal to the number of dependent variables in the study (Pallant, 2001). There were four dependent variables in this analysis and the number of cases was 1086. Therefore, this sample size is more than the required number. Hence, the sample size for this study was sufficient to run the MANOVA analysis. The next assumption needed to meet was the assumption of normality. It is also essential to identify outliers as MANOVA is quite sensitive to outliers. Therefore, the Mahalanobis distances were calculated



using the Regression menu and the output was generated as the residuals statistics in Table 11.

Table 11. Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.83	2.03	1.38	.212	1086
Mahal. Distance	.108	33.626	4.995	3.606	1086

a Dependent Variable: Types of Institution of Higher Learning

Table 11 indicated the maximum value for Mahalanobis Distance as 33.626 which was much larger comparing to the critical value for four dependent variables (18.47) based on the chi square values in Table 12. Therefore, there were multivariate outliers in the data file. In order to determine how many cases were involved as outliers, a further analysis was conducted using the descriptive statistics. The output generated in the extreme values box in Table 13 indicated both the highest and lowest values for the Mahalanobis distance variable and the case numbers that recorded those scores.



Table 12. Chi Square Table

Number of Dependent Variables	Critical Value
2	13.82
3	16.27
4	18.47
5	20.52
6	22.46
7	24.32
8	26.13
9	27.88
10	29.59

Note: Extracted and adapted from a Table in Tabachnik and Fidell (1996); originally from Pearson, E. S. and Hartley, H. O. (Eds) (1958). *Biometrika tables for statisticians* (Vol. 1, 2nd edition), 1958, New York: Cambridge University Press.

Table 13. Extreme Values

	No.	Case Number	Types of IHE		
				Value	
Mahalanobis Distance	Highest	1	216	PrIHE	33.62558
		2	779	PuIHE	32.33473
		3	885	PuIHE	30.76131
		4	333	PrIHE	29.91376
		5	505	PrIHE	22.26665
	Lowest	1	507	PuIHE	.10841
		2	606	PrIHE	.28065
		3	983	PuIHE	.29584
		4	800	PuIHE	.31008
		5	24	PuIHE	.35157



As there were as many as ten cases involved in the extreme values with the highest values much larger than the critical values, these cases were finally removed from the data file. The Mahalanobis Distance was calculated again and the maximum value of Mahal. distance generated was 17.006. This value was less than the critical value (18.47). Therefore, it can be concluded that there were no substantial multivariate outliers and the normality assumptions were met.

Next, the linearity assumptions were checked based on the output of the scatter plot for each of the group. Each pair of dependent variables (X_1 , X_2 , X_3 , X_4) for each group (PuIHE and PrIHE) generated a scatter plot.



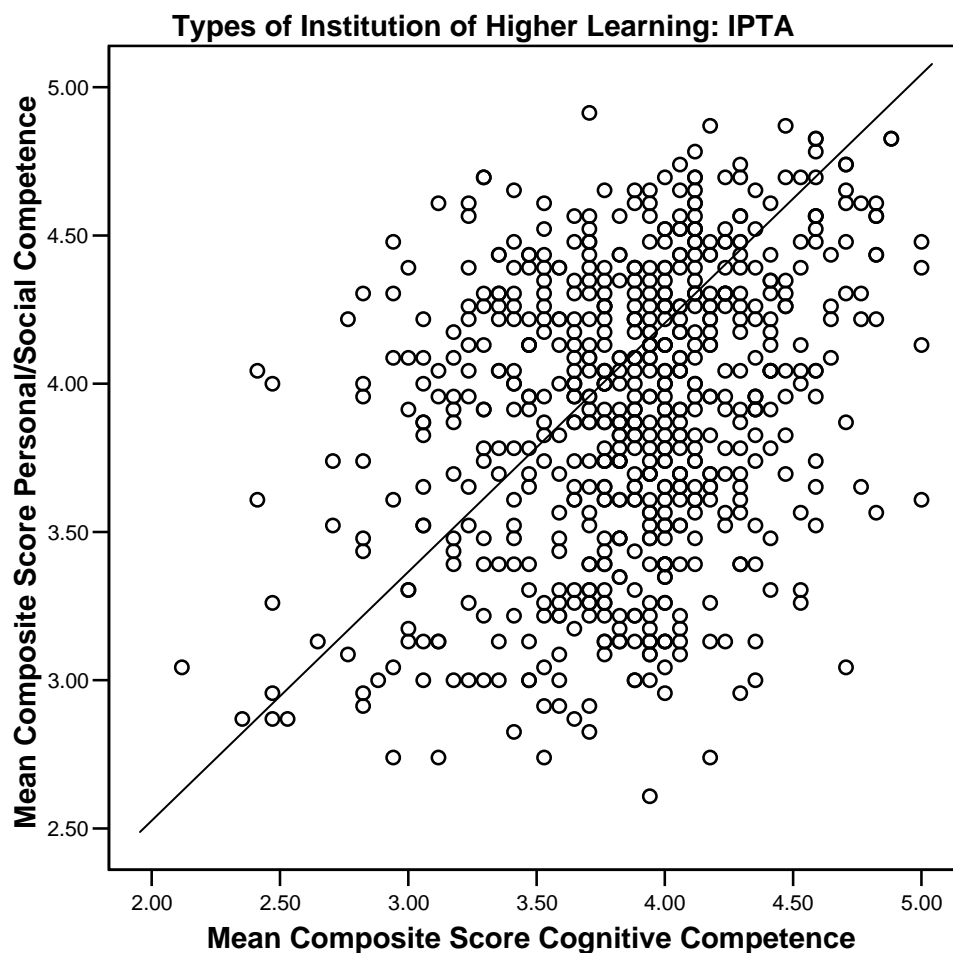
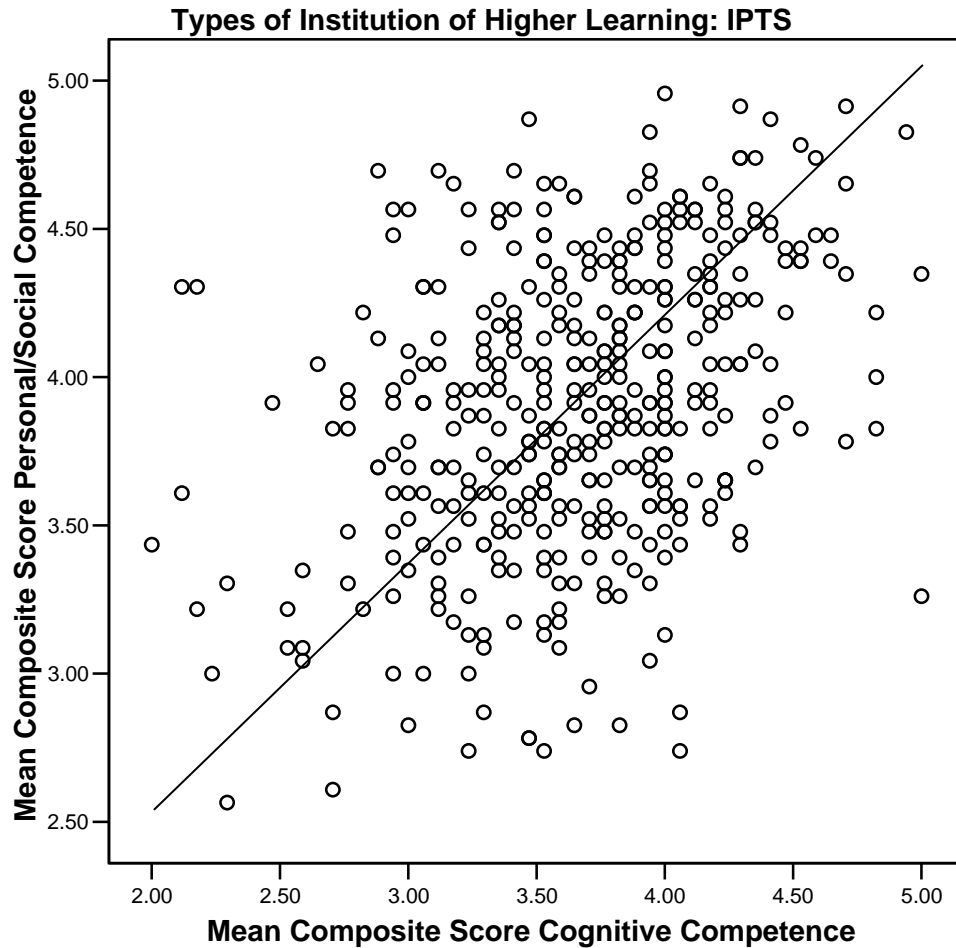


Figure 5: Scatter Plot for X₁ and X₂ for PuIHE
 * IPTA = PuIHE

The scatter plot in Figure 5 indicated that the relationship between X₁ and X₂ for PuIHE was linear. Since the plots did not show evidence of non linearity, therefore the assumption of linearity was satisfied. The scatter plot in Figure 6 showed similar pattern. There is linear relationship between X₁ and X₂ for PrIHE and since the plots did not show any evidence of non linearity, the assumption of linearity was also satisfied for this group. In fact, all the scatter plots generated between all

the different pairs of dependent variables for both PuIHE and PriHE showed similar patterns, no evidence of non linearity. Hence, the linearity assumption for this analysis was met.



**Figure 6: Scatter Plot for X₁ and X₂ for PriHE
* IPTS - PriHE**

The following satisfied the multicollinearity assumption. MANOVA works best when the dependent variables were only moderately correlated (Pallant, 2001).

Based on the correlation shown in Table 14, the strength of the correlations among the dependent variables was identified. The correlation values among all the dependent variables were less than 0.8. Hence, no pairs of dependent variables were strongly correlated and therefore, the violation of multicollinearity assumption was not present.

Table 14. Correlations between Youth Development Competencies

Youth Development Competencies		Score Personal/ Social Competence	Score Cognitive Competence	Score Vocational Competence	Score Citizenship Competence
Score Personal/ Social Competence	Pearson Correlation	1	.329(**)	.147(**)	.405(**)
	Sig. (2-tailed)	.	.000	.000	.000
	N	1076	1076	1076	1076
Score Cognitive Competence	Pearson Correlation	.329(**)	1	.290(**)	.434(**)
	Sig. (2-tailed)	.000	.	.000	.000
	N	1076	1076	1076	1076
Score Vocational Competence	Pearson Correlation	.147(**)	.290(**)	1	.261(**)
	Sig. (2-tailed)	.000	.000	.	.000
	N	1076	1076	1076	1076
Score Citizenship Competence	Pearson Correlation	.405(**)	.434(**)	.261(**)	1
	Sig. (2-tailed)	.000	.000	.000	.
	N	1076	1076	1076	1076

** Correlation is significant at the 0.01 level (2-tailed).



The final assumption needed to test was the assumption of homogeneity of variance-covariance matrices. However, the test of this assumption was generated as part of the MANOVA output; Box's M Test of Equality of Covariances Matrices. Therefore, the details of this assumption will be discussed in the interpretation of the MANOVA output to determine the strongest youth developmental competencies for PuIHE and PriHE students in the next section.

4.3.2 Comparing the Level of Strength for Youth Development Competencies by IHE

A one way between groups multivariate analysis of variance was performed to compare the strength of youth development competencies for PuIHE and PriHE students. Four types of youth development competencies: Social/Personal Competence, Cognitive Competence, Vocational Competence and Citizenship Competence were used as dependent variables of the study. The independent variable was IHE. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers and multicollinearity, with no serious violations noted. The homogeneity of variance-covariance assumption was checked against the output labeled Box's Test. The sig. value (0.013) was larger than 0.001 indicating no violation of assumption.



Table 15. Multivariate Test for IHE

Effect		Value	F	Hypothesis df	Error df	p value Sig.	Partial Eta Squared
Intercept	Wilks' Lambda	.008	34889.180(b)	4.000	1074	.000	.992
IHE	Wilks' Lambda	.830	55.160(b)	4.000	1074	.000	.170

a Computed using alpha = .05

b Exact statistic

c Design: Intercept + IHE

An inspection on the output generated in the Multivariate Tests for IHE table (Table 15), indicated there was a statistical significant difference between PuIHE and PriIHE on the combined dependent variables: $F(4, 1074) = 55.16, p = 0.0001$; Wilks' Lambda = 0.830; partial eta-squared = 0.17. This revealed that there was a significant difference between PuIHE and PriIHE in terms of their overall strength for youth development competencies. However, when the results for the dependent variables were considered separately, only three dependent variables recorded a statistical significant value less than the cut off value; using a Bonferroni adjusted alpha level of 0.0125 (0.05/4) as shown in Table 16. The variables were Cognitive Competence: $F(1, 1074) = 39.57, p = 0.001$, partial eta squared = 0.035, Vocational Competence: $F(1, 1074) = 22.727, p = 0.001$, partial eta squared = 0.021 and Citizenship Competence: $F(1, 1074) = 167.85, p = 0.001$, partial eta squared = 0.135. This indicated that PuIHE and PriIHE were only different



significantly on three out of the four youth development competencies. The eta-squared values represented the proportion of the variance in the dependent variables (youth development competencies) that can be explained by the independent variable (PuIHE and PrIHE).

In this study, the eta-squared value for both Cognitive Competence (0.035) and Vocational Competence (0.021) was considered small effect as proposed by Cohen (1988). Only 3.5% of the variance in cognitive competence was explained by the IHEs (Institutions of Higher Learning) and 2.1% of the variance in vocational competence was explained by the IHEs. However, the eta-squared value for Citizenship Competence was very high (0.135) with large effect size (Cohen, 1988) indicating that 13.5% of the variance in citizenship competence was explained by the IHEs.



Table 16. Mean Scores for Tests of Between IHE and Youth Development Competencies

Source	Youth Development Competencies Score	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
	Personal/Social Competence	.015	1	.015	.065	.798	.000
IHE	Cognitive Competence	9.644	1	9.644	39.569	.000	.035
	Vocational Competence	5.553	1	5.553	22.727	.000	.021
	Citizenship Competence	41.493	1	41.493	167.850	.000	.135

Examining the mean scores in Table 17, indicated that PuIHE students reported a slightly higher level of strength in Cognitive Competence ($M = 3.858$, $SD = 0.473$) than PriIHE students ($M = 3.663$, $SD = 0.525$). PuIHE students also reported a higher level of strength for Vocational Competence ($M = 4.186$, $SD = 0.483$) as well as for Citizenship Competence ($M = 4.140$, $SD = 0.482$) than PriIHE students respectively with the mean scores for Vocational Competence ($M = 4.039$, $SD = 0.513$) and Citizenship Competence ($M = 3.737$, $SD = 0.521$). On the other hand, there was no difference in the level of strength for Personal/Social Competence between the PuIHE and PriIHE students. This result suggested that the level of skills to evaluate and make correct judgments without prejudices and the ability to



develop positive relationship especially inter ethnic relationship is similar for students from both the PuIHE and PriHE.

The mean values in Table 17 also indicated that both the students in PuIHE and PriHE have a highest level of strength in their vocational competence as the mean value for vocational competence was the highest recorded (PuIHE = 4.186, PriHE = 4.039). This suggested that the Malaysian youth (students from both the PuIHE and PriHE), having lived in a multi ethnic society for almost two decades or more, have a strong awareness that they can choose to behave differently, peacefully in this sense and were confident in acting accordingly to ensure unity and harmony between the different ethnic groups. .

In addition, though the mean score for cognitive competence among the PuIHE students were higher than the PriHE students, cognitive competence recorded the lowest mean score for students in both these institutions compared to the other three competencies. This result suggested that the broadness of knowledge and understanding to interpret the social cues, society norms, behavioral and cultural norms of the 'other' ethnic groups among the Malaysian youth (students from both the PuIHE and PriHE) was rather limited. This probably explained why according to Khoo (2004), it is still a common scenario for students grouping according to their ethnic groups in the classrooms, common rooms, food court and for course work discussions. Shamsul Amri (2004) has also shared the same sentiment when



he commented that although Malay, Chinese and Indians students coexisted in the same class, they do not really mix. This is because only through having the right knowledge and understanding of the 'others', can one develop the correct values. Values influenced human behavior and condition what the individual will think and do in particular situations (Yinger, 1989). If the youth do not have knowledge and do not understand the behavioral and cultural norms of the 'other' ethnic groups, they will choose to remain with their own ethnic groups. This is because youth need to have the sense of belonging or otherwise, excluded. It is an individual's sense that he or she values, and is valued by, others in the family and surrounding community (Center for Youth Development and Policy Research, 1996); connection to another individual or group of individuals on the basis of common interest or formal affiliation. Therefore, if these youth were lacking in knowledge and understanding, lacking in common values with the other ethnic groups, they will choose to remain with their 'in group' to fulfill their needs of belongingness and sense of security.

This suggested the fragility of the current and perhaps future inter ethnic relations in the country. This is because the lack of knowledge and understanding will often give rise to prejudice, misunderstanding and stereotyping (Wenzlaff & Wegner, 2000). Therefore, it is important to enable the youth in the country to learn and know about the social cultural norms of other ethnic groups, the different values and beliefs advocated by the different ethnic groups besides excelling only



academically. This is because “Learning is the very purpose of human life, the primary factor in the development of personality, that which makes human beings truly human” (Ikeda, 2000). Besides, learning contributes to social cohesion and fosters a sense of belonging, responsibility and identity (Castolo, 2002). Hence, it is commendable that the Malaysian government has introduced a subject on inter-ethnic relations as a compulsory subject to improve the youth cognitive competencies; to increase knowledge and understanding on the different social, cultural and behavioral norms of the different ethnic groups in Malaysia since year 2005. This is because education above all is the basis for building with dignity and humanity, a supremely noble golden path of peace, culture and human solidarity (Ikeda, 2000).

Since students from the PuIHE recorded a higher mean score for the cognitive competence as compared to students from the PrIHE, this result suggested that students from the PuIHE have more knowledge and understanding to interpret the social cues, society and cultural norms of the ‘other’ ethnic groups. This probably was due to the availability of more opportunities for interaction as the number of students enrolled in any PuIHE was much higher and diverse compared to the enrolment in the PrIHE. The larger population and greater diversity in the PuIHE could have created more opportunities for learning and thus broadened the understanding of the different ethnic groups.

Table 17. The Level of Strength for Youth Developmental Competencies by IHE

Youth Developmental Competencies	Types of IHE	Mean	Std. Deviation	Sig.
Personal/Social Competence	PuIHE	3.9008	.48692	0.798
	PriIHE	3.9086	.48497	
	Total	3.9038	.48597	
Cognitive Competence	PuIHE	3.8578	.47305	0.0001
	PriIHE	3.6633	.52529	
	Total	3.7834	.50244	
Vocational Competence	PuIHE	4.1863	.48255	0.0001
	PriIHE	4.0387	.51275	
	Total	4.1298	.49928	
Citizenship Competence	PuIHE	4.1398	.48160	0.0001
	PriIHE	3.7364	.52139	
	Total	3.9854	.53429	

In conclusion, the results from the MANOVA analysis indicated that there was a difference in the overall level of strength for the youth developmental competencies between PuIHE and PriIHE students. However, the significant difference between PuIHE and PriIHE only occurred on three competencies out of four, which were cognitive competence, vocational competence and citizenship competence. There was no significant difference in the level of social/personal competency between the two IHEs. This means how the PuIHE and PriIHE students viewed and act towards issues related to inter-ethnic relationship did not differ significantly; though the literature has suggested otherwise because of the different social

environment. The results of this study indicated that the social environment have affected the other competencies instead; such as cognitive, vocational and citizenship competencies. This suggested that there was a difference in the level of understanding the different cultural, social political norms; there was a difference in the level of strength in the awareness of the different behavioral options in relation to inter ethnic relationships and the sense of shared values and desire to contribute to the nation among the students in the PuIHE and PrIHE but the level of skills to evaluate and make correct judgments without prejudices and the ability to develop positive relationship especially inter ethnic relationship is similar for students from both the PuIHE and PrIHE.

Comparing the mean values, the results indicated that all the three youth developmental competencies recorded a higher level for the PuIHE students as compared to the PrIHE students. This means the PuIHE students were more competent than the PrIHE students in terms of their knowledge and understanding of other ethnic groups, greater awareness of behavioral options and confident to act accordingly as well as a stronger sense of shared values and desire to contribute to the nation.

Besides having a larger student population in the PuIHE, one could also argue that there were more co-curricular and elective courses in the PuIHE, that were not directly related to the students' fields of study but are compulsory to take. For



example, a large number of Malays and Indians students took Mandarin language as an elective subject. This has helped them to develop a better understanding about the Chinese culture, breaking down the language barrier and developed more friends with the students from the Chinese ethnic group. Besides, there were other subjects such as public speaking, academic writing, media, music, performing arts and the like that provided great opportunities for interactions. This was supported by the study conducted by Dworkin, Larson and Hansen (2002) that suggested youth who participated in extra curricular and community based activities learnt how to regulate their emotions. They learn how to block negative emotions and used positive emotions constructively. Such positive emotions promote self confidence; self esteem and enhances the flexibility to act on alternative choices. Henze (2001) has also noted in her research that school based program indeed can promote racial tolerance among students.

In addition, among the four youth developmental competencies, both students from the PuIHE and PriHE have the highest level of strength in their vocational competence and moderate level of strength in their cognitive competence. However, comparing among the four competencies, cognitive competence was the lowest. Perhaps due to the conflicts that had occurred in the history of the country such as May 13, Kampung Medan and the Kampung Rawa incident, Malaysians realized the importance of maintaining peace and harmony in the country. They may not know or understand why but through daily experiences, living and



working amidst the different ethnic groups in a multi ethnic society, have helped developed their vocational competencies such as developing several behavioral options when dealing with differences; behaving in manners to avoid conflict and were confident about themselves without feeling threatened from one another.

Both PuIHE and PriHE recorded the lowest mean value in the cognitive competency which reflected what the famous and often quoted phrase in describing the state of inter ethnic in Malaysia, “Stable Tension” (Shamsul Amri, 2004). This is because in this study, ‘cognitive competency’ was defined as having broad knowledge and understanding to interpret the social cues, society and behavioral as well as cultural norms of others in order to behave tolerantly with each other. The lowest mean value in this competency hence suggested that though students from the PuIHE and PriHE were the groups of youth who received tertiary education, they somehow have limited knowledge and understanding about the cultural and behavioral norms of the other ethnic groups or the society norms. Therefore, this result suggested that such limited knowledge and understanding about the social, politic and cultural norms of a multi ethnic society among the youth may provide grounds that breeds prejudices, intolerant, ethnocentrism, stereotyping and narrow mindedness which may be the cause for conflict. In other words, the peacefulness and harmony that the Malaysian society experienced currently may disintegrate into a battle ground which is happening in many parts of the world today. Though the students may be aware of other behavioral options but without knowledge and

understanding, it will somehow put the nation into a very tense situation; just as walking on a razor blade because the mind is somehow mightier than the sword. Therefore, educating about the different ethnic issues, different social, cultural and political norms in a multi ethnic society is an important step towards achieving a peaceful and harmonious society.

4.4 The Level of Strength for Youth Development Competencies by Programs of Study

4.4.1 MANOVA (Assumptions and Analysis)

In order to identify and compare the level of strength for each youth development competency among the students from the five different programs of study, namely; Bioscience, Social Science, Technical Studies, Business Studies and Information Technology, multivariate analysis of variance (MANOVA) was used. The four dependent variables used were: Personal/Social Competence, Cognitive Competence, Vocational Competence and Citizenship Competence. The independent variables were the programs of study. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers and multicollinearity, with no serious violations noted as discussed earlier. The homogeneity of variance-covariance assumption was checked against the output labeled Box's Test. The sig. value was 0.0001 indicating no violation of assumption.



Then an inspection on the output generated in the Multivariate Tests table (Table 18) was conducted. The results indicated there were a statistical significant difference between the five fields of studies on the combined dependent variables: $F(16, 3272.597) = 6.804, p = 0.0001$; Wilks' Lambda = 0.905; partial eta-squared = 0.025. This revealed that there was a significant difference between Bioscience, Social Science, Technical Studies, Business Studies and Information Technology in terms of their overall youth developmental competencies.

Table 18. Multivariate Test of Significance by Programs of Studies

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Wilks' Lambda	.007	35935.435(b)	4.000	1071	.0001	.993
Program of Studies	Wilks' Lambda	.905	6.804	16.000	3272.60	.0001	.025

- a Computed using alpha = .05
- b Exact statistic
- c Design: Intercept + Category

When the results for the dependent variables were considered separately, indeed all four of the dependent variables recorded a statistical significant value less than the cut off value using a Bonferroni adjusted alpha level of 0.0125 (0.05/4) as shown in Table 18. The variables were Personal/Social Competence: $F(4, 1074) = 17.555, p$



= 0.0001, partial eta squared = 0.061, Cognitive Competence: $F(4, 1074) = 4.894$, $p = 0.0001$, partial eta squared = 0.0185, Vocational Competence: $F(4, 1074) = 4.432$, $p = 0.0001$, partial eta squared = 0.016 and Citizenship Competence: $F(4, 1074) = 5.988$, $p = 0.0001$, partial eta squared = 0.022. This indicated that all the five programs of studies were different significantly on all four youth developmental competencies. The eta-squared values represented the proportion of the variance in the dependent variables (youth developmental competencies) that can be explained by the independent variable (programs of studies).

Table 19. Mean Scores for Tests of Between Programs of Studies and Youth Developmental Competencies

Source	Youth Developmental Competencies Scores	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Program of Studies	Personal/Social Competence	15.624	4	3.906	17.555	.0001	.061
	Cognitive Competence	4.872	4	1.218	4.894	.0001	.018
	Vocational Competence	4.363	4	1.091	4.432	.0001	.016
	Citizenship Competence	6.713	4	1.678	5.988	.0001	.022

In this study, the eta-squared values for Cognitive Competence (0.018), Vocational Competence (0.016) and Citizenship Competence (0.020) were considered small



effect as compared to the criteria of eta-squared values in Cohen 1988. Small effect indicates small mean difference among the different programs of studies.

4.4.2 Comparing the Level of Strength for Each Youth Development Competencies by Programs of Studies

Examining the mean scores in Table 20, indicated that Bioscience students reported a slightly higher level of Personal/Social Competence ($M = 4.040$, $SD = 0.406$) than the other four programs of studies. However, when comparing the means scores for Cognitive Competence, Vocational Competence and Citizenship Competence, the Social Science students reported a higher level of Cognitive Competence ($M = 3.887$, $SD = 0.508$), a higher level of Vocational Competence ($M = 4.252$, $SD = 0.457$) and also a higher level of Citizenship Competence ($M = 4.075$, $SD = 0.516$) than the other four fields of study.

Students from the Social Sciences focused more on the social sciences or humanities, which dealt a lot with history, human experiences and emotions which may have helped to develop a higher competency in understanding the different cultural, norms and beliefs of the different ethnic groups. In addition, such learning experiences too may have helped to develop greater self efficacy and choices to act as well as a stronger sense of shared values and desire to contribute to the nation. According to Piaget (1972), youth mentally construct concepts through the process of active experimentation and reasoning. He saw humans as highly motivated to



organize the experiences they have into concepts and theories of how the world works. Therefore, the results of this study suggested students from the different fields of study have constructed different concepts, reasoning and understanding based on what they have learnt. Based on the subjects and experiences from the field of social sciences and humanity, the social science students thus demonstrated a higher level of competencies in understanding the social, political and cultural norms, a greater awareness of the different behavioral options in relating to inter ethnic relations and a greater sense of shared national values and goals.

4.4.3 The Overall Level of Strength for Youth Development Competencies

The mean values shown in Table 20 indicated that all the students from the five programs of studies (Bioscience, Social Science, Technical Studies, Business Studies and Information Technology) have the largest mean values (above 4.0) in their vocational competence (Bioscience = 4.137, Social Science = 4.252, Technical Studies = 4.123, Business Studies = 4.053 and Information Technology = 4.110) as compared to the other four youth developmental competencies.

These results indicated that these students, regardless of education background or fields of specialization, were aware of the different behavioral options or the different ways to deal with people from different ethnic groups; with different religion and different cultural background. These students were also confident in acting accordingly to ensure unity and harmony in the nation. This suggested that

the vocational competency did not differ by program of studies or in other words, the students' self efficacy and awareness of the different behavioral options in relation to inter ethnic tolerant behavior were similar irrespective of their program of studies.

The results of this study also supported the idea on the importance of having the competency to regulate one's negative emotions by choosing to act in an alternative manner as suggested in a study conducted by Dworkin, Larson and Hansen (2003). The results of the study indicated that after participating in some curricular activities, the youth managed to learn how to regulate their emotions by reacting in alternative ways. They learnt how to block out negative things and used positive emotions constructively. This is an important insight because in emotional development, there are emotions that can disrupt and interfere (Harris, 1981). But youth having the vocational competency were able to limit the disruptive effect of their negative emotions and deliberately choose to counteract the stress and tension they experienced in school life and also in relationships. Such positive emotions and competency in reacting positively using the alternative strategies have promoted self confidence; self esteem and enhanced the youths' flexibility to act on alternative choices (Dworkin, Larson & Hansen, 2003). Just as Fredrickson (2001) theorized that positive emotions can serve to broaden and build personal resources, which is the essential element in inter ethnic relationships.



