

Examining Students' Attitudes towards Sustainable Fashion Design Curriculum

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ABSTRACT

The rapid development of fashion has somehow affected today's environment. Apparel production and consumption continue to increase driven by fast fashion trends. However, it had caused several problems to the environment, basically economic and social issues. Thus, embedding sustainability in fashion education becomes crucial and highly encouraged. The objectives of this research were to: 1. examine students' attitudes about sustainability towards sustainable fashion design curriculum and 2. determine whether sustainability attitudes can be developed from the sustainable fashion design curriculum. Data was gathered through qualitative open-ended structured questions. Fifty fashion alumni were selected as research subjects for the survey. The major findings of the research showed that attitude of sustainability is explicitly integrated into sustainable fashion design curriculum. This study proposed a conceptual framework that integrates attitudes of sustainability into sustainable fashion design curriculum. Sustainable design curriculum could enhance social responsibilities and sustainable development growth among designers, students and entrepreneurs.

Keywords: Sustainable, Attitudes of sustainability, Fashion design curriculum.

1. INTRODUCTION

Problems in the fashion industry starting from very fast supply chain cycles in both consumption and production. Fast fashion seems to force retailers to want production and distribution with low cost, low quality, flexibility in design, which affects product quality. Along with the increasing demand for fast fashion, it has a negative impact on the fashion supply chain process, starting from problems in the procurement of raw materials, exploitation and wages of workers, as well as pollution waste, chemical waste and other waste generated [1].

The growth of the apparel and textile industry in Indonesia shows an increase from year to year. From the trend of data on the export value of apparel from textiles, the clothing and textile industry in Indonesia in 2015-2019 continues to show an increase. Indonesia occupies the fourth position as exporter global brands to various countries during January-April 2020 [2].

To overcome the impact of fast fashion, fashion apparel has begun to be pursued so that the ultimate goal is not only to seek profit but to realize the importance of sustainable fashion as a future-oriented

trend [3]. However, this has not been matched by its application to fashion education [4]. The opportunities is to change and adopt a paradigm to create fashion professionals with a sustainable attitude [5]. This study explores sustainability attitudes among alumni and proposed a conceptual framework for sustainable fashion design curriculum.

1.1. Sustainable Development Growth in Relation to Fashion

According to the SDGs, the apparel industry must contribute to the conservation of sustainability [6]. Fletcher shared sustainable systems approach into 4 principles that can be done, such as; build consumer awareness value of ethics and the environment by consumer education, support local values, slow down the life chain system of the fashion industry with Slow Fashion and develop an active and participatory design [7].

1.2. Sustainability Challenges and Opportunities

Fashion trends that rotate very quickly also have a consumptive impact contributing to the waste of wasted clothing [8]. It becomes a challenge for the clothing industry to contribute positively to a series of problems and impacts caused by fast fashion in order to realize the ideals and goals of the SDGs by creating better economic, social and environmental development in the future.

With these problems, the apparel industry is looking for graduates who are ready to face the breadth of the supply chain such as in the practice of fashion design by considering ethics and sustainability practices. However, the lack of fashion education that integrates attitude of sustainability in graduates as human resources and results in inconsistencies with industry needs [9].

1.3. Attitudes of Sustainable in Fashion Design

The integration of the curriculum with the implementation of sustainability strategies in fashion design attitudes and practice depends on the background knowledge of students, such as:

According to Hue and Cassidy raised 17 Sustainable Development Goals, issues of awareness level about sustainability in fashion which categorizes them into several levels of awareness that can be seen from the selection of eco-materials, control of hazardous substances, green energy, life cycle assessment, eco labeling, manufacturing waste, ethical manufacturing, clothing distribution & packages, ethical consumption, up-cycling & repairing, recycling, consumer care & washing, clothing disposal, cradle to cradle design, socio-cultural human well-being, corporate social responsibility and sustainable product service systems [4].

1.4. Integration Attitudes of Sustainable in Fashion Design Curriculum

The integration of the curriculum with the implementation of sustainability strategies in fashion design attitudes and practice depends on the background knowledge of students, such as: [4]. The sustainable design curriculum changes students' paradigms and attitudes towards the environment [10]. The role of fashion design education is needed in realizing the SDGs agenda through the integration of the sustainability curriculum through a combination of positive habits, attitudes and behaviors [11].

Proposition 1: Ensure that attitude of sustainability is explicitly integrated into sustainable fashion design curriculum

Referring to Hur and Cassidy, there are 6 levels of attitudes and actions for sustainable fashion; 1) Level of importance, 2) Level of interest, 3) Level of personal responsibility, 4) Level of expectation, 5) Level of involvement and 6) Level of priority in design. Of the six levels, it shows that the level with the highest score is "Level of Importance" and the level that ranks last is "Level of involvement" [4].

1.4.1. Level of Importance

The importance of involving sustainability in fashion design is something that is very much needed emphasized the importance of systems thinking, design action and integrating sustainability from the beginning of the design process to holistically sustainable fashion design practices [4]. For the importance of embedding an attitude of sustainability, fashion education must incorporate sustainable practices into the curriculum [12].

