Design Ethics Education for Creative Industry Programs: Attitude towards Socio-Ethical Issues in Design amongst Malaysian Design Undergraduates

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This paper reports the outcome of a study of Malaysian design undergraduates regarding their attitude towards socio-ethical issues in the creative design industry. The study was carried out in two Universities (University A and University B) in Malaysia, involving 120 design undergraduates. A survey was administered whereby a questionnaire was distributed amongst respondents to elicit their level of agreement concerning each statement in the questionnaire. The results of the data analyses show that the attitude of Malaysian design undergraduates towards socio-ethical issues is low except for respondents from University A, who have a positive attitude towards environmental and sustainable development issues. This study suggests that a design ethics education model should be introduced in the curriculum of creative industry programs in Malaysian higher education institutions since no such model or subject is available in the examined institutions.

Key words: *Design Ethics; Design Undergraduates; Creative Industry Program; Attitude.*

Introduction

The creative industry has become an important sector in national economic development in the 21st century. According to Carabal-Montagud, et. al. (2018), creative industries are the amalgamation of both knowledge and specialised skills regarding creativity. This industry can be divided into three categories; (i) creative application, (ii) creative expression and (iii) creative technology that consists of sectors such as art, film, multimedia and industrial innovation. This is a fast moving industry especially in the present era where users are keen to learn about the latest models and innovations.

The rudimentary element of creative industry is design and those who are attached to the creative industries are known mainly as designers (Collins, 2018). Van Laar et. al. (2019) cited that creative industry plays a vital role in transforming the socio-economic development of a nation that directly impact society. Fahmi et. al. (2017) assert that creative industries penetrate many important areas including economic, cultural, technological, and most importantly social which ultimately elevates the role of designers in creative industry from a person who deals with creative output to someone who plays a vital role in uplifting social well-being and environmental sustainability.

Since the nature of designers' profession directly affects society, designers must possess appropriate values and a sense of responsibility to protect the welfare of society from uncontrolled development in the creative industry. In the present era of Industrial Revolution 4.0, besides focusing on the technological advancement and its related skills, it is also essential to concentrate on building good values amongst future designers in contributing to a sustainable future (Osman & Kamis, 2019).

In order to achieve this, future designers need to be equipped with fundamental knowledge, skills and values that enable them to strike an appropriate balance between their commitment to their professions and the well-being of the biosphere. Ethical training must be in place in creative industry programs in higher education institutions.

Ethical education play an important role in preparing future designers with knowledge of ethics, good values and skills to face the issues pertaining to ethics in the design industry. These could give future designers the confidence to confront any ethical dilemmas engulfing society and sustainability of ecology in the context of the creative industry sectors.

Marshall-Baker (2011) cites that ethics is integral to design in multiple dimensions while Chan (2018) asserts that the creative output of designers must have moral values. These values are determined by the ethical consideration of designers. Ethical values in design need

to be cultivated amongst designers during their training as undergraduates in higher education institutions.

In Malaysia, ethics is one of the main elements of creative industry program outcomes as stated in standard programs (MQA, 2013). It is drafted by the Malaysian Qualification Agency which is responsible for the accreditation of educational programs in higher education institutions. Ethics education in creative industry programs in several Malaysian higher education institutions is carried out in many forms. Based on the analysis of the program structure of several established institutions that offer creative industry programs, we found that there is still a model for design ethics education or a dedicated subject for design ethics education which has been established in those institutions. However, ethical elements related to design in the creative industry have been infused in several subjects related to law and other design subjects comprising of technical and non-technical courses.

Chan (2018) maintains that design ethics education is still under development compared to other ethics education such as engineering, medicine and business. These can be seen in both curriculum development and research activities related to design ethics education and it is lacking in the context of creative industry programs (Balakrishnan & Azman, 2017).

Various teaching strategies will yield various advantages in the development of cognitive and affective learning domains amongst learners (Delany et. al., 2016). Nonetheless, the issue whether knowledge, skills and values earned in ethical classrooms have produced individuals who can think and act ethically has raised concerns amongst researchers such Balakrishnan et. al. (2019). Thus, it is important to scrutinise whether the knowledge, skills and values of design ethics in creative industry programs have developed the right attitude towards socio-ethical issues amongst design undergraduates.

Bauman & May (2019) found that attitude determines the thinking and action of an individual regarding an issue. It is pivotal for future designers who are going to join the creative industries workforce to equip themselves with the right attitude towards ethical design issues since positive attitude will create positive mindset and action.

