Moral Reasoning of Malaysian Adolescents

Chang Lee Hoon, University of Malaya, Kuala Lumpur, Malaysia

Abstract: Values education is fundamental in Malaysia's national school curriculum as it plays an important function in achieving the aims and visions of the National Philosophy of Education and National Education Curriculum of producing Malaysian citizens who are not only knowledgeable and competent but who possess high moral standards. In fulfilling these national educational aims, values education should be concerned with educating pupils to understand, know or reason and having the emotions and dispositions to act on the values, that is to have the capacities to function as moral agent in the moral sphere. It is in this light on the importance of values education a research on moral reasoning of the adolescents is conducted, focussing on the preferred choice of values, moral stage concerns and moral schemas in moral reasoning on a moral dilemma or situation. The research instrument for this study is one of the dilemmas, namely Heinz Dilemma, in the Defining Issues Test or DIT (1986). The sample consisted of 5152 respondents, namely 899 18 year-old and 4253 16 year-old Malaysian adolescents. The moral reasoning of the respondents are cross-tabulated with selected dependent variables, namely age, gender, location, family's monthly income, father's and mother's level of education for differences in moral reasoning. This research is part of a national study on Cognitive and Psychosocial Profile of Malaysian Adolescents funded by Ministry of Science and Technology, Malaysia.

Keywords: Moral Reasoning, Adolescents

Introduction

VALUES EDUCATION IS fundamental in the Malaysian school system as embodied in the National Philosophy of Education and National Education Curriculum of producing Malaysian citizens who are not only knowledgeable and competent but who possess high moral standards (Malaysia, Education Act, 1996). Values are incorporated as values across the curriculum in all school subjects and co-curricular activities. It is also a core class-based Moral Education subject for all pupils not professing the religion of Islam in both primary and secondary schools whilst Islamic Education is taught to pupils professing the religion of Islam (Malaysia, Education Act, 1996).

In fulfilling these national educational aims, values education should be concerned with educating pupils to understand, know or reason and have the emotions and dispositions to act on the values, namely to have the capacity to function as moral agents in the moral sphere (Malaysia, Ministry of Education, 2000). This implies that to develop as moral agents, it would involve moral reasoning or judgements when making decisions on what they ought to do, and act upon them. Furthermore, with globalisation, Malaysian youths today are faced with greater challenges in resolving social problems that are infused with values. Given the emphasis on values education in Malaysian school system, it would be pertinent to investigate how Malaysian adolescents grapple with moral problems. Specifically, this study focuses on three main aspects of moral reasoning, namely the preferred choice of values, moral stage concerns and moral schemas of moral reasoning on a given hypothetical moral dilemma by answering the following research questions:

1. What is the preferred predetermined value choice on a moral dilemma of Malaysian adolescents?
2. What is the moral stage concern of Malaysian adolescents?
3. What is the moral schema of Malaysian adolescents?

Review of Literature

Historically, the theoretical perspective and research on moral reasoning has been dominated by Kohlberg's six developmental stages of moral reasoning (Colby & Kohlberg, 1987a) as shown in Table 1.

Table 1: Kohlberg's Six Stages of Moral Judgement, *Source: Colby & Kohlberg 1987a*

Level	Stage
Level 1: Pre-conventional	Stage 1. Obedience and Punishment Orientation Stage 2: Individualism and Exchange
Level 2: Conventional	Stage 3: Good Interpersonal Relationships Stage 4: Maintaining the Social Order
Level 3: Post-conventional	Stage 5: Social Contract and Individual Rights Stage 6: Universal Principles

In deriving these six developmental moral stages, Kohlberg asked respondents to talk about several hypothetical moral dilemmas in semi-structured interviews. In each dilemma, subjects were asked to choose between two actions in the dilemma, each with two positive predetermined values (for example, life versus law in Heinz Dilemma). The stages were then determined by the reasons given for the choice of action in the dilemmas and were assessed using the Moral Judgment Interview (MJI) Scoring Manual (Colby & Kohlberg, 1987b).

Since then, much has been written on Kohlberg's work on his stage structures and measurement. Although Kohlberg's stage theory is well-acknowledged, there were strong criticisms of his theory and measurement. One such criticism was on the issue of "misunderstood voices". Studies such as Gilligan (1982), Keefer and Olson (1995) and Chang (1998) have indicated that individuals may prefer not to make a dichotomous choice between two predetermined values in a given hypothetical dilemma. In addition studies such as Wark & Krebbs (1996), Chang (1998) have also found that choice of values would not only depend on the context of the situation but also between cultures. In the light of these issues, a study of moral reasoning would not only include the moral stage concern but also the preferred choice of value in a given moral situation.

Another strong criticism of Kohlberg's theory was concerning the lack of emphasis on the orientation (Gilligan, 1982) or schema of moral reasoning (Gilligan, 1982; Rest, Narvaez, Thoma & Bebeau, 1999).

