



**THE INFLUENCE OF PRODUCT DESIGN WITH
TRADITIONAL CULTURAL ATTRIBUTES ON THE BEHAVIOR
OF YOUNG CHINESE CONSUMERS**

MR. JIDING GENG

**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE MASTER DEGREE OF
ARTS IN HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT**

INTERNATIONAL COLLEGE,

RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHAP

ACADEMIC YEAR 2021

COPYRIGHT OF RAJAMANGALA UNIVERSITY OF TECHNOLOGY

KRUNGTHER

Independent Study

THE INFLUENCE OF PRODUCT DESIGN WITH
TRADITIONAL CULTURAL ATTRIBUTES ON THE
BEHAVIOR OF YOUNG CHINESE CONSUMERS

Author

Jiding Geng

Major

Master of Arts in Human Resource Development and
Management (M.A.)

Advisor

Dr. Arti Pandey

**Faculty of Human Resource Development and Management International
College, Rajamangala University of Technology Krungthep approved this
independent study as partial fulfillment of the requirement for the Master Degree
of Arts in Human Resource Development and Management**

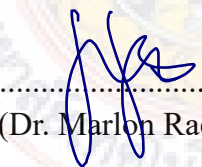


..... Dean of International College
(Dr. Jirangrug Samarkjarn)

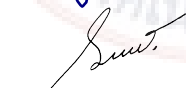
Examination Committee



..... Committee Chairperson
(Asst. Prof. Dr. Prajak Chertchom)



..... Committee
(Dr. Marlon Rael Astillero)



..... Committee and Advisor
(Dr. Arti Pandey)

Independent Study	THE INFLUENCE OF PRODUCT DESIGN WITH TRADITIONAL CULTURAL ATTRIBUTES ON THE BEHAVIOR OF YOUNG CHINESE CONSUMERS
Author	JIDING GENG
Major	Master of Arts in Human Resource Development and Management (M.A.)
Major Advisor	Dr. Arti Pandey
Academic year	2021

ABSTRACT

Traditional cultural attributes are regarded as part of sustainable social and economic development. Cultural innovation products with traditional cultural elements have attracted more and more attention and have become an important tool for disseminating product aesthetics and potential traditional culture. Recently, the key role of the younger generation in inheriting the contemporary values of traditional cultural attributes has aroused widespread discussion. However, there are few in-depth studies to distinguish and verify the connection between cultural products and consumer behavior. This connection is mediated by perceived cultural sustainability and resilience. This study attempts to investigate the impact of cultural innovation product design with traditional cultural attributes on the perception of cultural development and product intentions of 433 young Chinese consumers. The results show that product attitude, perceived sustainability, and perceived novelty, are significantly related to Chinese consumers' purchase intentions for the product design with traditional cultural attributes.

Keywords: cultural products, cultural innovation design, traditional cultural attributes, young Chinese consumers.

ACKNOWLEDGMENTS

On the occasion of the completion of this commemorative thesis, I would like to thank my beloved supervisor Dr. Arti Pandey. During the design process, Dr. Arti Pandey worked hard and provided patient and detailed answers to every question of mine. Despite his busy teaching work, he still provided professional guidance for my study. She often spared time to do collective answers for all questions arising from this thesis. For example, she suggested I should pay more attention to the explanations of the problem, and she also offered intensive suggestions regarding how to better prepare for the thesis. Sincere thanks should also be given to the teacher's academic guidance, her kind inspiration in the process, which allowed me to continuously improve and revise the research with a positive and enthusiastic attitude. The successful completion of this thesis could not have been possible without their help and support.

