THE ROLE OF EMOTIONAL VALUE AS A FACTOR IN SUSTAINABLE FASHION DESIGN EDUCATION

Wang MANQIAN¹ and Kim EUNYOUNG²

¹Student of Japan Advanced Institute of Science and Technology / Lecturer of School of Fashion of Dalian Polytechnic University

²Professor of Japan Advanced Institute of Science and Technology

ABSTRACT

In recent years, sustainable fashion education has gained more and more attention in China. However, there lacks exploration from the aspect of consumer emotion. This study explores the relationship between the life cycle of young people's clothing and emotion through a curriculum experiment in northeast China. Through the wardrobe analysis and sorting experiment, students pick out the clothing item from their wardrobe which has been worn or kept for the longest time. It can be found that the clothing with the longest retention has special emotional significance to the user, especially the narrative emotion and attachment emotion have a strong correlation with the longer life cycle of the clothing. Besides, through bivariate correlation analysis, a significant correlation was found between product practicability and longevity.

Keywords: Sustainable fashion design education, emotional durability, sustainable design, life cycle

1 INTRODUCTION

Fashion is often regarded as the antithesis of sustainability; thus, it is essential for high schools to imbue future fashion professionals with the concept of sustainable fashion [1]. Currently, sustainable design education (SDE) is mainly based on the methods of energy-saving, recycling, and redesign. Little research has been conducted on the relationship between emotions and sustainable fashion education. According to the emotional design theory of Norman [2] and the sustainable fashion design research of Fletcher [3], emotions have a significant impact on the life cycle of a product. Artistic aesthetics may affect people's impressions and help enhance the emotional value of products. In a course for design thinking and methods for second-year fashion design majors, the researcher, as the lecturer, attempted to identify the role of emotion in sustainable fashion design.

The main research question (MRQ) is to associate how emotional factors affect the lifetime of young people's clothing. The sub-research question (SRQ) is to identify what emotional factors may help to prolong the lifecycle of fashion products. We bring these two questions into the course and conduct indepth research through interaction with students so that students can discover the importance of emotion to sustainable fashion design from their own perspectives.

2 LITERATURE REVIEW

2.1 Sustainable design education in China

Higher education in China has gradually changed from elite to popular education, so it is necessary to cultivate the concepts of environmental ethics and sustainable development among students [4]. In terms of fashion design education, universities have introduced related courses on sustainable design. Xu has integrated the sustainable design method of "zero waste, upgrade and re-engineering, recycling and multiple wears" into her teaching for many years. Xu pointed out that the traditional fashion teaching mode, which is limited to artistic creation and practical technology cultivation, is not enough to promote the development of a sustainable industry, and interdisciplinary courses are needed to advance sustainable design education in the fashion industry [5]. The 5R principles of sustainable education proposed by Lv include Revalue, Reuse, Renew, Recycle, and Reduce [6]. Similarly, Xie emphasized

the cross-learning characteristics of sustainable design courses and suggested cultivating students' integration ability to deal with comprehensive multidisciplinary problems [7].

Some design colleges and universities in China have established education courses or sustainable design majors [8]. According to Tao & Wang, sustainable fashion education in China consists of three aspects: enterprise cooperation, cooperation with the government or environmental agencies, and independent research courses [9]. By summarizing the sustainable courses of colleges and universities that offer fashion design courses in China, it can be seen that current sustainable fashion education is mainly carried out from the perspective of recycling and new materials (Figure 1), and there is little sustainable teaching method employed from the viewpoint of emotional needs. Consumer emotion directly affects the process of purchase, use, and abandonment as a whole (Figure 2). Introducing emotional needs into fashion design education is useful in cultivating students' comprehensive design ability and expanding sustainable design education. Thus, the study of sustainable design from the perspective of emotion has a strong research significance in fashion design education.

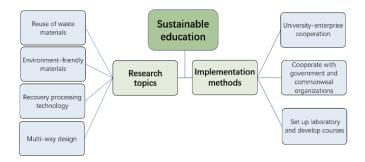


Figure 1. The sustainable education topics and methods in China

2.2 The emotional durability of fashion

Concerns about the product life cycle have been around [10]. "The sustainability crisis is a behavioural issue, and not one simply of technology, production, and volume" [11]. According to Chapman, it is possible to extend a product's lifespan by relying on emotions, especially narrative emotions from the product itself [12]. Furthermore, emotions will directly affect people's participation in environmental protection [13]. Thus, the specific impact of personal emotions on the life cycle of fashion products needs to be analysed.