Numerous studies such as Gilligan and Attanucci (1988), Wark and Krebbs (1996) have been conducted that indicated that respondents at similar stage levels of moral reasoning, have different orientations towards moral thinking. In fact, Kohlberg (1987a) argued that his stages of reasoning were based on the chosen value and elements or reasons which he classified under four categories, namely normative order, utilitarian, perfectionistic and fairness orientations. Gilligan (1982) contended that there were two different perspectives or orientations of moral reasoning, namely justice and care. She further argued that there was a tendency for male respondents to take justice orientation and female respondents to take care orientation when resolving a moral dilemma. Chang (1998) in her study of Malaysian 16 year-old adolescents found that the respondents' orientation of moral reasoning can be further classified as personal considerations, care, justice and combined orientations.

According to Narvaez and Bock (2002), moral schemas are important in understanding moral behaviour as they are "general knowledge structures used in social cooperation" and are "built from experience in social interaction" (p. 302). The schemas derived from DIT (Defining Issues Test) are classified as personal interests schema (derived from Kohlberg's Stage 2 and 3), maintaining norms schema (derived from Kohlberg's Stage 4) and post-conventional schema (derived from Kohlberg's Stage 5 and 6) (Narvaez & Bock, 2002). Table 11.2 gives the features of DIT moral judgement schemas.

Table 2: Features of DIT Moral Judgement Schemas, *Source: Narvaez & Bock, 2002 (p. 307)*

Schemas	Features
Personal-interest schema	Arbitrary, impulsive co-operation
	Self-focused
	Advantage to self is primary
	Negotiated co-operation
	Scope includes others who are known
	In-group reciprocity
	Responsibility orientation
Maintaining norms schema	Need for norms
	Society-wide views
	Uniform categorical application
	Partial society-wide reciprocity
	Duty orientation
Post-conventional schema	Appeal to an ideal
	Shareable ideals
	Primacy of moral idea
	Full reciprocity
	Rights orientation

In the light of the review of literature, a study of moral reasoning would arguably include investigating the three different aspects, namely preferred choice of value, stages of moral concerns and moral schemas when thinking about a moral situation.

Research Instrumentation

The research instrument for this study of the moral reasoning of Malaysian adolescents used one of the dilemmas, namely Heinz Dilemma (renamed Daud's Dilemma) in Defining Issues Test (DIT) devised by Rest and the University of Minnesota (DIT Manual,1986). It is a moral story about Heinz's wife who is dying of cancer and needs a drug that a druggist has invented. The druggist demands a high price that Heinz could not raise enough money to pay for the drug. Heinz's dilemma is whether to steal the drug to save his dying wife (value of life) or not to steal the drug (value of law). The DIT is a multiple-choice test that can be group-administered and computer-scored in which subjects are to rate and rank 12-items on hypothetical moral dilemmas. The items are written as different ways of thinking about a dilemma at different stage concern. As this study on moral reasoning was part of the main study of cognitive psycho-social profiling of Malaysian adolescents[1],

only one moral dilemma, namely the Heinz Dilemma was used.

After reading the given moral dilemma, respondents were asked to perform three tasks. First, the respondents were to make a decision on the choice of value, namely not to steal the drug (value of law), to steal the drug (value of life) and unable to decide (whether to steal or not to steal the drug). Second, the respondents were to rate the importance of the given 12-items in making a moral decision of the given moral dilemma. Third, after rating the 12 items individually, the respondents were to rank the four most important items. However on coding and analysing the data, the researcher found that the data obtained on the ranking task could not be used for accurate analysis of the findings. This was because most of the respondents did not select the most important items and ranked them according to what was required in the DIT. Nevertheless 9 out of 12 the rated items were coded and analysed for moral stage concerns and schemas of moral reasoning. The other three items were not analysed as they were either meaningless or anti-establishment questions or issues. The 9 items were then further analysed with selected dependent variables, namely gender, location, family's monthly income, father's and mother's level of education for differences in moral

reasoning. As the missing values were not included in data analysis, the total responses to the questions asked were varied.

Sample

The sample consisted of 5152 16 year-old and 18 year-old adolescents[2]. The 18 year-old respondents were adolescents who underwent the national service training and resided at three residential colleges, University of Malaya. The 16 year-old respondents were adolescents who were studying at form four level (equivalent to Grade 9) in national secondary schools throughout Malaysia. Out of 5152 respondents, 82.6% were 16 year-old and 17.4% were 18 year-old and they made up of 45.2% males and 54.8% females. In terms of location of the respondents' residence, there was a fairly even distribution between those from urban areas (31.2%), small towns (36.3%,) and rural areas (32.5%) .

The monthly family income or household income of the respondents were categorised under four categories. About 33.3% respondents were from families whose household income was less than RM500 per month, 34.3% were from families whose household income ranged from RM501 – 999, 17.7% were from families whose household income ranged from RM1000 – 1999 and 14.7% were from families whose household income was RM2000 and above. In terms of distribution of the sample according to fathers' and mothers' highest level of education, about 31.1% respondents stated that their fathers had primary school education while 49.9% reported that their fathers had secondary school education. The

other 19% indicated that their fathers had post-secondary level that included having a diploma, degree, post-graduate or professional qualifications. In response to their mothers' highest educational level, 34.2% respondents reported that their mothers had primary school education, 47.8% respondents' mothers had secondary school education and 18% respondents' mothers' had post-secondary education.