Table 20. The Level of Youth Developmental Competencies by Programs of Studies

Programs of Studies	Youth Developmental Competencies							
	Social/Personal		Cognitive		Vocational		Citizenship	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Bioscience	4.0402	0.40638	3.8254	0.46091	4.1373	0.45509	4.0452	0.52062
Social Science	4.0290	0.43503	3.8874	0.50824	4.2516	0.45740	4.0753	0.51605
Technical	3.7318	0.49378	3.7093	0.53090	4.1231	0.53943	3.9428	0.56685
Business	3.8298	0.50162	3.7856	0.47655	4.0533	0.50488	3.9966	0.50035
Information Technology	3.9079	0.52279	3.6974	0.53238	4.1100	0.52211	3.8297	0.54926
Significance	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

In addition, although the mean score for cognitive competence among the Social Science students was significantly higher than the students from the other programs of study, cognitive competence recorded the smallest mean score in all of these five fields of study compared to the other three competencies. This indicated that there is lacking in knowledge and understanding of the social cues, behavioral and cultural norms of the other ethnic groups among students from the various



programs of study. These results also corresponded to the results obtained when comparing between the students from the PuIHE and PriHE. In other words, the results of this study suggested, generally, all the students in the country, regardless of where they received their tertiary education and regardless of what programs they were specializing in, have a low level of cognitive competence with regards to inter ethnic relations.

Though the government has taken many initiatives to organize programs and activities especially for the youth to interact with one another, how much understanding and knowledge about each other's cultural and norms has been transpired through such activities is unclear. Did the youth share their beliefs and cultural norms with one another during such interactions too are unknown. Despite the amount of efforts taken and money spent in helping the youth to unleash their potential especially cognitively, the results of this study indicated more has to be done in relation to inter ethnic relations. Hence, more research in this area are needed in addition to the efforts undertaken from the various sectors of the society to help nourish the mind and developed the cognitive competency among the youth today with regards to inter ethnic relations, thus achieving inter ethnic tolerance.



4.5 Levels of Inter Ethnic Tolerance Behavior by IHE

Table 21 indicated the different means for Inter Ethnic Tolerance Behavior between the PuIHE and PriHE students.

Table 21. Inter Ethnic Tolerant Behavior Mean Score by IHE

Variable	IPT	Mean	Mean Difference	Standard Deviation	t	df	p-value
Inter Ethnic Tolerance	IPTA	3.47		0.613			
			-.029		-0.755 ^a	1084	0.251
	IPTS	3.50		0.649			

a. Based on Equal Variances Assumed

In order to compare the differences in the group means (PuIHE and PriHE) of inter ethnic tolerance, the following hypotheses (Ho) were tested.

Ho: There are no differences in the mean scores for inter ethnic tolerance behavior between the PuIHE and PriHE students

H1: There are differences in the mean scores for inter ethnic tolerance behavior between the PuIHE and PriHE students

An independent-samples t test was conducted to determine if there was any differences in the inter-ethnic tolerance behavior mean score for PuIHE and PriHE students. Prior to that, a preliminary assumption testing was conducted to check for



normality and equality of variance with no serious violation noted. There was no significant difference in the mean inter ethnic tolerant behavior score for PuIHE ($M = 3.47$, $SD = .613$) and PrIHE ($M = 3.50$, $SD = .649$), $t(1084) = -.755$, $p = .251$. With the p value greater than the alpha value of 0.05, the null hypothesis was not rejected. Hence, there was no significant difference in the mean scores of inter ethnic tolerant behavior between the PuIHE and PrIHE students. An inspection of the two means suggested that the level of inter ethnic tolerant behavior for both the PuIHE ($M = 3.47$) and PrIHE ($M = 3.50$) students were quite similar. Despite the significant difference in sampling numbers between the undergraduates from the PuIHE and PrIHE, the level of inter ethnic tolerant behavior between these two groups of students were insignificantly different.

Thus, the results of this study suggested that regardless of where the students studied (PuIHE or PrIHE), the level of inter ethnic tolerance did not differ significantly. This meant that the levels of acceptance, respect and appreciation of another ethnics' beliefs, cultures, religions and practices among students were not influenced by the type of institution of higher learning they went to. This also suggested that the way the youth (students from both the PuIHE and PrIHE) behave; how they treat people from different ethnic groups is common. This was despite the earlier assumption and discussion in Chapter 2 about the possibilities of differences in inter ethnic tolerance behavior among the youth in PuIHE and PrIHE due to the different social environment and competition for place in PuIHE, the



results in this study indicated otherwise. Though some literature also argued that cultural symbols and ancestral attachment were the major source that influence behavior, the results of this study supported the other perspective of literature review, which stated under other and more common circumstances in the world today, the cultural symbols and ancestral attachment were only weakly felt; it is the perception of shared interests that is dominant (Cohen, 1974). Probably the National Education Philosophy or the Rukun Negara which have been drilled into the education system since primary has been successful in developing the perception of shared interest among the youth thus developing common inter ethnic behavior among them.

4.6 Levels of Inter Ethnic Tolerant by Programs of Study

A one-way between-group analysis of variance was performed to investigate the impact of the different field of studies on the level of inter ethnic tolerant among the youth. Subjects were divided into five groups according to their program of study (Bioscience, Social Science, Technical Studies, Business Studies and Information and Technology). The mean scores obtained by these five groups for inter ethnic tolerant behavior was depicted in Table 22. Preliminary assumption testing was conducted to check for normality and homogeneity of variance with no serious violations noted. To compare the group means with the level of inter ethnic tolerant behavior, the following hypotheses were tested:

Ho: There are no differences in the mean scores for inter ethnic tolerant among the five programs of studies

H1: There are differences in the mean scores for inter ethnic tolerant among the five programs of studies

Table 22. Inter Ethnic Tolerant Mean Scores by Programs of Study

	Program of Study	Mean	Mean Square	Standard Deviation	F	df	p-value	Partial Eta Squared
Inter Ethnic Tolerant	Bioscience	3.51		0.623				
	Social	3.62		0.609				
	Technical	3.41	1.56	0.621	4.01	4	0.003	0.015
	Business	3.41		0.612				
	IT	3.49		0.662				

The ANOVA test revealed that there was a statistical significant difference at $p < .05$ level in inter ethnic tolerant behavior between the five groups $F(4, 1081) = 4.01$, $p = .003$. Thus, the null hypotheses (Ho) was rejected and the alternative hypotheses (H1) was supported, indicating that the mean scores for inter ethnic tolerant behavior between the five fields of studies were significantly different. However, despite reaching statistical significance, the actual difference in mean scores between the groups was small. Based on Cohen's (1988) criteria (0.01 = small



effect, 0.06 = moderate effect, and 0.14 = large effect) the eta-squared obtained was 0.015 indicating that the mean difference between groups was small. Post Hoc multiple comparisons using the Tukey HSD test showed that there was a statistically significant difference in the mean score for the following pairs: Social Science and Technical Studies, Social Science and Business, but not for the others. An inspection of the mean scores based on post-hoc comparisons using Tukey HSD test indicated that the Social Science students obtained significantly higher mean score ($M=3.62$, $SD=0.608$) than Technical Studies students ($M=3.41$, $SD=0.621$) and Business Studies students ($M=3.41$, $SD=0.612$). On the other hand, the differences between the other fields of studies were not significantly different at .05 level. Hence, among the five fields of studies, the Social Science students have a higher level of Inter Ethnic Tolerant Behavior as shown in the graph (Figure 7) while students from the Technical and Business studies have a lower level of Inter Ethnic Tolerant behavior comparatively.

This corresponded with the findings by Shalila (1993) who wrote a paper on ‘Getting Along across Differences, Overcoming Prejudice and Inequality’. In this paper, he discussed that the social sciences subjects (history in particular) may be particularly important in promoting multiculturalism. He also suggested that liberal art subjects to be encouraged both as major fields of study and as elective courses in the curriculum. This was because according to Altemeyer (1988), students in the humanities and social sciences have lower levels of Right Wing Authoritarianism



and this level decreases over their course of study. Hence, the different programs of studies do somehow influence the levels of inter ethnic tolerance behavior among the youth. Though the mean difference between the different programs were small, this results do suggest that educational program can play an important role in reducing inter group disharmony to a certain extent (Bond, 1988).

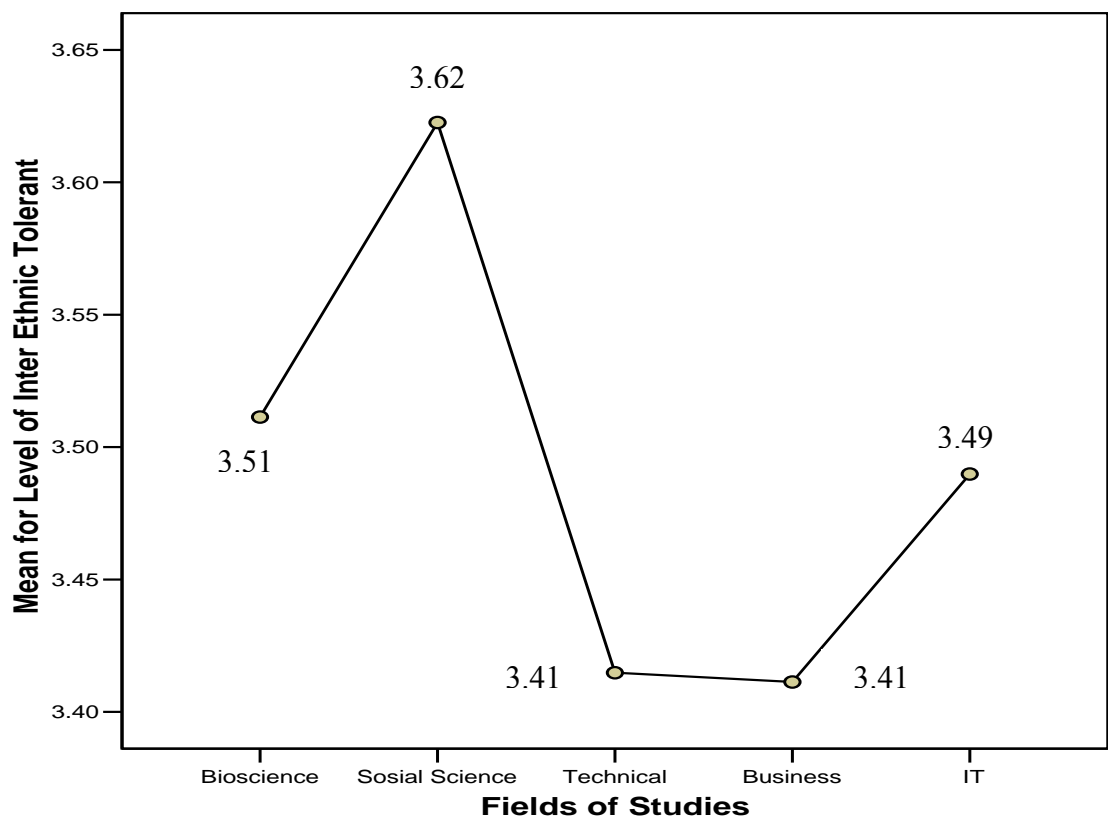


Figure 7: Comparing Mean Scores for Inter Ethnic Tolerant by Programs of Study

4.7 Factors Influencing Inter Ethnic Tolerant Behavior (IETB)

The third objective of the study was to determine whether the four identified youth development competencies (Personal/Social Competence, Cognitive Competence, Vocational Competence and Citizenship Competence), helped to explain the inter ethnic tolerant behavior among the undergraduates of both PuIHE and PriHE and across the five programs of studies. Hence, using multiple linear regression, a general prediction model was first determined for the entire sample of the study. Then, an estimated model or equation was determined for each of the Institution of Higher Learning, Finally an estimated model was determined for each of the programs of studies (Bioscience, Social Science, Technical Studies, Business and IT Studies). The prediction models for the different programs of studies was also be compared.

In order to gain an improved understanding of the variables and factors that help to explain the levels of inter ethnic tolerant behavior (IETB), a four predictors multiple linear regression model was proposed. The four-predictor variables were social/personal competence (X1), cognitive competence (X2), vocational competence (X3) and citizenship competence (X4). Thus, the equation of the proposed multiple linear regression model is as follows:

$$Y = b_0 + b_1 (X_1) + b_2 (X_2) + b_3 (X_3) + b_4 (X_4) + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

b₀ = Constant (Intercept)

b₁₋₄ = Estimates (Regression coefficients)

X₁ = Social/Personal Competence

X₂ = Cognitive Competence

X₃ = Vocational Competence

X₄ = Citizenship Competence

e = Error

To determine what factors influence or help to explain the levels of IETB, the standard multiple regression using enter method was used. Based on the enter method used; all the independent variables were entered into the equation simultaneously and each independent variable was evaluated in terms of its predictive power, over and above that offered by all the other independent variables. Besides, this method also allowed one to know how much unique variance in the dependent variable that each of the independent variables explained.

Based on the results obtained, only three predictor variables were found to be of significance in explaining IETB. The three-predictor variables were personal/social competence ($t = 8.558, p = 0.0001$), cognitive competence ($t = 9.662, p = 0.0001$), and vocational competence ($t = 5.503, p = 0.0001$). Citizenship competence did not



contribute in a significant way ($t = 0.420$, $p = 0.674$) to the variation of the dependent variable (IETB). Therefore, the four predictor model was not supported by the survey or sample data. The final estimated model has only three predictor variable namely personal/social, cognitive competence and vocational competence.

Table 23. Estimates of Coefficients for the Model

Inter Ethnic Tolerant Behavior Dimension	B (Unstandardized Coefficients)	Std Error	Beta (Standardized Coefficients)	t	p-value
Constant	0.080	0.186		0.4325	0.666
Social/personal competence (X1)	0.320	0.037	0.250	8.558	0.0001
Cognitive competence (X2)	0.351	0.036	0.291	9.662	0.0001
Vocational competence (X3)	0.187	0.034	0.151	5.503	0.0001
Citizenship competence (X4)	0.015	0.036	0.013	0.420	0.674

Notes: R = 0.511; R² = 0.261; Adj. R² = 0.258

As depicted in the coefficient Table 23, the estimates of the model coefficients were, for b_0 was 0.080, b_1 was 0.320, b_2 was 0.351, b_3 was 0.187 and b_4 was 0.015. Therefore, the estimated model for the sample of the study is as below:



$$Y (\text{IETB}) = 0.080 + 0.320 (X_1) + 0.351 (X_2) + 0.187 (X_3) + e \text{ ----- Equation (1)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

b₀ = Constant (Intercept)

b₁₋₄ = Estimates (Regression coefficients)

X₁ = Social/Personal Competence

X₂ = Cognitive Competence

X₃ = Vocational Competence

e = Error

The R-squared of 0.261 implied that the three predictor variables explained about 26.1% of the variance/variation in the IETB among the undergraduates in the Institution of Higher Learning generally. This was quite a respectable result (Cohen, 1988). The ANOVA table revealed that the F statistics (95.265) was very large and the corresponding p-value was highly significant (0.0001) or lower than the alpha value of 0.05. This indicated that the slope of the estimated linear regression model line was not equal to zero; confirming that there was linear relationship between IETB and the three-predictor variables.

As shown in Table 23, the largest beta coefficient was 0.291, which was for cognitive competence. This meant that this variable made the strongest unique contribution to explain the dependent variable (IETB), when the variance explained by all other predictor variables in the model was controlled for. It suggested that



one standard deviation increase in cognitive competence was followed by 0.291 standard deviation increases in IETB. The Beta value for personal/social competence was the second highest (0.254), followed by vocational competence in the third place (0.153). In other words, increase in cognitive competence among the undergraduates would contribute significantly to the increased level of inter ethnic tolerant behavior. Similarly, increase in personal/social competence and vocational competence too would contribute significantly to the increased level of inter ethnic tolerant. Hence, the results in this study indicated that developing the youth developmental competencies indeed are important towards the development of inter ethnic tolerant behavior among the youth in Malaysia. In general, Personal/Social, Cognitive and Vocational Competence were potential predictors for inter ethnic tolerant behavior among the youth in Malaysia.

These results indeed supported the statement made by Julliard and Schwab (2000) that the lack of social competencies is one of today's major problems in society; that leads to many social problems especially clashes between ethnic groups. Therefore this study has demonstrated the importance of having the correct judgment towards issues related to inter-ethnic relationships. However, in order to have the correct judgment, it is also necessary to possess the correct understanding about the differences found in different ethnic and culture. Without the understanding and knowledge of the other (cognitive competency), it is also very difficult to have the awareness of the different behavioral options to be tolerant in respond to the many issues encounter in inter-ethnic relationships. In short, these



findings corresponded to Furstenberg et al. (2003) suggestion, that to function successfully as adults, young people must be given a fair chance to develop the knowledge, attitudes, skills and behaviors that will make the successful transition to adulthood possible. Besides, youth must become educated to their highest potential, be able to foster a positive identity, have a personal sense of well-being and self efficacy and develop the habits associated with good citizenship.

Table 24. The Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	18.844	0.800	1.250
3	20.700	0.756	1.323
4	22.487	0.904	1.106
5	29.187	0.709	1.411

Based on the collinearity diagnostic table obtained, none of the model dimensions has condition index above the threshold value of 30.0, none of the tolerance value was smaller than 0.10 and all VIF statistics were less than 10.0. This indicated that there was no serious multicollinearity problem among the predictor variables of the model and therefore the model is stable and reliable. The normal P-P plot of regression standardized residuals of Figure 8 revealed all observed values fall along



the straight line indicating that the residuals are from a normally distributed population.

Dependent Variable: Mean Composite Score Tolerant Behavior

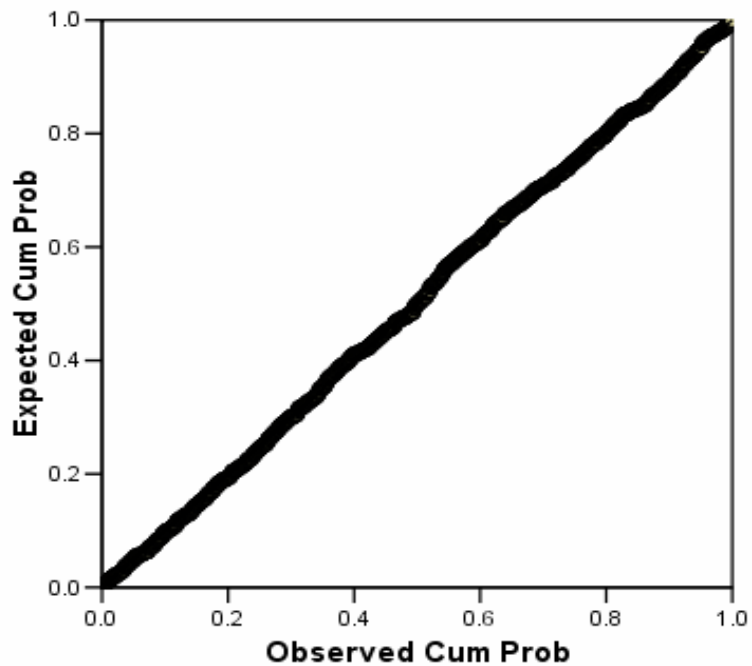


Figure 8: The Normal P-P plot of the Regression Standardized Residual

The scatterplot of the standardized residuals showed most of the scores concentrated in the centre (along the 0 point). Hence, there is no violation in assumptions. The scatterplot in Figure 9 also indicated that the relationship between the dependent variables and the predictors was linear and the residual variances were about equal or constant. Despite the large sample size (1086), no outliers were detected in the scatterplot as outliers were defined as cases that have standardized residuals of more than 3.3 or less than -3.3. Since there was no

multicollinearity problem, the predictors included in the final model and the assumptions of normality, equality of variance and linearity were all met, hence, it was reasonable to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant behavior was stable, good and quite respectable.

Dependent Variable: Mean Composite Score Tolerant Behavior

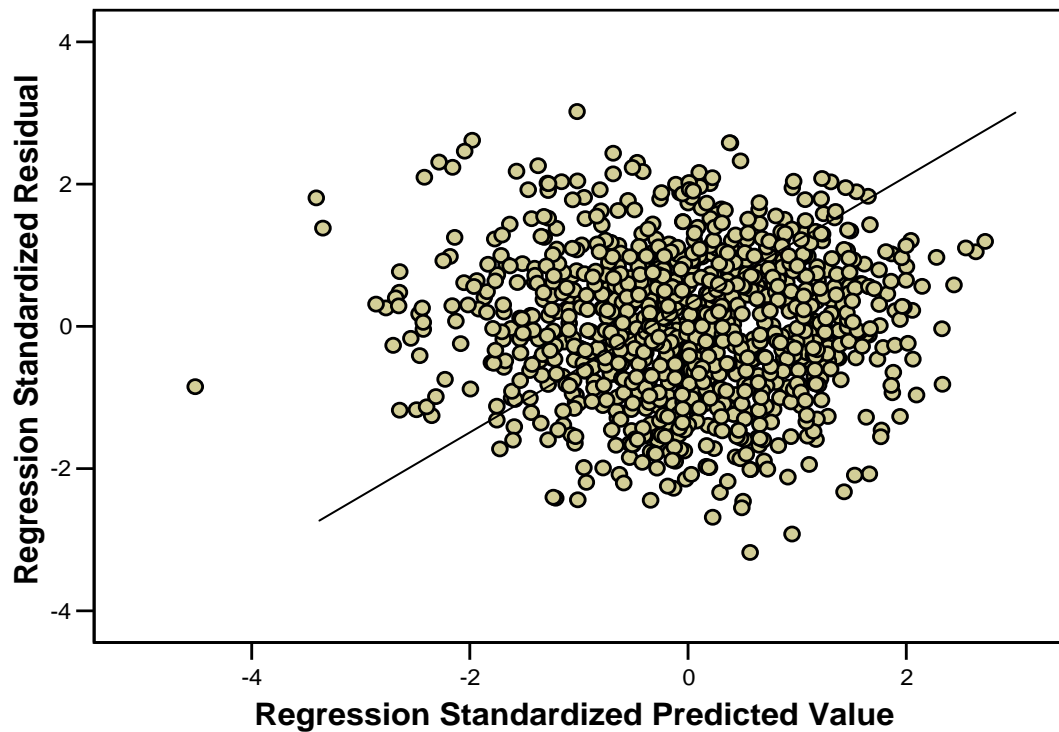


Figure 9: The Scatterplot of Standardized Predicted Values vs. Observed Values

4.7.1 Factors Influencing Inter Ethnic Tolerant Behavior in PuIHE

In the conceptual framework of this study, four youth developmental competencies were identified to determine their relationship with inter ethnic tolerant behavior.

Therefore, to find out what are the predictor variables for Inter Ethnic Tolerant Behavior in PuIHE, a four predictors multiple linear regression model was proposed. The four-predictor variables were personal/social competence (X_1), cognitive competence (X_2), vocational competence (X_3) and citizenship competence (X_4). The equation of the proposed multiple linear regression model is as follows:

$$Y_{PU} = b_0 + b_1 (X_1) + b_2 (X_2) + b_3 (X_3) + b_4 (X_4) + e$$

Where:

Y_{PU} = Inter Ethnic Tolerant Behavior (IETB) in PuIHE

b_0 = Constant (Intercept)

b_{1-4} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

X_4 = Citizenship Competence

e = Error

The standard multiple regression was used to determine the predictor variables in predicting IETB. Based on the enter method used, only three predictor variables were found to be of significance in explaining Inter Ethnic Tolerant Behavior (IETB). The three-predictor variables were personal/social competence ($t = 6.443$, $p = 0.0001$), cognitive competence ($t = 7.143$, $p = 0.0001$) and vocational

competence ($t = 3.920, p = 0.0001$). Citizenship competence did not contribute in a significant way ($t = 0.114, p = 0.909$) to the variation of the dependent variable (IETB). Therefore, the four predictor model was not supported by the survey or sample data. Based on the above findings, the final estimate model for inter ethnic tolerant behavior have only three predictor variables as follows: personal/social competence, cognitive competence and vocational competence.

Table 25. Estimates of Coefficients for the Model

Inter Ethnic Tolerant Behavior Dimension	B (Unstandardized Coefficients)	Std Error	Beta (Standardized Coefficients)	t	p-value
Constant	0.178	0.258		0.691	0.490
Social/personal competence (X₁)	0.305	0.047	0.244	6.443	0.0001
Cognitive competence (X₂)	0.348	0.049	0.272	7.143	0.0001
Vocational competence (X₃)	0.177	0.045	0.141	3.920	0.0001
Citizenship competence (X₄)	0.006	0.049	0.004	0.114	0.909

Notes: R = 0.476; R² = 0.226; Adj. R² = 0.222

As shown in the coefficient Table 25, the estimates of the model coefficients were, for b₀ was 0.178, b₁ was 0.305, b₂ was 0.348, b₃ was 0.177 and b₄ was 0.006. Therefore, the estimated model for the sample of the study is as below:



$$Y_{PU} (\text{IETB}) = 0.178 + 0.305 (X_1) + 0.348 (X_2) + 0.177 (X_3) + e \text{ ----- Equation (2)}$$

Where:

Y_{PU} = Inter Ethnic Tolerant behavior (IETB) in PuIHE

b_0 = Constant (Intercept)

b_{1-4} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

e = Error

The R-squared of 0.226 implied that the four predictors variables explained about 22.6% of the variance/variation in the IETB. The ANOVA table revealed that the F statistics (48.448) was very large and the corresponding p-value was highly significant (0.0001); lower than the alpha value of 0.05. This indicated that the slope of the estimated linear regression model line was not equal to zero; confirming that there was linear relationship between IETB and the three-predictor variables. As shown in Table 25, the largest beta coefficient was 0.272, which was for cognitive competence. This meant that among the PuIHE students, this variable made the strongest unique contribution to explain the dependent variable (IETB), when the variance explained by all other predictor variables in the model was controlled for. It suggested that one standard deviation increase in cognitive competence was followed by 0.272 standard deviation increases in IETB. The beta value for social/personal competence was the second highest (0.244), followed by

vocational competence in the third place (0.141). Hence, the variables that were significant to predict inter ethnic tolerant behavior among the PuIHE students were Social/Personal, Cognitive and Vocational Competence. These results also indicated that X_1 and X_2 were equally important in explaining levels of IETB and of lesser important was X_3 . Hence, this result was somewhat similar to the general estimated model for the entire sample of the study discussed earlier in pg 195.

Though the results earlier indicated that cognitive competency has a lower mean score among all the students as compared to the other competencies but this competency however was very important in explaining IETB. This was because having knowledge and understanding about ‘others’ is of paramount importance to effectively participate in a multi ethnic society. Based on the recommendations from a workshop conducted in United Nations University (UNU) on the topic “The Contribution of Ethics to the Dialogue of Civilization” in 2001, the group of scholars suggested that diversity is a precondition of the present world. Therefore, to nurture understanding and awareness, education curriculum should be revised in such a way that student learn to develop the knowledge and skills necessary to appreciate rather than fear the fact that many different values systems coexist. Ways of learning also should be included in the school curricula for this purpose. For instance, cognitive learning; learning about others through knowledge acquisition. The other is emotional learning through social and cultural learning. These two learning processes should enhance students’ respects for others’



opinions and their involvement with others through dialogues that does not demand the others' conformity to their worldviews. These suggestions were clear indication on the importance of cognitive competency, social personal competency as well as vocational competency as defined in this study in achieving inter ethnic tolerant behavior. Hence, these results suggested that in order to develop or enhance their inter-ethnic tolerant behavior; the focus has to be on education that enhances knowledge and understanding, judging and interpersonal skills as well as awareness of other behavioral options and self confidence in acting accordingly.

Table 26. The Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	19.627	0.817	1.225
3	22.335	0.805	1.243
4	24.463	0.899	1.113
5	30.983	0.767	1.304

Based on the collinearity diagnostic table obtained, none of the model dimensions has condition index above the threshold value of 30.0 except for dimension 5 (30.983), which was just slightly above but, none of the tolerance values were smaller than 0.10 and all VIF statistics were less than 10.0. Therefore, this indicated that there was no serious multicollinearity problem among the predictor

variables of the model and therefore the model was stable and reliable. Besides, the normal P-P plot of regression standardized residuals of Figure 10 revealed all observed values fell along the straight line indicating that the residuals were from a normally distributed population. Hence, the multicollinearity and normality assumptions were met in this regression equation for predicting inter ethnic tolerance among the PuIHE students.

Dependent Variable: Mean Composite Score Tolerant Behavior

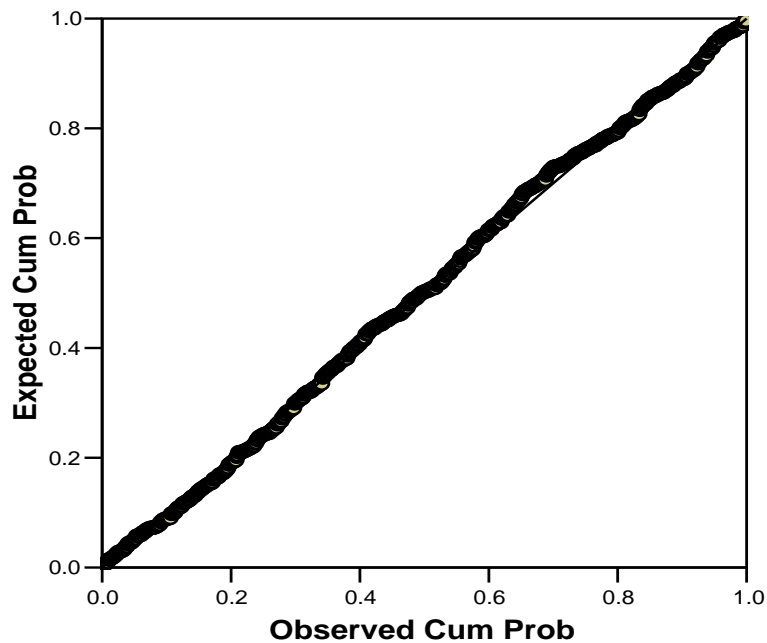


Figure 10: The Normal P-P plot of the Regression Standardized Residual

The scatterplot of the standardized residuals as depicted in Figure 11 indicated that most of the scores were concentrated in the centre (along the 0 point). Hence, the relationship between the dependent variables and the predictors was linear and the residual variances were about equal or constant. Similarly, despite the large sample size (668), no outliers were detected in the scatterplot as outliers were defined as

cases that have standardized residuals of more than 3.3 or less than -3.3. Since there were no violations in any assumptions, the predictors included in the final model were valid. Therefore, it was logical to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant Behavior among the PuIHE students was stable, good and reliable.