Mr. Jiding Geng



TABLE OF CONTENTS

	Page
APPROVAL PAGE.....	A
ABSTRACT.....	B
ACKNOWLEDGMENTS.....	C
LIST OF TABLES.....	D
LIST OF FIGURES.....	E
CHAPTER1 INTRODUCTION.....	1
1.1 Overview.....	1
1.2 The Statement of the Problem.....	2
1.2.1 The impact of product design on consumer behavior.....	2
1.2.2 The influence of traditional cultural attributes of product design on Chinese consumer behavior.....	5
1.3 Background of product design with traditional cultural attributes.....	8
1.4 Research Questions and Significance of Object.....	17
1.4.1 Research Questions.....	16
1.4.2 Significance of the Research.....	17
1.5 Scope of Research.....	17
1.6 Research Method.....	18
1.7 Definition of Variables.....	18
1.7.1 Product Attitude.....	18
1.7.2 Product purchase intention.....	19
1.7.3 Perceived novelty of the product.....	19
1.7.4 Product sustainability.....	22
1.7.5 Perceived Resilience.....	22
CHAPTER 2 LITERATURE REVIEW.....	24
2.1 Definition.....	24
2.1.1 Product design.....	24
2.1.2 Traditional cultural attributes.....	25

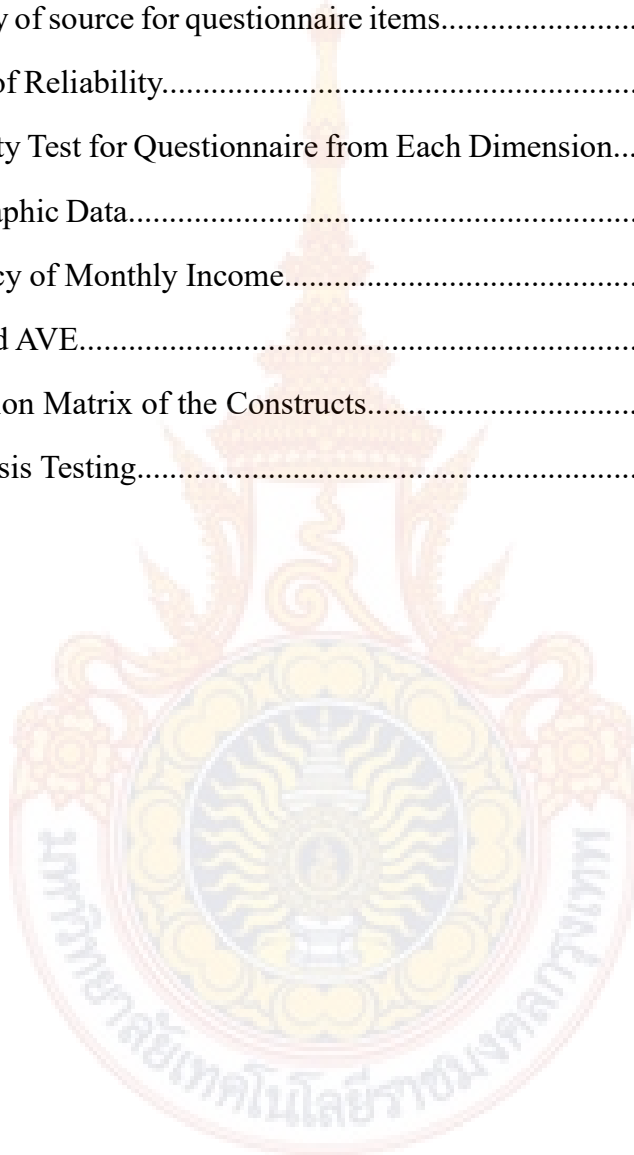
2.2 Previous research on the product design with traditional cultural.....	25
2.3 Previous research on the influence of product design with traditional cultural attribute on purchase intention.....	26
2.4 Research Hypothesis Development.....	30
2.4.1 Relationship between the perceived novelty of culturally innovative products and perceived sustainability, perceived Resilience, product attitudes, purchase intentions.....	30
2.4.2 Relationship between perceived sustainability and product attitudes...	32
2.4.3 Relationship between perceived resilience and perceived sustainability	32
2.4.4 Relationship between the perceived resilience and product attitude.....	33
2.4.5 Relationship between the product attitude and consumers' purchase intention.....	33
CHAPTER 3 RESEARCH METHODOLOGY.....	35
3.1 Conceptual Framework.....	35
3.2 Research Design.....	35
3.3 Population and sample selection.....	36
3.3.1 Population in Research.....	36
3.3.2 Sample Size in Research.....	36
3.4 Design of Questionnaire and scale.....	37
3.5 Collection of Data.....	39
3.6 Research Methodology.....	40
3.6.1 Descriptive Statistics Analysis.....	40
3.6.2 Reliability Test.....	41
3.6.3 Correlation test.....	41
3.6.4 Path analysis.....	42
CHAPTER 4 DATA ANALYSIS	43
4.1 Reliability test of Research instrument.....	43
4.2 Mean and Standard Deviation.....	45
4.3 Hypothesis test.....	47
CHAPTER 5 CONCLUSION AND DISCUSSION.....	50

