



Faculty of Applied and Creative Arts

**Creating Awareness among Young Generation in China on Modern
Hanfu Design by Using Interactive Design Applications**

Ding Mengshu

Doctor of Philosophy

2024

Creating Awareness among Young Generation in China towards on Modern
Hanfu Design by Using Interactive Design Applications

Ding Mengshu

A thesis submitted

In fulfillment of the requirements for the degree of Doctor of Philosophy
(Design Technology)

Faculty of Applied and Creative Arts
UNIVERSITI MALAYSIA SARAWAK

2024

DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

DING MENGSHU

.....

Signature

Name: Ding Mengshu

Matric No.: 19010023

Faculty of Applied and Creative Arts

Universiti Malaysia Sarawak

Date : 11/8/2023

ACKNOWLEDGEMENT

This PhD could not have been achieved without the support and encouragement of a great many people. I want to extend my deepest thanks and appreciation to everyone who has helped and encouraged me for their support to let me continue this work and make it possible to see the completion of my PhD program.

At this moment of accomplishment, I am highly indebted to my supervisor, Dr Qistina Donna Lee Abdullah. I thank her for her guidance and assistance throughout my studies. Her conscientiousness and commitment to the profession have been deeply infectious for me to make significant progress during my studies. She is also a very kind and beautiful teacher. Her every word and action is an example for me to follow. I would also like to thank Dr Salmiah Abdul Hamid for her advice and encouragement whenever I was lost. I learnt from her a rigorous approach to study and a kind way of treating people.

Last, I would like to extend my immense gratitude and sincere thanks to my father, mother, and all my closest friends for their ceaseless support and encouragement throughout my PhD. Thank you so much, and I love you.

ABSTRACT

The Han people are the largest ethnic group in China, and their traditional costume, Hanfu, has a rich history that reflects the formation and development of the Han nation. Modern Hanfu is a type of Hanfu that features innovative designs suitable for contemporary wear while still maintaining the typical characteristics of traditional Hanfu. In recent years, there has been a surge of interest in modern Hanfu design. However, this trend has also brought about some issues. Some designers misuse Hanfu elements, resulting in the misrepresentation of Hanfu culture. Some others just design similar-looking modern Hanfu. This highlights the importance of promoting a greater understanding of Hanfu culture and encouraging more original, high-quality designs. This study aims to raise awareness of modern Hanfu design through interactive design applications among the young generation in China. The study used a mixed research method, including semi-structured interviews with 16 respondents and a questionnaire survey with 315 respondents. The data from these sources revealed the Chinese perception of modern Hanfu design and identified areas for improvement. The respondents agree that Hanfu is essential but needs a better understanding of its cultural significance. Secondly, it discussed the suitability of using interactive design applications to educate and promote modern Hanfu. The relevant factors include lifestyle preferences, interactive design, educational information, perceived functional value, perceived emotional value, perceived risk, and communication. Lastly, the relationships between these factors were found to establish the theoretical model and guide the development of interactive design applications for modern Hanfu. The study developed a revised theoretical model and designed a digital interactive application integrating modern Hanfu interaction design and cultural dissemination. The study aims to

make feasible recommendations for the sustainable development of modern Hanfu design and to raise public awareness of Hanfu culture.

Keywords: Modern Hanfu design, interactive design application, young generation in China, user behaviour, Hanfu culture