Dependent Variable: Mean Composite Score Tolerant Behavior

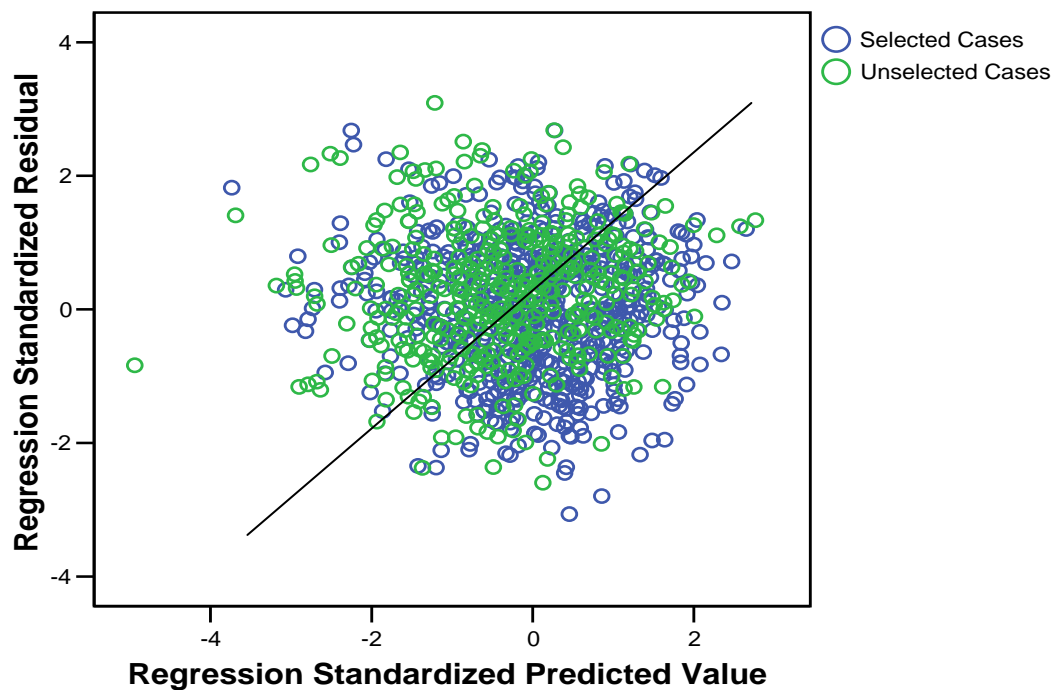


Figure 11: The Scatterplot of Standardized Predicted Values vs. Observed Values

4.7.2 Factors Influencing Inter Ethnic Tolerant Behavior in PriHE

Similarly, in order to determine the relationship between the four identified youth developmental competencies and inter ethnic tolerant behavior, a similar four predictors multiple linear regression model was proposed to find out what are the

predictors of Inter Ethnic Tolerant Behavior among PriHE students. Likewise, the four-predictor variables were social/personal competence (X_1), cognitive competence (X_2), vocational competence (X_3) and citizenship competence (X_4).

The equation of the proposed multiple linear regression model is as follows:

$$Y_{PR} = b_0 + b_1 (X_1) + b_2 (X_2) + b_3 (X_3) + b_4 (X_4) + e$$

Where:

Y_{PR} = Inter Ethnic Tolerant Behavior (IETB) in PriHE

b_0 = Constant (Intercept)

b_{1-4} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

X_4 = Citizenship Competence

e = Error

The same standard multiple regression was used to determine the best set of predictor variable in predicting IETB among the PriHE students. Based on the enter method used, all four-predictor variables; social/personal competence ($t = 6.845$, $p = 0.0001$), cognitive competence ($t = 3.693$, $p = 0.0001$), vocational competence ($t = 4.611$, $p = 0.0001$) and citizenship competence ($t = 3.118$, $p = 0.002$) were found to be of significance in explaining Inter Ethnic Tolerant Behavior (IETB). This was somewhat different from the equation model developed for the entire sample as discussed in 4.7 and also for PuIHE students.



Based on the above findings, the final estimated model for inter ethnic tolerant behavior among the PrIHE students have four predictor variables as follows: Personal/Social Competence, Cognitive Competence, Vocational Competence and Citizenship Competence.

Table 27. Estimates of Coefficients for the Model

Inter Ethnic Tolerant Behavior Dimension	B (Unstandardized Coefficients)	Std Error	Beta (Standardized Coefficients)	t	p-value
Constant	-0.390	0.275		-1.418	0.157
Social/personal competence (X₁)	0.232	0.063	0.177	6.845	0.0001
Cognitive competence (X₂)	0.366	0.054	0.313	3.693	0.0001
Vocational competence (X₃)	0.234	0.051	0.188	4.611	0.0001
Citizenship Competence (X₄)	0.189	0.061	0.155	3.118	0.002

Notes: R = 0.596; R² = 0.355; Adj. R² = 0.349

The coefficient Table 27 showed the estimates of the model coefficients; for b₀ was 0.390, b₁ was 0.232, b₂ was 0.366, b₃ was 0.234 and b₄ was 0.189. Therefore, the estimated model for the sample of the study is as below:



$$Y_{PR}(IETB) = -0.390 + 0.232(X_1) + 0.366(X_2) + 0.234(X_3) + 0.189(X_4) + e \text{ --}$$

Equat.(3)

Where:

Y_{PR} = Inter Ethnic Tolerant behavior (IETB) in PriHE

b_0 = Constant (Intercept)

b_{1-4} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

X_4 = Citizenship Competence

e = Error

The R-squared of 0.355 implied that the four predictor variables explained about 35.5% of the variance/variation in the Inter Ethnic Tolerant Behavior in PriHE; which was quite encouraging taking into consideration there could be other possible variables that may influence the inter ethnic tolerant behavior. The ANOVA table revealed that the F statistics (56.77) was very large with a highly significant corresponding p-value (0.0001). Therefore, this indicated that the slope of the estimated linear regression model line was not equal to zero; confirming that there was linear relationship between IETB and the four-predictor variables. As shown in Table 27, the largest beta coefficient was 0.313, which belongs to cognitive competence. This meant that this variable made the strongest unique contribution to explain the dependent variable (IETB), when the variance explained by all other predictor variables in the model was controlled for. It suggested that one standard deviation increase in cognitive competence was followed by 0.313



standard deviation increases in IETB. The beta value for vocational competence was the second highest (0.188), followed by social/personal competence in the third place (0.177) and finally followed by citizenship competence (0.155). Hence, the variables that were significant to predict inter ethnic tolerant behavior among the PriHE students were Social/Personal, Cognitive, Vocational and Citizenship Competence. These results also indicated that X_2 (Cognitive Competence) was very important ($\beta = 0.313$) in explaining levels of IETB and of lesser importance comparatively was X_1 ($\beta = 0.177$), X_3 ($\beta = 0.188$) and X_4 ($\beta = 0.155$).

These results offered a similar trend on the importance of having knowledge in contributing to IETB. Although both the students from PuIHE and PriHE were having a lower cognitive competency comparatively, no doubt this competence was an important factor to predict or determine their IETB. Hence, this suggested that more efforts needed to be taken to improve the knowledge and understanding of the students, youth in general, especially to understand the social, political and cultural norms of the diverse ethnic groups in the country. Knowing and understanding increases empathy and according to Fredickson (2001), such experiences serve to broaden and build personal resources which was important in helping them to navigate and behave tolerantly towards the different ethnic groups.

Nevertheless, one striking difference between students from the PuIHE and PriHE was the significant role citizenship competency had in predicting IETB among the



PriHE students only. In order to predict inter ethnic tolerant behavior among the PriHE students, it is important to have shared values, the desire to contribute to the nation and behave indifferently towards differences. As the results from the MANOVA analysis shown in Table 17 indicated that students from the PriHE had a significant lower level of citizenship competence as compared to students from the PuIHE, this suggested the need and importance of citizenship competence in predicting inter ethnic tolerant behavior. Likewise, based on the literature review, one of the research conducted by Zaharah Hassan (2005) and other researchers, to identify the perception of students from PuIHE and PriHE towards national unity, reviewed that students in the PuIHE scored higher in the level for each of these concepts such as ‘National Identity, Proud of Malaysia and Patriotism Towards the Country’ compared to PriHE students. This suggested since PriHE students may be lacking in the sense of shared values and desire to contribute to the nation, having them then would be necessary to determine the IETB.

Table 28. Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	16.855	0.681	1.468
3	19.565	0.747	1.338
4	24.388	0.937	1.067
5	27.851	0.629	1.591



The collinearity diagnostic Table 28 showed that none of the model dimensions has condition index above the threshold value of 30.0, none of the tolerance values were smaller than 0.10 and all VIF statistics were less than 10.0. Similarly, this indicated that there was no multicollinearity problem among the predictor variables of the model and therefore the model is stable and reliable. The normal P-P plot of regression standardized residuals of Figure 11 revealed all observed values fall along the straight line indicating that the residuals are from a normally distributed population or the normality assumptions were met.

The scatterplot as depicted in Figure 12 also revealed the relationship between the dependent variables and the predictors was linear and the residual variances were about equal or constant as most of the scores were concentrated in the centre, along the 0 point. Despite the large sample size (418), no outliers were indicated in the scatterplot as well. Since all the assumptions of multicollinearity, normality and equality of variance were met it was safe to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant Behavior in PriHE was stable and good.



Dependent Variable: Mean Composite Score Tolerant Behavior

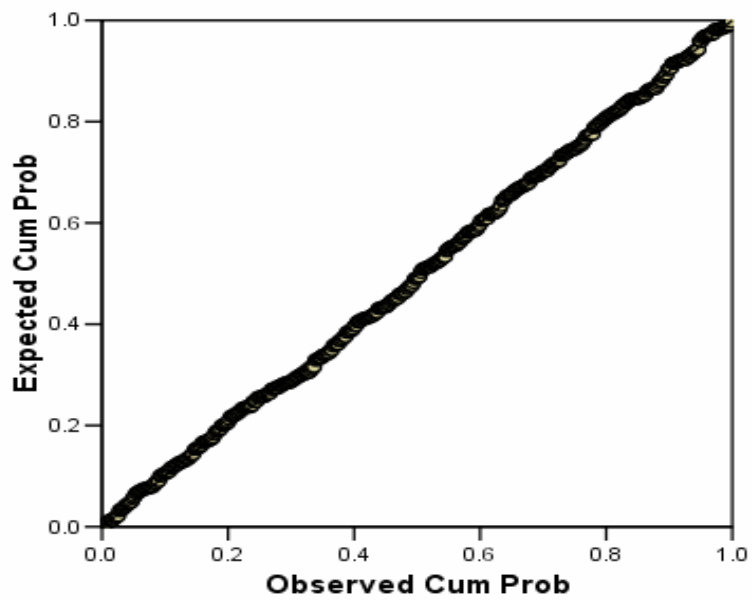


Figure 11: The Normal P-P plot of the Regression Standardized Residual

Dependent Variable: Mean Composite Score Tolerant Behavior

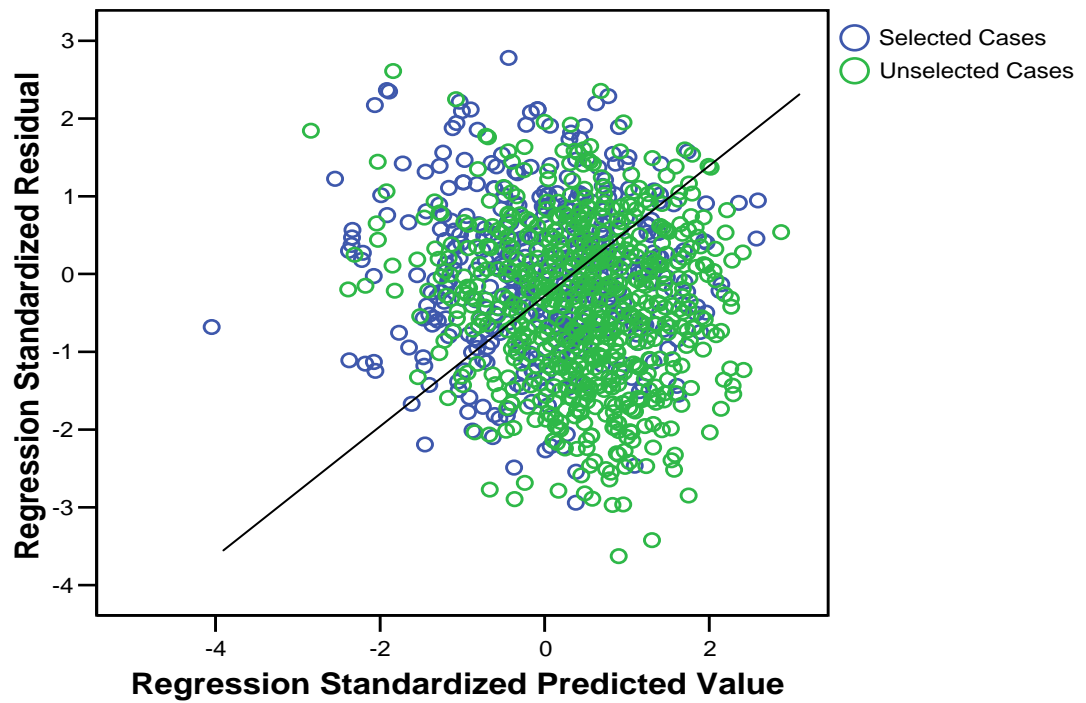


Figure 12: The Scatterplot of Standardized Predicted Values vs. Observed

To summarize this section, it is noted that there were similarities and differences in both the estimated equation model for inter ethnic tolerance among PuIHE and PriHE. Cognitive competency was found to contribute to the greatest variation in inter ethnic tolerant for both equations. This means, regardless of the social environment, all students needed to have the knowledge and understanding of the different culture and social norms of different ethnic groups as well as the understanding on the political norms in order to achieve inter ethnic tolerance in a multi ethnic country.

On the other hand, the major difference between these two equations would be the presence of citizenship competence in predicting inter-ethnic tolerant behavior among the PriHE students but not among the PuIHE students. Though the variance contributed by citizenship competence in the second equation is the smallest (0.155) but it is significant towards predicting inter ethnic tolerant behavior among the PriHE. This could probably due to the lacked of citizenship competence among the PriHE as indicated in the earlier analysis of MANOVA,

In conclusion, the general prediction models to determine the relationship between the four youth developmental competencies and inter ethnic tolerant behavior were similar when compared between the general sample and PuIHE but different when compared with PriHE. The prediction model was also different when compared between PuIHE and PriHE. An additional variable: citizenship competence was



included in the prediction model for PriHE in determining the relationship with Inter Ethnic Tolerant Behavior. Besides, vocational competence too has a higher beta value (0.188) in the prediction model for PriHE than the social/personal competence (0.177) as compared to the prediction model for the general sample and PuIHE where the social/personal competence have a higher beta value (0.244) than the vocational competence (0.141). Since the results in section 4.5 indicated the different social environment did not influence the level of inter ethnic tolerant behavior among the PuIHE and PriHE students directly, the results in the final section may have suggested the influence of the social environment towards the contributing variables (competencies in this case) in predicting IETB instead. This is because according to Vygotsky (1962, 1978), to understand development, the focus should not only be on solitary individual but shared interaction.

Children and youth gradually internalize what they gain from these interactions. Therefore the environment and peer groups were very important elements that influence the youth perception or competencies of inter ethnic relations and thus influence their toleration. Thus, the variables that determine the Inter Ethnic Tolerant Behavior between the PuIHE and PriHE students were different and the strength of the prediction power between each of the variable and Inter Ethnic Tolerant Behavior was also different between them.



4.7.3 Factors Influencing Inter Ethnic Tolerant Behavior (IETB) by Programs of Study

This section would determine which youth developmental competencies contributed to the prediction of inter ethnic tolerant behavior among the youth from the different programs of study. Firstly, in order to find out the determinants of IETB among students from the five different programs of study; Bioscience, Social Sciences, Technical Studies, Business Studies and Information Technology, four predictors multiple linear regression model was proposed. The similar four-predictor variables used were social/personal competence (X_1), cognitive competence (X_2), vocational competence (X_3) and citizenship competence (X_4). The equation of the proposed multiple linear regression model is as follows:

$$Y = b_0 + b_1 (X_1) + b_2 (X_2) + b_3 (X_3) + b_4 (X_4) + e$$

Where:

Y = Inter Ethnic Tolerant Behavior (IETB)

b_0 = Constant (Intercept)

b_{1-4} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

X_4 = Citizenship Competence

e = Error

Standard multiple regression was conducted for each of the program of study using the same predictor equation. Hence, the output generated an equation for each of the program. The results were presented in Table 29.

Table 29. Estimates of Coefficients for the Model

Programs of Study	Inter Ethnic Tolerant Behavior Competencies	B (Unstandardized Coefficients)	Std Error	Beta (Standardized Coefficients)	t	p-value
Bioscience	Constant	-0.100	0.472		-0.211	0.621
	Social/personal (X1)	0.364	0.091	0.239	4.017	0.0001
	Cognitive (X2)	0.483	0.079	0.335	5.527	00001
	Vocational (X3)	0.092	0.080	0.067	1.147	0.252
	Citizenship (X4)	0.023	0.075	0.019	0.303	0.762
	R = 0.480; R² = 0.231; Adj. R² = 0.218					
Social Science	Constant	0.032	0.484		0.066	0.947
	Social/personal (X1)	0.396	0.097	0.283	4.079	0.0001
	Cognitive (X2)	0.364	0.092	0.311	3.969	0.0001
	Vocational (X3)	0.212	0.088	0.159	2.398	0.018
	Citizenship (X4)	-0.079	0.085	-0.068	-0.925	0.356
	R = 0.537; R² = 0.289; Adj. R² = 0.273					



Table 29 – Continued

Technical Studies	Constant	0.757	0.401		1.886	0.061
	Social/personal (X1)	0.204	0.084	0.163	2.446	0.015
	Cognitive (X2)	0.330	0.079	0.292	4.184	0.0001
	Vocational (X3)	0.145	0.072	0.130	2.020	0.045
	Citizenship (X4)	0.020	0.082	0.018	0.244	0.808
	R = 0.434; R² = 0.188; Adj. R² = 0.174					
Business Studies	Constant	-0.054	0.400		-0.134	0.893
	Social/personal (X1)	0.341	0.074	0.279	4.582	0.0001
	Cognitive (X2)	0.210	0.077	0.163	2.739	0.007
	Vocational (X3)	0.237	0.073	0.195	3.227	0.001
	Citizenship (X4)	0.102	0.078	0.083	1.295	0.197
	R = 0.483; R² = 0.234; Adj. R² = 0.221					
Information Technology	Constant	-0.307	0.399		-0.768	0.444
	Social/personal (X1)	0.280	0.096	0.231	2.913	0.004
	Cognitive (X2)	0.484	0.089	0.420	5.442	0.0001
	Vocational (X3)	0.214	0.076	0.177	2.817	0.005
	Citizenship (X4)	0.014	0.095	0.012	0.142	0.887
	R = 0.648; R² = 0.419; Adj. R² = 0.405					

As depicted in Table 29, the estimates of the model coefficients for Bioscience were, b_0 was -0.100, b_1 was 0.364 and b_2 was 0.483. However, vocational competence ($t = 1.147$, $p = 0.252$) and citizenship competence ($t = 0.303$, $p = 0.762$) did not contribute in a significant way in to the variation of the dependent variable (IETB). Therefore, the four predictor model was not fully supported by

the sample data. Based on the above findings, the final estimated model for Bioscience has only two predictor variables as follows: Personal/Social Competence and Cognitive Competence. Therefore, the estimated model for the sample Bioscience is as below:

$$Y_{BS} (\text{IETB}) = -0.100 + 0.364 (X_1) + 0.483 (X_2) + e \text{ ----- Equation (4)}$$

Where:

Y_{BS} = Inter Ethnic Tolerant behavior (IETB) in Bioscience

b_0 = Constant (Intercept)

b_{1-4} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

e = Error

The R-squared value of 0.231 implied that the two predictors variables (Social/Personal Competence and Cognitive Competence) explained about 23.1% of the variance/variation in the Inter Ethnic Tolerant Behavior in Bioscience. The ANOVA table revealed the F statistics (18.383) and the corresponding p-value was highly significant (0.0001); lower than the alpha value of 0.05. This indicated that the slope of the estimated linear regression model line is not equal to zero. This confirmed that there was linear relationship between IETB and the two-predictor variables. As shown in Table 29, the largest beta coefficient for Bioscience belonged to cognitive competence (0.483), followed by social/personal competence (0.364). This meant that the cognitive competence variable made the strongest



unique contribution to explain the dependent variable (IETB), when the variance explained by all other predictor variables in the model was controlled for. It suggested that one standard deviation increase in cognitive competence was followed by 0.483 standard deviation increases in IETB.

Table 30. Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	21.299	0.885	1.130
3	21.460	0.856	1.169
4	23.379	0.907	1.102
5	34.840	0.802	1.246

Table 30 showed the multicollinearity diagnostic for the final model. None of the values in the tolerance table were smaller than 0.10 and all VIF statistics was less than 10.0. This indicated that there was no serious multicollinearity problem among the predictor variables of the model and therefore the model was stable and reliable. The normal P-P plot of regression standardized residuals of Figure 13 revealed all observed values fall along the straight line indicating that the residuals were from a normally distributed population. Besides, the scatterplot in Figure 14 also indicated the relationship between the dependent variable and the predictors was linear and the residual variances were about equal or constant as they all fell



along the 0 point. Since the all the assumptions of multicollinearity, normality, equality of variance and linearity were met, it was reasonable to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant Behavior in Bioscience was stable and good.

Hence, the amount of knowledge, the understanding about the other ethnic groups; their cultural and norms as well as the social and political norms in the country was very important in predicting inter-ethnic tolerance behavior among the students from the field of Biosciences. One of the possible reasons could be related to the nature of their studies. Students grouped in the field of Biosciences were basically specializing in the field of Biology, Forestry and Agriculture, which required very scientific mind. They based a lot of the results of their studies on facts, data, logic and rationale explanations before they were convinced with what they found. Similarly, in order for them to have an inter-ethnic tolerant behavior, much knowledge and understanding of the other ethnic groups were needed. Just as strangers required knowledge to understand how culture and social structure affected their perceptions and response towards out groups (Wenzlaff & Wegner, 2000), the Bioscience students too required knowledge and understanding to form the right perceptions about others, thus developing tolerant behaviors.



Dependent Variable: Mean Composite Score Tolerant Behavior

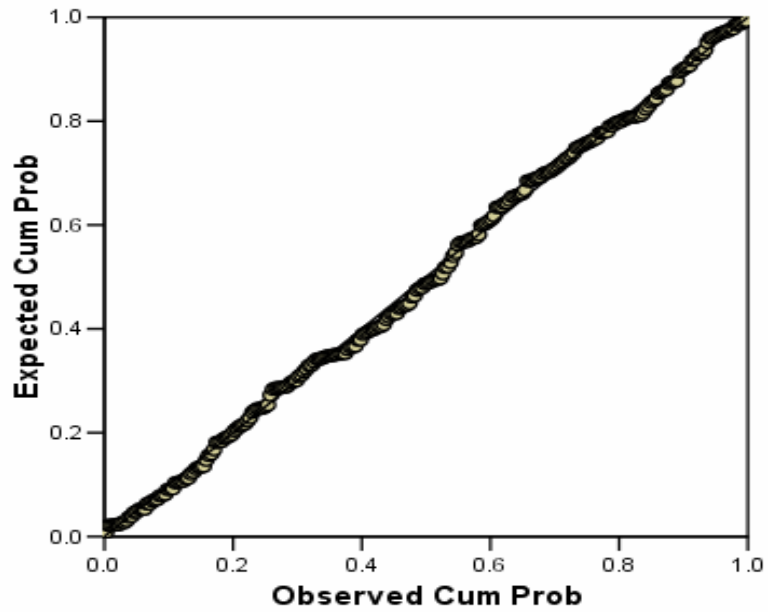


Figure 13: The Normal P-P plot of the Regression Standardized Residual

Dependent Variable: Mean Composite Score Tolerant Behavior

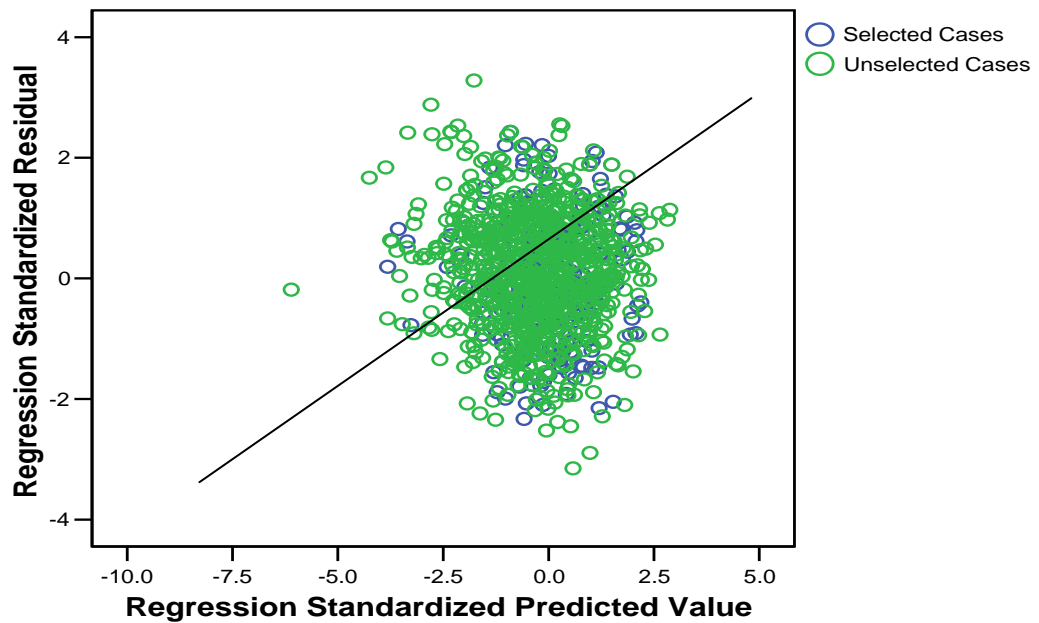


Figure 14: The Scatterplot of Standardized Predicted Values vs. Observed Values

4.7.4 Factors Influencing Inter Ethnic Tolerant Behavior for Social Science

In order to determine the determinants of Inter Ethnic Tolerant Behavior among students in the Social Science, a similar multiple linear regression model was applied. Results in Table 29 revealed that three out of four-predictor variables; cognitive competence ($t = 3.969, p = 0.0001$), social/personal competence ($t = 4.079, p = 0.0001$) and vocational competence ($t = 2.398, p = 0.018$) were found to be significant in explaining IETB. Citizenship competence (X_4) however, was excluded because it did not contribute in a significant way ($t = -0.925, p = 0.356$) to the variation of the dependent variable (IETB). Therefore, the four predictors model was not supported by the sample data. Based on the above findings, the final estimated model for Social Science has only three predictor variables as follows: cognitive competence, social/personal competence and vocational competence. Hence, the estimate of the model coefficients for b_0 was 0.032, b_1 was 0.396, b_2 was 0.364 and b_3 was 0.212. Therefore, the estimated model for the sample, Social Sciences is as below:

$$Y_{ss}(\text{IETB}) = 0.032 + 0.396 (X_1) + 0.364 (X_2) + 0.212 (X_3) + e \text{ ----- Equation (5)}$$

Where:

Y_{ss} = Inter Ethnic Tolerant behavior (IETB) in Social Science

b_0 = Constant (Intercept)

b_1-3 = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

e = Error



The R-squared of 0.289 implied that the three predictor variables explained about 28.9% of the variance/variation in the Inter Ethnic Tolerant Behavior for Social Science. The ANOVA table revealed the F statistics (18.459) and the corresponding p-value was highly significant (0.0001); lower than the alpha value of 0.05. This indicated that the slope of the estimated linear regression model line was not equal to zero. This confirmed that there was linear relationship between IETB and the three-predictor variables.

As shown in Table 29, the largest beta coefficient was 0.311, which was for cognitive competence followed by social/personal competence (0.283) with the second highest score and finally vocational competence in the third place (0.159) indicating that it made the least contribution to the prediction model. This also implied that the cognitive competence variable made the strongest unique contribution to explain the dependent variable (IETB), when the variance explained by all other predictor variables in the model was controlled for. It suggested that one standard deviation increase in cognitive competence is followed by 0.311 standard deviation increases in IETB. The significant difference in the regression model between Biosciences and Social Sciences was an additional variable (Vocational Competence) involved in the prediction model for Social Sciences.