Therefore, this study aims to measure and compare attitudes towards socio-ethical issues between design undergraduates from two Malaysian universities. It is essential to explore this issue since understanding the attitude of design undergraduates towards ethical issues is not a well- researched area, therefore the findings can serve as the foundation for educators in creative industry programs to develop an efficient design ethics education model and at the same time, enhance their current practice of teaching and learning of ethics education in the classrooms.

Design Ethics for Creative Industry Programs

Chan (2018) asserts that in a radical design situation - choosing who and what to prioritise - a designer should be able to face a dilemma or situation and make a sound decision without compromising anyone - the employer, client or society. Ethical decision making should be cultivated amongst designers during their undergraduate studies as they have to make sensitive and sensible decisions and it is important to make sure that these decisions ethically based. Collins (2018) maintains that ethics can bring new opportunities to designers where being innovative or creative are meaningful while protecting the environment. This begins with appropriate ethical attitude amongst designers which need to be instilled during their undergraduate studies (-, P., & Osadebe, 2017).

Design by nature has a projective view and designers in the creative industries look forward to changing the way the world senses and experiences their creative output. d'Anjou (2011) emphasizes that the creations of a designer should benefit humankind while according to Cummings (2006), a designer's creative outputs are mainly shaped by   while at the same time moulding to how society perceives and use the creations of designers. The creative industry has become an important component not only for economic development but also for the well-being of human beings. Thus, designers involved in this industry should have the necessary ethical values to uphold responsibility towards society and the environment at large.

Taylor (2011) cites that ethics consists of a set of rules of social practice and it is based on the professional code of conduct. At the same time, e Parson (2016) believes that ethics is set of rules of social practice which is based on the professional code of conduct. Ethics plays an essential function in moderating the action of an individual to produce or be productive with a sense of responsibility to all stakeholders directly   indirectly involved professional activities. In the context of the creative industry, ethics – to be precise, design ethics – are able to guide designers to determine responsibilities in order to comply with social norms and standards required by the profession.

Design ethics is a study of morals that encompasses the rudimentary information that leads a designer to evaluate, justify and guide his/her creative output (Chan, 2018). Ethics are mainly divided into fundamental theories such as utilitarian, deontological and virtue-based ethics (Latta & Dugan, 2019). The model of ethics education for other disciplines such as Engineering, Medicine and Business are also based on the above mentioned theories.

In the context of design ethics, the model of education practised in higher education institutions should produce future designers who have both creative skills – acquired through technical and non-technical subjects- and good ethical values. This is essential for

future designers in order to produce outputs that could serve all relevant stakeholders including society and the environment at large.

Thus, the cultivation of ethics and its fundamental knowledge, skills and values must start from higher education institutions where future designers are being moulded to serve in the creative industry. Future designers must have an appropriate attitude towards ethics which can only be gained through formal education. It is the role of higher education institutions that offer creative industry related programmes to spear-head the vision to produce holistic and socio-responsible designers.

Design Ethics Education in University A, Malaysia

University A is a private university in Malaysia that offers various undergraduate programs in the creative industry. One of the key aims of this institution specifically for creative industry programs is to promote creative practices to stakeholders via a sustainable approach and that graduates should possess knowledge and skills to develop a range of creative outputs ethically. There is no dedicated subject in University A for design ethics but the component of ethics is taught in two subjects – *Communication Law* and *Design for Sustainability*.

In the subject, *Communication Law* taught in Year 1, the ethics component is introduced through the following topics:

1) Ethics in Communication and Media
2) Responsibilities of Media Professionals
3) Issues and Ethics in Media and Communications

It is a two credit hours subject which is conducted via full lecture classes. The second subject, *Design for Sustainability* focuses on hands on creative projects. It is taught in the first semester in final year. In this subject students need to design a prototype to solve community problems which take into consideration the elements of sustainability. Design undergraduates visit the community to discover problems and come up with solutions via their creative prototype while ensuring that their creative design is sustainable.

Design Ethics Education in University B, Malaysia

University B is also a private higher education institution that offers a number of programs related to the creative industry. In this University, there is no subject allocated specifically to educate design undergraduates on design ethics but ethical components have been embedded in the subject *Media Law* offered during Year Three Semester One. This subject consists of three credit hours, where it is divided into lecture classes for two hours and a
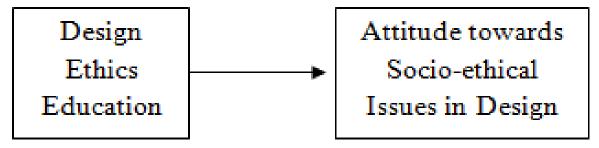
tutorial for one hour a week. The pedagogical approach is based on a teacher centred approach. Design undergraduates need to complete an assignment as part of their coursework in this subject. The assignment mainly focuses on problem based learning regarding media law and its practices.