Results

In studying the moral reasoning of the Malaysian adolescents, the responses to the given moral dilemma (Heinz Dilemma) were analysed in terms of the following:

1. Adolescents' preferred choice of value
2. Adolescents' moral stage concerns
3. Adolescents' moral schemas

1. Adolescents' Preferred Choice of Values

The results indicated that the Malaysian adolescents showed a preference for the value of law (should not steal the drug) (42.0%) compared to the value of life (should steal the drug) (34.8%) in the given moral situation (refer Fig. 1). In addition, about 23.2% of respondents could not decide on any one of the dichotomous choice of value thus indicating that some Malaysian adolescents preferred not to make a dichotomous choice of values but perceived moral choices to be contextual.
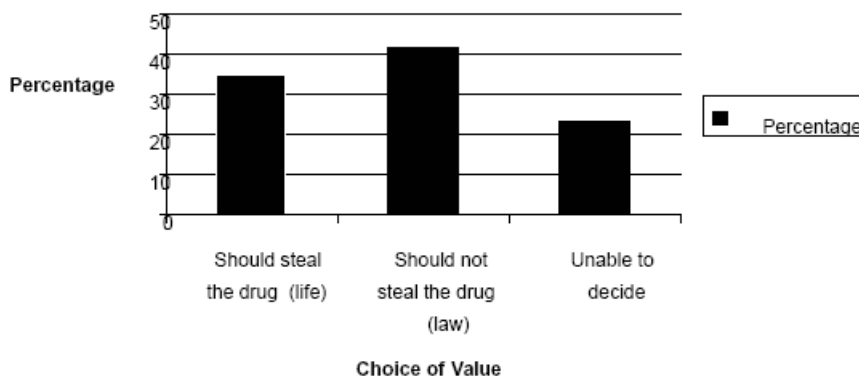

Figure 1: Malaysian Adolescents' Preferred Choice of Value

In investigating factors influencing preferred choice of value, this study found significant association between the adolescents' preferred choice of value and age, location, household income and parents' educational level (p<0.01) but not sex as shown in

Table 3. In terms of age, it was found that although both 16 (35.5%) and 18 year-olds (42.7%) showed greater preference for value of law, there was higher percentage of 18 year-old adolescents (29.6%) who were undecided on their choice of values compared

[2] The research findings on the 18 year-old adolescents are reported in Fatimah Hashim & Lihanna Borhan (eds). *A statistical snapshot of the 18 year old Malaysian adolescent.* Kuala Lumpur: Institute Sosial Malaysia, Ministry of Women, Family and Community Development. This paper on moral reasoning reports the findings from both the 16 year-old and 18 year-old respondents.

to the 16 year-old (21.8%). Similarly, regardless of the locations of respondents' homes (refer Table 3), the highest percentage of them from the urban (43.1%), small towns (44.7%) and rural (37.7%) areas chose the value of law. In addition, there seemed to be a more equal proportion of respondents from rural areas who chose the values of law (37.7%) and life (36.8%) compared to the respondents from urban and small town areas. Monthly family income was another factor that was found to be significantly associated with preferred choice of value. Respondents from various level of monthly family income chose the value of law compared to the value of life. Nonetheless, the study found that a higher percentage of respondents with higher monthly family income of RM2000 and above (48.0%) and RM1000 – 1999 (45.3%) compared to those with lower monthly family income of RM501 – 999 (40.7%) and RM500 and below (40.1%) chose the value of law (should not steal the drug). Significant associations were also found between choice of value and fathers' as well as mothers' levels of education. The findings showed that among those who opted for either the dichotomous choice for values of law or life, the highest percentage were from respondents with father's (law = 45.3% and life = 36.8%) and mother's (law = 46.4% and life = 37.5%) levels of education at post-secondary level. On the other hand, among those who were undecided about their dichotomous choice of values, the highest percentages were from respondents whose fathers' (25.2%) and mothers' (25.3%) levels of education at secondary school level. However, this study found no significant association between the preferred choice of value and sex. Although, there were a higher percentage of both male (40.0%) and female (43.6%) adolescents who chose the value of law, there was fairly equal percentage of both sexes (male = 23.6% and female = 22.8%) who were undecided on the dichotomous choice of values.