Pembangunan Aplikasi Mobil untuk Reka Bentuk Interaktif Hanfu Moden

ABSTRAK

Masyarakat Han adalah kumpulan etnik terbesar di China, dan pakaian tradisional mereka, Hanfu, mempunyai sejarah yang mencerminkan pembentukan dan perkembangan bangsa Han. Hanfu Moden ialah sejenis Hanfu yang menampilkan reka bentuk inovatif yang sesuai untuk pakaian kontemporari, disamping mengekalkan ciri-ciri tipikal Hanfu tradisional. Dalam beberapa tahun kebelakangan ini, terdapat peningkatan minat dalam reka bentuk Hanfu moden. Walau bagaimanapun, trend peningkatan ini telah memberi beberapa impak negatif di mana sesetengah pereka bentuk menyalahgunakan unsur Hanfu, mengakibatkan kecelaruan pemahaman budaya Hanfu. Sesetengah pereka hanya mereka bentuk Hanfu moden yang kelihatan serupa dan ini dapat mengetengahkan pemahaman yang lebih mendalam tentang budaya Hanfu dalam menggalakkan dan mempromosikan reka bentuk yang lebih asli dan berkualiti tinggi. Kajian ini bertujuan untuk meningkatkan kesedaran reka bentuk Hanfu moden melalui penggunaan aplikasi reka bentuk interaktif dalam kalangan generasi muda di China. Kajian ini menggunakan kaedah kajian campuran, termasuk temu bual separa berstruktur dengan 16 responden dan tinjauan soal selidik dengan 315 responden. Data daripada sumber ini mendedahkan persepsi orang China terhadap reka bentuk Hanfu moden dan mengenalpasti faktor untuk penambahbaikan. Responden bersetuju bahawa Hanfu adalah penting tetapi memerlukan pemahaman yang lebih mendalam bagi pengekalannya budayanya. Selain itu, faktor yang paling berpengaruh untuk menembusi batasan reka bentuk Hanfu moden turut dibincangkan dengan terperinci. Faktor yang berkaitan termasuk pilihan gaya hidup, reka bentuk interaktif, maklumat pendidikan, nilai fungsi, nilai emosi, risiko dan komunikasi.

Akhir sekali, hubungan antara faktor-faktor ini didapati dapat mewujudkan model teori dalam pembangunan aplikasi reka bentuk interaktif untuk Hanfu moden. Kajian ini menambahbaik model teori dalam mereka bentuk aplikasi digital yang mengintegrasikan hanfu moden, reka bentuk interaksi dan penyebaran budaya. Kajian ini bertujuan untuk mencadangkan untuk pembangunan mampan reka bentuk Hanfu moden dan untuk meningkatkan kesedaran orang ramai tentang budaya Hanfu.

Kata kunci: *Reka bentuk Hanfu moden, aplikasi reka bentuk interaktif, generasi muda di China, tingkah laku pengguna, budaya Hanfu*

TABLE OF CONTENTS

	Page
DECLARATION	i
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
TABLE OF CONTENTS	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF ABBREVIATIONS	xvii
CHAPTER 1 INTRODUCTION	1
1.1 Study Background	1
1.2 Problem Statement	3
1.3 Research Questions	6
1.4 Research Objectives	7
1.5 Scope of the Research	8
1.6 Definition of Terms	9
1.7 Significance of the Research	11
1.8 Thesis Structure	12
1.9 Chapter Summary	14
CHAPTER 2 LITERATURE REVIEW	15
2.1 Overview	15
2.2 The Development of Modern Hanfu	18
2.2.1 The History of Hanfu and Modern Hanfu	18

2.2.2	The Characteristics of Hanfu	28
2.2.3	The Cultural Connotations of Modern Hanfu	40
2.2.4	Traditional Costumes of Other Countries	42
2.3	Interactive Design Application for Modern Hanfu	46
2.3.1	Interactive Design	47
2.3.2	Application for Hanfu	48
2.3.3	The Young Generation in China	49
2.4	Relevant Theories	50
2.4.1	The Howard-Sheth Model	51
2.4.2	Perceived Value	53
2.4.3	Perceived Risk	54
2.4.4	Influencing Factors of Online Purchase Intention Model	55
2.5	Theoretical Framework	56
2.6	Conceptual Framework	57
2.7	Chapter Summary	60
	CHAPTER 3 RESEARCH METHODOLOGY	62
3.1	Overview	62
3.2	Research Design	62
3.2.1	Research Objective One	63
3.2.2	Research Objective Two	64
3.2.3	Research Objective Three	64
3.3	Qualitative Approach	65
3.3.1	Semi-Structured Interview	65
3.3.2	Sampling Technique for Semi-Structured Interview	66