Research Model and Methodology

Attitude is an essential component   for clarifying an individual's position or stand on a particular issue. Many researchers view attitude as an evaluative component in which attitude can influence thoughts, feelings and behaviour. In the context of design ethics, it plays an important role regarding how future designers are going to carry out their role as ethical designers. Breckler (1984) maintains that attitude is based on (i) cognitive, (ii) psychomotor and (iii) affective components. This clearly shows that education plays an important role in developing learners' attitude since those three domains are emphasised in the learning process. Positive attitude will emerge through appropriate education. Esa (2010) has found that knowledge and attitude have a strong correlation as attitude is positively proportionate to knowledge. In the "Theory of Instruction," Gagne & Dick (1983) assert that the attitude of an individual is largely influenced by the internal states that determine the choice of action towards events, things and persons. Internal states are developed through information gained via the direct and indirect learning process. Based on the above discussion, to the paper will investigate the level of attitude towards socio-ethical issues related to design in the creative industry amongst design undergraduates.

Figure 1. Study research model

120 design final year final semester students from University A (60 students) and University B (60 students) have been chosen to be participants in this study. The students are design undergraduates pursuing their Bachelor degrees in various creative industry programs such as Animation, Advertising, Games and Media Design.

 Participants were recruited via stratified sampling whereby each respondent was in his or her final year and had completed courses related with design ethics with a minimum

achievement of grade B+ - minimum 75% marks. Both universities gave their full co-operation in this recruitment process.

A questionnaire to gauge the attitude towards socio-ethical issues pertaining to the creative industry amongst design undergraduates was developed. The development of the questionnaire was based on the items that were utilised in the study of Balakrishnan et. al. (2019) and Balakrishnan et. al. (2020). The items that were used in the literature mentioned measured the level of attitude towards socio-ethical issues related to the engineering discipline. In order to suit the study needs, the items were modified to be appropriate to the ethical issues related to design in the creative industry. Each statement/item in the questionnaire uses a 5 point Likert scale with the agreement level value 5 for strongly agree and 1 for strongly disagree.

The questionnaire was verified by two design educators with more than 10 years of experience and two designers who have more than 15 years of experience in the creative industry. The pilot study was conducted amongst 30 final year design undergraduates from University C, Malaysia to inspect the reliability of the questionnaire. The co-efficient reliability value (Cronbach Alpha Value) obtained was 0.845 which shows that it is reliable (Creswell, 2013).

Results and Discussion

The outcome of the study – data – was assessed utilising a Statistical Package for Social Science (SPSS). The co-efficient reliability value (Cronbach Alpha) for the questionnaire was 0.851 which was deemed to be reliable. At the same time, the data collected was identified as normally distributed. Thus, we can use a parametric test to assess the comparison of the attitude level towards socio-ethical issues amongst respondents from University A and B.

Table 1 illustrates the mean score (M) and standard deviation (SD) of design undergraduates' responses from University A and B for each item of the questionnaire.

Table 1: Mean and Standard Deviation values of respondents from University A and B.

Statement	(M) Uni A/Uni B	(SD) Uni A/Uni B
A1: I am confident to ethically deal with design problems.	2.67/2.54	0.17/0.12
A2: I am sensitive towards the function of designers in today's society.	2.82/2.52	0.04/0.22
A3: I am aware the impact of the creative industry on economic issues.	2.75/3.01	0.17/0.08
A4: I am aware of the consequences of creative	4.11/2.82	0.08/0.17

designs on the environment.		
A5: I am conscious of the impact of design activities in the creative industry on humankind.	2.67/2.65	0.13/0.23
A6: I believe in the significance of ethics in every decision taken in the design process.	2.82/2.57	0.25/0.20
A7: I believe in the importance of being aware of the view of the public in design activities.	2.47/2.37	0.18/0.25
A8: I believe in the worthiness of taking into account the element of sustainable development in my design process.	4.08/2.25	0.02/0.11

Table 2 shows the t-values of paired two-tailed t-tests. These tests were conducted for each statement to scrutinise the comparison of the differences in the level of attitude between design students from University A and B.