Table 3: Selected Factors Influencing Malaysian Adolescents' Preferred Choice of Values

Choice of value	Age (%)		Sex (%)		Location (%)			Family Income (RM) (%)				Fathers' Level of Education (%)			Mothers' Level of Education (%)		
	16 year-old	18 year-old	Male	Female	Urban	Small Town	Rural	500 and below	501 – 999	1000 – 1999	2000 and above above	Primary school	Secondary school	Post Secondary	Primary school	Secondary school	Post Secondary
Should steal the drug (life)	35.5	31.4	36.4	33.5	34.6	32.9	36.8	34.7	36.7	31.2	35.0	35.0	33.3	36.8	33.8	33.4	37.5
Should not steal the drug (law)	42.7	39.0	40.0	43.6	43.1	44.7	37.7	40.1	40.7	45.3	48.0	42.1	41.5	45.3	42.4	41.3	46.4
Unable to decide	21.8	29.6	23.6	22.8	22.3	22.4	25.4	25.3	22.6	23.5	17.1	22.9	25.2	17.9	23.8	25.3	16.0
N	4088	878	2181	2785	1540	1759	1577	1567	1658	856	715	1399	2229	864	1532	2114	810
χ^2	24.91*		6.889		18.396*			29.670*				18.733*			18.733*		
p<0.01																	

2. Adolescents' Stages of Moral Concerns

This study refers to Kohlberg's six developmental stages of moral reasoning as shown in Table 1 (Colby & Kohlberg, 1987a) in determining the stages of moral concerns of the Malaysian adolescents. However, as given in the DIT Manual (Rest, 1986), stage 1 was not included in this study. The 9 items in the DIT Manual (Rest, 1986) reflect the five different stage concern while other three items were not stage concern. The responses to the 9 items were categorised according to the moral stage concerns and the means of the responses to the Likert scale (1 = no important, 2 = little important, 3 = some important, 4 = important and 5 = very important) were obtained. A comparison of the mean score by stages of moral concern was then obtained as shown in Figure 2.
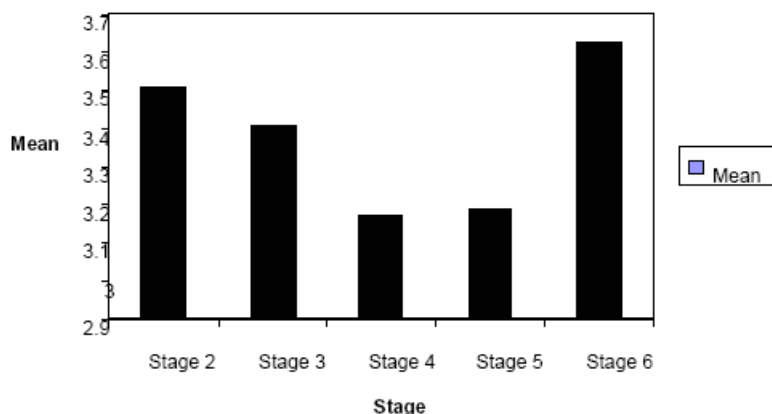
Figure 2: Malaysian Adolescents' Stages of Moral Concerns

The results showed that the highest mean score is stage 6 (mean value = 3.63) of moral concern, followed by moral stage 2 (mean value = 3.51), stage 3 (mean value = 3.41),, stage 5 (mean value = 3.19), and lastly by stage 4 (mean value = 3.17) of moral concern (refer Figure 2). To further investigate the respondents' stages of moral concerns, the means of the stages were then compared with selected variables, namely gender, ethnicity, location, monthly family's income or household income, and fathers' and mothers' levels of education, using one-way analysis of variance (ANOVA) (refer Table 4).

Table 4: Selected Factors Influencing Malaysian Adolescents' Stages of Concern

Stage of Moral Concern	Age (mean)		Sex (mean)		Location (mean)			Family Income (RM) (mean)				Fathers' Level of Education (mean)			Mothers' Level of Education (mean)		
	16 year-old	18 year-old	Male	Female	Urban	Small Town	Rural	500 and below	501–999	1000–1999	2000 and above	Primary school	Secondary school	Post Secondary	Primary school	Secondary school	Post Secondary
Stage 2	3.46	3.46	3.40	3.50	3.43	3.50	3.45	3.34	3.43	3.48	3.26	3.37	3.42	3.66	3.38	3.45	3.60
F-score	0.00		7.69*		1.20			15.55*				14.09*			7.92*		
Stage 3	3.09	3.30	3.20	3.06	3.14	3.09	3.15	3.04	3.11	3.19	3.54	3.04	3.12	3.22	2.99	3.19	3.19
F-score	27.57*		22.23*		1.20			9.18*				7.79*			18.47*		
Stage 4	3.38	3.27	3.43	3.30	3.31	3.44	3.32	3.35	3.26	3.45	3.43	3.30	3.36	3.52	3.31	3.33	3.53
F-score	8.50*		18.88*		7.24*			14.46*				11.42*			13.87*		
Stage 5	3.16	2.99	3.10	3.16	3.06	3.19	3.13	3.01	3.12	3.16	3.80	3.08	3.06	3.32	3.09	3.10	3.27
F-score	14.38*		3.55		4.72*			21.17*				15.43*			7.43*		
Stage 6	3.70	2.72	3.51	3.54	3.52	3.61	3.44	3.44	3.51	3.50	3.87	3.49	3.50	3.77	3.48	3.55	3.77
F-score	458.63*		0.69		6.94*			13.50*				16.39*			14.24*		
N	4253	899	2330	2822	1575	1836	1642	1656	1705	880	728	1447	2318	884	1573	2198	829

