# Implicit Values behind Young Architects' Moral Level: A Case Study in Malaysia

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# Abstract

Moral principles are perpetually of immense significance in human society. Kohlberg has been recognized in the scholar world as the forerunner in identifying moral levels. Though subjective, his six levels of morality set the platform for other researchers to look deeply into it across many parameters. Later on, attempts were also made to measure morality quantitatively. Defining Issues Test (DIT) is one of the most recognized one. Studies went one step deeper with professional ethics being considered as a component of general morality. The challenge was that, while measuring ethics, a universal tool seemed to be unfair to judge different professionals. Moreover, in most cases, code of conducts, instead of morality, was the platform to measure Ethics. Construction-related Moral-judgment Test (CMT) was one of few newly developed tools to measure professional ethics, with 'construction' in this case being the profession. This study customized CMT, specific to architects in the context of Malaysia, but adopted Kohlberg's moral levels as the platform to judge morality, instead of measuring ethical level on the basis of practicing codes of conducts in the profession. Investigating on a sample of 135 young architects around Malaysia selected through stratified random sampling, the study found some implicit interesting factors that emerged. It showed that working experience might be strongly correlated with increasing level of morality, but at young age, it might show a different direction in the curve.

Keywords: morality, professional ethics, young professional, architects, Malaysia, moral judgment test

# 1. Introduction

Morality refers to individual's own principles of right or wrong. Moral principles are perpetually of immense significance in human society. Since humans live in society, often there are external sources which suggests certain codes of conducts for the sake of orderly coexistence. They are referred to as ethics. The word 'ethics' originates from the Greek word 'ethos', which means 'character, spirit and attitude of a group of people or culture' (Loeb, 1971). To be specific, ethics is a system of moral principles by which human actions may be judged as good or bad, right or wrong; and also the rules of conduct recognized in respect of a particular class of human actions. Though sometime used interchangeably, there are subtle differences between morality and ethics. At first, morality should be understood, and then ethics come into place.

Throughout history, philosophers and theologians have emphasized virtues which resembles purity of soul, or moral piety (Fieser, 2006; Guttmann, 2006; Hartman 2008; Law, 2007; Shouler, 2008). The fundamental message of virtues is to reach the ultimate happiness by advocating good, and avoid evil (Beauchamp & Childress, 1994; Fieser, 2006). However, unlike virtues, utilitarianism goes one step further by taking into consideration the benefits of society. Thus, a decision maker must maximize the utility of everyone in a society by achieving higher-level satisfaction compared to the dissatisfaction that the consequence of action might involve (Mallor et al., 2004; Weiss, 2006). Therefore, a person might face a conflict between morality and ethics when living in a system.

Socrates highlighted using reason to improve lives and wellbeing. Socrates' moral principles included key social issues, such as restrain from ill will toward others, loyalty to promises, respecting parents, elders, and authority

(Guttmann, 2006). Plato highlighted the purity and wellbeing of soul rather than the physical body (Birkeland, 2000; Oliver, 1997). Aristotle, the most famous student of Plato, believed that a human who is the best of all animals when he reaches full of development, could become the worst of all animals when he is detached from law and justice (Oliver, 1997). However, it is only recently that professional ethics has emerged as a discipline where utilitarianism is professional engagement, and there have been attempts to examine the conflict that separates man's ethical obligation in workplace from individual's personal encompassment of right or wrong.

## 2. Background Study

## 2.1 Kohlberg's Theory

Morality studies have long trace back with studies in psychology. Jean Piaget, a pioneer of developmental child psychology, conducted lifelong studies on children's learning (Mathews, 2005; Puka, 2005). Piaget's research in the psychology of child development influenced Kohlberg, who was convinced by Piaget's identification of the developmental stages and the notion that child is a philosopher (Trevino, 1992). Thereafter, Kohlberg expanded upon Piaget's work in cognitive reasoning and applied structural approach to study moral development (Kohlberg, 1981).

Kohlberg reaffirmed the cause of justice and the Socratic theory of advocating good. The main theoretical base of the he put forward was his Theory of Cognitive Moral Development (CMD). Kohlberg claimed that moral development follows invariant and irreversible schematic stages. One may consider each level and stage as a distinctive moral philosophy or moral view of the world. Kohlberg defined three different levels of moral development: Pre-conventional, Conventional, and Post-conventional, with each level consisting of two stages. He used Piaget's story telling method and used dilemmas to judge the levels and stages (ibid).