Proposition 2: The level of importance is explicitly integrated into sustainable fashion design curriculum.

1.4.2. Level of Interest

In the level of interest, students expressed a high interest in being involved in sustainability. However, there is a lack of information on implementing sustainability, such as the lack of guidance on the design process, limited choice of materials and design processes. Thus, the highest agreement among students is to integrate sustainability into the curriculum [13].

Proposition 3: The level of interest is explicitly integrated into sustainable fashion design curriculum.

1.4.3. Level of Personal Responsibility

According to Palomo, although students feel they have a responsibility but it is not in accordance with the practice, they are only interested in making fashion design creations that require detail without focusing on sustainability. This reason underlies the fashion education in some design colleges to focus their undergraduate curriculum on basic skills in sustainability [14].

Proposition 4: The level of personal responsibility is explicitly integrated into sustainable fashion design curriculum.

1.4.4. Level of Expectation

Apparel industry have high expectations for the adoption of sustainable practices and encourage future fashion education graduates to integrate sustainability into their designs. It is necessary to anticipate according

to the expectations of industry needs by preparing skills for future fashion education through a sustainable fashion design curriculum [4].

Proposition 5: The level of expectation is explicitly integrated into sustainable fashion design curriculum.

1.4.5. Level of Involvement

Students' attitudes towards sustainable things need to be improved by implementing sustainability in fashion design [15]. It is strengthened by the statement that in the context of education, it is important to raise awareness about the responsibility of educators, students, consumers and producers about the importance of preserving the environment for future generations by implementing a sustainable fashion design curriculum [16].

Proposition 6: The level of involvement is explicitly integrated into sustainable fashion design curriculum.

1.4.6. Level of Priority in Design

Eliminating environmental impacts is a top priority in integrating into design through various breakthroughs the latest in fulfilling lifestyles and creating a good approach with consumers by prioritizing sustainable ethics [17]. Thus, the focus is that by referring to a fashion curriculum that focuses on the concentration of sustainability, it will increase students' knowledge, awareness, attitudes and involvement in sustainability behavior and strive to be able to integrate sustainability into design [18,19].

Proposition 7: The level of priority in design is explicitly integrated into sustainable fashion design curriculum.

2. METHODOLOGY

The overall research employed a mix-method orientation between qualitative and quantitative methods that using both closed-ended questions and open-ended questions. The purpose is to get answers to closed-ended questions, students are given questions in the form of an open questionnaire and then conduct an investigation of closed-ended questions ensure in-depth questions to enrich the answers and take the key points to ensure that attitude of sustainability is explicitly integrated into sustainable fashion design curriculum.

The research methodology is a constructivist grounded theory by Charmaz [20], design to perform a comprehensive exploration of the topic (explorative studies). Since the study is aimed at exploring the study informants' viewpoints in developing a conceptual framework, the constructivist grounded theory will be

instrumental toward generating a conceptual framework attitude towards sustainable fashion design curriculum. This theory aims to develop a theory based on the experiences and perspectives of participants from a phenomenon [21]. Moreover, the approach provides insights into processes or practices into the issue [22]. This exploratory study is research by assessing or recognizing a particular symptom [23].

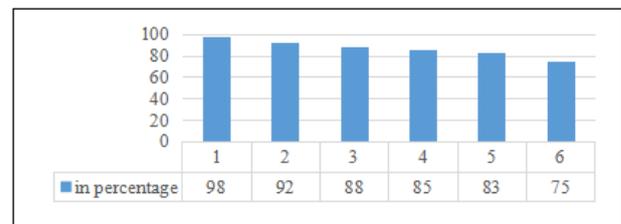
The sampling strategy was based on purposive sampling involved with fashion design alumni of 2012-2015. Online surveys through Google form were utilised for alumni of class fashion design alumni who have graduated from undergraduate education for 3-5 years. A total of 50 alumni of fashion design participated in this study. The data analysis was based on mix-method. Quantitative data were analysed based on data of students' attitudes about sustainability in the sustainable fashion design curriculum and qualitative using open-ended text data were determined whether sustainability attitudes can be developed into a sustainable fashion design curriculum.

3. FINDINGS AND DISCUSSION

3.1. Discussion on Questionnaire Survey

The alumni were asked their attitudes about sustainability whether it can be developed into a sustainable fashion design curriculum. Given a question with the answer choices "Yes" and "No".

Questionnaire Results



Note: (1) Level of Importance; (2) Level of Interest; (3) Level of Personal Responsibility; (4) Level of Expectation; (5) Level of Involvement; (6) Level of Priority in Design.

Figure 1 Ranking the level of results according to each level.