The students grouped in the category of Social Sciences included those that major in 'Human Ecology,' 'Social Science,' 'Liberal Arts,' 'Law' and 'Music.'



Therefore, one probable reason to explain the differences in the prediction model for IETB between Biosciences and Social Sciences is perhaps students in the Social Sciences studied more subjects related to arts and humanities; dealing with emotions and their relationship with the real social world. According to Furth (1969) and Piaget (1965) whom shared ideas on youth cognitive development; hypothesized that individual moved from thinking about real or known subjects to ‘thinking just thinking’. This enabled an individual to construct various logical possibilities (eg: ‘what if..’) or formulate cause and effect hypothesis (eg: ‘if then...’) about possible relationships in the physical or social world. Such development was predicted as individuals’ abilities to reflect their interactions with others and constructs meaning from these interaction based on logical possibilities. These probably explained why having awareness of other behavioral options towards inter ethnic tolerant relations and acting confidently accordingly (Vocational Competency) an important indicator for IETB among students from the Social Sciences as compared to Biosciences.

Table 31. Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	19.632	0.815	1.228
3	23.610	0.635	1.547
4	24.665	0.889	1.125
5	33.831	0.717	1.395

Table 31 depicted the multicollinearity diagnostic for the final model. None of the tolerance value was smaller than 0.10 and all VIF statistics was very much lesser than 10.0. Therefore, this indicated that there was no serious violation in multicollinearity among the predictor variables of the model and therefore the model was stable, respectable and reliable. The normal P-P plot of regression standardized residuals of Figure 15 revealed that all observed values fall along the straight line indicating that the residuals were from a normally distributed population. Hence, the normality assumption too was not violated.

Dependent Variable: Mean Composite Score Tolerant Behavior

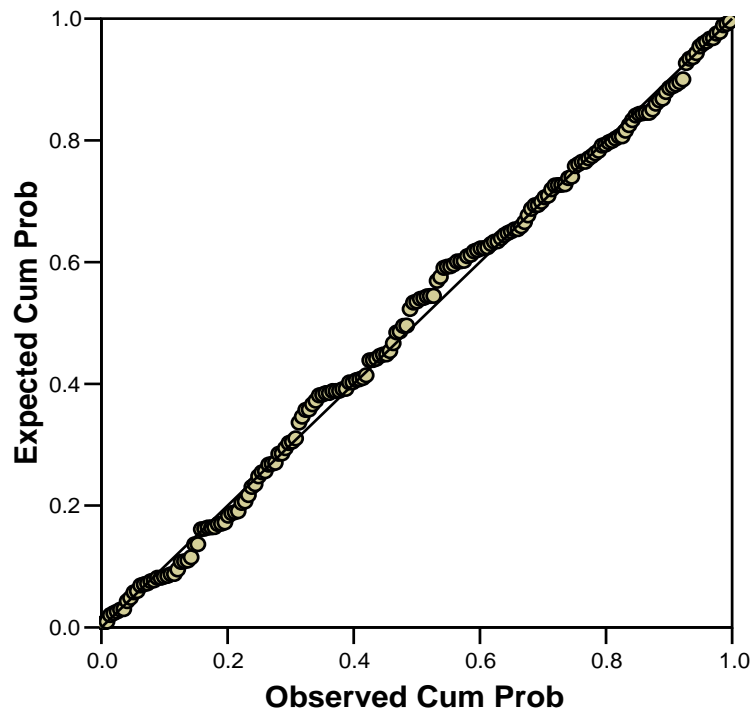


Figure 15: The Normal P-P plot of the Regression Standardized Residual

The scatterplot in Figure 16 indicated the relationship between the dependent variable and the predictors was linear and the residual variances are about equal or constant. Since there was no multicollinearity problem, the predictors included in the final model and the assumptions of normality, equality of variance and linearity were all met. Therefore, it was safe to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant Behavior in Social Science was stable and good.

Dependent Variable: Mean Composite Score Tolerant Behavior

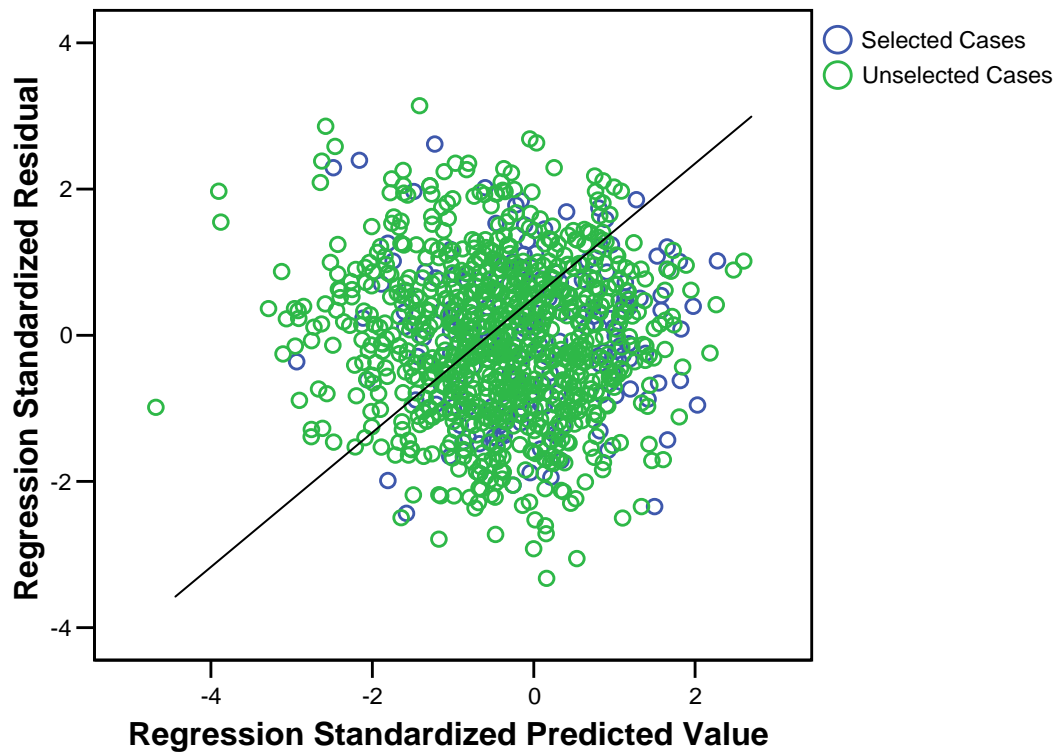


Figure 16: The Scatterplot of Standardized Predicted Values vs. Observed Values

4.7.5 Factors Influencing Inter Ethnic Tolerant Behavior for Technical Studies

In order to find out what are the predictors of Inter Ethnic Tolerant Behavior among the students from the Technical Studies, the same predictor variables were applied in the similar regression model. The result indicated the similar prediction model with that of Social Science. Only three out of four predictor variables were found to be of significance in explaining Inter Ethnic Tolerant Behavior (IETB). The three-predictor variables were cognitive competence ($t = 4.184, p = 0.0001$), social/personal competence ($t = 2.446, p = 0.015$) and vocational competence ($t = 2.020, p = 0.045$). Citizenship competence (X_4) did not contribute in a significantly way ($t = 0.244, p = 0.808$) to the variation of the dependent variable (IETB). Based on the above findings, the final estimated model for Technical Studies has only three predictor variables as follows: cognitive competence, social/personal competence and vocational competence.

Similarly, the estimates of the model coefficients shown in Table 29 were, for b_0 was 0.757, b_1 was 0.204, b_2 was 0.330 and b_3 was 0.145. Therefore, the estimated model for the sample of the study was as below:

$$Y_{TS} (\text{IETB}) = 0.757 + 0.204 (X_1) + 0.330 (X_2) + 0.145 (X_3) + e \text{ ----- Equation (6)}$$

Where:

Y_{TS} = Inter Ethnic Tolerant Behavior (IETB) in Technical Studies

b_0 = Constant (Intercept)

b_{1-3} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

e = Error

The R-squared of 0.188 implied that the three predictor variables explained about 18.8% of the variance in the Inter Ethnic Tolerant Behavior. The ANOVA table revealed that the F statistics (12.869) and the corresponding p-value were highly significant (0.0001) (lower than the alpha value of 0.05). This indicated that the slope of the estimated linear regression model line was not equal to zero. There was linear relationship between IETB and the three-predictor variables. As shown in Table 20, the largest beta coefficient was 0.292, which was for cognitive competence. This meant that this variable made the strongest unique contribution to explain the dependent variable (IETB), when the variance explained by all other predictor variables in the model was controlled for. It suggested that one standard deviation increase in cognitive competence was followed by 0.292 standard deviation increases in IETB. The Beta value for social/personal competence was the second highest (0.163), followed by vocational competence in the third place (0.130).

From the results obtained, it was clear that the predictor variables for inter ethnic tolerant behavior for students in Social Sciences and Technical Studies were similar though the predictors in the Social Sciences contributed to a larger variance in the inter ethnic tolerant behavior comparatively. .

Table 32. Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	17.366	0.821	1.219
3	18.756	0.750	1.333
4	21.783	0.888	1.126
5	28.006	0.647	1.546

The multicollinearity diagnostic in Table 32, indicated that none of the model dimensions has condition index above the threshold value of 30.0, none of tolerance value smaller than 0.10 and all VIF statistics were less than 10.0. This indicated that there was no serious multicollinearity problem among the predictor variables of the model and therefore the model was stable and reliable. The normal P-P plot of regression standardized residuals of Figure 17 revealed that all observed values fall along the straight line indicating that the residuals are from a normally distributed population.



Dependent Variable: Mean Composite Score Tolerant Behavior

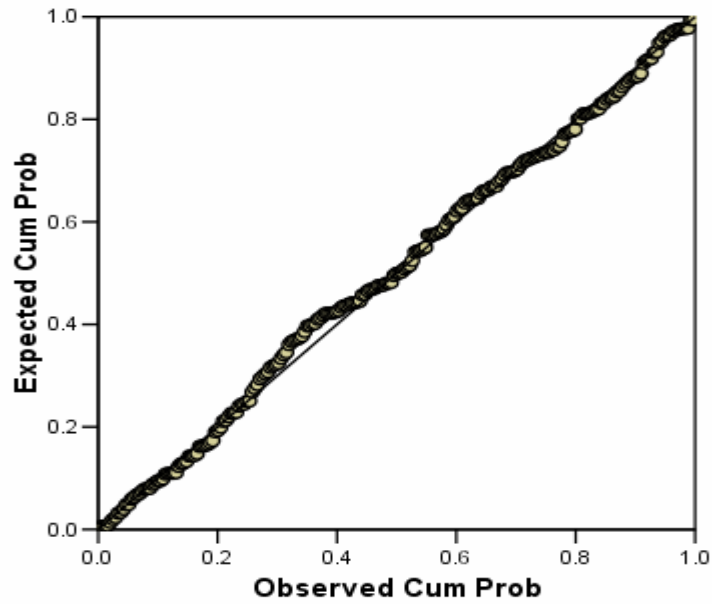


Figure 17: The Normal P-P plot of the Regression Standardized Residual

Dependent Variable: Mean Composite Score Tolerant Behavior

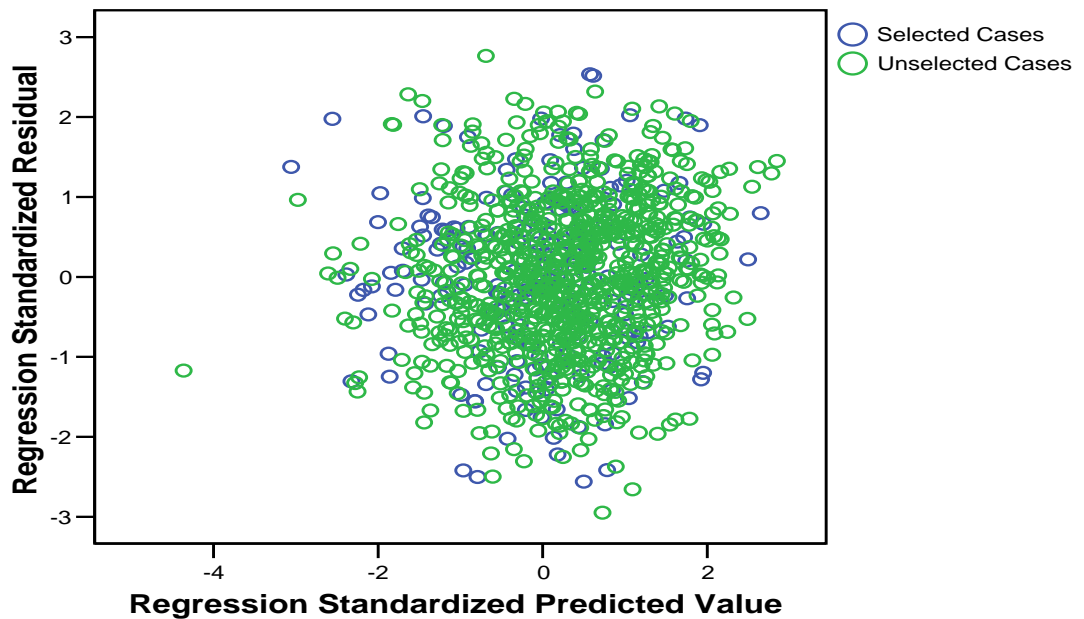


Figure 18: The Scatterplot of Standardized Predicted Values vs. Observed Values

The scatterplot as shown in Figure 18 indicated that the residual variances were about equal or constant as they all fell along the 0 point. Since there was no multicollinearity problem, the predictors included in the final model and the assumptions of normality, equality of variance and linearity were all met. Hence, it was reasonable to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant Behavior for Technical Studies was stable, good and quite respectable.

Most of the students from the Technical Studies program were from engineering faculties. These results corresponded to the results of another study conducted on the requirements that companies claimed for engineers for position advertised in German newspapers in 2000. The study revealed that 70% of the companies declared that social competence was the decisive criteria for successful employment (Julliard & Schwab, 2000). Team ability, communication and the ability to negotiate with people of other cultural background were the main requirements for employment. Moreover, the study revealed that engineers need to have deep knowledge (cognitive competence) of the social impacts; they should work as human interfaces between technique and society. Therefore, engineers need to be well educated in technical competence as well as developed personality (social/personal competence) at the same time. Only in combination of these key virtues engineers are able to meet the requirements related to their profession in future (Julliard & Schwab, 2000). Hence, the results of the current study have



also suggested that cognitive competence, social/personal competence and vocational competence were predictors of inter ethnic tolerant behavior for the students in the Technical Studies.

4.7.6 Factors Influencing Inter Ethnic Tolerant Behavior (IETB) for Business Studies

Social/personal competence (X_1), cognitive competence (X_2), vocational competence (X_3) and citizenship competence (X_4) were the four predictors variables used in the predictors multiple linear regression model to determine the predictors for IETB among for Business Studies. The standard multiple regression method was conducted and the result indicated that only three out of four predictor variables were found to be of significance in explaining IETB. The three-predictor variables were social/personal competence ($t = 4.582, p = 0.0001$), vocational competence ($t = 3.227, p = 0.0001$) followed by cognitive competence ($t = 2.739, p = 0.007$). Citizenship competence (X_4) was excluded because it did not contribute in a significant way ($t = 1.295, p = 0.197$) to the variation of the dependent variable (IETB).

The estimates of the model coefficients indicated in coefficient Table 29 were, for b_0 is -0.054, b_1 is 0.341, b_2 is 0.210 and b_3 is 0.237. Therefore, the estimated model for the sample of the study is as below:



$$Y_{\text{BuS}} (\text{IETB}) = -0.054 + 0.341 (X_1) + 0.210 (X_2) + 0.237 (X_3) + e \text{ ---- Equation (7)}$$

Where:

Y_{BuS} = Inter Ethnic Tolerant Behavior (IETB) in Business Studies

b_0 = Constant (Intercept)

b_{1-3} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

e = Error

The R-squared of 0.234 implied that the three predictor variables explained about 23.4% of the variance/variation in the Inter Ethnic Tolerant Behavior. The F statistics (19.348) indicated in the ANOVA table revealed that the corresponding p-value was highly significant (0.0001). This indicated that the slope of the estimated linear regression model line was not equal to zero. There was linear relationship between IETB and the three-predictor variables. As depicted in Table 29, the largest beta coefficient was 0.279, which was for social/personal competence. This meant that this variable made the strongest unique contribution to explain the dependent variable (IETB), when the variance explained by all other predictor variables in the model was controlled for. It suggested that one standard deviation increase in social/personal competence was followed by 0.279 standard deviation increases in IETB. The Beta value for vocational competence was the second highest (0.195) and lastly followed by cognitive competence (0.163).

The results of the equation model for Business Studies suggested an interesting finding as compared to the other equation models for Social Science and Technical Studies. In the equation model for Business Studies, social/personal competence contributed to the highest variance in inter ethnic tolerant behavior while cognitive competence contributed to the highest variation in inter ethnic tolerant behavior for both the Social Sciences and Technical Studies. This indicated that the social and interpersonal relationship played a more important role in determining the inter-ethnic tolerant behavior among the business students. The reasons however were unclear but it could be attributed to the nature of the subjects studied in the Business Studies program. For example, students in the Business studies were exposed to more concepts of profit and loss, business relations and strategies and the importance of relationships with others in sales and marketing. As the personal/social competence in this study was defined as having the skills to make the right evaluation and judgments related to intrapersonal and interpersonal relationship without prejudices; the nature of their subjects and what they have learnt could have played a major role in influencing their relationship with others especially IETB. In other words, this could have influenced their personal beliefs about others and its corresponding judgments towards inter-ethnic tolerant behavior.



Table 33. Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	17.938	0.811	1.232
3	20.877	0.848	1.179
4	24.746	0.822	1.216
5	30.174	0.733	1.364

The multicollinearity diagnostic Table 33 indicated that all the model dimensions has condition index above the threshold value of 30.0 except for dimension 5 but none of the tolerance values were smaller that 0.10 and all the VIF statistics were less than 10.0. Therefore, there was no serious multicollinearity problem among the predictor variables of the model and therefore the model was reliable. The normal P-P plot of regression standardized residuals of Figure 19 revealed all observed values fell along the straight line indicating that the residuals were from a normally distributed population. Hence, there was no violation in the normality assumption.



Dependent Variable: Mean Composite Score Tolerant Behavior

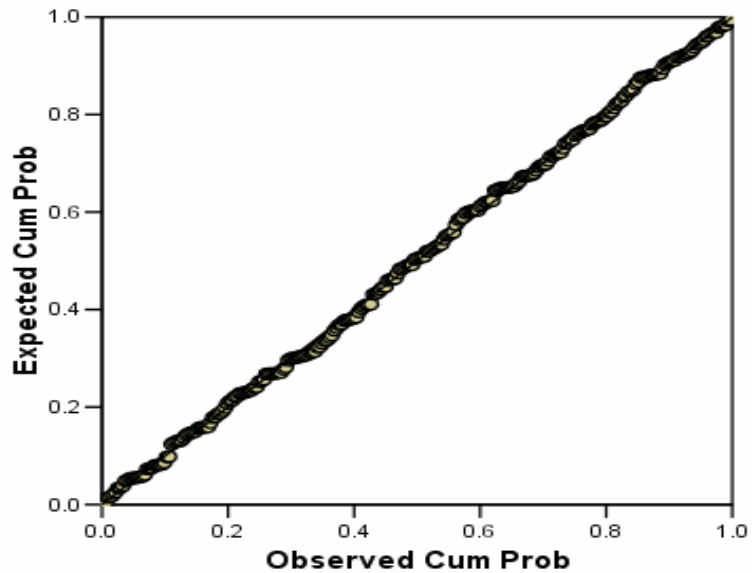


Figure 19: The Normal P-P plot of the Regression Standardized Residual

Dependent Variable: Mean Composite Score Tolerant Behavior

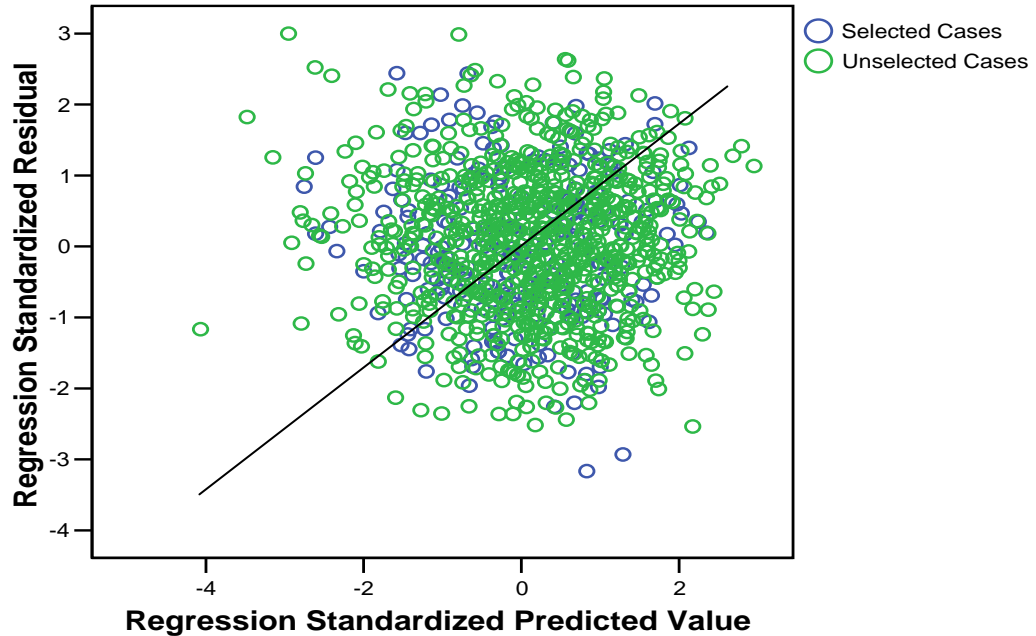


Figure 20: The Scatterplot of Standardized Predicted Values vs. Observed Values

The scatterplot as shown in Figure 20 indicated that the relationship between the dependent variables and the predictors was linear and the residual variances were about equal or constant. Since there was no multicollinearity problem the predictors included in the final model and the assumptions of normality, equality of variance and linearity were all met. Therefore, it was logical to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant behavior for Business Studies was stable and good.

4.7.7 Factors Influencing Inter Ethnic Tolerant Behavior (IETB) for Information Technology Studies (IT)

To find out the determinants of IETB in Information Technology Studies, the similar four predictors multiple linear regression model was proposed. Based on the standard multiple regression method used, only three-predictor variables; cognitive competence (X_2), social/personal competence (X_1) and vocational competence (X_3) were found to be of significance in explaining Inter Ethnic Tolerant Behavior (IETB). Citizenship competence (X_4) was excluded because it did not contribute in a significant way ($t = 0.142$, $p = 0.887$) to the variation of the dependent variable (IETB). Based on the above findings, the final estimated model for Information Technology Studies has only three predictor variables as follows: cognitive competence, social/personal competence and vocational competence.

The coefficient in Table 29 depicted the estimates of the model coefficients as follows: b_0 was -0.307, b_1 was 0.280, b_2 was 0.484 and b_3 was 0.214. Therefore, the estimated model for the sample of the study is as below:

$$Y_{ITS} (\text{IETB}) = -0.307 + 0.280 (X_1) + 0.484 (X_2) + 0.214 (X_3) + e \text{ ----- Equation (8)}$$

Where:

Y_{ITS} = Inter Ethnic Tolerant behavior (IETB) in Information Technology Studies

b_0 = Constant (Intercept)

b_{1-3} = Estimates (Regression coefficients)

X_1 = Social/Personal Competence

X_2 = Cognitive Competence

X_3 = Vocational Competence

e = Error

The R-squared of 0.419 implied that the three predictor variables explained about 41.9% of the variation in the Inter Ethnic Tolerant Behavior for Information Technology Studies. This was quite a good and respectable result (Cohen, 1998). The ANOVA table revealed the F statistics (28.519) and the corresponding p-value was highly significant (0.0001); lower than the alpha value of 0.05. This indicated that the slope of the estimated linear regression model line was not equal to zero. This confirmed that there were linear relationship between IETB and the three-predictor variables. As shown in Table 28, the largest beta coefficient was 0.420, which was for cognitive competence followed by social/personal competence (0.231). The lowest beta value indicated in Table 28 is vocational competence (0.177). This meant that the cognitive competence variable made the strongest

unique contribution to explain the dependent variable (IETB) when the variance explained by all other predictor variables in the model was controlled for. It suggested that one standard deviation increase in cognitive competence was followed by 0.420 standard deviation increases in IETB. On the other hand, vocational competence has the least contribution to explain the dependent variable.

This equation model generated for Information and Technology students was similar to that of Social Science as well as Technical Studies. However, the variance for cognitive competence in predicting inter-ethnic tolerant behavior was much larger (0.420) in this equation as compared to Social Science (0.311) and Technical Studies (0.292). Besides, the overall variance contributed by the three similar predictors too was larger in this equation comparatively (41.9%). This suggested that cognitive competence, personal/social competence and vocational competence helped to explain the inter ethnic tolerant behavior to a greater extent among the Information and Technology students as compared to Social Science as well as Technical Studies.

In other words, these three competencies (cognitive competence, personal/social competence and vocational competence) will help to predict almost 42% of inter-ethnic tolerant behavior among the Information and Technology (IT) students. One of the probable reasons could be due to the nature of the IT program. Students in this program deals mostly with the computers. They spent most of their time



learning everything about the ‘*machine*,’ (computer), from hardware to software, from writing programs to creating web pages. They lack the opportunities to learn about human interaction and the social values involved in human interactions. Values are the primary motivating variables in almost all human systems, from the material to the spiritual. Values influenced human behavior and condition what the individual will think and do in particular situations (Yinger, 1989). Therefore, in order for the youth to behave in a tolerant manner, one must ensure they have the right values; they must be informed and have knowledge about the ‘other’ because if little is known now, virtually nothing is known of the ‘other’ in the future. Hence, this could be the missing puzzle among the IT students when it comes to inter-ethnic interaction. Therefore, the results in this study revealed that these three competencies are so crucial for predicting inter-ethnic tolerant behavior among the IT students as compared to the students from the other programs.

It can then be concluded that the three competencies (Social/Personal, Cognitive and Vocational) were important predictors for inter ethnic tolerant behavior for students from the Social Science, Technical Studies, Business Studies and Information Technology except for Biosciences as only Social/Personal Competence and Cognitive Competence were found to be important predictors for IETB. Nevertheless, the equation model from Social Sciences, Technical Studies and Information Technology showed similar sequence in the strength of each of these three predictors (Cognitive, Social/Personal, Vocational Competence – in

descending order). Conversely, the equation model for Business Studies recorded the Social/Personal Competence with a higher variance followed by Vocational and Cognitive Competence.

Table 34. Multicollinearity Diagnostic for the Final Model

Dimension	Condition Index	Collinearity Statistics	
		Tolerance	VIF
1	1.000		
2	15.405	0.583	1.716
3	20.988	0.619	1.617
4	25.275	0.933	1.072
5	26.030	0.530	1.887

Table 34 showed the multicollinearity diagnostic for the final model. None of the model dimensions has condition index above the threshold value of 30.0, none of the tolerance value was smaller than 0.10 and all VIF statistics was less than 10.0. This indicated that there were no serious multicollinearity problem among the predictor variables of the model and therefore the model was stable and reliable. The normal P-P plot of regression standardized residuals of Figure 21 revealed that all observed values fall along the straight line, thus indicating that the residuals were from a normally distributed population.