Table 2: T-values of paired two-tailed t-test.

Statement	t-value
A1: I am confident to ethically deal with design problems.	2.01
A2: I am sensitive towards the function of designers in today's society.	1.20
A3: I am aware of the impact of the creative industry on economic issues.	1.98
A4: I am aware of the consequences of creative designs on the environment.	5.12*
A5: I am conscious of the impact of design activities in the creative industry on humankind.	1.36
A6: I believe in the significance of ethics in every decision taken in the design process.	2.17
A7: I believe in the importance of being aware of the view of the public in design activities.	1.88
A8: I believe the worthiness of taking into account the element of sustainable development in my design process.	5.78**

*$p<0.05$; **$p<0.01$

Referring to Table 1, the mean scores of the respondents of University A range from 2.77 (SD=0.17) to 4.11(SD=0.02) while the mean scores of respondents from University B range from 2.54(SD=0.12) to 3.15(SD=0.11).

The mean scores of respondents' attitude towards socio-ethical issues from University A are higher in Item A4 and A8 compared to the mean values recorded from the respondents of University B. This has been ascertained from the paired two-tailed t-test (referring to Table 2) which shows that differences in item A4 and A8 were significant while the other items recorded low t-values and no significant differences were established from the test. This

clearly shows that the attitude of design undergraduates towards ethical issues related with environment and sustainability from University A was promising compared to undergraduates from University B.

On the other hand, the mean values for other items were relatively low referring to Table 1 and 2, as there were no significant differences in attitude towards socio-ethical issues between respondents from both universities except for items A4 and A8. It is evident that the attitude towards socio-ethical issues related to design for undergraduates from both Universities was not promising except for environmental and sustainable development issues for respondents from University A.

Respondents from University A had a positive attitude regarding environmental and sustainable development issues because they were exposed with those issues through the course entitled *Design for Sustainability*. This subject has an developed appropriate attitude amongst students to be sensitive towards environmental and sustainability issues in the context of design in the creative industry.

However, the attitude towards other key aspects of ethics were low for respondents from both University A and B. This was mainly attributed to a lack of knowledge, skills and values imparted in those subjects that were responsible in moulding students' attitudes regarding design ethics. The absence of a dedicated subject(s) for design ethics in disseminating the necessary ethical knowledge, skills and most importantly values may have contributed to the low mean values obtained for attitude amongst design undergraduates in this study (Hoe, 2013).

The design project that has been carried out in the subject *Design for Sustainability* – University A – has proven to make a positive impact on design students to be sensitive towards ethical issues related to the environmental and sustainable development which has been emphasised in the subject. The mechanism of subject's pedagogy has cultivated a positive attitude regarding those issues amongst students. Salam et. al. (2019) found that project based learning via service learning facilitates the development of a sense of responsibility which ultimately helps students to possess the necessary values according to the subject's learning outcomes.

Felton et. al. (2013) cite that ethics play a vital role in determining an individual's actions which will facilitate designers to determine their role in adhering to both social norms and professional standards.

Although a positive attitude has been identified regarding environmental and sustainability issues amongst design undergraduates in University A, it is still insufficient since the

attitude towards ethical issues should cover other ethical dimensions as well in order to develop socio-responsible future designers who can protect the well-being of human beings and society. Thus, there should be a proper mechanism in place in each higher education institution to teach ethics to design students from creative industry programs (Balakrishnan & Azman, 2017).

In this fast growing era, future designers need to be equipped with necessary characteristics that can drive them towards being a designer who has the required ethical values and most importantly responsibility to society in future. This can be achieved via a proper design ethics education model in the curriculum of creative industry programs. Higher institutions that do not design ethics education should consider an appropriate model of design ethics education to be implemented in creative industry courses.   Effective design ethics education will determine the attitude of future designers towards the ethical issues that they are likely to face in the industry once they graduate.

Conclusion

This investigation has assessed the attitude towards ethical issues amongst Malaysian design students pursuing their undergraduate studies in creative industry programs in two Universities. The findings show that the attitude towards ethical issues is low in many dimensions related to ethical issues but design undergraduates of University A have a positive attitude towards ethical issues related to environmental and sustainable development issues.

A well-structured design ethics education model should be included in the creative industry programs' curriculum that can instil appropriate knowledge, skills and values that foster good attitude towards socio-ethical issues amongst design undergraduates.Future designers should be accountable for their creative outputs and this accountability will lead them towards becoming holistic and socio-responsible designers in the future.

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