3.3.3	Validity and Reliability	68
3.3.4	Semi-Structured Interview Procedures	69
3.4	Quantitative Approach	71
3.4.1	Hypothesis Building	71
3.4.2	Questionnaire	73
3.4.3	Sampling Technique for Survey Questionnaire	73
3.4.4	Preliminary Questionnaire	74
3.4.5	Generation of the Formal Questionnaire	87
3.5	Chapter Summary	96
	CHAPTER 4 DATA ANALYSIS	98
4.1	Overview	98
4.2	Qualitative Data Analysis	98
4.2.1	The Transcription Process of Semi-structured Interview	99
4.2.2	Semi-structured Interview Data Coding and Analysis	100
4.3	Quantitative Data Analysis	113
4.3.1	Descriptive Statistical Analysis of the Sample	113
4.3.2	Path Testing	133
4.4	Chapter Summary	149
	CHAPTER 5 FINDINGS AND DISCUSSION	151
5.1	Overview	151
5.2	Research Objective One	151
5.2.1	The Importance of Modern Hanfu Design	151
5.2.2	The Expectations of Modern Hanfu Design	153
5.3	Research Objective Two	155

5.3.1	Lifestyle Preferences	155
5.3.2	Interactive Design	156
5.3.3	Educational Information	157
5.3.4	Modern Hanfu Communication	159
5.4	Research Objective Three	161
5.4.1	Effect of Independent Variables on Mediating Variables	161
5.4.2	Effect of Mediating Variables on Dependent Variable	163
5.5	The Proposed Model	166
5.6	Chapter Summary	167
CHAPTER 6 INTERACTIVE DESIGN APPLICATION OF MODERN		
HANFU		169
6.1	Overview	169
6.1.1	Design Plan	169
6.1.2	Module Descriptions	171
6.1.3	Design of the Application	181
6.1.4	Simulation Effects and Limitations	183
6.1.5	Future Development Plans	183
6.2	Chapter Summary	186
CHAPTER 7 CONCLUSION AND RECOMMENDATION		188
7.1	Overview	188
7.2	Conclusion	188
7.3	Research Contribution	190
7.4	Recommendations for Future Research	192
REFERENCES		194

LIST OF TABLES

	Page
Table 2.1: Characteristics of Hanfu	29
Table 2.2: The Five Colours	40
Table 3.1: Interviewee Information	66
Table 3.2: The Reliability Tests for Each Variable	75
Table 3.3: The Validity of the Questionnaires	80
Table 3.4: The First Part of the Questionnaire	89
Table 3.5: The second part of the questionnaire	91
Table 3.6: The Third Part of the Questionnaire	93
Table 4.1: NVivo Analysis	103
Table 4.2: Questionnaire Respondent Information	114
Table 4.3: The Descriptive Statistics	117
Table 4.4: The Reliability Test Results	119
Table 4.5: KMO and Bartlett's Test of Sphericity	122
Table 4.6: The Orthogonal Rotation Component Matrix of the Scale Nine	123

Table 4.7: Results of the Validation Factor Analysis	127
Table 4.8: Results of Convergent Validity Analysis	130
Table 4.9: Results of Discriminant Validity Analysis	132
Table 4.10: Table of Initial Model Fit Coefficients	136
Table 4.11: Results of Path Testing	137
Table 4.12: Table of Modified Model Fit Coefficients	141
Table 4.13: Path Coefficient	142
Table 4.14: ANOVA Results-Results of Gender Variance Analysis	146
Table 4.15: ANOVA Results-Results of Age Variance Analysis	148

LIST OF FIGURES

	Page
Figure 2.1: The Shang Dynasty Jade Sculpture	20
Figure 2.2: The Han Dynasty Quju	22
Figure 2.3: The Han Dynasty Zhiju	22
Figure 2.4: The Sui Dynasty Sculpture in the Chest-length Ru Skirt	25
Figure 2.5: The Song Dynasty Hanfu	26
Figure 2.6: The Ming Dynasty Bijia	27
Figure 2.7: The Warring States Period Sculpture	30
Figure 2.8: The Warring States period Pao	31
Figure 2.9: The Ming Dynasty Hanfu With Cross Collar and Right Overlap	32
Figure 2.10: The Tang Dynasty Banbi	33
Figure 2.11: The Ming Dynasty Pao With Round Collar	33
Figure 2.12: The Tang Dynasty Pao with Small Sleeves	34
Figure 2.13: The Ming Dynasty Wide-sleeves Robe	35
Figure 2.14: The Ming Dynasty Hanfu with the Knotting of the Rope	35