5.1 Conclusions.....	50
5.2 Results and Discussion.....	51
5.3 Limitations.....	54
5.4 Research contributions.....	54
5.5 Practical contributions.....	55
5.6 Future research.....	55
BIBLIOGRAPHY.....	56
APPENDICES.....	60
BIOGRAPHY.....	63



LIST OF TABLES

Table	Page
Table 2.1 Summary of Previous Study.....	27
Table 3.1 Number of questionnaires for 5 factors that affect purchase intention.....	38
Table 3.2 Five-point Likert Scal.....	38
Table 3.3 Summary of source for questionnaire items.....	39
Table 3.4 Criteria of Reliability.....	41
Table 4.1 Reliability Test for Questionnaire from Each Dimension.....	44
Table 4.2 Demographic Data.....	44
Table 4.3 Frequency of Monthly Income.....	45
Table 4.4 SMC and AVE.....	45
Table 4.5 Correlation Matrix of the Constructs.....	47
Table 4.6 Hypothesis Testing.....	48



List of Figures

Figure	Page
Figure 3.1 The Conceptual Framework of this research.....	35
Figure 3.2. The sample size of this research.....	37
Figure 4.1 Path Coefficients Resulting from Structural Equation Modeling (SEM).49	



CHAPTER 1

INTRODUCTION

1.1 Overview

For decades, in the process of modernization centered on the West, many countries have underestimated or ignored the value of their own traditional culture (Inglehart & Baker, 2000). China, as a country with a long history, also faces the dilemma of whether to transform or continue cultural traditions. Many traditional handicrafts and customs continue to disappear from daily life and remain as heritage items or norms. Some empirical studies have shown that the younger generation of China has a low level of personal awareness of traditional culture in the context of modern society (Qin et al., 2019). With the recent changes in consumer needs and expectations, products with elements derived from traditional cultural attributes have attracted more and more attention, and as an important tool to convey product aesthetics and potential traditional culture. They mainly present geographic, lifestyle and ethical characteristics (Kim & Chung, 2011). However, recent surveys have shown that the significance of products with innovative cultural characteristics and their impact on user cultural satisfaction is derived from the inherent invisible and behavioral aspects of traditional cultural attributes. With the recent changes in consumer demand and expectation, products with traditional cultural attributes are paid more and more attention, and become an important tool to convey product aesthetics and potential traditional culture, mainly through the presentation of local geographical, lifestyle and ethic characteristics of the local cultural group (Inglehart & Baker, 2000). However, recent studies have shown that the meaning of products with relatively innovative cultural characteristics and their profound impact on user cultural satisfaction stems from the inherent intangible and behavioral aspects of traditional cultural attributes (Lee et al., 2017). Although the internal connection between cultural sustainability and the commercialization of

traditional cultural attributes has been discussed, there is a lack of in-depth research to further distinguish and verify cultural product attitudes, cultural perceptions, and subsequent consumer behaviors from the perspective of the younger generation. The internal connection between the two has a profound impact on sustainable cultural development (Ely et al., 2020).