*p < 0.01

As shown in Table 4, the findings in this study revealed that in some variables, significant associations only occurred at some stage levels as seen in the case of age, sex and location of the respondents. In the case of the age factor, there were significant associations (p <0.01) at all stages except stage 2. Stage 6 was the highest mean score among the 16 year old respondents (mean value = 3.70) but the lowest mean for the 18 year olds ((mean value = 2.72). The highest mean score for 18 year-old respondents was stage 2 (mean value = 3.46) which is also the second highest mean score for 16-year olds. In terms of sex, the significant associations (p <0.01) occurred at stages 2, 3 and 4. Although the male (mean value = 3.51) and female (mean value = 3.54) respondents' highest mean score was at stage 6, there was no sig-

nificant association between that stage level and sex. However, the mean score of male respondents were higher than the females at stage 3 and stage 4 but lower at stage 2. The significant associations (p <0.01) between stages of moral concern and location occurred at stages 4, 5 and 6. Respondents from small towns obtained highest mean score for all stage levels except for stage 3 which was obtained by respondents from rural areas.

However, there were significant associations (p <0.01) between all stages of moral concerns and monthly family income, fathers' and mothers' level of education. Respondents with higher monthly family or household income of RM2000 and above and RM1000 -1999 generally obtained higher mean scores than those with lower monthly family income of RM501 – 999 and RM500 and below. The respondents with lower monthly family income of RM501 – 999 and RM500 and below received the lowest mean score for all stage levels except for stage 2, the lowest being those from RM2000 and above. Fathers' and mothers' educational levels were found to be an important determinant in the stages of moral concern of Malaysian adolescents. The highest mean score for all stages were from respondents' fathers' level of education at post-secondary while the lowest mean score for all stages except stage 5 were from respondents' fathers' level of education at primary school. Similarly, the highest mean score for all stages were from respondents' mothers' level of education at post-secondary, although respondents' mothers' level

of education at secondary level obtained similar mean score at stage 5. On the other hand, the lowest mean score at all stages were from respondents' mothers' educational level at primary school.

3. Malaysian Adolescents' Moral Schemas

According to Narvaez and Bock (2002), moral schemas are important in understanding moral behaviour as they are "general knowledge structures used in social cooperation" and are "built from experience in social interaction" (p. 302). The schemas derived from DIT (Defining Issues Test) are classified as personal interests schema (derived from Kohlberg's Stage 2 and 3), maintaining norms schema (derived from Kohlberg's Stage 4) and post-conventional schema (derived from Kohlberg's Stage 5 and 6) (Narvaez & Bock, 2002) as given in Table 2. As such, the issues of moral stage concerns were re-categorized under three schemas and the mean scores were obtained for comparison among the respondents.

The results (Figure 3) revealed that the respondents used one dominant moral schema, namely post-conventional (mean value = 4.79) when thinking about the given moral dilemma (refer Table 21). They however gave fairly similar ratings of importance to all the other two moral schemas, namely personal interests (mean value = 3.41) and maintaining norms (mean value = 3.22).
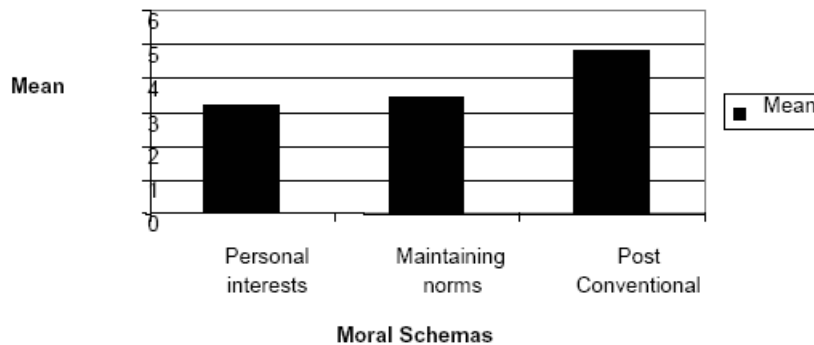