Dependent Variable: Mean Composite Score Tolerant Behavior

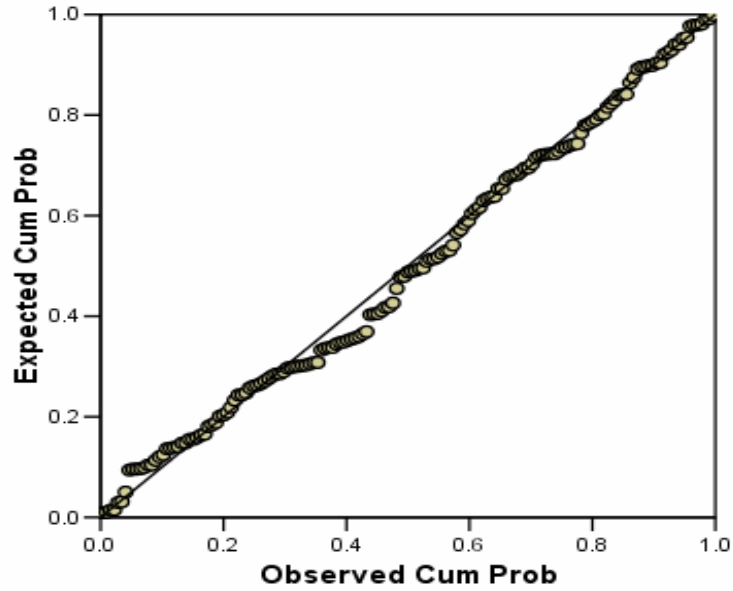


Figure 21: The Normal P-P plot of the Regression Standardized Residual

Dependent Variable: Mean Composite Score Tolerant Behavior

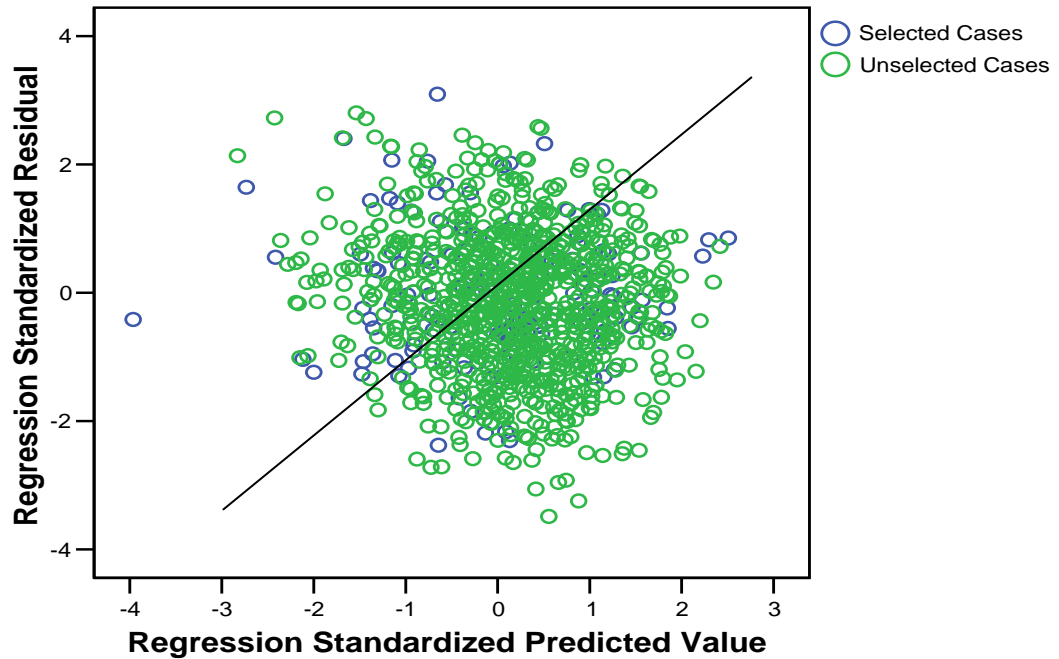


Figure 22: The Scatterplot of Standardized Predicted Values vs. Observed Values

The scatterplot in Figure 22 indicated that the relationship between the dependent variable and the predictors was linear and the residual variances were about equal or constant. Since there is no multicollinearity problem, the predictors included in the final model and the assumptions of normality, equality of variance and linearity were all met. Thus, it was reasonable to conclude that the estimated multiple regression model to explain Inter Ethnic Tolerant Behavior in the field of Information and Technology was stable and reliable.

In conclusion, as shown in all the five equation models, both the social/ personal and cognitive competencies were very important in explaining inter ethnic tolerant behavior across the five programs of study. Among them, cognitive competency made the strongest unique contribution to explain inter ethnic tolerance behavior in all the four programs of study except for Business Studies where it ranked at third place after social/personal and vocational competence. On the other hand, vocational competence has the least contribution in explaining Inter Ethnic Tolerance Behavior for three out of the five programs of studies namely, Social Science, Technical Studies and IT Studies. However, it has the second highest contributing effect for Business Studies. Nevertheless, vocational competence has no effect in explaining the inter ethnic tolerant behavior (IETB) for the Bioscience students. The results of the study also revealed that Citizenship Competence has no significant effect at all in contributing to the inter ethnic tolerant behavior across the five programs of studies. Although when comparing the overall level of



strength for youth development competencies across the five program of studies, citizenship competency was the second strongest after vocational competency (refer Table 29) for almost all the five programs of study; it did not contribute in a significant way to IETB when compared across the five programs of study. This suggested that having shared values and desire to contribute to the nation was not the determining factor in explaining IETB when compared across the five different programs of study.

What was essential in predicting IETB among all the students across the different programs of study were knowledge; whether they have a broad based knowledge and understanding about the society norms, behavioral and cultural norms of others beliefs and the ability to interpret social cues. It was essential for them too, to have the skills to make the right evaluation and judgments related to intrapersonal and interpersonal relationship without prejudices. Lastly, in predicting IETB among all the students across the different programs of study, it was essential to have the awareness of the behavioral options related to IETB and having the confidence to act accordingly. In short, knowledge, affective and psychomotor was the essential competencies in predicting IETB among students from the five different programs of study. This was because according to Hechter (1986), preferences helped determine individual action. Where do preferences come from then? It appeared that they can be formed through both selection and learning mechanism. Therefore, it was from the knowledge they gained; which eventually



affects their beliefs, judgments about people of other ethnic groups and finally resulted in the choices of behavioral outcome. In a way, this study has supported the Theory Planned Behavior and indeed emphasized the importance of youth developmental competencies especially the three competencies (Social/Personal, Cognitive, Vocational) in predicting IETB.

4.8 Moderating Effects of IHE between Youth Development Competencies and Inter Ethnic Tolerant Behavior

The earlier multiple linear regression analysis conducted in Section 4.7 indicated that the youth developmental competencies that contributed to the variance in inter ethnic tolerant behavior was different between PuIHE and PrIHE. The three-predictor variables which were found to be the predictor variables in predicting IETB for PuIHE were social/personal competence (X_1), cognitive competence (X_2) and vocational competence (X_3). On the other hand, in the case of PrIHE, all four predictor variables; social/personal competence (X_1), cognitive competence (X_2), vocational competence (X_3) and citizenship competence (X_4) were found to be the predictor variables in predicting IETB. Hence, this section intended to determine whether the relationship between the youth development competencies and inter ethnic tolerant behavior changes depending on IHE (refer Figure 20). Thus, moderated multiple regression (MMR) analysis was used to determine if IHE moderates the relationship between each of the youth developmental competencies and inter ethnic tolerant behavior.

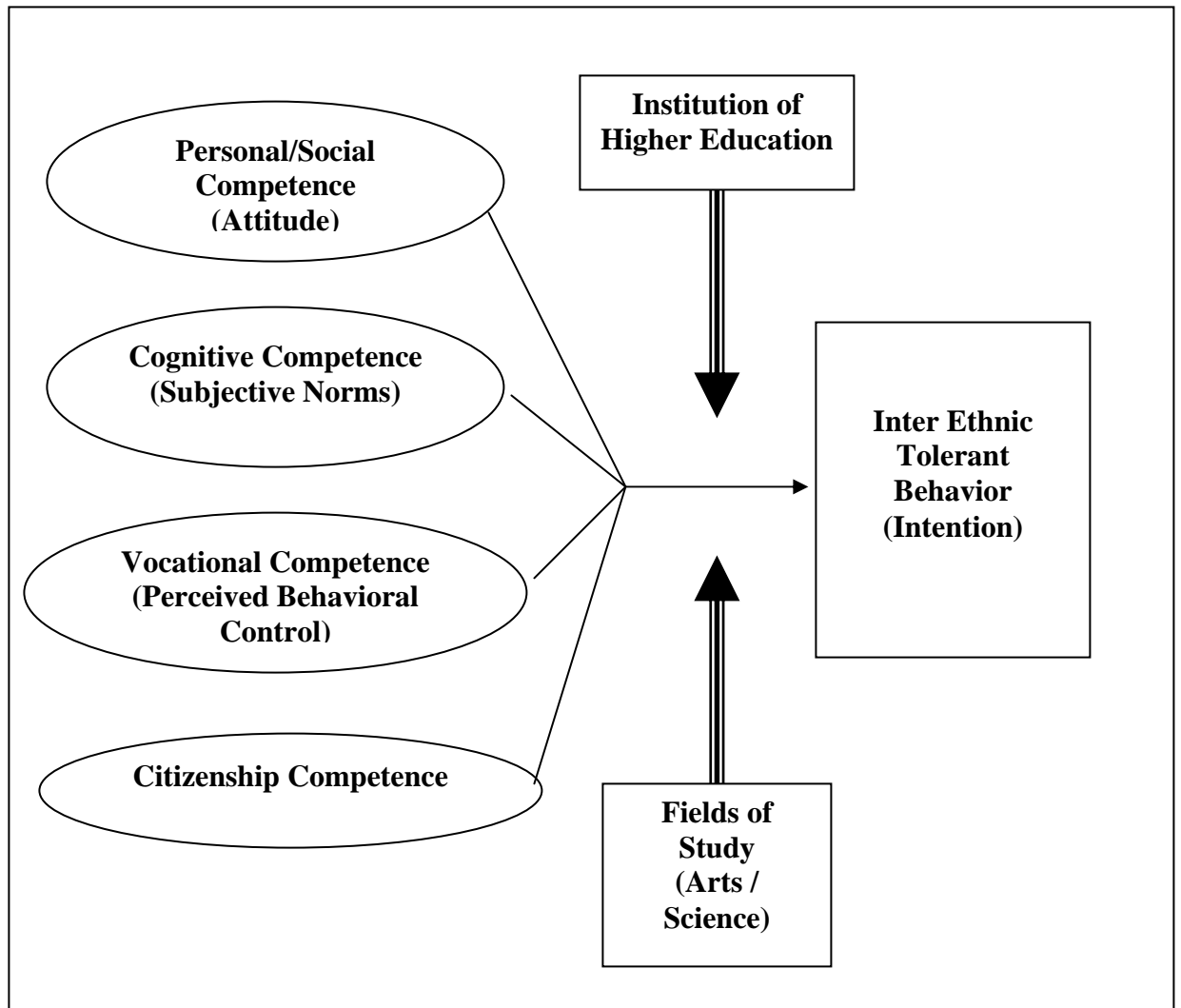


Figure 23: Model for Predicting the Moderating Effects of IHE and Field of Studies (Arts/Science) between Youth Development Competencies and Inter Ethnic Tolerant Behavior

4.8.1 Moderating Effects of IHE between Social/Personal Competence and Inter Ethnic Tolerant Behavior

In order to determine if IHE moderated the relationship between social/personal competence and inter ethnic tolerant behavior, two equations needed to be formed.

The first equation proposed is as follows:

$$Y = a + b_1X_1 + b_2Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₁ = Social/Personal Competence

Z = IHE (moderator)

e = residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors (X₁·Z), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_1 + b_2Z + b_3X_1 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b_2 = Least squares estimate of the population regression coefficient for Z

b_3 = Sample based least squares estimate of the population regression coefficient for the product term

X_1 = Social/Personal Competence

$X \cdot Z$ = Product Term between Social/Personal Competence and IHE

e = residual (error)

Results in Table 35 showed that for model 1, $R = 0.376$, $R^2 = 0.142$ and $F(2, 1083) = 89.373$, $p = 0.0001$. The R^2 means that 14.2% of the variance in inter ethnic tolerant behavior was explained by social/personal competence and types of IHE. Specifically, the coefficients in Table 36 showed that the resulting regression equation for model 1 is the following:

$$Y = 1.601 + 0.480X_1 + 0.028Z \text{ ----- Equation (9)}$$

Where:

Y = Inter Ethnic Tolerant Behavior

X_1 = Social/Personal Competence

Z = IHE

Results in Table 35 also indicated that the adjusted $R^2 = 0.140$. These statistical attempted to correct for capitalization on chance by applying a “correction” factor to R^2 based on the size of the sample and the number of predictors included in the regression model. In this study, the difference between R^2 and adjusted R^2 was very small because the sample size was quite large (1086) and the regression



equation included two predictors only. The coefficients for both social/personal competence and IHE in Model 1 were statistically significant at the $p < .001$ level. Equation in Model 1 also showed that for one point increase in social/personal competence, inter ethnic tolerant behavior was predicted to increase by 0.480, given that IHE was held constant. The regression coefficient associated with IHE meant that the difference in inter ethnic tolerant behavior increased between PuIHE and PrIHE was 0.028, given that social/personal competence score was held constant. Model 1 did not include the product term and thus ignored a possible moderating effect of IHE. In other words, this model showed that, holding IHE constant; inter ethnic tolerant behavior increase by an average of 0.480 when social/personal competence increases 1 point.

Table 35. Model Summary for the Moderating Effects of IHE between Social/Personal Competence and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.376(a)	.142	.140	.58151	.142	89.373	2	1083	.0001
2	.379(b)	.143	.141	.58118	.002	2.226	1	1082	.136

a Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Social/Personal Competence

b Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Social/Personal Competence, Dummy Variable IHE and X₁



Model 2 showed results after the product term has entered into the equation. As shown in Table 35, the addition of the product term resulted in an R^2 change of 0.002, $F(1, 1082) = 2.226, p = 0.136$. With the p value = 0.0001, this result did not support the presence of a moderating effect. In other words, the moderating effect of IHE did not explain the variance in inter ethnic tolerant behavior above and beyond the variance explained by social/personal competence and IHE. This indicated that IHE did not moderate the relationship between social/personal competence and inter ethnic tolerant behavior. Output in Table 36 included information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 1.768 + 0.437X_1 - 0.401Z + 0.110X_1 \cdot Z \text{ ----- Equation (10)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X_1 = Social/Personal Competence

Z = IHE

$X_1 \cdot Z$ = Product Term between Social/Personal Competence and IHE

Table 36. Coefficients Values for each Model for the Moderating Effects of IHE between Social/Personal Competence and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.601	.142		11.280	.0001
Mean Composite Score					
Personal/Social Competence	.480	.036	.376	13.345	.0001
Dummy Variable IHE	.028	.036	.022	.770	.442
2 (Constant)	1.768	.181		9.784	.0001
Mean Composite Score					
Personal/Social Competence	.437	.046	.342	9.498	.0001
Dummy Variable Z (IHE)	-.401	.290	-.311	-1.384	.167
Dummy Variable IHE and X ₁	.110	.074	.337	1.492	.136

The graph in Figure 24 showed the relationship between social/personal competence and inter ethnic tolerant behavior for each of the groups separately. It revealed a clear picture that the relationship between social/personal competence and inter ethnic tolerant behavior was rather similar for the PuIHE and PrIHE. This was revealed in the steepness of the slope for both PuIHE and PrIHE. The steepness was almost the same. This suggested that how the skills in making the right evaluation and judgments related to intrapersonal and interpersonal relationship without prejudices in contributing to IETB for students in PuIHE and PrIHE was similar.

As Hurst (2003) has defined social interaction as action (both verbally and non-verbally) with one another and this interaction can be affected by several factors such as ethnicity, gender and social class. However, the results of this study indicated that there is no difference between students in the PuIHE and PrIHE suggest that ethnicity, gender and social class did not play a role here. This is because there is no significant difference in the ethnicity, gender and social class composition between the PuIHE and PrIHE in this study.

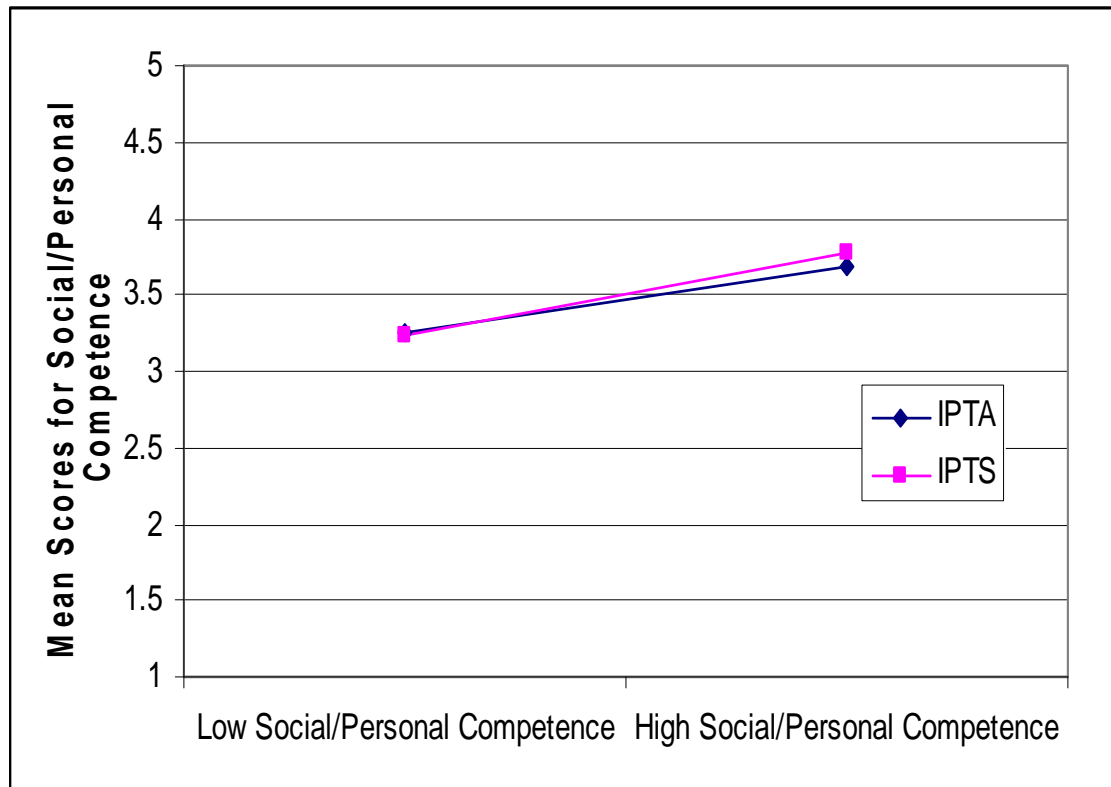


Figure 24: Slopes for Inter Ethnic Tolerant on Personal/Social Competence for PuIHE and PrIHE based on Model 2

* *IPTA = PuIHE*

* *IPTS = PrIHE*

4.8.2 Moderating Effects of IHE between Cognitive Competency and Inter Ethnic Tolerant Behavior

Next, in order to determine if IHE moderated the relationship between cognitive competence and inter ethnic tolerant behavior, two equations were formed. The first equation proposed is as follows:

$$Y = a + b_1X_2 + b_2Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₂ = Cognitive Competence

Z = IHE (moderator)

e = residual (error)

The second MMR model equation which included the product between the predictors (X₂·Z), and including it as a third term in the regression is as follows:

$$Y = a + b_1X_2 + b_2Z + b_3X_2 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

b_3 = Sample based least squares estimate of the population regression coefficient for the product term

X_2 = Cognitive Competence

$X \cdot Z$ = Product Term between Cognitive Competence and IHE

e = residual (error)

Results in Table 37 indicated that for model 1, $R = 0.434$ $R^2 = 0.188$ and $F(2, 1083) = 125.467$, $p = 0.0001$. This R^2 meant that 18.8% of the variance in inter-ethnic tolerant behavior was explained by cognitive competence and types of IHE. Specifically, the coefficients showed in Table 29 indicated that the resulting regression equation for Model 1 is as follows:

$$Y = 1.416 + 0.533X_2 + 0.141Z \text{ ----- Equation (11)}$$

Where:

Y = Inter Ethnic Tolerant Behavior

X_2 = Cognitive Competence

Z = IHE

The output generated in Table 37 also indicated that the adjusted $R^2 = 0.187$. The difference between R^2 and adjusted R^2 was very small because the sample size was quite large (1086) and the regression equation included two predictors only. The coefficients for both cognitive competence and IHE in Model 1 were statistically significant at the $p = 0.0001$ level. Equation in Model 1 also showed that for one point increase in cognitive competence, inter ethnic tolerant behavior was predicted



to increase by 0.533, given that IHE was held constant. The regression coefficient associated with IHE meant that the difference in inter ethnic tolerant behavior increased between PuIHE and PriHE was 0.141, given that cognitive competence score was held constant. Model 1 did not include the product term and thus ignored a possible moderating effect of IHE. In other words, this model showed that, holding IHE constant; inter ethnic tolerant behavior will increase by an average of 0.533 when cognitive competence increases 1 point.

Table 37. Model Summary for the Moderating Effects of IHE between Cognitive Competence and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.434(a)	.188	.187	.56555	.188	125.467	2	1083	.0001
2	.435(b)	.189	.189	.56544	.001	1.415	1	1082	.235

a Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Cognitive Competence

b Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Cognitive Competence, Dummy Variable IHE and X₂

Model 2 showed results after the product term has entered into the equation. As shown in Table 28, the addition of the product term resulted in an R² change of 0.001, $F(1, 1082) = 1.415$, $p = 0.235$. With the p value > 0.0001 , this result did not support the presence of a moderating effect. In other words, the moderating effect



of IHE did not explain the variance in inter ethnic tolerant behavior above and beyond the variance explained by cognitive competence and IHE. This indicated that IHE did not moderate the relationship between cognitive competence and inter ethnic tolerant behavior. Output in Table 37 included information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 1.557 + 0.497X_2 - 0.160Z + 0.080X_2 \cdot Z \text{ ----- Equation (12)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X₂ = Cognitive Competence

Z = IHE

X₂·Z = Product Term between Cognitive Competence and IHE



Table 38. Coefficients Values for Each Model for the Moderating Effects of IHE between Cognitive Competency and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.416	0.132		10.741	0.0001
Mean Composite Score Cognitive	0.533	0.034	0.442	15.819	0.0001
Dummy Variable IHE	0.141	0.036	0.109	3.920	0.0001
2 (Constant)	1.557	0.178		8.769	0.0001
Mean Composite Score Cognitive	0.497	0.046	0.411	10.863	0.0001
Dummy Variable IHE	-0.160	0.256	-0.124	-0.626	0.531
Dummy Variable IHE and X ₂	0.080	0.068	0.232	1.189	0.235

The graph in Figure 25 that showed the relationship between cognitive competence and inter ethnic tolerant behavior for each of the groups separately helped to give a clearer picture that the relationship between cognitive competence and inter ethnic tolerant behavior did not defer much for the PuIHE as compared to the PrIHE. The steepness of the slope for both PuIHE and PrIHE was almost the same.

This result is attributed to the sampling framework used in this study. The samples taken for this study were the final year undergraduates from both the PuIHE and PrIHE. Therefore, they probably have similar level of cognitive competency or there were no significant difference in their level of understanding and knowledge



towards the different ethnic groups. Hence, the relationship between cognitive competence and inter ethnic tolerant behavior did not defer much for the PuIHE as compared to the PrIHE.

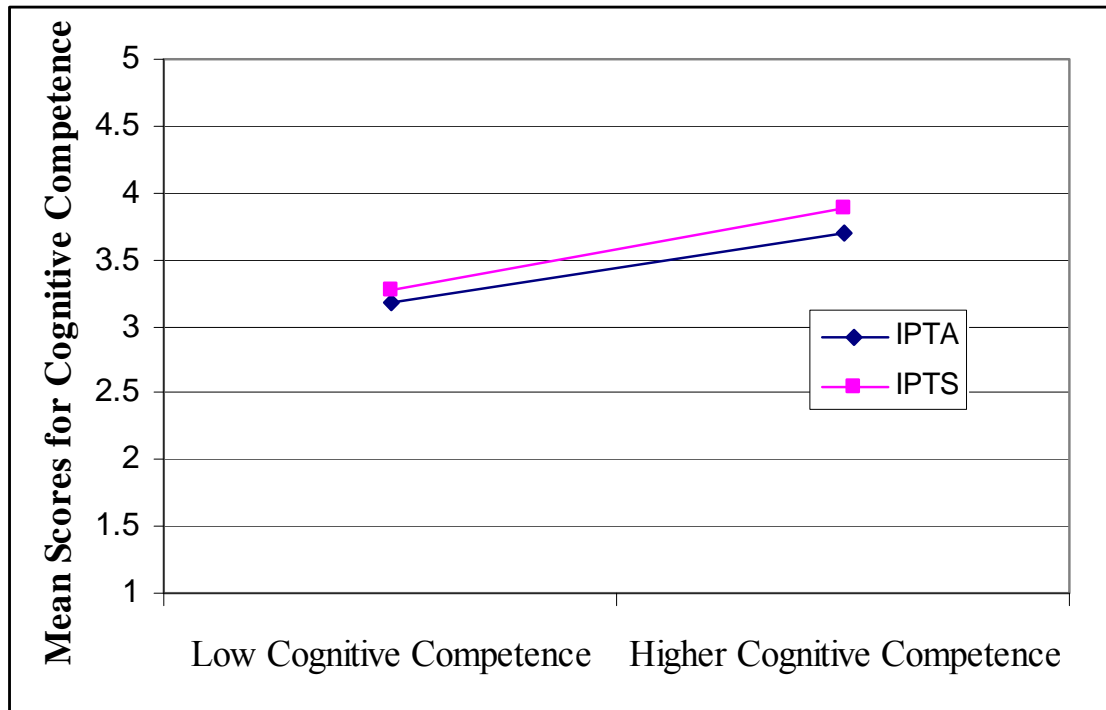


Figure 25: Slopes for Inter Ethnic Tolerant on Cognitive Competence for PuIHE and PrIHE based on Model 2

* *IPTA = PuIHE*

* *IPTS = PrIHE*

4.8.3 Moderating Effects of IHE between Vocational Competency and Inter Ethnic Tolerant Behavior

The following equations were developed in order to determine if IHE moderated the relationship between vocational competence and inter ethnic tolerant behavior.

The first equation proposed is as follows:

$$Y = a + b_1X_3 + b_2Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₃ = Vocational Competence

Z = IHE (moderator)

e = residual (error)

The second equation which included the product between the predictors (X₃·Z), and including it as a third term in the regression is as shown:

$$Y = a + b_1X_3 + b_2Z + b_3X_3 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

b_3 = Sample based least squares estimate of the population regression coefficient for the product term

X_3 = Vocational Competence

$X \cdot Z$ = Product Term between Vocational Competence and IHE

e = residual (error)

The output generated in Table 39 indicated that for model 1, $R = 0.276$ $R^2 = 0.076$ and $F(2, 1083) = 44.716$, $p = 0.0001$. This means that 7.6% of the variance in inter-ethnic tolerant behavior is explained by vocational competence and types of IHE. The coefficients shown in Table 40 showed that the resulting regression equation for Model 1 is as follows:

$$Y = 2.035 + 0.343X_3 + 0.080Z \text{ ----- Equation (13)}$$

Where:

Y = Inter Ethnic Tolerant Behavior

X_3 = Vocational Competence

Z = IHE

An inspection on the output generated in Table 39 also indicated that the adjusted $R^2 = 0.075$. The difference between R^2 and adjusted R^2 was very small because the sample size was quite large (1086). The coefficients for both vocational competence and IHE in Model 1 are statistically significant at the $p = 0.0001$ level. Equation in Model 1 showed that for one point increase in vocational competence, inter ethnic tolerant behavior is predicted to increase by 0.343, given that IHE is

held constant. The regression coefficient associated with IHE indicated that the difference in inter ethnic tolerant behavior increase between PuIHE and PriIHE was 0.080, given that vocational competence score was held constant. However, Model 1 did not include the product term and thus ignores a possible moderating effect of IHE. In other words, this model shows that, holding IHE constant; inter ethnic tolerant behavior increase by an average of 0.343 when vocational competence increases 1 point.

Table 39. Model Summary for the Moderating Effects of IHE between Vocational Competency and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.276(a)	.076	.075	.60325	.076	44.716	2	1083	.0001
2	.278(b)	.078	.075	.60311	.001	1.481	1	1082	.224

a Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Vocational Competence

b Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Vocational Competence, Dummy Variable IHE and X₃

Model 2 showed the results after the product term has been entered into the equation. As shown in Table 39, the addition of the product term resulted in an R² change of 0.001, $F(1, 1082) = 1.481, p = 0.224$. With the p value > 0.0001 , this result did not support the presence of a moderating effect. In other words, the moderating effect of IHE did not explain the variance in inter ethnic tolerant



behavior above and beyond the variance explained by vocational competence and IHE. This indicated that IHE did not moderate the relationship between vocational competence and inter ethnic tolerant behavior. The output generated in Table 39 included information on the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 2.191 + 0.306X_3 - 0.288Z + 0.090X_3 \cdot Z \text{ ----- Equation (14)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X₃ = Vocational Competence

Z = IHE

X₃·Z = Product Term between Vocational Competence and IHE

Table 40. Coefficients Values for Each Model for the Moderating Effects of IHE between Vocational Competency and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.035	0.154		13.190	0.0001
Mean Composite Score Vocational	0.343	0.036	0.278	9.424	0.0001
Dummy Variable IHE	0.080	0.038	0.062	2.115	0.035
2 (Constant)	2.191	0.201		10.917	0.0001
Mean Composite Score Vocational	0.306	0.048	0.248	6.426	0.0001
Dummy Variable IHE	-0.288	0.305	-0.224	-0.944	0.345
Dummy Variable IHE and X ₃	0.090	0.074	0.286	1.217	0.224

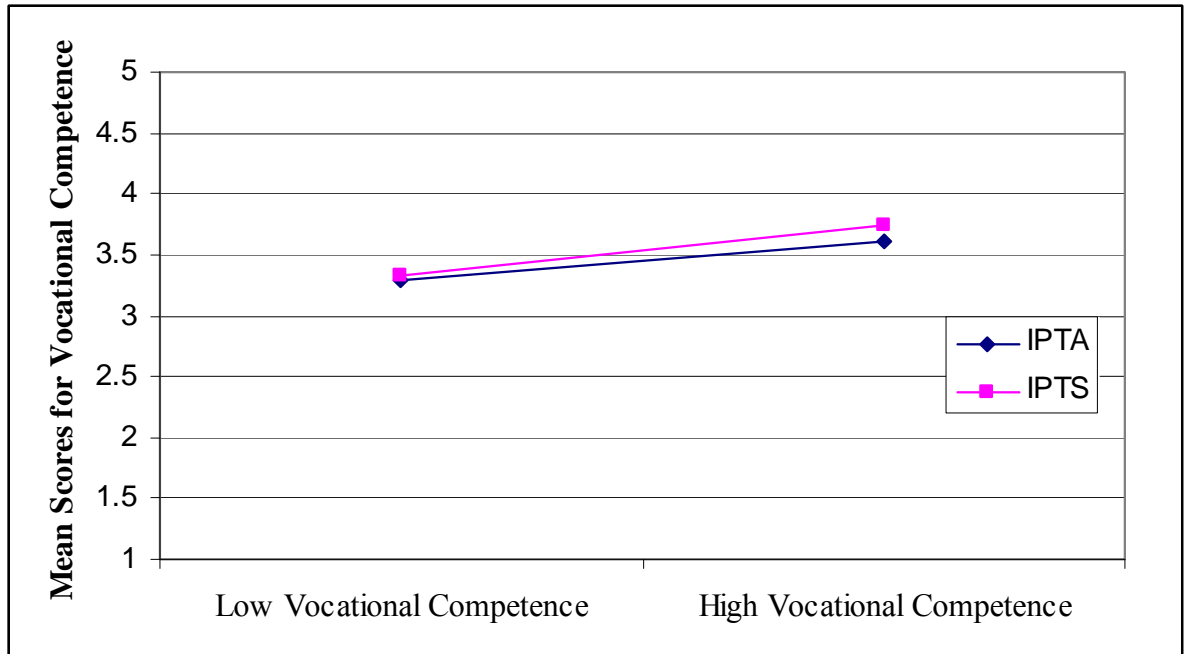


Figure 26: Slopes for Inter Ethnic Tolerant on Vocational Competence for PuIHE and PrIHE based on Model 2

* *IPTA = PuIHE*

* *IPTS = PrIHE*

The graph in Figure 26 that showed the relationship between vocational competence and inter ethnic tolerant behavior for each of the groups separately helped to give a clearer picture that the relationship did not defer much for the PuIHE as compared to the PrIHE. The steepness of the slope for both PuIHE and PrIHE was almost the same. This suggested that the contribution of vocational competence towards IETB was not determined or regulated by the types of IHE. Having the awareness of other behavioral options towards inter ethnic relationships and having self efficacy in acting accordingly was equally important in its predicting effect towards IETB for all the students in the IHE.