## 2.2 Other Conceptual Models

Rest (1986) expanded Kohlberg's CMD in several important areas. CMD did not have a scoring method. Rest designed a survey instrument, the Defining Issues Test (DIT) to measure moral reasoning (Rest, 1986). The instrument also used dilemmas and was very easy to score and administer, and researchers have used the instrument extensively. Rest also defined the four-component model (FCM) of morality, which articulates how cognition, affect, and social dynamics influence one's moral behavior (Rest et al., 1999).

Psychologically, morality is multifaceted, and involves a multiplicity of processes (Rest, 1986; Rest et al., 1999). In other words, observable moral behavior is a reflection of one's interaction or response to four inner psychological processes or components. Moral judgment is one component of the FCM. The other three components are moral sensitivity, moral motivation, and moral character (Rest et al., 1999). Rest et al. (Ibid) summarized the limitations of Kohlberg's theory of CMD in two categories: those limitations that do not require fundamental changes of the basic tenets, and problems that do require change.

In the past 30 years, a few general theoretical models of moral behavior have been proposed; perhaps the two best known are the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB). The TRA was developed by Ajzen and Fishbein (1975). It proposed that one's intention to perform or not to perform an action (behavioral intention) is the immediate precursor to the actual behavior. The TRA model introduced two factors that affect behavioral intention: attitude toward the behavior, and subjective norms. Attitude involves judgment whether the behavior is good or bad, and whether the actor is in favor of, or against performing it. Subjective norm is the perception of how one ought to behave. Ajzen (1991) later extended the model and called it the TPB, which added perceived behavioral control as another factor influencing behavioral intention. Perceived behavioral control is the perception of how easy or difficult it would be to perform the behavior. These two has also been in line with the concept of 'before-the-fact' and 'after-the-fact' judgments, the former is the perception before the action taking place, and the latter is the hindsight view of the actual consequences (Ajzen and Fishbein, 1980). These theories are also related to a person's conflict between morality and ethics, when individuals can hide or over-react to a particular stimulus only because of thinking about the consequences. Both the TRA and TPB models have been the basis of numerous studies. Empirical research supported the proposed relationships in both.

However, DIT still remains as a widely used instrument in the study of moral judgment. DIT consists of six (five in case of DIT-2, revised in 1999 for more clarity) hypothetical moral dilemmas, and offers the subject choices from a list of possible considerations concerning moral decision-making. The respondents rank the four most important considerations, which determine the P-Score as a determinant of morality. A person who has high moral principles usually scores higher on the scale than those who are less principled (Trevino, 1992). DIT-2 is the newer and revised version of the original version of the DIT. The DIT-2 has shortened the tests and provided

better instruction (Rest et al., 1997; Rest et al., 1999). The newer version of the index, the N2, outperforms the P-index (Rest et al., 1999). Using the levels similar to Kohlberg's as the platform of creating the dilemmas, DIT further advocated that a person's morality does not belong to only one level, but can have components across different levels. Therefore, the different schemas in DIT has been useful to describe one's morality in various ways. Moreover, it also posits a challenge to Kohlberg's claim that reaching a higher level of morality is irreversible.

## 2.3 Professional Ethics

According to Airaksinen (2003), Professional ethics is a term that can be understood in different ways. First, professional ethics is a code of values and norms that actually guide practical decisions when they are made by professionals. As such, professional ethics may be more or less explicit and conscious determination of action. Second, professional ethics is a fully idealized set of values whose purpose is to explicate the best possible world in which the given profession could be working. All professions have nowadays formulated their own codes of conduct that explicate their own best values, conduct and consequences. Such professional ethics can be characterized as expressive and demonstrative. But such an assertion must be clarified before it becomes acceptable. It can be said that professional ethics is a declaration and manifestation of good intension that are supposed to characterize a given profession. Third, professional ethics may be a critical philosophical discipline, and hence a part of the wider field of applied ethics. In this case, normal methods of philosophical ethics are applied to professions defines a profession in general terms by means of professionalism. This implies that a profession has a certain degree of autonomy in society, its members' is based on science, and the professional work exemplifies a service ideal.