Figure 3: Malaysian Adolescents' Moral Schemas

Table 5: Selected Factors Influencing Malaysian Adolescents' Moral Schemas

Stage of Moral Concern	Age (mean)		Sex (mean)		Location (mean)			Family Income (RM) (mean)				Fathers' Level of Education (mean)			Mothers' Level of Education (mean)		
	16 yr old	18 yr old	Male	Fe-male	Ur-ban	Small Town	Ru-ral	500 and be-low	501–999	1000–1999	2000 and above	Prim-ary school	Seco-nd-ary school	Post Seco-nd-ary	Prim-ary school	Seco-nd-ary school	Post Seco-nd-ary
Personal Interests	3.18	3.22	3.23	3.15	3.19	3.18	3.20	3.11	3.18	3.21	3.35	3.10	3.19	3.32	3.08	3.23	3.27
F-score	1.48		10.83*		0.20			12.48*				15.10*			16.64*		
Maintain-ing Norms	3.38	3.32	3.44	3.30	3.32	3.45	3.33	3.34	3.28	3.47	3.56	3.32	3.37	3.51	3.32	3.35	3.53
F-score	3.47		28.60*		10.98*			18.40*				11.32*			13.57*		
Post Convention-al	5.01	3.28	4.63	4.77	4.63	4.81	4.65	4.58	4.68	4.66	5.13	4.64	4.60	5.05	4.62	4.69	5.03
F-score	1196.20*		11.10*		7.05*			23.48*				30.10*			21.25*		
N	4253	899	2330	2822	1575	1836	1642	1656	1705	880	728	1447	2318	88	1573	2198	829
*p < 0.01																	

In determining some factors influencing the moral schemas of the Malaysian adolescents, the findings in this study indicated that in some variables, significant associations (p <0.01) were not at all the moral schemas as seen in the case of age and location of the respondents (refer Table 5). In the case of the age factor, significant association was only found on post-conventional moral schema (p <0.01). The highest mean score on post-conventional (mean value = 5.01) and maintaining norms (mean value = 3.38) schemas were obtained by 16 year-old respondents while the highest mean score on personal interests (mean value = 3.22) was obtained the 18 year-olds. As for the location of respondents, significant associations (p <0.01) were found on maintaining norms and post-conventional moral schemas. Among the highest mean scores for the three different locations of the respondents, the respondents from small towns obtained higher mean score on maintaining norms (mean value = 3.45) and post-conventional (mean value = 4.81) schemas while those from the rural areas obtained the highest mean score on personal interests schema (mean value = 3.20).

As shown in Table 5, this study found significant associations (p <0.01) between all types of moral schemas and several factors namely sex, monthly family income, fathers' and mothers' levels of education. The male respondents showed highest mean scores on personal interests (mean value = 3.23) and maintaining norms (mean value = 3.44) schemas while the female respondents (mean value = 4.77) showed highest mean score on post-conventional

schemas. In the case of monthly family income, the highest mean scores for all three types of moral schemas were respondents with monthly family income of RM2000 and above. This is in contrast with those respondents with low monthly family income of RM500 and below who obtained the lowest mean scores for personal interest and post-conventional moral schemas while those with monthly family income of RM501- 999 obtained lowest mean score for maintaining norms schema. The fathers' and mothers' educational levels were also two other determinants of the adolescents' types of moral schemas. The highest mean scores on all three types of moral schemas were from respondents' fathers' and mothers' levels of education at post-secondary. The lowest mean scores on personal interests (mean value = 3.10) and maintaining norms (mean value = 3.32) schemas were respondents' fathers' level of education was at primary level while respondents' fathers' level of education at secondary level obtained the lowest mean score (mean 4.60) on post-conventional schemas. However, it was found that lowest mean scores for all three types of moral schemas were from respondents' mothers' level of education at primary level.

Discussions

The moral reasoning of the Malaysian adolescents in this study focuses on three aspects of moral reasoning, namely preferred choice of value, stages of

moral concern and moral schemas when thinking on the given hypothetical dilemma.

Adolescents' Preferred Choice of Value

The findings in this study showed that the Malaysian adolescents had a greater preference for the value of law (should not steal the drug) rather than the value of life (should steal the drug) in the given moral situation. Nevertheless, what is noteworthy is that about one-fifth of respondents were undecided on the dichotomous choice of value whether to steal (life) or not to steal (law) in the given moral situation. This study on Malaysian adolescents' moral reasoning confirms previous studies (such as Gilligan, 1982; Keefer & Olson, 1995; Wark & Krebbs, 1996; and Chang , 1998) that some respondents preferred not to make an absolute choice of values rather considered choice to be contextual or relative when deciding on the choice of action of a given dilemma.

Factors influencing the Malaysian adolescents' preferred choice of value were found to be age, location, household income as well as fathers' and mothers' educational level but not sex. Although about two-fifths of both 16 and 18 years old adolescents showed greater preference for value of law the 18 year-old adolescents were more undecided in their dichotomous choice of value. Perhaps this is an indication that age could influence the adolescents' perception on whether values are considered in relative or absolute terms. In the case of the locations of the adolescents' residence, although two-fifths of them from the urban and small towns chose the value of law, the respondents from the rural areas seemed to be fairly divided in their choice for value of life and law. The adolescents' family background in terms of household income and parents' level of education seemed to be other factors that were significantly associated with choice of value. A higher percentage of adolescents with higher family income (RM1000 and above) compared to those with lower family income (RM999 and below) preferred not to steal the drug (law) than to steal the drug (life). In addition, adolescents' whose fathers' and mothers' levels of education were at post-secondary level seemed to indicate a more decisive choice for values of law or life while those who were undecided about their dichotomous choice of values, were from respondents whose fathers' and mothers' levels of education were at secondary school level. This study found no significant association between the preferred choice of value and sex, and there was fairly equal percentage of both sexes who were undecided on the dichotomous choice of values, thus indicating that both male and female adolescents considered values to be contextualised. It is this contextualised rather than the dichotomous choice of values that

needed to be further explored, particularly in terms of cultural differences.