According to Parrilov (1999), people with low self esteem or low self efficacy were more prejudiced in their interpretations of others. Besides, they deprecate others to enhance their feelings about themselves. However, in this case, as the samples were taken from the IHE, these students have achieved a certain level of self-esteem as they have made it to university. They are probably more confident about themselves and hence, there were no significant difference in the relationship between vocational competence and inter ethnic tolerant behavior for both these groups (PuIHE and PriHE).

4.8.4 Moderating Effects of IHE between Citizenship Competency and Inter Ethnic Tolerant Behavior

Two equations were developed in order to determine if IHE moderated the relationship between citizenship competence and inter ethnic tolerant behavior.

The first equation proposed is as follows:

$$Y = a + b_1X_4 + b_2Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₄ = Citizenship Competence

Z = IHE (moderator)

e = residual (error)

The second equation which includes the product between the predictors ($X_4 \cdot Z$) as a third term in the regression is as follows:

$$Y = a + b_1X_4 + b_2Z + b_3X_4 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b_1 = Least squares estimate of the population regression coefficient for X

b_2 = Least squares estimate of the population regression coefficient for Z

b_3 = Sample based least squares estimate of the population regression coefficient for the product term

X_4 = Citizenship Competence

$X \cdot Z$ = Product Term between Vocational Competence and IHE

e = residual (error)

The output generated in Table 41 indicated that for Model 1, $R = 0.316$, $R^2 = 0.100$ and $F(2, 1083) = 60.163$, $p = 0.0001$. This means that 10.0% of the variance in inter-ethnic tolerant behavior was explained by citizenship competence and types of IHE. The coefficients shown in Table 42 showed that the resulting regression equation for Model 1 is as follows:

$$Y = 1.846 + 0.393X_4 + 193Z \text{ ----- Equation (15)}$$



Where:

Y = Inter Ethnic Tolerant Behavior

X₄ = Citizenship Competence

Z = IHE

An inspection on the output generated in Table 41 also indicated that the adjusted $R^2 = 0.098$. The difference between R^2 and adjusted R^2 was very small because the sample size was quite large (1086). The coefficients for both citizenship competence and IHE in Model 1 were statistically significant at the $p = .0001$ level. Equation in Model 1 showed that for one point increase in citizenship competence, inter ethnic tolerant behavior was predicted to increase by 0.393, given that IHE was held constant. The regression coefficient associated with IHE indicated that the difference in inter ethnic tolerant behavior increased between P_{IHE} and P_{RIHE} was 0.193, given that citizenship competence score was held constant. However, Model 1 did not include the product term and thus ignored a possible moderating effect of IHE. In other words, this model showed that, holding IHE constant; inter ethnic tolerant behavior increased by an average of 0.393 when citizenship competence increases 1 point.

Table 41. Model Summary for the Moderating Effects of IHE between Citizenship Competency and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.316(a)	.100	.098	.59545	.100	60.163	2	1083	.0001
2	.329(b)	.108	.106	.59296	.008	10.127	1	1082	.002

a Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Citizenship Competence

b Predictors: (Constant), Dummy Variable IHE, Mean Composite Score Citizenship Competence, Dummy Variable IHE and X₄

Model 2 showed the results after the product term has been entered into the equation. As shown in Table 41, the addition of the product term resulted in an R² change of 0.008, $F(1, 1082) = 10.127, p = 0.002$. With the p value < 0.05 , this result supported the presence of a moderating effect. In other words, the moderating effect of IHE explains 0.8% of the variance in inter ethnic tolerant behavior above and beyond the variance explained by citizenship competence and IHE. This indicated that IHE did moderate the relationships between citizenship competence and inter ethnic tolerant behavior.

The output generated in Table 42 included information on the regression coefficients after the product term was entered in the equation. The equation is as follows:



$$Y = 2.258 + 0.293X_4 - 0.704Z + 0.230X_4 \cdot Z \text{ ----- Equation (16)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X₄ = Citizenship Competence

Z = IHE

X₄·Z = Product Term between Citizenship Competence and IHE

Table 42. Coefficients Values for Each Model for the Moderating Effects of IHE between Citizenship Competency and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.846	0.150		12.270	0.0001
Mean Composite Score Citizenship	0.393	0.036	0.340	10.940	0.0001
Dummy Variable IHE	0.193	0.040	0.149	4.811	0.0001
2 (Constant)	2.258	0.198		11.402	0.0001
Mean Composite Score Citizenship	0.293	0.048	0.254	6.172	0.0001
Dummy Variable IHE	-0.704	0.285	-0.547	-2.474	0.014
Dummy Variable IHE and X ₄	0.230	0.072	0.675	3.182	0.002



The regression coefficient results for the product term shown in Table 42 indicated that there was a 0.230 differences between the slope of inter ethnic tolerant behavior on citizenship competence between the PuIHE (coded as 0) and the PriIHE (coded as 1). In other words, the slope regressing inter ethnic tolerant behavior on citizenship competence was less steep for PuIHE as compared to PriIHE. The graph in Figure 27 that showed the relationship between citizenship competence and inter ethnic tolerant behavior for each of the groups separately helped to give a better sense that the relationship is stronger for PriIHE (a steeper slope) as compared to PuIHE. As seen in the slope of the lines in Figure 27, PriIHE has a larger slope as compared with PuIHE. This suggested citizenship competence has a greater influence towards IETB for students in the PriIHE compared to PuIHE. This also suggested that having shared values and desire to contribute to nation was important in determining IETB for PriIHE students; but not PuIHE students.

The results of a study conducted by Zaff et al. (2003) indicated that individual and social contextual variables in early youth promoted civic participation in late youth. This is because the social interactions including schools provide different social support system as compared to the family. Therefore, there is a difference in how the different IHE influenced the citizenship competence in this study. Both the public and private universities provide different learning environments. The learning environment in the PuIHE is more national based where 95% of its students are local Malaysians and the programs of study are 100% based on the

national curriculum as compared to the PrIHE, where there were more international students and almost 100% of the programs of study are based on the twinning foreign universities. Such differences in the social campus environment could probably have influence the level of citizenship competence among the students.

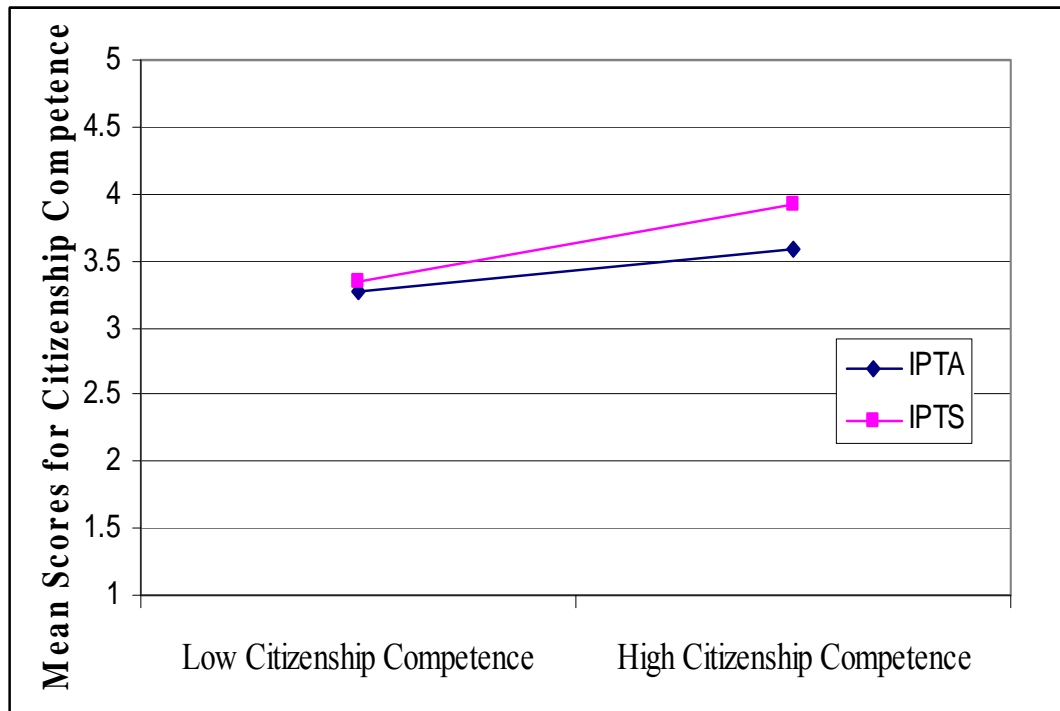


Figure 27: Slopes for Inter Ethnic Tolerant on Citizenship Competence for PuIHE and PrIHE based on Model 2

* *IPTA = PuIHE*

* *IPTS = PrIHE*

4.9 Moderating Effects of Fields of Study between Youth Development Competencies and Inter Ethnic Tolerant Behavior

The multiple linear regression analysis which was conducted in section 4.7 earlier has also indicated that there were differences in the youth development competencies that contributed to the variance in inter ethnic tolerant behavior between the five different programs of study. However, based on the literature review, most comparison studies comparing differences among students from the different programs of study were grouped into two major fields, Arts and Science. Hence in order to identify whether the relationship between the youth development competencies and inter ethnic tolerant behavior changes depending on programs of study, the students from the five different fields of studies in this study were also grouped accordingly to the two major fields; Arts and Science. Similarly, moderated multiple regression (MMR) analysis was used to determine if the fields of study (Arts and Science) moderated the relationship between youth development competencies and inter ethnic tolerant behavior.

4.9.1 Moderating Effects of Arts and Science (FIELDS) between Social/Personal Competency and Inter Ethnic Tolerant Behavior

In order to determine if FIELDS moderated the relationship between social/personal competence and inter ethnic tolerant behavior, two equations were formed. The first equation proposed is as follows:

$$Y = a + b_1X_1 + b_2Z + e$$



Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₁ = Social/Personal Competence

Z = FIELDS (moderator)

e = residual (error)

The second equation, MMR model equation, which included the product between the predictors (X₁·Z), and including it as a third term in the regression is as follows:

$$Y = a + b_1X_1 + b_2Z + b_3X_1 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

b₃ = Sample based least squares estimate of the population regression coefficient for the product term

X₁ = Social/Personal Competence

X₁·Z = Product Term between Social/Personal Competence and FIELDS

e = residual (error)

The output generated in Table 43 indicated that for model 1, R = 0.376 R² = 0.141 and F(2, 1083) = 89.152, p = 0.0001. This means that 14.1% of the variance in inter-ethnic tolerant behavior was explained by social/personal competence and



FIELDS of study. The coefficients shown in Table 44 indicated that the resulting regression equation for Model 1 is as follows:

$$Y = 1.607 + 0.480X_1 + 0.017Z \text{ ----- Equation (17)}$$

Where:

Y = Inter Ethnic Tolerant Behavior

X₁ = Social/Personal Competence

Z = PROGRAMS

An inspection on the output generated in Table 43 also indicated that the adjusted R² = 0.140. The difference between R² and adjusted R² was very small because the sample size was quite large (1086). The coefficients for both social/personal competence and FIELDS in Model 1 were statistically significant at the $p < .001$ level. Equation in Model 1 showed that for one point increase in social/personal competence, inter ethnic tolerant behavior was predicted to increase by 0.480, given that FIELDS was held constant. The regression coefficient associated with FIELDS indicated that the difference in inter ethnic tolerant behavior increased between Arts and Science was 0.017, given that social/personal competence score was held constant. However, Model 1 did not include the product term and thus ignored a possible moderating effect of FIELDS. In other words, this model showed that, holding FIELDS constant; inter ethnic tolerant behavior increased by an average of 0.480 when social/personal competence increased 1 point.



Table 43. Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Social/Personal Competency and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.376(a)	.141	.140	.58161	.141	89.152	2	1083	.0001
2	.377(b)	.142	.139	.58170	.001	0.641	1	1082	.423

a Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Social/Personal Competence

b Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Social/Personal Competence, Dummy Variable FIELDS and X₁

Model 2 showed the results after the product term has been entered into the equation. As shown in Table 43, the addition of the product term resulted in an R² change of 0.001, $F(1, 1082) = 0.641$, $p = 0.423$. With the p value > 0.001 , this result did not support the presence of a moderating effect. In other words, the moderating effect of FIELDS did not explain the variance in inter ethnic tolerant behavior above and beyond the variance explained by social/personal competence and FIELDS. This indicated that FIELDS did not moderate between social/personal competence and inter ethnic tolerant behavior. The output generated in Table 44 included information on the regression coefficients after the product term was entered in the equation. The equation is as follows:



$$Y = 1.698 + 0.456X_1 - 0.213Z + 0.059X_1 \cdot Z \text{ ----- Equation (18)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X₁ = Social/Personal Competence

Z = FIELDS

X₁·Z = Product Term between Social/Personal Competence and FIELDS

Table 44. Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Social/Personal Competency and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.607	0.142		11.330	0.0001
Mean Composite Score Social/Personal	0.480	0.036	0.375	13.330	0.0001
Dummy Variable FIELDS	0.017	0.036	0.013	0.461	0.645
2 (Constant)	1.698	0.182		9.330	0.0001
Mean Composite Score Social/Personal	0.456	0.046	0.357	9.826	0.0001
Dummy Variable FIELDS	-0.213	0.289	-0.167	-0.737	0.461
Dummy Variable FIELDS and X ₃	0.059	0.073	0.183	0.801	0.423



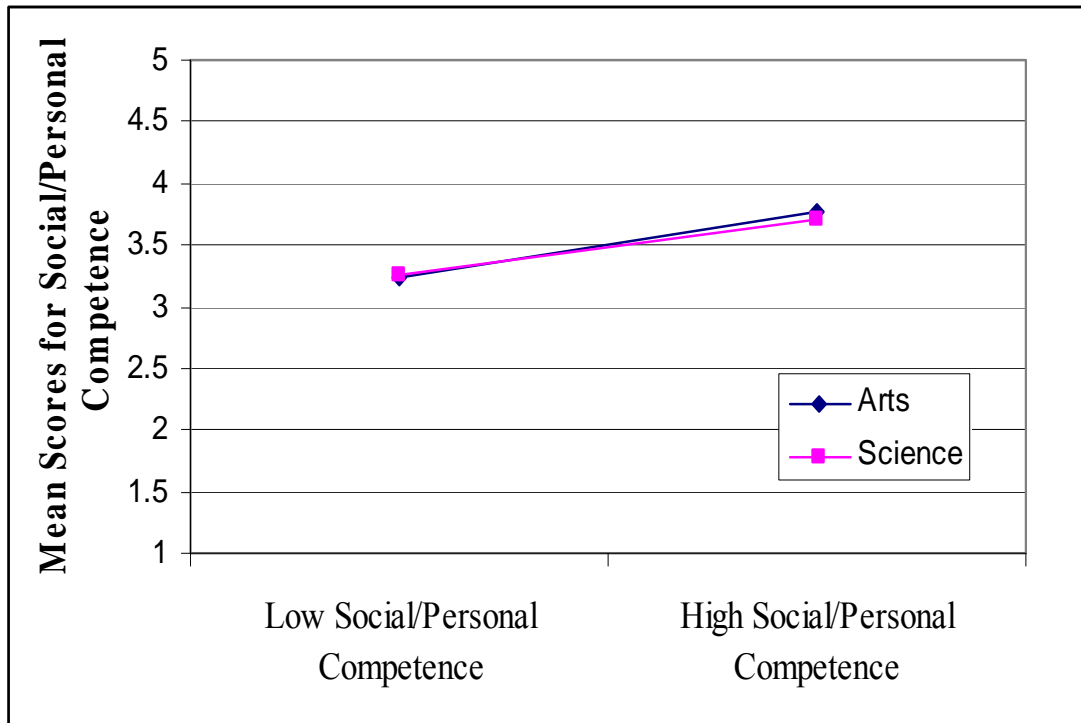


Figure 28: Slopes for Inter Ethnic Tolerant on Social/Personal Competence for Arts and Science based on Model 2

The graph in Figure 28 showed the relationship between social/personal competence and inter ethnic tolerant behavior for each of the groups separately. It helped to give a clearer picture that the relationship did not defer much for the Arts as compared to the Science. The steepness of the slope for both Arts and Science was almost the same. This suggested that regardless of the fields of study (Arts or Science) the students studied, it did not moderated the relationship between their skills to make the right evaluation and judgments related to intrapersonal and interpersonal relationship and inter ethnic tolerant behavior.

In inter ethnic relationships; a challenging attitude will be how people tend to identify with their own ethnic or national group as a means of fulfilling their needs for group belongingness and security (Basirico & Bolin, 2000). As a result, people usually view their own cultural values as somehow more real and therefore superior to those of other groups, and they prefer their own way of doing things (Basirico & Bolin, 2000). Since there is no significant difference in the ethnic composition for both the Science and Arts program, therefore the fields of study (Arts or Science) did not moderated the relationship between personal/social competence and inter ethnic tolerant behavior in this study.

4.9.2 Moderating Effects of Arts and Science (FIELDS) between Cognitive Competency and Inter Ethnic Tolerant Behavior

To determine if FIELDS moderated the relationship between cognitive competence and inter ethnic tolerant behavior, two equations were formed. The first equation is as follows:

$$Y = a + b_1X_2 + b_2Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₂ = Cognitive Competence

Z = FIELDS (moderator)

e = residual (error)



The second equation, which included the product between the predictors ($X_2 \cdot Z$), and including it as a third term in the regression is as follows:

$$Y = a + b_1X_2 + b_2Z + b_3X_2 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b_1 = Least squares estimate of the population regression coefficient for X

b_2 = Least squares estimate of the population regression coefficient for Z

b_3 = Sample based least squares estimate of the population regression coefficient for the product term

X_2 = Cognitive Competence

$X_2 \cdot Z$ = Product Term between Cognitive Competence and FIELDS

e = residual (error)

The output generated in Table 45 indicated that for Model 1, $R = 0.420$, $R^2 = 0.177$ and $F(2, 1083) = 116.248$, $p = 0.0001$. This means that 17.7% of the variance in inter-ethnic tolerant behavior was explained by cognitive competence and FIELDS of study. The coefficients shown in Table 46 showed that the resulting regression equation for Model 1 is as follows:

$$Y = 1.570 + 0.509X_2 - 0.015Z \text{ ----- Equation (19)}$$



Where:

Y = Inter Ethnic Tolerant Behavior

X₂ = Cognitive Competence

Z = FIELDS

An inspection on the output generated in Table 45 also indicated that the adjusted $R^2 = 0.175$. The difference between R^2 and adjusted R^2 was very small because the sample size was quite large (1086). The coefficients for both cognitive competence and FIELDS in Model 1 were statistically significant at the $p < .001$ level. Equation in Model 1 showed that for one point increase in cognitive competence, inter ethnic tolerant behavior was predicted to increase by 0.509, given that FIELDS was held constant. The regression coefficient associated with FIELDS indicated that the difference in inter ethnic tolerant behavior decrease between Arts and Science is 0.015, given that cognitive competence score was held constant. However, Model 1 did not include the product term and thus ignored a possible moderating effect of FIELDS. In other words, this model showed that, holding FIELDS constant; inter ethnic tolerant behavior increased by an average of 0.509 when cognitive competence increases 1 point.



Table 45. Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Cognitive Competency and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.420(a)	.177	.175	.56950	.177	116.248	2	1083	.0001
2	.421(b)	.177	.175	.56955	.001	0.829	1	1082	.363

a Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Cognitive Competence

b Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Cognitive Competence, Dummy Variable FIELDS and X₂

Model 2 showed the results after the product term has been entered into the equation. As shown in Table 45, the addition of the product term resulted in an R² change of 0.001, $F(1, 1082) = 0.829, p = 0.363$. With the p value > 0.001 , this result did not support the presence of a moderating effect. In other words, the moderating effect of FIELDS did not explain the variance in inter ethnic tolerant behavior above and beyond the variance explained by cognitive competence and FIELDS. This indicated that FIELDS did not moderate the relationship between cognitive competence and inter ethnic tolerant behavior.

The output generated in Table 46 included information on the regression coefficients after the product term was entered in the equation. The equation is as follows:



$$Y = 1.481 + 0.532X_2 + 0.223Z - 0.063X_2 \cdot Z \text{ ----- Equation (20)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X₂ = Cognitive Competence

Z = FIELDS

X₂·Z = Product Term between Cognitive Competence and FIELDS

Table 46. Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Cognitive Competency and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.570	0.127		12.366	0.0001
Mean Composite Score Cognitive	0.509	0.033	0.421	15.227	0.0001
Dummy Variable FIELDS	-0.015	0.035	-0.012	-0.425	0.671
2 (Constant)	1.481	0.160		9.257	0.0001
Mean Composite Score Cognitive	0.532	0.042	0.441	12.569	0.0001
Dummy Variable FIELDS	0.223	0.264	0.175	0.846	0.398
Dummy Variable FIELDS and X ₃	-0.063	0.069	-0.191	-0.911	0.363



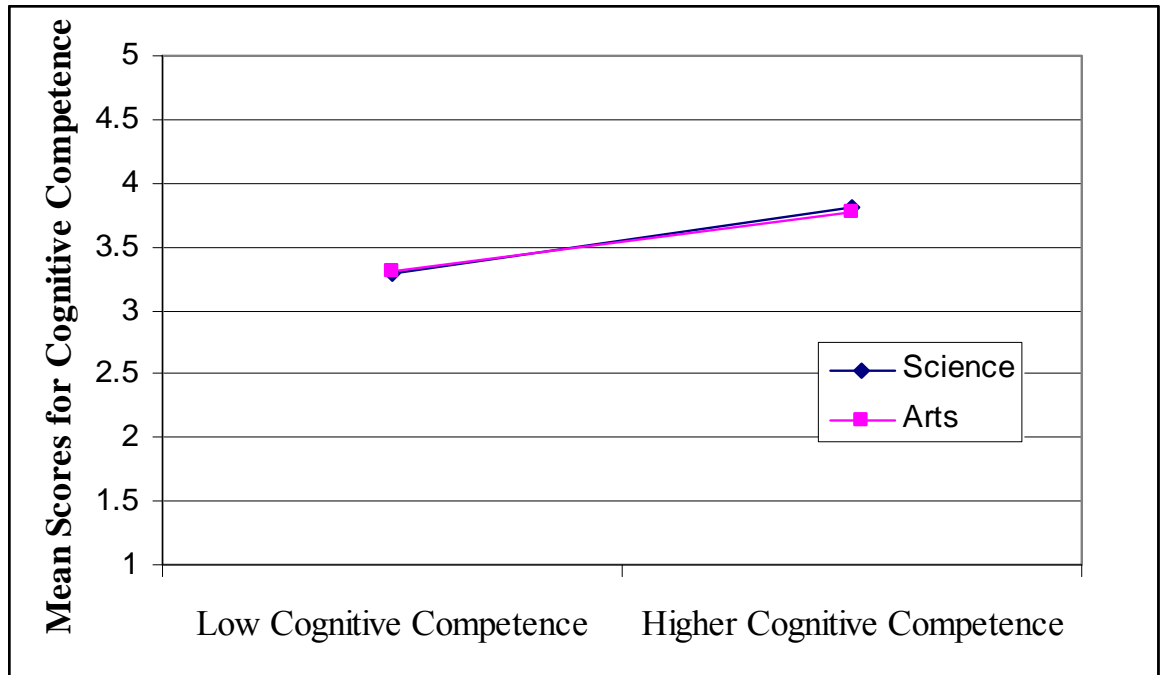


Figure 29: Slopes for Inter Ethnic Tolerant on Cognitive Competence for Arts and Science based on Model 2

The graph in Figure 29 indicated the relationship between cognitive competence and inter ethnic tolerant behavior for each of the groups separately. It helped to give a clearer picture that the relationship did not defer much for the Arts as compared to the Science. The steepness of the slope for both Arts and Science was almost the same. Cognitive competency was therefore equally important in inter ethnic relationships across all the different fields of study. This was also supported by the results showed in Table 29 where cognitive competence was one of the variable that has contributed significantly towards the regression of inter ethnic tolerant behavior across all the different programs of study. This result also suggested that when the different programs of studies were grouped as two major fields of study (Arts of Science), these fields of study did not moderated the

relationship between inter ethnic tolerant behavior and their knowledge and understanding on the social, cultural and political norms of the country.

4.9.3 Moderating Effects of Arts and Science (FIELDS) between Vocational Competency and Inter Ethnic Tolerant Behavior

Next, in order to determine if FIELDS moderated the relationship between vocational competence and inter ethnic tolerant behavior, two equations were formed. The first equation is as follows:

$$Y = a + b_1X_3 + b_2Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₃ = Vocational Competence

Z = FIELDS (moderator)

e = residual (error)

The second equation, which included the product between the predictors (X₃·Z), as a third term in the regression is as follows:

$$Y = a + b_1X_3 + b_2Z + b_3X_3 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

b₃ = Sample based least squares estimate of the population regression coefficient for the product term

X₃ = Vocational Competence

X₃·Z = Product Term between Vocational Competence and FIELDS

e = residual (error)

Results in Table 47 indicated that for Model 1, $R = 0.270$, $R^2 = 0.073$ and $F(2, 1083) = 42.501$, $p = 0.0001$. This means that 7.3% of the variance in inter-ethnic tolerant behavior was explained by vocational competence and FIELDS of study. The coefficients shown in Table 48 indicated that the resulting regression equation for Model 1 is as follows:

$$Y = 2.103 + 0.332X_3 + 0.023Z \text{ ----- Equation (21)}$$

Where:

Y = Inter Ethnic Tolerant Behavior

X₃ = Vocational Competence

Z = FIELDS



The output generated in Table 47 also indicated that the adjusted $R^2 = 0.071$. The difference between R^2 and adjusted R^2 is very small because the sample size is quite large (1086). The coefficients for both vocational competence and FIELDS in Model 1 were statistically significant at the $p < .001$ level. Equation in Model 1 showed that for one point increase in vocational competence, inter ethnic tolerant behavior was predicted to increase by 0.332, given that FIELDS was held constant. The regression coefficient associated with FIELDS indicated that the difference in inter ethnic tolerant behavior increased between Arts and Science was 0.023, given that vocational competence score was held constant. However, Model 1 did not include the product term and thus ignored a possible moderating effect of FIELDS. In other words, this model showed that, holding FIELDS constant; inter ethnic tolerant behavior increased by an average of 0.332 when vocational competence increases 1 point.



Table 47. Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Vocational Competency and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.270(a)	.073	.071	.60439	.073	42.501	2	1083	.0001
2	.273(b)	.075	.072	.60410	.002	2.029	1	1082	.155

a Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Vocational Competence

b Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Vocational Competence, Dummy Variable FIELDS and X₃

Model 2 showed the results after the product term has been entered into the equation. As shown in Table 47, the addition of the product term resulted in an R² change of 0.002, $F(1, 1082) = 2.029$, $p = 0.155$. With the p value > 0.001 , this result did not support the presence of a moderating effect. In other words, the moderating effect of FIELDS did not explain the variance in inter ethnic tolerant behavior above and beyond the variance explained by vocational competence and FIELDS. This indicated that FIELDS did not moderate the relationship between vocational competence and inter ethnic tolerant behavior. In a nutshell, the relationship between having the awareness of the different behavioral options and choices in responding peacefully towards inter ethnic relations and the confidence



to perform the behavior and inter ethnic tolerant behavior was not moderated by the FIELDS of study.