Figure 2.15: The Qing Dynasty Hanfu With Theme-based Pattern	37
Figure 2.16: The Qing Dynasty Hanfu With Marginal Pattern	37
Figure 2.17: The Republic of China era Hanfu With Embellished Pattern	38
Figure 2.18: Howard-Sheth Model	52
Figure 2.19: Influencing Factors of Online Purchase Intention Model	55
Figure 2.20: The Theoretical Framework of This Study	57
Figure 3.1: The Flow Chart of This Study	63
Figure 4.1: The Analysis Process of Semi-structured Interview	100
Figure 4.2: The Coding Process of Semi-structured Interview	101
Figure 4.3: The Analysis of Browsing Information Related to Hanfu	116
Figure 4.4: The Model Fit	126
Figure 4.5: The Unstandardized Initial Model	135
Figure 4.6: The Standardized Initial Model	135
Figure 4.7: The Modified Standardized Model	140
Figure 5.1: The Proposed Model	167
Figure 6.1: The Information Architecture	173
Figure 6.2: The Login Page Design	173

Figure 6.3: Homepage Design	173
Figure 6.4: Style Selected Page Design	174
Figure 6.5: Colour Selected Page Design	175
Figure 6.6: Pattern Selected Page Design	176
Figure 6.7: Dynasty Selected Page Design	177
Figure 6.8: Education Page Design	178
Figure 6.9: Communication Page Design	180
Figure 6.10: The Icons Design	182

LIST OF ABBREVIATIONS

AGFI	Adjusted Goodness-of-fit Index
ANOVA	Analysis of variance
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CITC	Corrected Item-Total Correlation
CMIN	Chi-Square
C.R.	Critical Ratio
CR	Composite Reliability
CYL	Communist Youth League
DF	Degree of Freedom
EKB	Engel Kolat Blackwel
IFI	Incremental Fit Index

KMO	Kaiser-Meyer-Olkin
MI	Model Fit Index
NFI	Normed Fit Index
RMSEA	Root Mean Square Error of Approximation
S.E.	Standard Error
SOR	Stimulus-Organism-Response
TAM	Technology Acceptance Model
TLI	Tucker-Lewis Index
UI	User Interface
VAM	Value-based Adoption Model

CHAPTER 1

INTRODUCTION

1.1 Study Background

From the Qin dynasty to today, clothing has been an essential part of traditional Chinese culture. It is a symbol of material and spiritual civilisation, a result of the long-term development and accumulation of the Chinese nation, and an external symbol of people's lives, reflecting the unique Chinese characteristics in terms of social status, cultural transmission, and folk customs. There are fifty-six ethnic groups in China, of which the Han Chinese are not only the leading ethnic group in China but also the most numerous in the world today. It is one of the few ancient peoples with an unbroken civilisation. Traditional Hanfu is distinctly different from that of other ethnic groups' costumes. It has developed through many dynasties and was influenced by factors such as the environment, politics, and economy, gradually forming an outfit with characteristics of the Han nationality. Traditional Hanfu represents the traditional culture of the Han nationality, reflecting their ideology, ritual system, living habits, and so on, and can objectively reflect the social situation and national style (Liu, 2011). However, as Western culture entered China after the Xinhai Revolution, people's perceptions changed, favouring Western-style clothing, and the traditional Hanfu gradually faded out of style. By now, the typical Hanfu is even disappearing progressively. If this situation is not reversed, it will inevitably lead to a deficiency in Chinese culture (Su, 2005). Therefore, in modern society, we must take the appropriate methods to make the Hanfu effectively passed on and developed in modern times.