1.2 The Statement of the Problem

1.2.1 The impact of product design on consumer behavior

Consumers' consumption behavior is composed of two conditions: purchase motivation and purchase behavior (Haase et al., 2020). In general, purchase motivation is the first and purchase behavior is the second. The entire purchase process is carried out in accordance with the wishes of consumers. Consumers' satisfaction, demand, and preference for the product itself are the direct reasons that determine consumers' consumption. Product design is the main factor that captures consumers' attention and allows consumers to consider consumption. Therefore, product design is important to consumers (Gasarch, 2015).

Purchasing motivation refers to the psychological activities that directly drive consumers' purchasing behavior (Wedowati et al., 2018). It reflects the inner, emotional and spiritual needs of consumers. Essentially, consumers are the promoters of purchasing behaviors that meet their own needs. The product stimulates the psychological needs of consumers and prompts consumers to have a desire to buy. Before consumers are fully motivated to consume, this desire is the so-called consumption motivation. The prerequisite for purchasing a product is an understanding of the product. The subjective feelings of products are based on vision, so product design is the main means to promote consumer consumption (Gürşen et al., 2020). Consumer behavior refers to the process activities in which people choose, purchase, use, evaluate and enjoy services in order to meet their own needs and desires. Consumers are the main body that promotes consumer behavior. People consume and buy different products according to their different needs (Emilien et al., 2017).

Consumers are from different industries, statuses, families, ages, etc., so the purchasing power is also very different. This shows that consumers' purchasing motivation is based on their own needs. When consumers have urgent needs and desires for a certain product, they will have a desire to buy, which will lead to purchasing behavior. Product design will have an impact on consumers' purchasing motivation, and the premise of consumer behavior is the demand for products (Amberg & Fogarassy, 2019). For products, low-level product demand is the basic performance of the product, which mainly refers to the basic function and psychological function of the product. Only when the product meets the needs of consumers can it form a related purchase motivation.

The function of the product will affect the purchase motivation of consumers. The function of the product must be produced on the premise of satisfying the needs of consumers (Emilien et al., 2017). However, in the context of large-scale industry, people's demand for products is mainly to solve the needs in life, so in general, it is the so-called 'form follows function'. In the early stage of society, product designers should study the basic functions and services of products to solve small problems that consumers encounter in work, life, and study. It mainly includes the use function of the product, the characteristics of the product, the reliability of the product, the safety of the product, the practicability of the product, etc. It is mainly to design the structure of the product, design the material, and design the method of use ingeniously, so as to meet the basic needs of consumers (Cor & Zwolinski, 2015). However, with the progress of society and the improvement of industrialization, the production technology of products has also improved. Most of the products sold on the market can meet the basic needs of consumers. Therefore, in order to promote the increase of product sales, product designers pay more attention to the changes in consumers' hearts and transform the design of basic functions into product design, so as to better attract consumers' attention and encourage consumers to consume (Cheng et al., 2019).

Consumer behavior will promote product design. In order to save energy and reduce environmental pollution, product designers lead design concepts such as ecological design, green design, and recycling design (Cheng et al., 2019). These design

concepts and design styles are aimed at the original design concepts and consumer consumption. Based on this method, the design of the product not only stays in the internal use and appearance, but also tends to people's healthy design. Such a design is more humane and more energy-efficient. As the times change, people's thinking is constantly changing. While satisfying their own needs and practicability, consumers are constantly pursuing the personalization and aesthetics of products (Haryanto et al., 2015). Consumer demand prompts product designers to design better products, thereby promoting consumer consumption and increasing product sales. The design concept of the product is generated based on the designer's understanding and analysis of the internal needs of consumers. When designing products, designers not only require designers to invest in product design and design concepts, but also in consumers. From this perspective, the design is based on the consumer's shopping motivation. It is necessary to combine the process materials, manufacturing technology, ergonomics and many other disciplines used in the design, and closely combine these disciplines to design products with consumers as the center in order to design excellent products that satisfy consumers. Therefore, satisfaction and consumer desire are of great importance (Bang Nguyen Dilip S. Mutum, 2015).