Professional work is different from occupational work, which forms the content of a vocation, so that an engineer and a car mechanic, or a physician and a faith healer cannot both be professionals in the same sense of the word. According to sociological theory, the engineer's and the physician's expertise is based on scientific training that allows them to understand what is to be done from the point of view of the rational, epistemological foundations of action- (Chadwick, 1994). The term 'profession' is used in different senses. In a wide sense, it simply means someone's occupation. In a narrower sense, it refers to a certain kind of activity, one carrying with it a certain status and associated with a particular ethic. Freidson (1994) outlines the problems of defining 'profession' in terms of a number of characteristics or traits and considers instead a definition in terms of process, i.e., how particular occupational groups gain professional status. It is not surprising that there have been attempts to measure ethical level in professions just like there were attempts to measure morality. Some of the most significant ones are as follows.

## 2.4 Measuring Professional Ethics

McCuen (1979) has tried to isolate professional ethics from general morality. He advanced the works of Kohlberg by applying levels of ethics to the profession. He posited that professionals might vary in moral judgment but can still advance through stages of professional conduct development. The model characterized professional conduct development into three levels, with two stages at each level. The three levels are labelled respectively, as 'Pre-professional', 'Fundamental Professional' and 'Principled Professional'. At the pre-professional level, the ethicality of professional conduct is measured only in terms of the overall consequences to oneself. At the fundamental professional level, the individual acknowledges the firm and the professional level, proper professional conduct rightly considers the benefit of using advanced moral thinking to human welfare. Like the different schema in DIT, which states that one can have components from different levels, McCuen's levels also was not vertically linked.

By using these two concepts, Law and Fan (2012) introduced a test parallel to DIT to measure professional ethics. This Construction-related Moral-judgment Test (CMT) insisted that dilemmas to measure professional ethics should be discipline specific. CMT used McCuen's schemas to determine respondents' levels of professional ethics. Three dilemmas referred to morality, and three were related to the professional ethics. There were 'Action Choice' questions designed to determine which of the three of McCuen's level the respondents belong, and they appeared only in the three construction related dilemmas. The 'Justifications' section appeared in all six dilemmas, and the statements were based on Kohlberg's moral levels. 'Intermediate Concepts' (IC), which resembled particular 'virtues' extracted from literature to relate with the particular profession of construction, were used as a tool to determine the three ethical levels. Scores from 'Justification' section was used to correlate with DIT as a validation of CMT. The professional code of conducts became the basis to

construct the 'Action Choice' section. In this way, CMT tried to develop certain interesting schemas that can be a combination of Kohlberg's moral levels, Rest's schemas, and McCuen's levels in Professional Ethics. The hidden essence of CMT is that if the correlation between CMT scores and DIT scores are positively related, the particular code of conducts can prove its sensibility to moral values. Otherwise, that particular code of conducts become questionable from moral perspective.

However, the 'before-the-fact' issue of 'perceived morality', which can be different than a person's actual action, was not considered. In fact, that might not be required unless the research objectives were set so, as conflicting results might appear depending on the diverse surrounding environments of the respondents. Probably that is why most researchers avoided to measure that phenomenon, though exclusively recognizing its existence. And last but not the least, if professional ethics is measured only through code of conducts, it might give an impression that ethics can always supersede morality in profession. Therefore, it might be worthy to attempt to measure ethical level by respecting moral levels, or in other words, morality could be worthy to be judged even while professional ethics is being measured. This study tried to explore that.

## **3. Search for Parameters**

While an effective scoring method is always advantageous, it is equally important to find the correct parameters that can explain the scoring in an effective and acceptable way. From literature, several of them could be extracted. Age, gender, ethnicity, religion, educational background, profession, work experience, political bias, social status etc. have been used in various ways to explain a person's moral level. Some of them has been considered as more universal, while others proved to be significant in a particular context only. The followings were those that were considered significant to the context of the study. Therefore, a little contextual reference might be relevant here.