Adolescents' Moral Stage Concerns

The moral stage concerns that are expressed in the issues or questions on the moral dilemma have been categorised according to Kohlberg's stage levels as indicated in the DIT. The study found that the Malaysian adolescents when thinking on a moral dilemma gave fairly similar importance to all stages of moral judgement. Nonetheless they seemed to favour issues on stage 6 and stage 2 concerns as both received the two highest mean scores respectively. If the moral stages are hierarchical and integrative (Kohlberg, 1987), then what is confounding is the the pre-conventional issue on individualism and exchange (stage 2) seemed to be equally important as post-conventional issue on universal principles (stage 6) when reasoning on the same moral situation. Nonetheless, the results indicated that Malaysian adolescents do give importance to issues on universal principles.

When investigating for some factors influencing the moral stage concerns of the Malaysian adolescents, the data in this study showed that in some variables significant associations only occurred at some stages but in other variables significant associations were found at all stages Variables that have significant associations at some stages were age, sex and location of the respondents and variables that have significant associations at all stages were the respondents' household income, fathers' and mothers' levels of education. In terms of age, significant associations were at all stages except stage 2. It was found that the 16 year-old adolescents gave greater importance to issue on universal principles compared to the 18 year olds as the former obtained the highest mean score while the latter obtained the lowest mean score for stage 6 moral concern. In terms of sex, the significant associations occurred at stages 2, 3 and 4. Although both male and female adolescents obtained the highest mean score for stage 6 concern on universal principles, the male respondents gave greater importance to issues relating good interpersonal relationship (stage 3) and maintaining the social order (stage 4) compared to their female counterparts. On the other hand, the female respondents gave greater importance to issues relating to individualism and exchange (stage 2) and social contract and individual rights (stage 5) compared to their male counterparts. The data in this study also showed significant associations between stage concerns and adolescents' location of residence at stages 4, 5 and 6. The adolescents from small towns seemed to show greater importance to issues for almost all stages as they obtained the highest mean score for all stage

levels except for stage 3 which was obtained by respondents from rural areas.

Variables relating to family background seemed to be important factors in influencing the adolescents' moral stage concerns as significant associations were found between all stages of moral concerns and monthly family income, fathers' and mothers' level of education. The respondents with higher monthly family or household income of RM1000 and above showed greater importance to issues for all stage concerns compared to those with lower monthly family income of RM999 and below. Furthermore, respondents' fathers' and mothers' (except for stage 5) level of education at post-secondary generally showed greater importance to all issues for all stage concerns compared to those parents' with secondary and primary school levels.

Adolescents' Moral Schemas

Moral schemas are important to measure moral understanding at a level of moral judgement. This is so as a schema consists of "a representation of some prior stimulus phenomenon that organises or guides the application of prior knowledge to new information" (Narvaez and Bock, 2002, p. 302). As earlier mentioned, the moral schemas in the DIT are categorised as personal interests' schema (Stages 2 and 3), maintaining norms schema (Stage 4) and post-conventional schema (Stages 5 and 6). The Malaysian adolescents in this study used one dominant moral schema, namely post-conventional when thinking about the given moral dilemma. They however gave fairly similar ratings of importance to all the other two moral schemas, namely personal interests and maintaining norms. This means that the Malaysian adolescents seemed to be more rights orientation (post-conventional) compared to responsibility orientation (personal interests) and duty orientation (maintaining norms) in their moral reasoning. Perhaps with globalisation and the use of information and communications technology (ICT) in the school system, the Malaysian adolescents are more exposed with wider issues that infringe on universal rights that could subsequently influence the way they organise their thoughts on a moral issue.

As to the factors influencing the moral schemas of the Malaysian adolescents, this study found that age and location of the respondents' residence were only significantly associated at some but not all types of moral schemas. There was significant association between post-conventional moral schema and age. However, the mean scores indicated that the 16 year-old respondents gave greater importance to rights (post-conventional) and duty (maintaining norms) orientations while the 18 year-old respondents gave greater importance to responsibility (personal in-

terests) orientation. In the case of location of respondents, the significant associations were found on maintaining norms and post-conventional moral schemas. Although respondents from all three different locations of urban, small towns and rural areas showed great importance to rights orientation, the respondents from small towns had the highest mean score for rights and duty orientations while those from the rural areas had the highest mean score for responsibility orientation. This indicates that the perspective taken by adolescents from different locations of residence could be different when reasoning on a moral dilemma.