To design products that meet consumer needs, consumers' consumption behavior generally starts with many external factors such as the appearance of the product. Therefore, product design is an important factor in determining consumer behavior. The products produced by current product manufacturers are almost the same. This requires manufacturers to use design as a tool to create individuality when producing products, so that consumers can be attracted by the uniqueness of the product through the design of the product, and obtain a certain sense of psychological satisfaction. In this case, consumers' purchasing behavior is encouraged. When designing products, we must pay attention to the physical and psychological needs of consumers (Wang et al., 2000). Only by designing a product that satisfies consumers can they satisfy their desire for purchasing and stimulating their purchase behavior. Only good design can make products actively meet the needs of consumers. The various needs and promotion of purchasing behavior make the products have better sales and development. In summary,

this thesis makes the design of various steps and links in product design more humane and rational through the research on the influence of product design on consumer behavior (He et al., 2018). When designing a product, we must pay attention to the subjective initiative of consumers, and study consumer behavior from the perspective of product design, so as to effectively increase the output of the product.

1.2.2 The influence of traditional cultural attributes of product design on Chinese consumer behavior

The influence of traditional culture on consumers' consumption concept and behavior is particularly prominent among Chinese consumers. For example, "there are no gifts this year, only melatonin" has become a common mantra. In terms of advertising effect, it not only establishes the product brand, but also greatly stimulates the market sales. Melatonin is mainly defined as "health gift" in health food. The combination of health care products and gifts, on the one hand, fills the blank of health care products market. On the other hand, it opens up a broader sales channel for products. Melatonin advertised that "People do not accept gifts this holiday, they only accept melatonin as a gift", so the sales of melatonin during holidays are booming. Brain platinum is a kind of health product. Most of the traditional health care products are selling points with significant curative effect, and can't wait to cure all kinds of diseases. However, melatonin quickly entered the gift market, and became a popular gift among Chinese people during holiday. Coupled with the popularity of health awareness, melatonin is unique in the market of health care products. This innovation avoids the fate of losing vitality after the mystery of product efficacy disappears. Although the concept of "gift" is not unique to melatonin, there is no doubt that the concept of "gift" tied with melatonin is the most successful operation. It's very worthwhile to spend so much energy to open up the gift market of melatonin. Because health care products have no other patterns, and what they sell is their function. After the concept of function enters the mind of consumers, we must find another way, that is, through the gift market. The added value of products is spread as an emotional carrier. In terms of consumer group positioning, "meplatin" takes the middle-aged and elderly

people in large and medium-sized cities as the target consumers and takes the urbanization route. This is determined by its consumption level of 68 yuan per box, with an average of 7 yuan per day. If it is in small cities and some areas where people are not so rich, it is difficult for them to accept such a price. In addition, middle-aged and elderly consumers in large and medium-sized cities generally have higher health awareness and income level, hence they have such demand and consumption ability.

Positioning of high-end health products: The high-end sense of the product can be seen from the direct naming of "melatonin". The product that promotes sleep and intestinal effects to the brain level is the melatonin body of the brain. The high gold content reflects the health benefits of its products. So from its name to its curative effect, it is very high-end and high-quality. Gift positioning: The classic slogan "No gifts for the New Year, only melatonin" has been deeply rooted in people's hearts. Many people think of melatonin when they think of gifts. China is a country of etiquette. "Mutual benefit" and "communication without being rude" also reflect the natural complex of Chinese people.

Brain Platinum elevates health products to the height of gifts. Not only has it expanded the market, it has also humiliated all health products. The positioning strategy of melatonin gifts not only won the first place in the market, but also created the health care products and gifts market.