The output generated in Table 48 included information on the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 2.273 + 0.291X_3 - 0.413Z + 0.106X_3 \cdot Z \text{ ----- Equation (22)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X₃ = Vocational Competence

Z = PROGRAMS

X₃·Z = Product Term between Vocational Competence and PROGRAMS



Table 48. Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Vocational Competency and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.103	0.151		13.943	0.0001
Mean Composite Score Cognitive	0.332	0.036	0.269	9.188	0.0001
Dummy Variable FIELDS	0.023	0.037	0.018	0.604	0.546
2 (Constant)	2.103	0.192		11.831	0.0001
Mean Composite Score Cognitive	0.291	0.046	0.236	6.290	0.0001
Dummy Variable FIELDS	-0.413	0.308	-0.324	-1.341	0.180
Dummy Variable FIELDS and X ₃	0.106	0.074	0.347	1.424	0.155

The graph in Figure 30 indicated the relationship between vocational competence and inter ethnic tolerant behavior for each of the groups separately. It also helped to give a clearer picture that the relationship did not defer much between the students from Arts and Science. This was because the steepness of the slope for both Arts and Science was almost the same. Therefore, FIELDS of study is not a moderator between vocational competence and inter ethnic tolerant behavior.

Although the results from the multiple linear regression shown in table 29 indicated that vocational competence did not influence the inter ethnic tolerant behavior only among the Bioscience students, but when the different programs of study were grouped together into two major fields (Science and Arts), there were no difference in the relationship between vocational competence and inter ethnic tolerant behavior. This suggest when programs of study are grouped together into broad categories, it is difficult to determine the relationships between the different youth development competencies and inter-ethnic tolerant behavior.

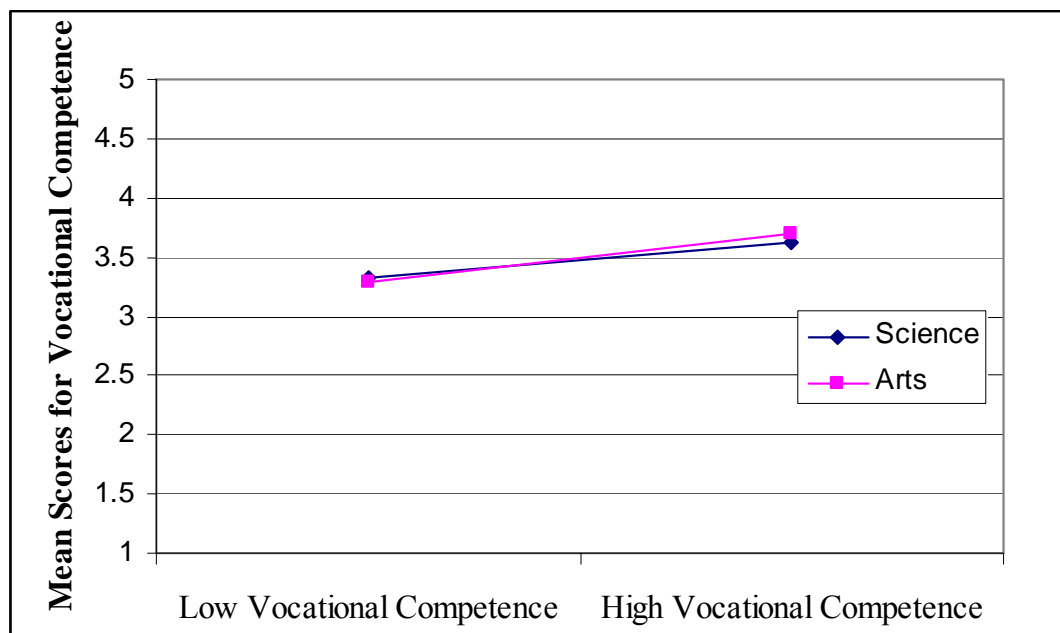


Figure 30: Slopes for Inter Ethnic Tolerant on Vocational Competence for Arts and Science based on Model 2

4.9.4 Moderating Effects of Arts and Science (FIELDS) between Citizenship Competency and Inter Ethnic Tolerant Behavior

Finally, in order to determine if FIELDS moderated the relationship between citizenship competence and inter ethnic tolerant behavior, two equations were formed. The first equation is as follows:

$$Y = a + b_1X_4 + b_2Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₄ = Citizenship Competence

Z = FIELDS (moderator)

e = residual (error)

The second equation, which included the product between the predictors (X₄·Z), as a third term in the regression is as follows:

$$Y = a + b_1X_4 + b_2Z + b_3X_4 \cdot Z + e$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

b_3 = Sample based least squares estimate of the population regression coefficient for the product term

X_4 = Citizenship Competence

$X_4 \cdot Z$ = Product Term between Citizenship Competence and FIELDS

e = residual (error)

Results in Table 49 indicated that for Model 1, $R = 0.284$, $R^2 = 0.081$ and $F(2, 1083) = 47.574$, $p = 0.0001$. This means that 8.1% of the variance in inter-ethnic tolerant behavior was explained by citizenship competence and FIELDS of study. The coefficients shown in Table 50 showed that the resulting regression equation for Model 1 is as follows:

$$Y = 2.175 + 0.328X_4 + 0.002Z \text{ ----- Equation (23)}$$

Where:

Y = Inter Ethnic Tolerant Behavior

X_4 = Citizenship Competence

Z = FIELDS

The output generated in Table 49 also indicated that the adjusted $R^2 = 0.081$. The difference between R^2 and adjusted R^2 was very small because the sample size was quite large (1086). The coefficients for both citizenship competence and FIELDS in Model 1 were statistically significant at the $p < .001$ level. Equation in Model 1 showed that for one point increase in citizenship competence, inter ethnic tolerant



behavior was predicted to increase by 0.328, given that FIELDS was held constant. The regression coefficient associated with FIELDS indicated that the difference in inter ethnic tolerant behavior increased between Arts and Science was 0.002, given that citizenship competence score was held constant. However, Model 1 did not include the product term and thus ignored a possible moderating effect of FIELDS. In other words, this model showed that, by holding FIELDS constant; inter ethnic tolerant behavior increased by an average of 0.328 when citizenship competence increases 1 point.

Table 49. Model Summary for the Moderating Effects of Arts and Science (FIELDS) between Citizenship Competency and Inter Ethnic Tolerant Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.284(a)	.081	.079	.60178	.081	47.574	2	1083	.0001
2	.284(b)	.081	.078	.60206	.000	0.001	1	1082	.978

a Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Citizenship Competence

b Predictors: (Constant), Dummy Variable FIELDS, Mean Composite Score Citizenship Competence, Dummy Variable FIELDS and X4

Model 2 showed the results after the product term has been entered into the equation. As shown in Table 49, the addition of the product term resulted in an R² change of 0.000, $F(1, 1082) = 0.001$, $p = 0.978$. With the p value > 0.001 , this



result did not support the presence of a moderating effect. In other words, the moderating effect of FIELDS did not explain the variance in inter ethnic tolerant behavior above and beyond the variance explained by citizenship competence and FIELDS. This indicated that FIELDS did not moderate the relationship between citizenship competence and inter ethnic tolerant behavior.

The output generated in Table 50 included information on the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 2.173 + 0.329X_4 + 0.010Z - 0.002X_4 \cdot Z \text{ ----- Equation (24)}$$

Where:

Y = Inter Ethnic Tolerant behavior (IETB)

X₄ = Citizenship Competence

Z = FIELDS

X₄·Z = Product Term between Citizenship Competence and FIELDS

Table 50. Coefficients Values for Each Model for the Moderating Effects of Arts and Science (FIELDS) between Citizenship Competency and Inter Ethnic Tolerant Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.175	0.135		16.068	0.0001
Mean Composite Score Cognitive	0.328	0.034	0.284	9.725	0.0001
Dummy Variable FIELDS	0.002	0.037	0.002	0.056	0.955
2 (Constant)	2.173	0.170		12.817	0.0001
Mean Composite Score Cognitive	0.329	0.043	0.285	7.739	0.0001
Dummy Variable FIELDS	0.010	0.282	0.008	0.035	0.972
Dummy Variable FIELDS and X ₃	-0.002	0.070	-0.006	-0.027	0.978

The graph in Figure 31 indicated the relationship between citizenship competence and inter ethnic tolerant behavior for each of the groups separately. However, because the slopes of both the lines were almost the same, it crossed one another and only one line can be seen. This gave a clear picture that the relationship did not defer between the students from Arts and Science. This was because the slope in the graph for both the Arts and Science indicated similar steepness. This suggested when the different programs of study were categorized into the two main FIELDS of study (Arts and Science), this did not moderated the relationship between the



sense of shared values and their desire to contribute to the nation with inter ethnic tolerant behavior. This results was also supported by the multiple regression results shown in Table 23 where citizenship competence did not contributed in a significant way to the regression of inter ethnic tolerant behavior for all the five programs of study. Hence, FIELDS of study was not a moderator between citizenship competence and inter ethnic tolerant behavior.

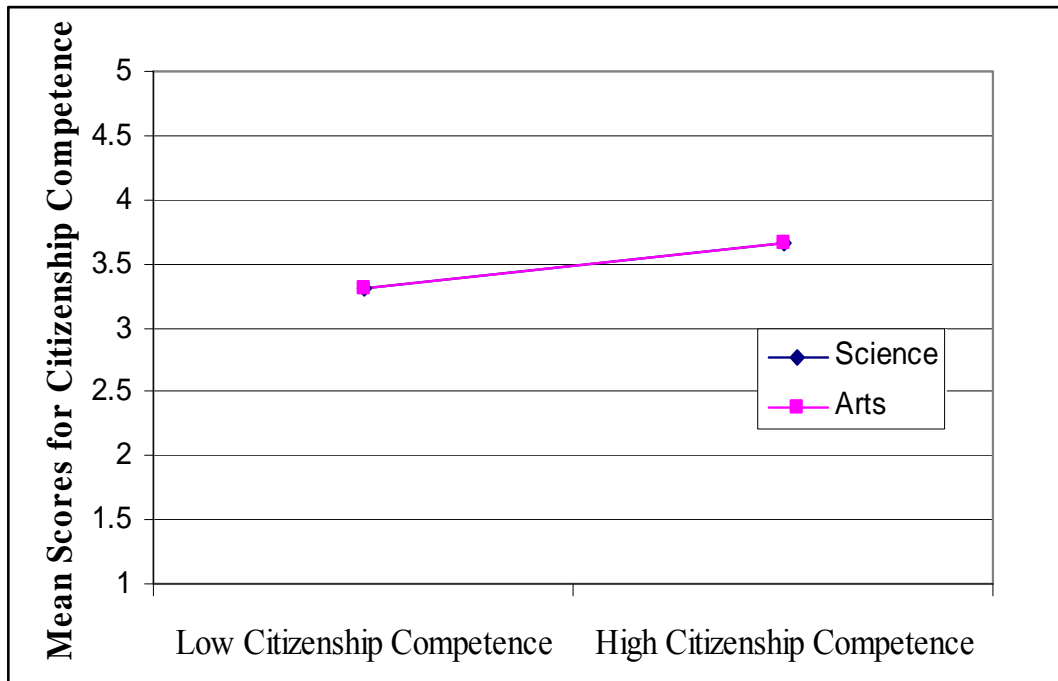


Figure 31: Slopes for Inter Ethnic Tolerant on Citizenship Competence for Arts and Science based on Model 2

4.10 Chapter Summary

This chapter presented the results from the different statistical analysis conducted to answer the research objectives as detailed in Chapter One. All the respondents in this study were made up of the three major ethnic groups in the country. They were all undergraduates from a sample of five Public Universities and six University Colleges in Malaysia majoring in five different programs of study; namely, Bioscience, Social Science, Technical Studies, Business Studies and Information Technology. These respondents were asked to answer a self-administered questionnaire each which consisted of six sections, each measuring a different variable with a 5 point Likert scale except for the last section that was the demographic profiles of the respondents. The variables measured by each section were Social/Personal Competence, Cognitive Competence, Vocational Competence, Citizenship Competence and Inter Ethnic Tolerant Behavior.

Following the initial analysis to identify which youth development competencies have the highest level of strength among the students from the Public Universities (PuIHE) and Private Universities (PriHE) using multivariate analysis of variance, students in both these universities were found to have the highest level of competency in vocational competence. Similarly, students from these two types of universities also recorded the least strength in cognitive competency. This indicated that the students, regardless of the types of universities they attended (Public or Private) have similar competencies and weaknesses (lower level of



strength) in the same area when it comes to issues related to inter ethnic tolerant behavior.

However, when comparing the levels of strength for each of the competencies by the institutions of higher learning, there was a significant difference between PuIHE and PriHE. Students from the PuIHE recorded a higher level of strength for each of these competencies; Cognitive Competence, Vocational Competence and Citizenship Competence except for Social/Personal Competence as compared to the students from PriHE. There was no difference in the level of strength for Social/Personal Competence between the PuIHE and PriHE. This meant that the ability to make the right evaluation and judgments related to intrapersonal and interpersonal relationship without prejudices among students from the PuIHE and PriHE was similar.

The multivariate analysis also indicated that there was a statistical significant difference between the five programs of studies on the combined dependent variables (Social/Personal Competence, Cognitive Competence, Vocational Competence and Citizenship Competence). Bioscience students reported a slightly higher level in Social/Personal Competence than the other four programs of study. However, Social Science students on the other hand, recorded a higher score for Cognitive Competence, Vocational Competence and Citizenship Competence than the other four programs of studies. This explained that students from the Social



Science studies were more equipped with competencies in relation to inter ethnic tolerant behaviors; or rather this could also suggest that Social Science students were capable in performing a tolerant behavior among the different ethnic groups.

When comparing the level of inter ethnic tolerant between the two institutions of higher learning (PuIHE and PriHE), t test was used to determine the differences in mean scores between PuIHE and PriHE. The results indicated no significant difference for inter ethnic tolerant behavior between PuIHE and PriHE. In addition, to compare the level of inter ethnic tolerant by the five programs of studies, analysis of variance (ANOVA) was used. The ANOVA results for inter ethnic tolerant behavior across the five programs of studies indicated significant differences in the mean scores for inter ethnic tolerant behavior between the five programs of study. Post Hoc tests indicated significant difference for two pairs: Social Science with Technical Studies and Social Science with Business Studies. The Social Science students obtained a significant higher mean score in inter-ethnic tolerant behavior than Technical Studies students. Hence, among the five programs of studies, the Social Science students have a higher level of Inter Ethnic Tolerant Behavior comparatively. This corresponded to the results obtained from MANOVA conducted earlier which indicated that the Social Science students indeed recorded the highest competencies on three out of four competencies. Therefore, this could contributed to the high level of inter ethnic tolerant among social science students.



To determine which youth development competencies (Social/Personal Competence, Cognitive Competence, Vocational Competence and Citizenship Competence), explained inter ethnic tolerant behavior among the undergraduates of both PuIHE and PriHE and across the five programs of study, multiple linear regression analysis was used. For PuIHE, the results indicated that only social/personal competence, cognitive competence and vocational competence were found to be of significance in explaining Inter Ethnic Tolerant Behavior (IETB). Citizenship competence was excluded. However, for PriHE, all four-predictor variables; social/personal competence, cognitive competence, vocational competence and citizenship competence were found to be of significance in explaining Inter Ethnic Tolerant Behavior.

However, there was similarity in both the predicting equation model for PuIHE and PriHE. Cognitive competency was found to contribute to the greatest variation in inter ethnic tolerant for both the equation. This means, cognitive competency was very important to promote inter ethnic tolerant behavior among the youth despite the types of universities. This suggest the importance of having knowledge, the importance of understanding the different cultural and behavioral norms, understanding the social norms to interpret society cues in predicting a person's inter ethnic tolerant behavior in Malaysia.



Results generated from the multiple linear regression was to determine which youth development competencies explained inter ethnic tolerant behavior across the five programs of study indicated that both the social/ personal and cognitive competencies explained inter ethnic tolerance across the five programs of studies. Specifically, cognitive competence made the strongest contribution to explain inter-ethnic tolerance behavior for the four fields of study except for Business Studies. Vocational competence has the least contribution in explaining Inter Ethnic Tolerance Behavior for Social Science, Technical Studies and IT Studies and with no effect for the Bioscience students. The results of the study also revealed Citizenship

Across the five different programs of study, the results generated from the multiple linear regression suggested that both the social/ personal and cognitive competencies were significant in contributing to the variance in inter ethnic tolerance behavior. Specifically, cognitive competence made the strongest contribution to explain inter-ethnic tolerance behavior for the four programs of study except for Business Studies. On the other hand, vocational competence has the least contribution in explaining Inter Ethnic Tolerance Behavior for Social Science, Technical Studies and IT Studies and with no effect for the Bioscience students. The overall results from the study also revealed that citizenship competence has no significant effect at all in contributing to the prediction of inter ethnic tolerant behavior across the five programs of studies.



The final analysis conducted in this study was to determine the moderating effects of IHE and the fields of study (Arts and Science) between each of the youth developmental competencies and inter ethnic tolerant behavior. For IHE, the output generated by the moderated multiple regression (MMR) analysis indicated that IHE was not a moderator between all the three youth developmental competencies and inter ethnic tolerant behavior except for citizenship competence. In short, IHE only moderated the relationship between citizenship competence and inter ethnic tolerant behavior.

To sum up, this chapter utilized the different statistical analyses to answer the different research objectives as stated earlier. Each of the results obtained from the various techniques of analysis provided a new understanding to the various research matters under study; the highest level of strength among the youth developmental competencies among the undergraduates, their level of inter ethnic tolerant, youth developmental competencies as possible predictors for inter ethnic tolerant and the possible moderating effect of institutions of higher learning and fields of study between inter ethnic tolerant behavior and youth development competencies.



CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This final chapter deals with the overview of the study and the basis that led to the development of the conceptual framework, objectives and methodology for the study. Subsequently, this chapter also discusses the significant findings, conclusion, implications, recommendations and suggestions for future research.

5.2 Summary

The main objective of the study was to determine if youth developmental competencies are potential predictors for inter ethnic tolerant behavior among the youth in PuIHE, PriHE and across the five different programs of studies (Bioscience, Social Science, Business Studies, Technical Studies and Information and Technology Studies). Therefore, four specific objectives were set in order to achieve the aim of this study. Firstly, the objective of the study was to determine which youth developmental competencies (Social/Personal Competence, Cognitive Competence, Vocational Competence and Citizenship Competence) were strongest among the youth in PuIHE and PriHE as well as across the five different programs of studies. Secondly, the study compared the different levels of inter ethnic tolerant behavior among the youth in PuIHE and PriHE as well as across the five different programs of studies. Next, the study aimed to determine which of the four identified youth developmental competencies (social/personal competency,

cognitive competency, vocational competency and citizenship competency) explains the inter-ethnic tolerant behavior among the undergraduates of both PuIHE and PriHE and across the field different programs of studies. The final section of the study investigated the moderating effects of Institution of Higher Education (IHE) and the two major Fields of Study (Arts and Science) between youth developmental competencies and inter-ethnic tolerant behavior.

As for the methodology, survey using self-administered questionnaire was conducted. This study basically used the three-phase process of measurement, which began with the conceptual definition of youth development and interethnic tolerant behavior, followed by instrument or measurement development, which involved testing and its application and finally, analyzed the obtained results.

Samples were taken by stratified random sampling from a homogenous population. A large sample size was taken to reduce sampling errors. A quantitative survey questionnaire was used and the survey instrument was divided into six different sections, which measured cognitive competence, personal/social competence, citizenship competence, inter-ethnic tolerant behavior, vocational competence and the final section contained questions for demographic variables. Data collection and analysis were conducted after the pilot study. The field test involved youth from the PuIHE and PriHE. The data was first analyzed for the establishment of reliability and validity of the research instrument, followed by statistical analysis of



the field data. Both descriptive and inferential statistical analysis procedures were employed to derive answers to the questions posed in the study. The descriptive statistics were used to describe the demographic background of the respondents while the inferential statistics were used to achieve the objectives of the study.

The process of conceptual development involved literature reviews. The review of literatures conducted as the background for this study revealed that young people whom had undergone the process of positive youth development, would develop their individual assets or competencies needed to participate successfully in the adult life. This is because the positive youth development approach focuses on developing youth competencies which is so important in helping them to develop a healthy and positive identity especially for inter ethnic relations in the society. Similarly, the literature also demonstrated that the Theory of Planned Behavior with perceived behavioral control, attitude and subjective norm as predictors could predict behavior. These three predictors can be manipulated to influence a person's desired action. Hence, applying this theory to understand the inter-ethnic tolerant behavior among the youth is considered useful and crucial. Therefore, this study has synthesized and incorporated the positive youth development theory into the theoretical planned behavior framework to gain an improved understanding of the variables that influence inter-ethnic tolerant behavior among the youth; specifically in PuIHE, PriHE and across the five programs of studies. In this sense, this study is a new initiative and is especially important for the additional theoretical



contribution to the development of theory especially in the field of inter ethnic tolerant behavior among the youth. On the basis of this conceptualization, the present study was structured. Previous models in positive youth development theory included five variables (competencies), namely; health/ physical competence, personal/social competence, cognitive /creative competence, vocational competence and citizenship competence but based on the research problem posed in the frame of this study, the focus is only on four competencies; personal/social competency, cognitive/creative competency, vocational competency and citizenship competency. Besides, the theoretical definition of these competencies (personal/social competency, cognitive/creative competency, vocational competency) complemented the definition of the three predictor constructs in the Theory of Planned Behavior. The fourth competency, which is citizenship competence, will be an additional predictor added in the prediction equation of Theory Planned Behavior; which may not been accounted for in models of planned behavior. Therefore, this study explores the combination of these two models.

This study had primarily targeted the final year undergraduates studying in the PuIHE and PriHE as the sample for this study. A sample of 1086 youth (undergraduates) from the three major ethnic groups, Malay, Chinese and Indian were involved in this study. They were from the different programs of studies (Bioscience, Social Science, Technical Studies, Business Studies and Information



Technology) from both PuIHE and PrIHE. Besides, another 77 students with the ethnic ratio of 5:3:1 were used for pilot testing. All these students were in their final year or in the second semester of their second year with ages ranging between 20 and 32 years old.

The research instrument, a self-administered structured questionnaire was used. The questionnaire was designed to measure the cognitive competency (16 items) the personal/social competency (23 items); vocational competency (9 items) and citizenship competency (15 items) of inter ethnic tolerance as well as scales measuring the respondents' practice component on inter ethnic tolerant behavior (17 items). The scales were found to have high alpha coefficient (ranged between 0.726 and 0.906), indicating good internal consistency of the instrument and the attainment of good levels of item homogeneity and precision of measurement.

5.3 Summary of Key Findings

5.3.1 The Level of Youth Development Competency by IHE and Programs of Studies

In general, this study showed that students from both the PuIHE ($M = 4.186$) and PrIHE ($M = 4.039$) have the highest level of vocational competency as compared to the other youth development competencies (social/personal, cognitive and citizenship competencies). However, when comparing the second highest level of youth development competencies among the PuIHE and PrIHE gave differing results. The findings showed that the PuIHE students scored higher in citizenship

competency after vocational competency while PrIHE students scored higher in personal social competency after vocational competency. In the next section of analysis, the findings also showed that there was no difference in the highest level of youth development competency among students across the different programs of studies. Students from Biosciences, Social Sciences, Business and Technical Studies as well as Information and Technology Studies too, have the highest level of vocational competency as compared to the other youth development competencies.

5.3.2 Levels of Inter Ethnic Tolerance Behavior by IHE and Programs of Studies

The results for the second objective in this study revealed that students from the PrIHE recorded a higher level of inter ethnic tolerance as compared to students from PuIHE but these results were insignificant. In other words, this suggest that there is no difference in the level of IETB among students from PuIHE and PrIHE. In contrast, results from the ANOVA indicated that the level of inter ethnic tolerance among students from the different programs of studies differed significantly. Students from the Social Sciences scored highest in inter ethnic tolerant behavior ($M = 3.62$, $SD = .609$) comparatively. It was then followed by students from Biosciences ($M = 3.51$, $SD = .623$). However, students from both the Business ($M = 3.41$, $SD = .612$) and Technical studies ($M = 3.41$, $SD = .621$) revealed the lowest level of inter ethnic tolerant respectively.

5.3.3 Youth Development Competencies as Predictors of Inter Ethnic Tolerant Behavior

Generally, the results in this study suggested that three out of the four predictor variables had a very significant contribution in explaining about 26.1% ($R^2 = 0.261$) of the variance in Inter Ethnic Tolerant Behavior. They were: cognitive competence, social/personal competence and vocational competence. Out of the three significant predictors, cognitive competence ($t = 9.662, p = .00001$) emerged as the most significant predictor of inter ethnic tolerant behavior. The second significant predictor for inter ethnic tolerant behavior was social/personal competence ($t = 8.558, p = .00001$) followed by the third best predictor, vocational competence ($t = 5.503, p = .00001$). The regression model contributed empirical evidences regarding the relationship between youth development competencies and inter-ethnic tolerant behavior among the undergraduates in Malaysia.

5.3.3.1 Youth Development Competencies as Predictors of Inter Ethnic Tolerant Behavior for PuIHE and PriHE

The results of the regression analysis in determining the predictors for inter ethnic tolerant behavior for the PuIHE undergraduates too revealed that only three predictor variables were found to be of significance in explaining Inter Ethnic Tolerant Behavior (IETB). These were social/personal competence, cognitive competence and vocational competence; together, they explained about 22.6% of the variance in the IETB. On the contrary, the multiple regressions used to determine the best set of predictor variable in predicting IETB among the PriHE

students indicated that all four-predictor variables; social/personal competence, cognitive competence, vocational competence and citizenship competence were found to be of significance in explaining IETB. In total, these four predictors explained about 35.5% of the variance in the IETB for the undergraduates from PrIHE.

5.3.3.2 Youth Developmental Competencies as Predictors of Inter Ethnic Tolerant Behavior for the Different Programs of Study

In the second section of the analysis, results from the regression analysis indicated significant differences in the predictors for determining IETB across the five different programs of study. From the results obtained, the key findings were as follows:

- a) For Bioscience, results indicated that only two predictor variables (Social/Personal Competence and Cognitive Competence) were significant in explaining about 23.1% of the variance in the Inter Ethnic Tolerant Behavior. However, the largest beta coefficient was for cognitive competence (0.483), followed by personal/social competence (0.364). This meant for Bioscience students, the cognitive competence variable made the strongest unique contribution to explain IETB, when the variance explained by all other predictor variables in the model was controlled for.



- b) For Social Sciences, results indicated that three predictor variables (cognitive competence, social/personal competence and vocational competence) explained about 28.9% of the variation in the IETB with the largest beta coefficient (0.311) for cognitive competence followed by social/personal competence (0.283). This suggested for Social Science students, the cognitive competence variable made the strongest unique contribution to explain IETB, when the variance explained by all other predictor variables in the model was controlled for.
- c) For Technical Studies, results indicated that the similar three predictor variables (cognitive competence, social/personal competence and vocational competence) explained about 18.8% of the variance in the IETB. Similarly, the largest beta coefficient was cognitive competence (0.292). This also meant that the cognitive competence variable made the strongest unique contribution to explain IETB for students from the technical studies, when the variance explained by all other predictor variables in the model was controlled for.
- d) For Business Studies, similar results indicated that three predictor variables (cognitive competence, social/personal competence and vocational competence) explained 23.5% of the variance in the IETB. However, social/personal competence has the largest beta coefficient 0.279, which

meant the social and interpersonal relationship played a more important role in determining the inter-ethnic tolerant behavior among the business students.

- e) For Information Technology Studies, the results indicated that the similar three predictor variables (cognitive competence, social/personal competence and vocational competence) explained the variation in the inter-ethnic tolerant behavior. But these three predictors explained about 41.9% of the total variation in inter-ethnic tolerant behavior, which was the highest among all five programs of studies. However, the largest beta coefficient was 0.420, which belonged to cognitive competence. This meant that cognitive competence made the strongest unique contribution to explain IETB for students majoring in Information Technology Studies.

This study revealed that there was a significant difference in the determinants of inter-ethnic tolerant behavior among the youth from the different programs of study. Though the determinants of inter-ethnic tolerant behavior among the youth for Social Sciences, Technical Studies, Business Studies and Information Technology Studies were similar but the determinants with the strongest influence towards inter ethnic tolerant behavior deferred. This finding reflected that different competencies have a different degree of variation in inter ethnic tolerant behavior across the different programs of study. As for the students from the program of

Bioscience, only two competencies were identified as significant in determining the variation in inter-ethnic tolerant behavior.

5.3.4 Moderator of Youth Development Competencies and Inter Ethnic Tolerant Behavior

In assessing the moderating effect of IHE between each Youth Development Competency and Inter Ethnic Tolerant Behavior, this study confirmed that IHE does not moderate cognitive competence, social/personal competence, vocational competence and inter ethnic tolerant behavior. Nevertheless, IHE did moderate the relationships between Citizenship Competence and Inter Ethnic Tolerant Behavior. Therefore, this study had found that students from the different education environment (public versus private) will have different levels of shared values, different strength of desire to contribute to the nation and behave differently towards differences across ethnic groups. This finding provided the empirical evidence regarding the moderating effect of IHE on the relationship between youth development competencies and inter-ethnic tolerant behavior.

Likewise, in identifying the moderating effect of the two major fields of study between youth development competencies and inter ethnic tolerant behavior, the results showed that the two major fields of study did not moderate between youth development competencies and inter ethnic tolerant behavior. This indicated that the relationship between the youth development competencies and inter ethnic



tolerant behavior did not defer when students were grouped according to the two major fields of study; Science and Arts.