## 3.1 Religion and Morality

As religions urge for morality as well as ethical conducts, one may feel that one's religious background might be a basis to start judging one's ethical or even moral level. However, as it is explained below, that kind of judgment may be misleading. Some researchers see ethics and religion as separate entities (Reidenbach & Robin, 1990), while others posit that despite secularization, many general spiritual principles and values are related to ethics (Skipper & Hyman, 1993; Jackson, 1999). We can take a quick look at major ethical codes stated in different religions to have an idea whether they differ from each other significantly.

Confucius followers are guided by 'Ren' (benevolence and humaneness) and believe that individuals are not born as isolated objects. To cultivate a harmonious hierarchical social order remains the main concern, while accepting that the world is human-centered. Familial priority and interest are more vital than any other social obligation. Confucianism is not a religion in a traditional sense where people go to religious services in Buddhism and Taoism temples, as they do not visit temples for Confucianism services. Although some academics argue that Confucianism should be regarded as a religion, it is generally regarded as an ideology or philosophy (Lau, 1981).

According to traditional Buddhism, the foundation of Buddhist ethics for laypeople is the five precepts: no killing, stealing, lying, sexual misconduct, or intoxicants (Harvey, 2000).

Christian ethical principles are based on the teachings within the Bible. "Love God with heart, soul, and mind, and love your neighbor as yourself", commonly called the Great Commandment, Christian ethics are founded upon the concept of grace which transforms a person's life and enable's one to choose and act righteously in this world with the afterlife at the background (Ferguson, 1998).

The Islamic moral system stems from its primary creed of belief in One God as the Creator and Sustainer of the Universe. Islam considers the human race to be a part of God's creation, and as His subjects. From an Islamic perspective, the purpose of human life is to worship God, by leading this worldly life in harmony with the Divine Will, and thereby achieve peace in this world, and everlasting success in the life of the hereafter. Muslims look to the holy Qur'an and the traditions of the Prophet (*sunnah*) as their ethical guides (Al-Hasan, 2013).

Ethical traditions in Hinduism have been influenced by evolving concepts that search for everything essential for people, the world and the nature to prosper together in harmony (Crawford, 1982).

As far as the ethical codes urges to nurture our virtues, and to control the desires, all religion in broader perspective speak the same philosophy, though the language may differ. Once the philosophy behind the ethics become clearer, the commands or guidelines can help to achieve higher moral level. On the other way round, if guidelines are practiced without proper explanation of philosophy, an individual's moral level is not bound to rise automatically, though ethically they might excuse themselves by not breaking any laws. However, it is always tough for human beings to achieve that 'highest' moral level, irrespective of following any religion, or how 'outwadly religious' one is. It is due to the earthly temptations around them. The time one needs to reach that level might vary from another as well, depending on other parameters. Moreover, once achieving any particular level does not automatically guarantee that one would remain there. The temptations always have the chance to drag moral level down. Therefore, religion may not be directly held as a 'reason' for one to achieve a certain moral level. And, it is safe to not to include religion as a parameter to measure morality.

## 3.2 Cultural Background and Morality

Culture, unlike religion, might have different impact on morality. Particular cultural codes act as a social glue for communities. However, it might or might not be associated with religion and unlike religion which is explicitly documented, cultural codes are generally implicit and non-written (Blaum & Fong, 1998). Therefore, while religious codes might be urged to be practiced in the same way around the world just because someone has accepted that particular religion, cultural codes do not actually bother to urge that way. It is more localized. That is why diversity is the beauty of cultural codes. For the same reason, a certain cultural code comparatively less or unacceptable from religious point of view can still be practiced without conflict in a particular community, as long as there is overall acceptability inside that community. But, someone new to that community, even from the same religion, might feel awkward to accept that, though the religion might be same. Therefore, in places where culture is diversified, each distinctive cultural group, whether it is based ethnicity, color, profession, livelihood, or whatever, a single measuring scale may not reflect the relative differences between sub-groups in terms of level of morality. For countries like Malaysia, where diversified cultural communities co-exist, it is obviously challenging to measure them with the same measuring scale.