Culture is the sum of beliefs, values, and habits that a certain society has acquired through learning and used to guide customer behavior. The influence of culture on customer psychology is profound and huge, and the influence of culture on customer psychology is a deep-seated influence. A certain culture will affect the customer's consumption source-demand; culture will affect the direction and standards of customer consumption; culture will affect customers' purchasing methods and behaviors. Chinese culture has a long history of 5,000 years, and its uniqueness and tradition will definitely have a profound impact on Chinese consumption patterns and consumption habits (Zhao et al., 2014).

Humanism is the basic style of Chinese culture, which always adheres to people-oriented. "Human" is regarded as the fundamental consideration of all problems. The

greatest benefit is for the benefit of the "people" themselves. This requires companies to determine whether the positioning of a new product is in the interests of most people when developing new products, and to meet consumers' needs for more consumption. Chinese traditional culture emphasizes the golden mean, and its core meaning is that when a certain goal is reached, there are certain standards, and only those who reach this standard can achieve this goal (Choi & Yu, 2011). The golden mean is to observe certain standards and be impartial. When a company's new product is launched on the market, it must conduct good market segmentation and establish accurate product positioning and market goals. Only when the product is placed in the right place will there be unexpected promising results (Dinda et al., 2015).

The characteristic of Chinese culture is to emphasize interpersonal relationships, that is, to emphasize ethical relationships. The core of Chinese traditional culture is Confucian culture with ethics as the core. The ethical concepts of Confucian culture are developed from the most basic blood relationship. Chinese people attach great importance to the interdependence between family members (Liu & Xiang, 2020). On this basis, the family relationship, kinship, and interpersonal relationship in traditional Chinese society are all derived from the core relationship between husband and wife, father and son. When a company's new product is launched on the market, its brand image may highlight its own characteristics of respecting interpersonal relationships and respecting consumption according to the situation (Shome, 2012).

Chinese people pay special attention to their own face, especially through their own impression modification, role-playing and behavior to leave a good impression in the minds of others, thus gaining a good reputation. Chinese people generally compare this to others and obtain better reputation (Liu & Xiang, 2020). Chinese people pay special attention to interpersonal relationship and face, and the emotional relationship between people. In interpersonal communication, human feelings are often regarded as the primary factor, and maintaining human feelings is the highest principle of behavior. Chinese people follow various behavioral norms and traditional etiquette habits formed in history. Face or reputation is more important than anything else. The product should have novel packaging suitable for the product itself. It is significant to highlight the

maximum value of the product to meet the various psychological status of consumers when purchasing (Choi & Yu, 2011).

One of the characteristics of Chinese culture is that people pay more attention to friendship rather than money and material benefits. Especially when there is a conflict, what is pursued is relic and righteousness. Therefore, what Chinese people hate most is "seeing profit and forgetting justice" and "ingratitude" (Lee et al., 2017). The characteristics of Chinese culture that value righteousness and despise profit make people easily sentimental in interpersonal communication and work, emphasize "loyalty", keen on giving gifts to each other, and emphasize "reciprocity." When the product establishes the product image and brand image, it can highlight the emotional appeal of the product, so that consumers not only get the satisfaction of the purchase behavior, but also the psychological satisfaction of the purchase (Ely et al., 2020)

1.3 Background of Product Design with Traditional Cultural Attributes

The rich historical associations contained in each country's own traditional culture can nourish a nation's future cultural identity, national pride and satisfaction. Furthermore, according to the UNESCO Declaration (1997) on the Responsibility of the Present Generations toward Future Generation, the contemporary young people should take responsibility for protecting and inheriting our diverse traditional culture for future generations, because they are curious about the world and full of vitality. In this way, protecting traditional culture should become a major task, even an obligation, for young people (Zhao et al., 2014). For example, Zhan et al. (2018) discuss that the traditional handicraft manufacturing industry in the Yangtze River Delta region of China is facing huge challenges and opportunities, and discuss how to integrate this traditional cultural capital into modern product design to promote a modern lifestyle with local characteristics. Another interesting question is whether young people's attitudes towards cultural product design significantly affect their perception of cultural communication and resilience, which can prove the potential role of cultural products