3 METHODS

3.1 Adjustment of the curriculum

The course which was named "design thinking and methods," aimed to seek innovative thinking and design concepts and explore the expression of new design from multiple perspectives. The curriculum

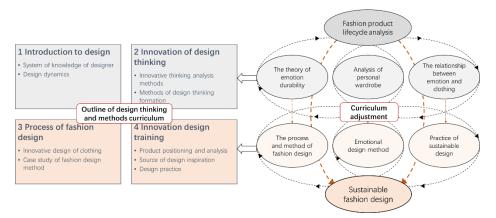


Figure 2. Schematic diagram of course adjustment

is a platform foundation course for sophomores. Before that, students mainly learned the curricula of the plane constitution, solid constitution, basic clothing craft, and other basic courses. Therefore, design thinking and methods are intermediate bridging courses from platform foundation courses to clothing design courses. The structure of the course is shown in Figure 2, it mainly includes four parts: the first two parts focus on letting students understand the design thinking method that designers need to master; The last two parts include the process of fashion design methods, as well as the innovation design training.

However, the concept and method of sustainable design are not introduced in the course. In the course of 2022, Norman's Emotional Design Theory [2] and the sustainable fashion design research of Fletcher [3] were integrated into the second part of the course, students stepped out of the traditional design method based on artistic modelling and material production and developed a more comprehensive understanding of the relationship between emotion and sustainable design. The second part of the course focuses on the relationship between the life cycle and emotion. Through the analysis of personal wardrobe to understand the influence of personal emotion on the lifecycle of clothing.

3.2 Survey of personal wardrobe analysis

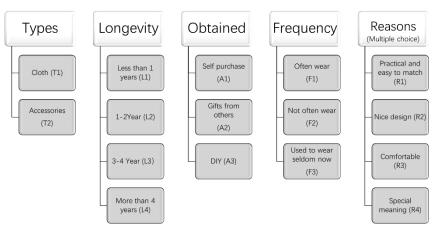


Figure 3. Content of personal wardrobe survey

This study adopts an intensive survey of the relationship between students' emotions and clothing life cycle. Each student is required to organize and analyse his/her wardrobe within one week. Figure 4 specifically shows the content of the wardrobe survey of students. Firstly, each student needs to organize his or her closet and find clothing or accessory (bag, shoes, etc.) which has been worn for the longest time. Then, questions need to be unanswered. 1) How the clothing and accessories were obtained? there are three alternatives to the question, self-purchase, given by others, and DIY (do it by myself). 2) How long have the clothes or accessories been worn? 3) Answer in depth the reasons for getting used to the item (Figure 3).

Through the survey of in-depth analysis of personal closets, students can learn more about their own closets. In addition, during the course, each student had 10 minutes to present the relationship been his/her personal information and the fashion items. By learning from each other, students learn about the relationship between young people's emotional needs for clothing and the life cycle of clothing.

4 RESULTS

4.1 Data analysis

A total of 48 students aged between 18 and 20 years participated in the survey for personal wardrobe analysis. Through sorting out the results of students' analysis, we made data statistics according to five items: Types, Longevity, Access ways, Frequency, and Reasons.

From Table 1, it can be seen that special meaning (R4) has the greatest impact on longevity by comparing the relationship between longevity and reasons. The Chi-square test was conducted, and the result shows that the p-value is .562633, which shows that there is no obvious connection between the life cycle and reasons. The practicability, comfort, and special meaning of clothing have a great influence on the life

cycle of clothing, which shows that the study of emotional design is as important as the aesthetic design and comfort of products.

Table 1 Data anal	ysis of the relationshi	in between longevit	v and reasons
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Longevity	R1	R2	R3	R4
less than 1 year	2	1	1	1
1-2 years	8	3	5	7
3 - 4 years	10	10	8	10
more than 4 years	5	10	2	11
Sum	25	24	16	28

The chi-square statistic is 7.7196. The p-value is .562633. The result is not significant at p < .05.