Based on Figure 1, the survey results found that embedding sustainability at the "Level of Importance" in the sustainable fashion curriculum is ranked first with the highest rating of 98%, it can be said that almost all students stated that today's industry must be concerned with the impact of fast fashion, thus Implementing sustainability is very important, then sustainability should be included in the fashion design curriculum. The next highest result is "Level of Interest". 92% of students stated that they are interested in making sustainable designs and according to them to

implementing sustainable means that we are responsible for protecting the environment and providing a good impact on the environment. "Level of Responsibility" is the 3 important in integrating sustainability into the curriculum. The survey results show that 88% of students carry out an environmentally responsible process in designing clothes, they also stated that they prioritize environmentally friendly in making designs than pursuing profit and practicing in making fashion designs. The ranked 6 "Level of Involvement" that indicated 85% of entries is students reveal that they can improve the design by implementing sustainable. "Level of Expectation" is ranked 5 with the statement that they have more expectations by implementing sustainable into the designs and they have expectations that sustainable implementation will be greater if it is in the fashion design curriculum and level 6 is "Level of Priority in Design", although 75% of students stated that they prioritized sustainability in their designs such as recycling materials or clothes, 25% of them were those who did not feel that implementing sustainability in their designs was a challenge. Important thing, and through an open statement.

3.2. Discussion on Open-Ended Questions

An open-ended comment section was included to gather more in-depth perspectives. Open-ended responses showed that, depending on participants' background knowledge and their position at work, their rating of interest in and importance of sustainable fashion varied. For example, designers were relatively more considerate about material choice (e.g. using recycled materials and renewable materials), eco-friendly ways of manufacturing, up-cycling old clothes, child labour, and the throwaway fashion culture.

Student statements in the open-ended comment section regarding levels in sustainable fashion can be seen in the following Table 1:

Table 1. Open-ended text data

Participant's Responses	
Section 1	Level of Importance
	– Implementing sustainability is very important today
	– Sustainability should be included in the fashion design curriculum
	– Today's industry must be concerned with the impact of fast fashion, thus its sustainable implementation is very important

Participant's Responses	
Section 2	Level of Interest
	– I am interested in making sustainable design – Implementing sustainable means that we are responsible for protecting the environment and providing a good impact on the environment
Section 3	Level of Personal Responsibility
	– I carry out an environmentally responsible process in designing clothe
	– I prioritize making designs that are more environmentally friendly than pursuing profit – I prioritize environmentally friendly practices in making fashion designs
Section 4	Level of Expectation
	– I can improve the design by implementing sustainable – I can educate consumers If I design sustainably – Expectations for sustainable implementation will be greater if it is in the fashion design curriculum
	Level of Involvement
Section 5	– I can improve the design by implementing sustainable – I feel more creative by implementing sustainability in design
	Level of Priority in Design
Section 6	– I do design development such as recycling materials or clothes to have a positive impact on the environment – If I don't implement sustainable practices, I will cause problems for the environment

Attitudes of sustainability-involved students' understanding towards sustainable fashion design curriculum.

The table above is a summary of various students' alumni answers regarding the responses of each level in the attitude of sustainability. From the statement above, instilling an attitude of sustainability is very important. The description of alumni's answers regarding the importance of sustainability in the curriculum is students feel that they need to develop and express their creative side in all aspects of fashion design, including sketching, exploring ideas and putting them into the form of product commercialization design, understanding design techniques, application computer design, fashion development and collection and others but by instilling sustainability. Another statement is that sustainability is very important in environmental aspects and human life. Along with civilization, humans continue to create new modes without realizing that we actually live side by side with nature whose conditions are getting worse day by day. For this reason, it is necessary for us to make the slightest movement in an effort to protect our environment and nature so that it can continue to develop and be sustainable and in the end we will also feel the benefits and values, how important the role of nature is for our life. The statement above is a statement that is summarized from open-ended questions.

4. PROPOSED CONCEPTUAL FRAMEWORK

This study proposes a conceptual framework that examines the student's attitudes of sustainability towards sustainable fashion design curriculum (Figure 2). This means that the level of importance, level of interest, level of personal responsibility, level of expectation, level of involvement and level of priority in design will be observed independently as stated in Proposition 1 through Proposition 7. All of these levels have been identified in sustainable fashion design curriculum, and, as previously discussed, findings have been mixed different in every level of attitudes.

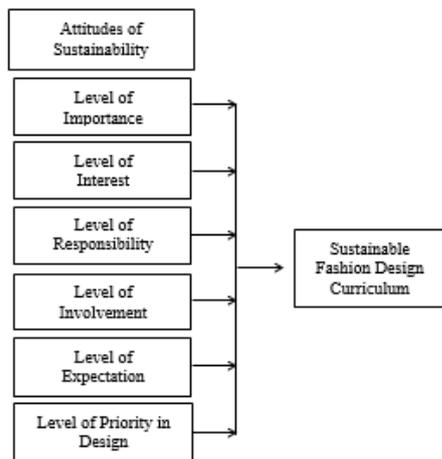


Figure 2 Proposed conceptual framework.

5. CONCLUSION

Attitude of sustainability is explicitly integrated into sustainable fashion design curriculum. This study proposed a conceptual framework that integrates attitudes of sustainability into sustainable fashion design curriculum. Sustainable design curriculum could enhance social responsibilities and sustainable development growth among designers, students and entrepreneurs.

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