Malaysia is usually called a multicultural, multi–ethnic, and multilingual society, and the several ethnic groups in Malaysia uphold distinct cultural individualities. Malaysia has developed its own distinctive significance that is accommodative to the country's rich tapestry of different ethnicities and religions. The society of Malaysia has been described as 'Asia in miniature' (Khoo, 2005; Kahn, 1998). The main ethnic groups in the country are Malay, Chinese and Indian communities, as well as some other ethnic groups. Every race in Malaysia has the individual cultural principles and values which has been practiced since ancient times until now. Adopted and inherited culture whether in the arts, languages, customs, music, religion, faith or law has its own unique character of each community. All forms of cultural and all other religions are always respected. According to the 2010 Population Housing Census, the country's religious make up is as follows: Muslim 61.3%, Buddhist (Sometimes combined with 'Taoist' because of lack of proper definition) 19.8%, Christian 9.2%, Hindu 6.3%; Confucianism, and other traditional religions 1.3%; and other or unknown religions 2.1% (Department of Statistics, 2010).

The Malays, the largest ethnic community in Malaysia, make up more than 60% of population and play a dominant role. By constitutional definition, Malays are Muslims who practice Malay customs and culture, speaks Malay language. The Malays practice 'Syafi'i Mazhab and promote Islam in a way that is meant to inspire a stable approach of life and encourages inclusivity, patience and looking outwards. The values of them are knowledge, honesty, hard work and efficiency (Martinez, 2004; Othman, 1994; Baginda & Schier, 2003). The Chinese are the second largest ethnic community, who make up about 24.6% of the population. They have been leading dominantly in trade and commerce since the early 20th century. The large Chinese population practices a mixture of beliefs, with influences from traditional religions followed such as Buddhism and Taoism, Confucianism and ancestor worship. They produced a syncretic set of believes, practices, and arts, merging Malay and Chinese traditions in such a way as to create a new culture. A minority of 11.05% of Chinese is Christian, mostly from the East Malaysia in the island states of Sarawak and Sabah. A small number (0.66%) profess Islam, primarily as a result of adaptation through marriages to Muslims. Though official Chinese language is Mandarin, there are strong dominance of dialects across the region that includes Cantonese, Hokkien, Teo Chiu, Fu Zhou, and several other minor ones. The Indian ethnic community in Malaysia is the bottommost of the three main ethnic groups, comprising 7.1% of the population. Mostly Tamil speaking, they make up the largest sub-group, and together with Malayalams and Telugu speakers, they make up over 85% of the people of Indian origin in the country. The rest of the percentage consists of mostly Sikh and Punjabis. Indians began migrating to Malaysia in the early 19th century. The Indians who came to Malaysia brought with them the Hindu culture, customs and norms. Hindu tradition remains strong until today in the Indian community of Malaysia (SDM, 2011). In addition, there are Indigenous Ethnic groups of Malaysia that have many other non-Malay indigenous people, who are given Bumiputra (Native) status along with the Malays. The indigenous tribes are the eldest inhabitants of Malaysia, and the indigenous groups of Peninsular Malaysia and East Malaysia are collectively known as the 'Orang Asli' which literally translates as the 'original people'. They account for about 5 percent of the total population, and represent a majority in East Malaysia of Sabah and Sarawak, where each group has their own language and culture. Iban, Murut (Lun Bawang), Dusun, Minag, Sukun are among the major groups. They are mostly Muslims and Christians by conversion (Kahn, 1998).

Diversity is rather like an optical illusion. The more it is looked at, the less clearly defined it appears to be and viewing it from different angles can lead to different perceptions of what is involved (Magurran, 1988). Therefore, cultural differences might always confuse researchers if morality is measured with one-scale-fit-all scale.

#### 3.3 Gender, Age and Morality

Ruegger and King (1992) have produced empirical findings to suggest that females' moral levels are higher than that of males, and that age is a major factor in determining ethical decision-making. Ruegger and King (1992) perceived that older students have higher morality than younger ones. However, a later study by Barnett et al. (1994) conflicted with Ruegger and King's study. Barnett et al. (1994) concluded that age was not a deciding factor in an individual's moral judgments and intentions.

Age is a variable for which empirical results differ across studies. Research frequently predicted the relationship between age and strictness of moral judgments to be positive (Chiu, 2003; Peterson et al., 2001; Vitell et al., 2003). People tend to have higher moral level as they grow older. However, some empirical studies find that younger people render stricter moral judgments than older people (Ede et al., 2000; Vitell et al., 2007). Other studies report no significant relationship between age and moral judgments. Therefore, to remove this bias, scholars often tend to study on same gender or same age (Barnett & Valentine, 2004; Schepers, 2003). However, work experience can be proportional to age, and depending on the nature of experience, same aged people may also show different levels of morality (Fei & Khan, 2015). Therefore, work experience can also play a significant role as a parameter.