Table 2 Result of bivariate correlation analysis

Correlations									
		Longevity	Obtained	Frequency	Practical	Design	Comfort	Meaning	
Longevity	Pearson Correlation	1	.141	.281	317	.268	242	.130	
	Sig. (2-tailed)		.337	.053	.028	.065	.098	.379	
	N	48	48	48	48	48	48	48	
Obtained	Pearson Correlation	.141	1	.216	310	205	121	.439**	
	Sig. (2-tailed)	.337		.140	.032	.163	.414	.002	
	N	48	48	48	48	48	48	48	
Frequency	Pearson Correlation	.281	.216	1	654**	.025	353	.433**	
	Sig. (2-tailed)	.053	.140		.000	.866	.014	.002	
	N	48	48	48	48	48	48	48	
Practical	Pearson Correlation	317	310	654**	1	209	.501**	521**	
	Sig. (2-tailed)	.028	.032	.000		.155	.000	.000	
	N	48	48	48	48	48	48	48	
Design	Pearson Correlation	.268	205	.025	209	1	442**	.128	
	Sig. (2-tailed)	.065	.163	.866	.155		.002	.387	
	N	48	48	48	48	48	48	48	
Comfort	Pearson Correlation	242	121	353	.501**	442**	1	512**	
	Sig. (2-tailed)	.098	.414	.014	.000	.002		.000	
	N	48	48	48	48	48	48	48	
Meaning	Pearson Correlation	.130	.439**	.433**	521**	.128	512**	1	
	Sig. (2-tailed)	.379	.002	.002	.000	.387	.000		
	N	48	48	48	48	48	48	48	

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Correlation analysis was conducted on the longevity, obtained ways, frequency, and the four seasons in the survey, it was found that practicability and longevity were significantly correlated, the sig. is 0.028. Whether the product has special meaning to the user depends on how the product is acquired. Studies show that most of the clothes that students keep for a long time have special emotional significance. Besides, practicability also has a strong correlation with the frequency of product use.

4.2 Analysis of emotion toward longest-lives fashion products

According to Chapman's theory, the product's service life would be affected by six factors, including



Figure 4. The samples with special meaning



Figure 5. The samples with classical style

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

Narrative, Detachment, Surface, Attachment, Consciousness, and Fiction. The top three factors were narrative (24 percent), surface (23 percent), and attachment (16 percent). According to students' emotional descriptions of their clothes, it can be found that the clothes with the longest life cycle can be divided into two types (Figure 4-6). 1) The cloth or accessory has special meaning to the student; 2) The cloth or accessory is convenient and practical, and the classic style is easy to match.

The emotional factors carried by the clothing selected by students in this research can be classified into two categories: attachment and narrative. For example, the three clothes in the top row of Figure 4 are received as birthday gifts or commemorative gifts, which have special emotional significance for the student. The three clothes in the bottom row of Figure 4 are mostly related to attachment. According to the description of students, some of these clothes accompany them through the most difficult time of the college entrance examination, some of the clothes are considered to be lucky clothes.

The clothes in Figure 5 are not emotionally related to the students' description but are simply considered to be of good quality, simple and practical. The reason for the longevity of the accessories in Figure 6 has more to do with practicality. Especially for bag preferences, practicality is very important. This shows that young college students pay more attention to the function of accessories design.

5 CONCLUSION AND DISCUSSION

Through the experiment of personal wardrobe analysis, it is found that 1) Among the factors which clothing was retained for a long time, practicability, comfort, and special meaning of clothing have a great influence on the life cycle of clothing, which shows that emotion has an important impact on the sustainability of clothing; 2) Practicability and longevity were significantly correlated. Practicability has a strong correlation with the frequency of product use; 3) The analysis of the experimental results shows that clothing with a long-life cycle can be divided into two types: first, the clothing is retained with a specific emotional basis. Second, the classic style is easy to match. There are two main factors among the emotion towards the longest lifespan clothing: attachment and narrative. Through this course, students analyse the relationship between emotion and clothes' life cycle not only by individuals but by the whole class communicating. The students understand the importance of emotion in fashion design and lay a foundation for sustainable fashion design in the future. However, a limitation of this study is that the participants of the questionnaire survey were concentrated in one university, and a limited number of students participated in the experiment. In addition, the experiment required students to select only one garment or accessory for analysis, which resulted in insufficient samples. The researchers will absorb more samples for further analysis.

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