Nonetheless what was clearly shown in this study is that there are some important factors that can influence the moral schemas of the Malaysian adolescents. Significant associations were found for all types of moral schemas with the respondents' sex, monthly family income, fathers' and mothers' levels of education. The male respondents seemed to be more responsibility (personal interests) and duty (maintaining norms) orientated compared to their female counterparts who were more rights (post-conventional) orientated and hence indicates sex differences in the way how moral issues are perceived in a moral dilemma. Household income of the adolescents is found to be another important factor in influencing the adolescents' moral schemas. Respondents with higher household income of RM2000 and above obtained higher mean score for all the three types of moral schemas compared to those with low monthly family income. This study also found that the other two determinants of the adolescents' types of moral schemas were their fathers' and mothers' educational levels. Respondents' fathers' and mothers' level of education at post-secondary generally obtained higher mean score for all the three types of moral schemas. This is an indication that the socio-economic status and educational levels of parents could influence how Malaysian adolescents organise their moral thoughts on a moral issue.

Conclusions and Implications on Values Education

Although the findings in this study are based on the responses from one moral dilemma and the consistency of moral reasoning across dilemmas could not be checked, this study on moral reasoning in terms of preferred choice of value, stage of moral concerns and moral schemas can provide some valuable insights on the moral reasoning profile of Malaysian adolescents. The sample consisted of 5152 16 year-old and 18 year-old adolescents from different demographic backgrounds. Factors such as age, sex, location, family income and parents' educational

levels can significantly influence how the adolescents relate their moral understanding to a moral situation. This is a clear indication that cultural influences need to be further explored in understanding how adolescents reason on a moral situation

In sum, the perceptions of the Malaysian adolescents on a moral situation would have implications to the teaching and learning of values education, specifically in Malaysian context. The teaching and learning of values would entail not only exploring the concept of values but also the reasons for value choice from all perspectives when students grapple with moral issues both in and outside the classroom. Furthermore, teachers should also be sensitive and open to the different perspectives of the students from different backgrounds such as in terms of age, sex, location and socio-economic and family background. For as argued by Haydon (2004, p. 127-128), "Teachers need to respond positively to different perspectives coming from students, not only out of respect for individuals, and not only because differences of view can make for more lively lessons, but also to help all to be aware of the richness of the ethical environment." Haydon further added that students "should be encouraged to reflect on that environment, appreciate its importance, accept their share of responsibility for it and be helped to negotiate their own way through it in their lives."

References

Chang Lee Hoon (1998). Using dilemma vignettes in a study on moral reasoning of Malaysian students. *Journal of Educational Research*. Faculty of Education, University of Malaya, 19, pp. 47 – 68.

Chang Lee Hoon (2007). Moral reasoning. In Fatimah Hashim & Lihanna Borhan (eds). *A statistical snapshot of the 18 year old Malaysian adolescent*. Kuala Lumpur: Institute Sosial Malaysia, Ministry of Women, Family and Community Development, pp. 100 -123.

Colby, A., Kohlberg, L. & collaborators (1987a). *The measurement of moral judgement Volume 1: Theoretical foundations and research validation*. Cambridge: Cambridge University Press.

Colby, A., Kohlberg, L. & collaborators (1987b). *The measurement of moral judgement Volume I1: Standard issue scoring manual.* Cambridge: Cambridge University Press.

DIT Manual, Manual for the Defining Issues Test, 3 rd ed, 8/90 Revision (1986). Center for the Study of Ethical Development, University of Minnesota.

Gilligan, C. (1982). *In a different voice. Psychological theory and women's development.* Cambridge, Massachusetts: Harvard University Press.

Haydon, G. (2004) 'Values education: sustaining the ethical environment', *Journal of Moral Education*, 33:2, 115 – 129.

Keefer, M. W. & Olson, D.R. (1995). Moral reasoning and moral concerns. An alternative to Gilligan's gender based hypothesis. *The Canadian Journal of Behavioural Sciences*, 27, pp. 420 – 437.

Malaysia, *Education Act 1996.*

Malaysia, Ministry of Education (2000). *Moral Education syllabus for secondary schools*. Kuala Lumpur: Curriculum Development Centre.

Narvaez, D. & Bock, T. (2002). Moral schemas and tacit judgement or how the defining issues test is supported by cognitive science. *Journal of Moral Education*, 31, 3, pp. 297 – 314.

Rest, J., Narvaez, D., Bebeau, M. & Thoma, S. (1999). *Postconventional moral thinking: a neo-Kohlbergian approach.* Mahwah, NJ: Lawrence Erlbaum Associates.

Wark, G.R. & Krebs, D. L. (1996). Gender and dilemma differences in real life moral judgement. *Developmental Psychology*, 32, pp. 220 -230.

About the Author

Dr. Chang Lee Hoon
Lecturer in Moral/Values education at Faculty of Education, University of Malaya. Consultant to Ministry of Education Malaysia on Moral Education as well as Civics and Citizenship for Malaysian national curriculum for schools and teachers' training colleges, textbook writing on Moral Education for schools. Main research area and publications is in the field of moral/values and social science education.