in the sustainable development of traditional culture. Chai (2014) suggest that the cultural design which is more abstract and innovative can better meet the perceptual needs of young people, but whether it will significantly affect their purchasing behavior in this way is still inconclusive. The research on young people's purchasing behavior is helpful to the sustainable commercialization of traditional cultural attributes, and it also provides conditions for the inheritance and development of traditional culture (J. Chai & Ngai, 2015).

Product design has never left the supply of traditional cultural elements. Just like fish cannot do without water, design cannot do without cultural root. My country's traditional culture is the result of the evolution and precipitation of civilization from generation to generation. It reflects the regional style and national customs. It is the overall expression of the thoughts, cultures and ideologies created by the ancestors of various backgrounds, or it is inherited and developed by the Chinese nation from generation to generation (Lee et al., 2017). A culture with distinctive national and regional characteristics has broad and profound connotations and excellent inheritance spirit. Chinese culture is consistent and uninterrupted. Because of this, Chinese traditional culture has strong vitality. It is the source of cultural creativity in product design, which also brings cultural vitality to our product design (Dinda et al., 2015).

Product design is the core of industrial design. Products are the product of human social production and practical activities, and the materialized embodiment of people's desire, wisdom and spirit in real life. Product design uses scientific design concepts and reasonable design techniques to solve the relationship between human and machine environment. The purpose is to solve the problems in people's lives and meet people's physical and mental needs. Creative practice activities are based on design principles such as technology and aesthetics. At present, China's industrial design is in a period of rapid development, as well as a period of rapid innovation. With the rapid development of China's economy, industrial design has become an important part of strategic emerging industries and leading industries. Product design agencies are emerging endlessly, and development policies related to industrial design are also listed one by one. After landing, the government gave strong support to provide a good social

environment for the development of industrial design. The transition from "Made in China" to "Created in China" is an important part of the development strategy in China. At the same time, industrial design is also required to move towards innovation as soon as possible. As a Chinese nation with a long cultural history, the national traditional culture is broad and profound, which provides innovation for the development direction of Chinese product design. Product designs containing Chinese elements have become increasingly prominent internationally, and have received more and more recognition. However, it is not enough to just make use of national traditional culture and express national characteristics.

The relationship between traditional Chinese culture and product design is of great importance. Looking at the history of product design in various countries in the world, the reason why product design in various countries can form a systematic system and distinctive features is because the development of product design culture is synchronized. Culture is the foundation of design, and design is the carrier of culture. In the product design competition, the production process of the product, the practical performance of the product, the structure of the product and the application of materials are becoming more and more mature. These have led to the homogeneity of product design. In this case, only distinctive design can survive and occupy the market, while traditional Chinese culture points out the direction for the embodiment of product design characteristics. Culture is the soul of modern design and affects product design. Product designers use a wealth of traditional cultural elements in product design, and at the same time integrate them into the product design style. In the complex product market, excellent design often contains profound cultural heritage, which can reflect spiritual thinking. While completing the design and providing new lifestyles, it also inherits traditional culture and produces new cultural concepts and creations, new culture and form. In today's diversified development of design, it is difficult and important for the humanistic spirit to be reflected in product design. Product design is a creative activity. It is incorporated into cultural creation activities. In this process, culture and design influence and promote each other. They make progress and grow together. In the stage of rapid development of product design in China, some bad and

negative information presented by product design has become more and more obvious, especially in the application of culture. In the relatively simple and superficial stage, formalism is too obvious. Of course, this is an inevitable stage brought about by the development of Chinese society and the times. It's time to face yourself and re-examine the meaning of design. In addition to cultural connotations, finding the right entry point to perfectly blend the two requires calm, long-term thinking and practice, is important as well. Therefore, the use of Chinese traditional cultural elements and the understanding of traditional cultural expressions are added to the product design, so that the product design is not only cultural, but also rich in the characteristics of the times. Chinese traditional culture is extensive and profound. In product design, we add Chinese traditional culture to build a suitable product design, reflecting the design concept of natural harmony and unity. The inheritance and development of Chinese traditional culture and product design are closely integrated. At the same time, the integration of traditional concepts and modern styles creates product designs with the charm of traditional Chinese culture, realizes the inheritance and development of traditional Chinese culture, and forms distinctive designs. The purpose of design culture is to design features and styles.