China's economy has gradually developed in recent years, and people have become increasingly concerned about traditional culture as their material living standards have improved. The Chinese government has also introduced many policies to promote the development of cultural industries in recent years. For example, in 2017, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council of the People's Republic of China introduced a policy that Opinions on implementing the inheritance and development project of Chinese incredible traditional culture, which is the first time that China has thematically elaborated on the inheritance and development of Chinese excellent traditional culture in the form of a central document. Therefore, the heritage, innovation, and development of Chinese traditional costume culture have once again attracted the attention of people from all walks of life. Against this social backdrop, the Han nationality, as the ethnic group that occupies the most significant number of people in China, its national costume, the Hanfu, soon attracted the attention of many people. A few Hanfu enthusiasts would wear Hanfu daily, and the general public went from not understanding this phenomenon to slowly accepting, paying attention to, and even loving Hanfu culture. People found a sense of cultural belonging and a sense of national identity through Hanfu (Wang, 2013).

As the influence of Hanfu culture has grown, so has the number of studies dedicated to it, social media outlets focusing on it, and physical shops and online shops selling Hanfu products. Scholars have concentrated their efforts on aesthetics, culture, and structure, with little attention given to Hanfu's popularisation, dissemination, and design innovation (Wang, 2014). A substantial amount of information regarding Hanfu culture can be found on social media. However, its reliability varies significantly, primarily because the content is predominantly generated by random customers selling the Hanfu

costumes (Su, 2005). Most Hanfu products sold in physical and online stores are modern Hanfu, but due to commercial issues, the market is not large-scale (Weng & Liang, 2020). This research focused on the behaviour of using interactive design applications for modern Hanfu. It will allow more people to participate in the innovative design of modern Hanfu that meets the habits of modern people, or people even want to buy current Hanfu products designed by themselves in the future. This will help impart and inherit the culture of Hanfu and will be a reference for the revival of Hanfu culture and other traditional cultures.

1.2 Problem Statement

Clothing is one of the most curtail ways of reflecting the culture and carries many connotations such as institutions, aesthetics, and folklore (Ren, 2018). The Han nationality is the leading ethnic group in China, with a history of several thousand years (Wang, 2014). Hanfu, the national costume of the Han nationality, needs to be adequately understood today (Jiao, 2021). Many people lack an understanding of Hanfu; some are unaware of the concept - they think that traditional national dress is an exclusive term for ethnic minorities or foreign countries. This was because the Hanfu system, which had developed over nearly four thousand years since the Xia Dynasty, was changed by the rulers in the Qing Dynasty when they forbade people to wear traditional Hanfu. Immediately afterwards, the war of aggression at the end of the Qing Dynasty brought about social unrest. Since then, China has been heavily influenced by Western civilisation and has gradually neglected its traditional culture, especially the Chinese costume culture. People were changing their dressing habits based on the aesthetic preferences of the West, resulting in a gap in the cultural heritage of Chinese costumes, which has only been brought back to public attention in recent years (Sun & Xiong, 2022). As an essential part of the traditional

Chinese cultural system, modern Hanfu embodies the conventional culture and image of the Han nationality. The development of modern Hanfu design in contemporary society needs help in Hanfu knowledge popularity, correct information dissemination, and innovative design. If this phenomenon continues for too long, it will inevitably become an irreparable loss in Chinese culture, even the world culture.

From the perspective of cultural education, the current spread of Hanfu culture has always been limited to a small group of Hanfu enthusiasts' social circles. This has made it challenging to attract the public who do not have a great interest in Hanfu (Jiao, 2021). Over the last ten years, the Hanfu culture has primarily spread through enthusiasts communicating with each other and organising events. They attract potential enthusiasts and convert them into Hanfu enthusiasts through online communication, ultimately joining the social circle of Hanfu enthusiasts. This situation has led to the development of Hanfu in a small group, and the general public lacks the means to understand the basic information of Hanfu (Lin & Mo, 2020). The Hanfu culture circle needs more authoritative and compelling publicity to avoid misconceptions and prejudices among people. Some may confuse Hanfu culture with ancient costumes or cosplay. Many do not realise the value of Hanfu for their spiritual and cultural life and even resist it (Guo, 2019). Books and museums are two traditional channels for cultural education and dissemination, yet books and literature are frequently highly specialised and difficult to understand by the general audience. The educational function of museums has limitations in the widespread dissemination of Hanfu. The unique nature of the costume exhibits, in particular, places great demands on the exhibition halls, not just in humidity and light but also in the limited number of costumes on display. Therefore, traditional museums are not a suitable channel for the general public to learn about Hanfu culture (Jiao, 2021).