#### 4. Methodology

The study followed a customized method derived from Construction-related Moral-judgment Test (CMT) fit to the profession of Architecture. As mentioned in the literature, dilemmas were customized to fit to this profession. The Intermediate Concepts were virtues derived from the code of conducts from different professional bodies. In this case it was related to code of conduct of Professional Architects in Malaysia. However, unlike CMT, it developed questions in the 'Action Choice' section that not only derived from code of conducts, but at the same time representing Kohlberg's six stages of Morality. Therefore, it did not use the McCuen's three levels, but used Kohlberg's six levels so that judgment can be made on the basis of moral level. I is because the study hypothesized that professional ethical level should not conflict with the level of morality, as that can lead to hypocrisy. However, the 'Justification' section had questions developed from code of conducts and used McCuen's levels to design them. The results from this section were used to correlate with CMT questionnaire distributed to same respondents in order to validate the customized method. The questions set in 'Action Choice' section, and the statements set in 'Justification' section were verified by Professional Experts in the related field in order to finalize which levels they should belong. The criteria of selecting Experts included Age: higher than thirty, and Work experience: more than ten years, as suggested suitable by Fei and Khan (2015). The scoring system followed the basic concept of CMT, where best two choices from respondents were matched by the questions/ statements that belong to the top two levels of morality. ANOVA test was performed to combine the scores of different subgroups. Final score was calculated by combining the scores from 'Action Choice' section.

After the scoring, the range was divided into 5 categories with equal intervals. The middle range was considered 'Average' (score 3), while the higher ones represented 'High Morality', and 'Very High Morality' (score 4 and 5 respectively). The lower ones represented 'Low Morality' and 'Very Low Morality' (score 1 and 2 respectively).

Demographic data was recorded, which were considered as the independent variables for this study. These included gender, ethnicity, and work experience. Age was kept within a range of 20–35, as only young architects were chosen for the study. By selecting bachelor degree as condition, the educational level was also kept constant. Those were the tactics by which most of the significant universal parameters were tackled in this study. Statistical method of correlation and regression were performed in order to find relationship between dependent variable (level of morality) and independent variables, and the predicting power of the independent variables.

The final result from 'Action Choice' section was again validated by using selected ICs through interview. Selecting three respondents from each category, their past record on three selected 'Intermediate Concepts', namely Honesty, Competence and Loyalty that were related to the dilemmas, were verified. It was done through post-survey interview. This validation was to remove the bias that might have been created by 'after-the-fact'

moral judgments, where respondents usually cannot reflect exactly the way they perceived 'before-the-fact' judgments, mostly due to certain practical constraints. In other words, moral decision was enquired instead of ethical decisions.

After this validation, the findings were revealed, that included levels of morality, and the possible predictors to explain the subsequently achieved level.

## 5. Data Collection

The sample was taken among young architects graduated within the last five years from the Universiti Teknologi Malaysia (UTM). The university admission system in public Universities in Malaysia follows a lottery system, where applicants provide their choices. Therefore, the students represented different states of Malaysia fairly evenly. However, being one of the top five Universities of Malaysia, UTM attracts students of higher grade from the previous study level, which is equivalent to A-level (NewsHub, 2012). So, the respondents in this study could be considered as having an above average educational background. A sample of 135 respondents participated in the study. With more than 2000 graduates every year through 13 recognized Institutions in Malaysia (LAM, 2015), and the age range for this study being 5 years, the population was counted to be beyond 10,000. Using Krejcie and Morgan (1970)'s sample size table, with 95% confidence level, 10 confidence interval, and  $\pm 3.5\%$  standard error, a sample size of more than 96 appeared to be enough.

#### 6. Results and Discussion

ANOVA test showed that the scores from different sub-groups of the sample could be added together to find the final score (Table 1). In general, the results showed high level of morality among the respondents (Table 2). The value was 3.73, which was close to High Morality of value 4.0.