5.4 Conclusions

Results from the multiple regression analysis conducted concluded that having the broad based knowledge and the understanding and ability to interpret the social cues, understand the society norms, behavioral and cultural norms of others has the strongest influence towards inter ethnic tolerant behavior for all the IHE students. Therefore, there was similarity in both the predicting equation model for PuIHE and PriIHE. Figure 32 and Figure 33 are the models to illustrate and to summarize the differences and similarities in the relationship between the four youth development competencies as predictors for inter ethnic tolerant behavior among the undergraduates of both PuIHE and PriIHE.



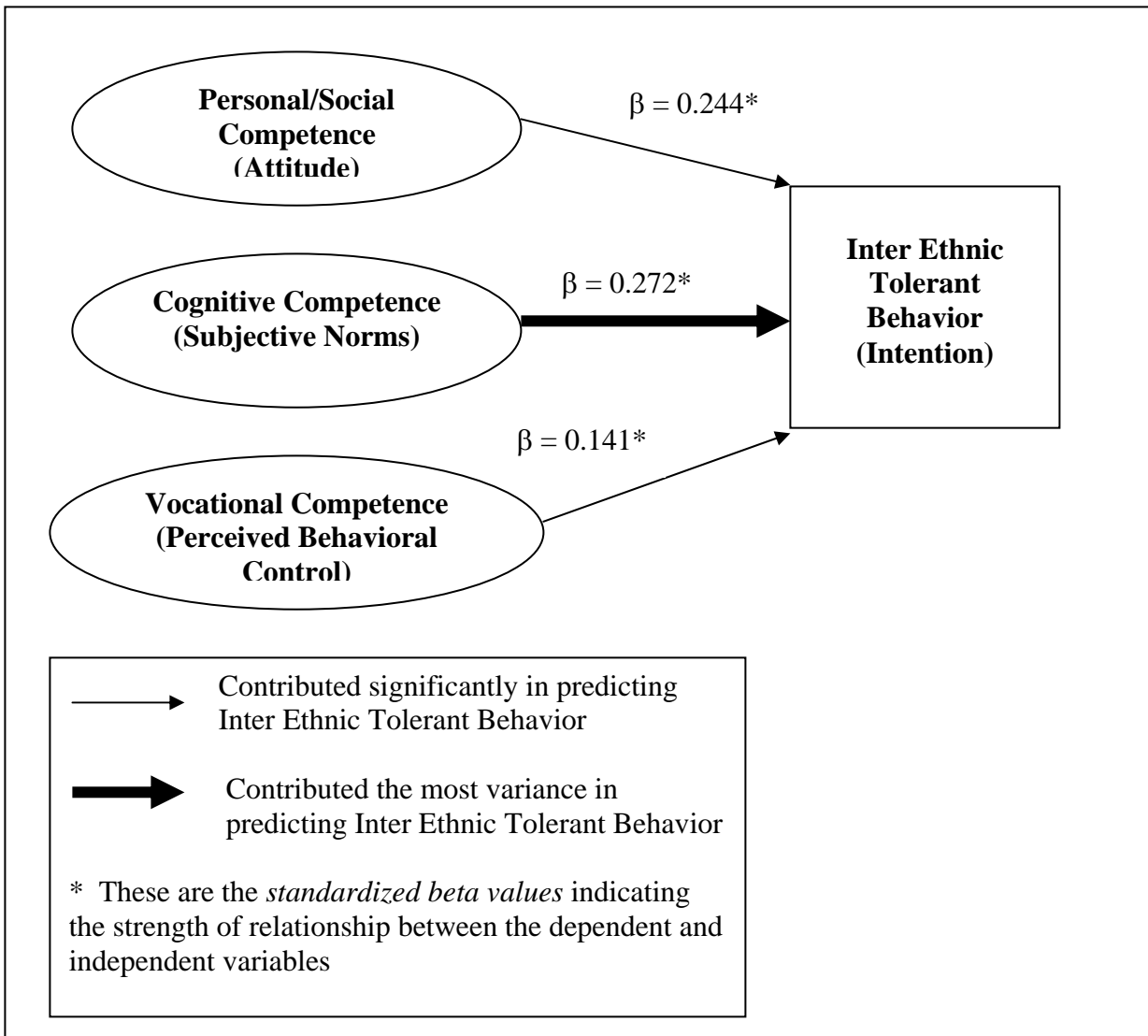


Figure 32: Model for Predicting Inter Ethnic Tolerant Among PuIHE Students

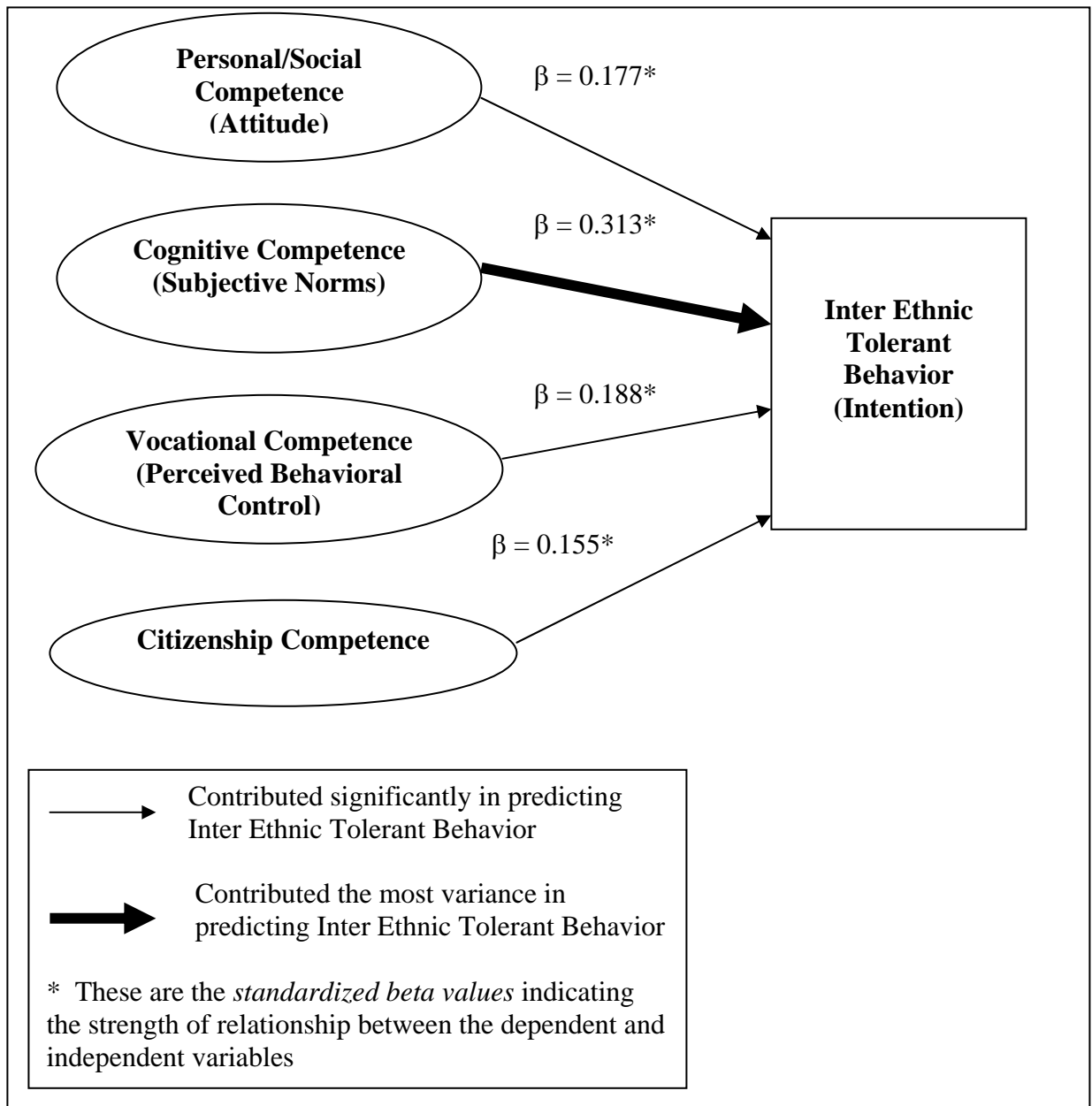


Figure 33: Model for Predicting Inter Ethnic Tolerant Among PriHE Students

Across the five different programs of study, the results generated from the multiple linear regression suggested that both the social/ personal and cognitive competencies were significant in contributing to the variance in inter ethnic

tolerance behavior. Specifically, cognitive competence made the strongest contribution to explain inter-ethnic tolerance behavior for the four programs of study except for Business Studies. On the other hand, having the correct views and judgment towards issues related to inter ethnic relationship (personal/social competency) was more influential in predicting inter-ethnic tolerant behavior for the undergraduates from Business studies. On the other hand, vocational competence has the least contribution in explaining Inter Ethnic Tolerance Behavior for Social Science, Technical Studies and IT Studies and with no effect for the Bioscience students.

The overall results from the study also revealed that citizenship competence has no significant effect at all in contributing to the prediction of inter ethnic tolerant behavior across the five programs of studies. Figure 34 is the model to illustrate the differences and similarities in the relationship between the four youth development competencies as predictors for inter-ethnic tolerant behavior across the five programs of study.

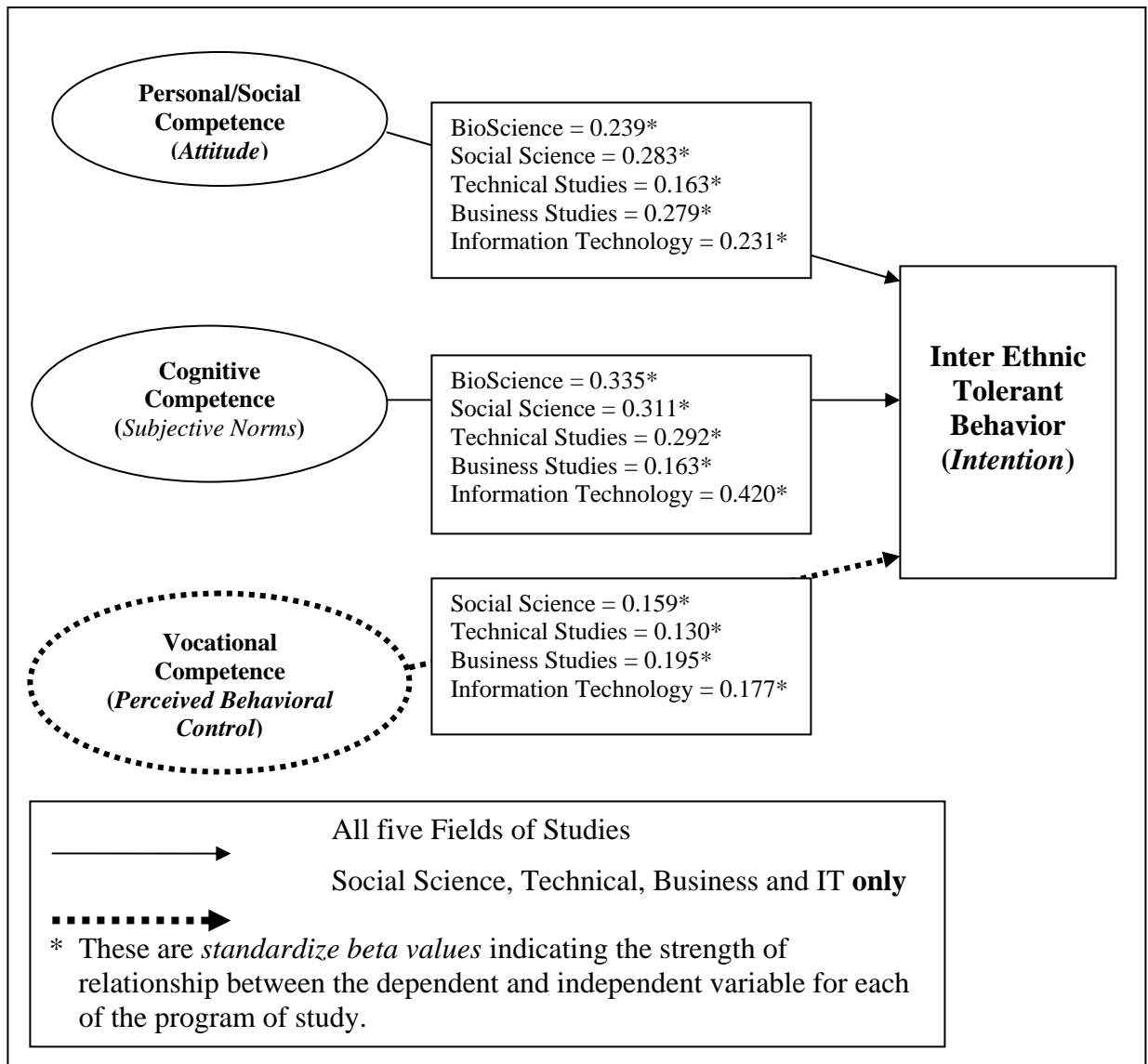


Figure 34: Model for Predicting Inter Ethnic Tolerant Across the Five Programs of Studies

The final analysis conducted using moderated multiple regression (MMR) revealed that IHE was not a moderator between all the three youth developmental competencies and inter ethnic tolerant behavior except for citizenship competence. In short, IHE only moderated the relationship between citizenship competence and

inter-ethnic tolerant behavior. Figure 35 illustrated the model with the moderating variable as the final model for this study.

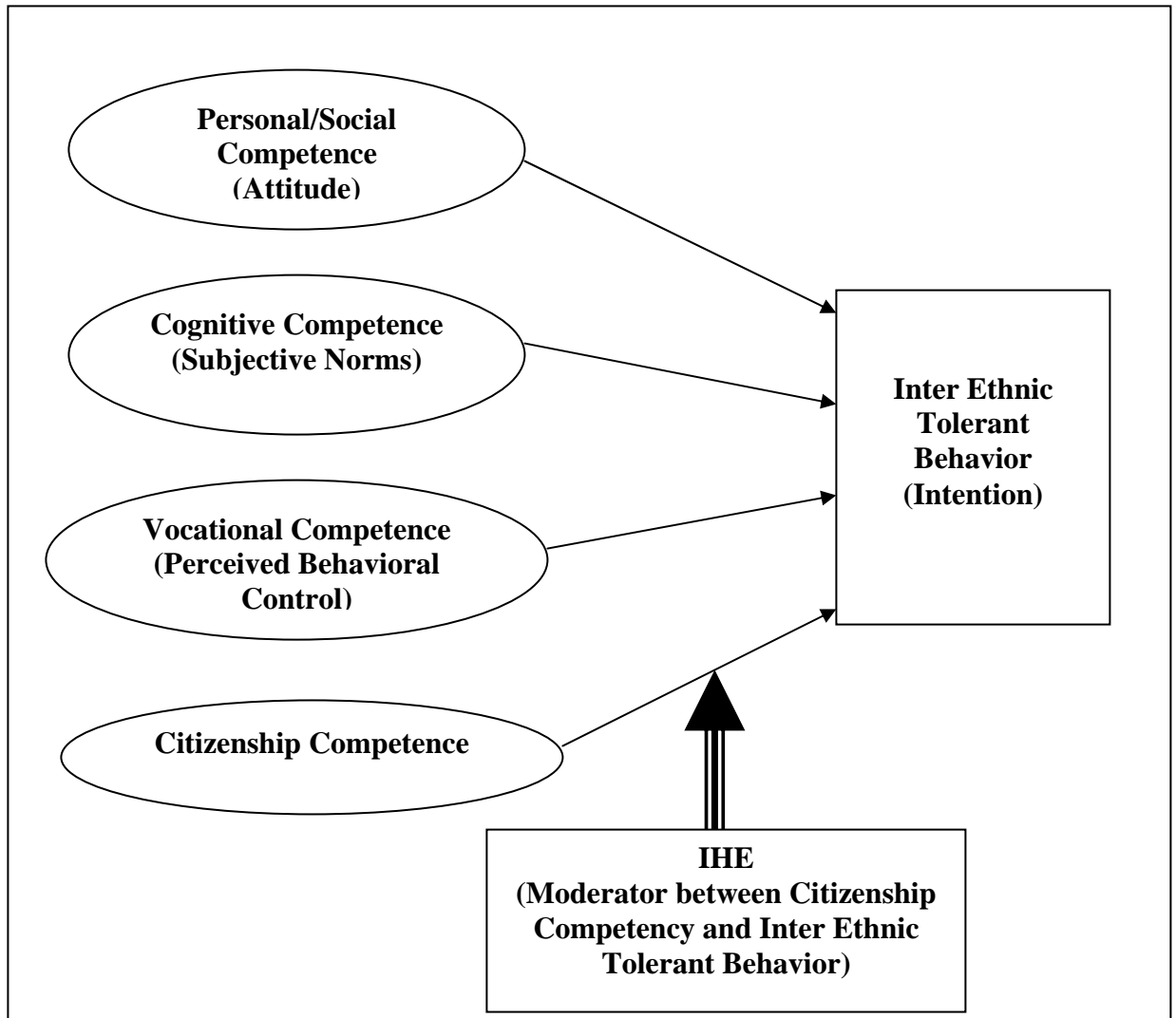


Figure 35: Model for Predicting Inter Ethnic Tolerant with IHE as the Moderator between Citizenship Competency and Inter Ethnic Tolerant Behavior

As such, the contribution of this study to the body of knowledge is that the conceptual model developed in this study (refer Figure 4) can helped to predict the

level of inter ethnic tolerant behavior among the students. Hence, to increase the level of inter ethnic tolerant behavior among the youth, relevant stake holders can look into ways to increase the students' knowledge and understanding of the social cues, behavioral and cultural norms of other ethnic groups (cognitive competence). Besides, to increase the level of inter ethnic tolerant behavior among the undergraduates, relevant stake holders can also focus on instilling the correct views and judgment towards issues related to inter ethnic relationship through media, education, community activities and the strength of other youth development competencies (refer Figure 4). Therefore, this is an important contribution to the body of knowledge. With this model and the results of this finding, universities, schools; government agencies as well as NGOs can look into ways to enhance and further strengthen these youth development competencies to improve the status of inter ethnic tolerant behavior among the youth in this country.

In a nutshell, to improve the status of inter ethnic tolerant behavior, developing the students' cognitive competencies is very crucial. This again refers to the importance of education in such developments. What is thought in school, in the universities and perhaps at home are all important elements to cognitive development. If what is taught is perceived as negative cognitively, the outcome which is usually manifested in the behavior will be negative as well. If what is taught is perceived as positive cognitively, the manifestation of the behavior will be positive as well. This was supported by the social cognitive theory which states

that behavior is largely regulated antecedently through cognitive processes. This theory suggest that one's cognitions or the mind is an active force that constructs one's reality, selectively encodes information and performs behavior on the basis of values and expectations, and imposes structure on its own actions. The findings from this study supported the above mentioned theory.

Therefore, it is recommended that the purpose of education is to provide correct information and knowledge, to build on what the students have already known, to confront and eradicate students' misconceptions. For example the content of history courses is particularly important in promoting multiculturalism or inter-ethnic understanding. The contents could also include a greater emphasis on peace building as a counterweight to the emphasis on war that currently dominates most peoples' perceptions of history. It is also recommended that the relevant stakeholders for positive youth development, especially lecturers in this case, need to engage in the task of teaching appropriately, providing accurate and balance information, encouraging the need to know and instilling curiosity; as broad based knowledge and understanding was the strongest predictor of a tolerant behavioral outcome.

In conclusion, this study has addressed the gap between youth developmental competencies and inter-ethnic tolerant behavior in the Malaysian context. This study has also provided the basis for understanding the relationship between each

youth developmental competencies and inter-ethnic tolerant behavior particularly among the undergraduates; both from the PuIHE and PriHE as well as from the different programs of study. Such understanding thus provided a profound insight into how actions can be taken to enhance the level of IETB among the youth.

5.5 Implications and Recommendations

5.5.1 Implications and Recommendations for Practice

The findings of the present study presented observations that the present undergraduates; especially those in their final year in both the PuIHE and PriHE as well as across all disciplines of study were strongest in their vocational competency. This implied that youth in the universities around the country were more competent in areas related to self efficacy and were more prepared in building inter ethnic relationships. This also implied that universities' students were confident and should they experience any difficulties especially in dealing with inter ethnic relationships, they will have the capability to resort to alternative behavioral options. Such capabilities suggest conflicts in inter ethnic relations among undergraduates in Malaysia can be avoided.

These could be attributed to the fact that these students have been exposed to a multi ethnic environment in the universities and in these educational environments, unity; tolerance and harmony have always been the main focus and emphasis. In the universities, students get to meet with people from different ethnic background everyday in their classes, food court, around campus and even some may stay with

different ethnic groups of friends in the same hostel. All these have provided them with the opportunities to understand, communicate and interact without fear and not knowing what to do. Contrary to the working world, the educational environment have always provided the environmental conditions that facilitate group interactions that include the development of common purpose and goals; for example, group projects, group assignments, sports and co-curriculum activities. Besides, in universities, many educational provisions undertaken focuses on conflict resolution skills. In summary, all these factors could have contributed to the reason for a high vocational competence among all the undergraduates disregard of the types of universities (private or public) and disregard to the programs of study. By assisting diverse groups to confront their differences through group problem solving task, it is likely to help these groups develop the three skills of successful integration, thus developing confidence and awareness of the different behavioral options in relation to inter ethnic tolerance.

Therefore, it is recommended that all youth should be encouraged to pursue a higher education right up to the university level as this will give them a longer time frame (longer exposure) to the educational environment that facilitates opportunities for meeting new people, developing their self efficacy and expanding their scope of interaction (with different ethnic groups). Therefore, there should be more collaborative efforts between the government, NGOs, youth organizations, media and local community to encourage all youth to further their education.



Besides, it is also recommended that each family unit should also be involved to encourage and create the awareness among the youth on the importance of furthering their education at this age; not just to improve their knowledge for a better career but to developed self efficacy, awareness and understanding of the different ethnic groups, different cultures, religions and beliefs around them. Hence, strengthening their awareness of the behavioral options they have as lives in a multi ethnic society is inter dependent; between themselves, their communities as well as society.

In addition, to enhance the learning experience among the different ethnic groups in the universities, it is recommended that the lecturers in the universities to make use of their classes as opportunities to focus on greater cooperative learning tasks where students learn to interact with one another in different ways to achieve understanding and a common goal. Assignments or projects designed should span ethnic boundaries providing opportunity structures that help promote ethnic harmony within the campus community and ultimately to the society.

Results in the final analysis on the moderating effects of IHE between the four youth development competencies and inter ethnic tolerant suggested that there was interaction between IHE and citizenship competence on inter ethnic tolerant behavior. Indeed, results from the multiple regression analysis conducted also indicated that besides the similar (with PuIHE) three youth development

competencies, citizenship competence was also and only significant in predicting inter ethnic tolerant behavior among the PriHE undergraduates. Such results implied, a little more than one third of the inter-ethnic tolerant behavior among the undergraduates from PriHE can be explained by the four identified competencies in this study. This indicated that students from the PriHE would have to live up the first challenge among the nine challenges of vision 2020; that is to establish a united Malaysia nation with a sense of common and shared destiny. Whether the PriHE students possessed shared values, have the desire to contribute to the nation and being indifferent towards differences across ethnic groups will be important and necessary to determine the inter ethnic tolerant behavior.

Along these lines, the results of this study also implied that interactions to instill shared values and sense of belonging to the society and nation for the PriHE students are important and require consistent efforts. This cannot be restricted to one or two programmes or activities alone. It is recommended to have continuous efforts; focusing on the sharing and understanding of values and beliefs across ethnic groups. This can also be achieved through various ways; from classroom lectures, seminars, outdoor activities such as homestay programmes, group camping, Rakan Muda activities, Program Latihan Khidmat Negara that focuses on patriotism and creating opportunity for interaction and understanding of shared national values.

5.5.2 Implications and Recommendations for Policy Development

The results of the study suggested that there was no difference in IETB between students from PuIHE and PriHE. Thus, this study implied that the environment or the type of university one attended did not play an important role in influencing the level of inter ethnic tolerance. However, when compared between the different programs of study, the undergraduates from the social sciences have the highest level of inter ethnic tolerant behavior while the undergraduates from the business studies have the lowest level of inter ethnic tolerant behavior. This implied that the different programs of studies did influence the inter-ethnic tolerant behaviors. The core subjects in social sciences were mostly humanity based and related to current social issues while the core subjects in business studies were mostly on entrepreneurship, profit and loss as well as administrative. Perhaps due to such differences, the students from the social sciences demonstrated a higher level of inter ethnic tolerant behavior.

Therefore, it is recommended that the policy makers for curricular and educational development could make some social science subjects with humanities based such as philosophies, peace studies and world histories as common subjects across all programs of study. Such widened curriculums presuppose a broadened definition of what it is to be fully human and provide alternative routes and rewards for self development. Also, the content of these additions to the curriculums can help to achieve better understanding among the different ethnic groups and reduce



prejudices as well as stereotypes. Hence it is recommended for policy makers to encourage social science subjects to be recognized as major fields of study and core elective courses in the curriculum for those not in the social sciences programs.

This was a preliminary study on how the different programs of study effected the level of inter ethnic tolerant. As this preliminary results suggested that the undergraduates from the social sciences have the highest level of inter ethnic tolerant behavior, it is recommended that the policy makers for research grants to allocate more research grants or funding for researches in the field of social sciences in the future. This is to enable more in-depth studies to be conducted on the impact of the study of social sciences towards the development of social behaviors.

5.6 Recommendations for Future Research

5.6.1 Different Conceptual Models for Different IHE and Different Programs of Studies in Predicting Inter Ethnic Tolerant Behavior

Research into youth development competencies and predicting behavioral outcomes can be a very huge task. As the results in this study suggested that the fourth variable; citizenship competency was significant when used for students in PrIHE, to predict the intention of inter ethnic tolerant behavior (IETB), future researches that aimed to predict IETB among the PrIHE can incorporate the new model (refer Figure 33) with the four youth development competencies as the

predictor variables instead of the conventional model of the Theory of Planned Behavior with only three variables.

It is recommended that this model be further tested in future researches to validate the reliability of the model. This can be done by conducting a study for the PuIHE and PriHE students separately; applying the two different models (refer Figure 32 and Figure 33) developed in this study. Similarly, when predicting inter ethnic tolerant behavior for the different programs of study, a different model can be used especially for Bioscience students, another different model (refer Figure 34) with only two predictor variables, social/personal competency and cognitive competency should be used. Such future researches will help strengthened the newly developed model to predict inter ethnic tolerant behavior using the youth developmental competencies as variables among the different categories of youth in Malaysia.

5.6.2 Identifying other Contributing Variables to the Developed Conceptual Model

Future researches can also focus on experimental studies based on the developed models (refer Figure 32, 33 and 34) in this study. The focus could be the comparisons of significant contributions by each predictor variables towards inter ethnic tolerant behavior for the new students, in their first semester as the pre test and a post test with the similar group of students during their final semester. This is to determine if there are other factors such as the educational environment in the

university influencing their IETB besides the competencies determined in this study such as personal/social competence, vocational, cognitive and citizenship competencies.

Another important area for future research considerations is the application of the new model to study the relationship between each youth developmental competencies and inter ethnic tolerant behavior among non social sciences students who took additional elective social science and humanities subjects and those who did not. This will help determine if subjects related to social sciences and humanities do actually influence the development of cognitive competence and its strength in influencing cognitive competence development among the youth, which ultimately contributed to a higher level of inter ethnic tolerant behavior.

5.6.3 Youth Developmental Competencies as a Measurement of Inter Ethnic Tolerant Behavior

In order to address the issue of polarization among the students in the IHE, the government has introduced a new subject, 'Ethnic Relations' across all universities in helping the students to achieve a better understanding and increase the level of inter ethnic tolerant behavior. It is recommended for future researches to measure the effectiveness of this subject in achieving its objective by determining the level of each of these competencies; cognitive competence, vocational competence, social/personal competence and citizenship competence among the students who

took the subject. Based on the conceptual model developed (refer Figure 4) in this study, by measuring these youth developmental competencies, one can predict the inter-ethnic tolerant behavior among the youth. Therefore, with the level of inter ethnic tolerant behavior obtained; one can determined if the objective of instilling a better understanding among the different ethnic groups have been achieved through this subject. Therefore, the results from this research could then be used to further enhance or to revise the content of the subject as and where necessary to strengthen the youth development competencies.

To further refine the conceptual model developed in this study, it is recommended that future research apply this model to a larger group of youth, from different backgrounds and socio economy status. This will also help to fully explore the potential and strength of this model in the Malaysian context across the different layers of society. It is obvious that to develop the youth development competencies is not merely the responsibility of the lecturers in the universities. The responsibility starts from home, then the neighborhood and finally the society. However, the home, the family has the most crucial role to play. Ethnic prejudice and cultural ignorance can be fought by both parents and children if they were conscious of what multi ethnic living entails. Probably a single daily committed to genuine multiethnic thinking can achieve much more than all the songs and slogans dedicated to national unity. Therefore, by applying the conceptual model developed in this study to determine the relationship between youth development

competencies and inter ethnic tolerant behavior across a larger spectrum of youth will help to provide a better understanding on the levels of competencies among the different groups of youth, a better understanding on the level of inter ethnic tolerant behavior and a better idea on the predicting powers of each youth development competencies towards inter ethnic tolerant behavior.

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