	т	df	Sig.	Sig. Mean -tailed) Difference	$\alpha = 95\%$ Confidence Interval of the Difference	
	1	ui	(2-tailed)		lower	Upper
Action choice	54.021	134	.000	3.733	3.60	3.87
Justification	54.996	134	.000	3.511	3.38	3.64

Table 1. One-Sample t-Test (Total)

The scores from 'Justification' section, and from CMT had significant correlation (Adjusted  $R^2 = 0.272$ , significance level  $\alpha = 0.02$ ) that validated this study's method of scoring. Correlation analysis between predictors showed there was no significant correlation between them, or with the score from 'Action Choice' (Table 2).

## Table 2. Coefficients of correlation

		Gender of respondent	Working experience	Ethnic of respondent	Action choice
Gender of	r	X	101	109	.058
respondent	respondent α	Λ	.245	.206	.504
Working	r	101	х	.005	064
experience	α	.245	Λ	.956	.460
Ethnic of	r	109	.005	Х	126
respondent	α	.206	.956	Λ	.147
A stign shairs	r	.058	064	126	V
Action choice	α	.504	.460	.147	Х

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

Backward Stepwise Regression Analysis also could not determine any one as the most significant predictor for

action choices i.e for moral levels (Table 3).

	Madal	Unstandardized C	Coefficients	Standardized Coefficients		<u> </u>
	Model —	B Std. Error		Beta	– t	Sig.
	(Constant)	3.917	.304		12.868	.000
1	Gender of respondent	.062	.140	.039	.444	.658
1	Working experience	069	.100	060	686	.494
	Ethnicity of respondent	131	.094	121	-1.393	.166
	(Constant)	4.021	.194		20.722	.000
2	Working experience	073	.099	063	737	.463
	Ethnicity of respondent	136	.094	125	-1.454	.148
2	(Constant)	3.991	.189		21.080	.000
3	Ethnicity of respondent	136	.093	126	-1.460	.147
4	(Constant)	3.733	.069		54.021	.000
	a. Dependent Variable	e: Action choice				

Table 3. Backward stepwise regression analysis: action choice

Afterwards, the sub-groups under each demographic variable were considered in order to find predictors of morality. Group wise descriptive analyses were used to find outcomes. After t-test analysis of mean, conclusions could be drawn from its values.

For 'Gender' variable, both genders showed similar scores with only a slight difference between male and female, though they were not statistically significantly different (Table 4). It was concluded that gender was not a major predictor for morality. However, it contradicts with some existing literature, where gender bias is considered significant. Some of those researches also showed that gender can play significant role among young stars as well. Therefore, it can be tentatively concluded that in the context of Malaysia, and at young age, within this profession, gender might not play a vital role. However, it does not necessarily cancel out the possibility of influence of gender in other disciplines and professions. In fact, that could rise more interesting issues, for example, suitability of studying particular discipline for particular gender.

Table	4.	Gender
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Gende	er of respondent	Ν	Minimum	Maximum	Mean	Std. Deviation
Male	Action choice	67	1	5	3.69	.839
Female	Action choice	68	2	5	3.78	.770

While investigating 'Work Experience', previous studies showed it plays a role. They also hinted that morality is likely to increase with age. However, that's probably not the same way the curve goes at young age. Also, studies were not clear whether the phenomenon of increase of morality with age is the same for men and women. The score of 3.75 in this study for the sub-group of those who have no experience at all, was same for the sub-group of those with experience of 1 year or less. It went down to 3.62 for the sub-group of those having experience of 1 to 4 years. It went even less to a score of 3.00 for the sub-group of those who had more than 4 years of experience (Table 5). There might be a possibility about the context specificity of the results as it was in the case of the previous variable, and moreover, the sample size also could play a role here. However, one possible explanation for this result was that young stars with no experience might still belong to a utopian world where all the virtues are considered to have been purely reserved as much as possible. Practical experience might

disintegrate that idealistic concept in the beginning of their professional experience. That means, the curve of morality score that could be rising along age at macro level (for example, along life span), might go the other way at the micro level at young age, especially at the beginning stages of their career.

#### Table 5. Work experience

Working exp	Working experience		Minimum	Maximum	Mean	Std. Deviation
No experience	Action choice	93	1	5	3.75	.803
1 year or less	Action choice	28	3	5	3.75	.752
1-4 years	Action choice	13	2	5	3.62	.961
More than 4 years	Action choice	1	3	3	3.00	

For 'Ethnicity' variable, though both had quite high level of morality, the Chinese showed slightly higher score than the Malays though that difference was not statistically significant (Table 6). However, it was not easy to come to conclusion, as different disciplines might show different levels of morality. Therefore, the validity of this score might not be debatable.

Ethnic	e of respondent	N	Minimum	Maximum	Mean	Std. Deviation
Chinese	Action choice	30	3	5	4.00	.788
Malay	Action choice	100	1	5	3.66	.807
Others	Action choice	5	3	4	3.60	.548

## Table 6. Ethnicity

## 7. Findings

While gender was found to be a distinctive factor in Alleyne et al. (2010)'s study, Nikoomaram et al. (2013) insisted that gender is not a determining factor behind a higher or lower level of morality. However, the latter explained that the way males make moral decisions might be different from the way the females do, and the natural biological difference between genders might probably be the underlying reasons behind that. Therefore, same set of questions may not be fit for both. Therefore, it appears to be safe to draw that gender difference cannot be a good predictor, and further investigations might be necessary to determine the differences in moral level between genders, if there is any.

The next factor was the cultural difference. In this case, the ethnicity reflected the cultural difference. Ballantine (1999) strongly suggested that ethnicity may not be a big decider. In fact, at a 'before-the-fact' scenario, where the respondents' perception is only measured, not the actual action that the respondent might have taken, it is unlikely that respondents will show lower level of morality. Especially, if the educational level is similar among the respondents, and age is similar, there is little chance of responding to answers that could show different levels of morality. However, 'after-the-fact' scenario, is dependent on the surroundings, social scenario, group behavior etc. and it can limit one to perform at a higher or lower moral level even though one could perceive oneself to do differently at the perceived moral level (Ajzen & Fishbein, 1980). Therefore, a very little difference in the two major ethnic groups in this study is actually not very conclusive as well. It can also lead researchers to think about a different set of questionnaires to determine how cultural difference might affect morality, if there is any.

The final determinant was work experience. Usually, work experience is strongly related to age (McDonald, 1996). As studies showed age might have a strong correlation with the level of morality, work experience should also show that relationship. However, we can still see conflict between researchers on this issue (Joseph, 2000). Studies did not clearly relate age and gender together as well. Cultural difference and work experience has not been studied together in detail too. Therefore, it is unlikely to get any direct relationship between work experience and level of morality from a more generalized questionnaire. There is a reasoning that moral level

should be increasing along age with the fact that physical abilities reduce along age, and that allows one to look into the world as a less-capable and less egocentric way (Macdonald, 1996). While this study did not take into account the old age group, and the overall morality of these young respondents were quite high, the small differences between sub-groups were carefully validated during interviews on selected respondents. There was some evidence that respondents with 'no experience' showed stricter intentions and higher level of morality. The level went down noticeably as the experience increased. The complete picture throughout all ages could have showed more of a direction, however, the small subgroups within these young respondents still showed that the level was perhaps going down starting from a relatively higher level. This was validated by the informal interviews taken on one randomly selected respondent from each subgroup, where their previous life histories were examined subjectively based on the selected intermediate concepts, which reflected the matching between their scores and the subjective judgments. The downward movement of morality actually conformed to the earlier statement that young stars remain stricter in moral level early in life, but become more bendable and flexible while they start gaining experience. It might be because of the pressure and struggle in the competitiveness of life that starts tempting them more to bend their moral level with respect to the virtues.

#### 8. Conclusion

In conclusion, several points can be drawn from this study on young professional architects in the context of Malaysia. It can be inferred that at young age, gender might play its role differently at different contexts of the world, but from this particular context, it might be non-significant. Work experience might increase level of morality at macro level, but at micro levels under young age, the initial bubble of high morality can become deflated as practical life becomes tougher and temptations get bigger. The study also indicated the necessity to customize questionnaires on different demographic variables in order to get clearer pictures of the differences between such variables and between their sub-groups. It also suggested that such studies in specific disciplines could help what particular virtues could be more significant for particular professions.

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