Traditional Chinese culture is a culture that reflects the characteristics and style of a nation formed in the evolution of civilization. It is the overall expression of various thoughts, cultures, and ideologies in the history of a nation. In the world, every nation has its own characterized traditional culture. Chinese traditional culture is the creativity formed in the history of Chinese civilization, the basic idea for the continuous development and progress of the national spirit, and the general term for the moral inheritance, cultural ideas, and spiritual concepts in the history of the nation. Traditional Chinese culture includes various material and non-material cultures such as politics, economy, ideology, and art.

Turning to the connotation of Chinese traditional culture, the basic idea of Chinese traditional culture is to "be vigorous, use neutrality to challenge morality, and unite with nature and man." "Book of Changes" emphasizes that "continuous self-improvement" and "glorious virtue" are the manifestations of the spirit of the Chinese

nation. It is a portrayal of the Chinese nation's continuous progress and vigor, requiring people to strive for progress in the law of active and enterprising. Advocating harmony and unity is the highest value principle of Chinese traditional culture. And "the Golden Mean" reflects the traditional way of thinking and principles. The concept of "Harmony between Man and Nature" advocated by Confucianism is the basic concept of Chinese classical philosophy. It is a complete manifestation of the life state, way of thinking, and mental state of the Chinese people. It advocates that man and nature are initially integrated together, as a unified life system, Man is the product of nature, and at the same time, it is also transforming nature, emphasizing the perfect fit between man and nature, and paying attention to the inner spiritual realm of man himself. Traditional Chinese culture has extremely rich connotations. Analyzed by dialectical materialism, traditional Chinese culture has both positive and negative sides. The essence of Chinese traditional culture plays an active role in modern society. It is necessary to use a critical vision and inherited mentality to conduct a correct review, and then combine it with product design to complete innovation and creation.

Looking at the extension of Chinese traditional culture, the scope of Chinese traditional culture is very wide, including thought, writing, language, technology, economy, law, religion, folklore, music, opera, calligraphy, martial arts, festivals, traditional Chinese painting, etc. Among them, calligraphy is unique in China. Our calligraphy has gone through the development process of hieroglyphs, oracle bone inscriptions, bronze inscriptions, seal script, official script, regular script, running script, cursive script and hard pen calligraphy. Calligraphy, like painting, is a subjective and expressive art form. Calligraphy can express the author's life experience, emotions, knowledge and personality. As an important part of traditional culture, Chinese folk music embodies the greatness of the Chinese nation, showing the profound emotions, strong strength and will of the Chinese nation, as well as rich fantasy and great pursuits. For example, the famous erhu performance "horse racing" and folk music "Jadamerin" both interpret different emotions with their unique expressions. In addition to these specific manifestations, there are some intangible thoughts and cultures that permeate our daily behaviors in the past, present and future.

Traditional Chinese culture affects interpersonal communication. Traditional Chinese culture has a guiding role in the nature, the relationship between man and nature, and the practice of human social life. With the rapid development of society and economy, with extremely rich material life, with many challenges and pressures, and with ecological imbalance affecting survival, people are showing impetuous, unpredictable stability and deception. Yin (2019) facing the scarcity of the spiritual world, his psychological problems have become increasingly exposed and serious. In this case, traditional Chinese culture is particularly important as a spiritual and psychological therapy. Applying traditional Chinese culture to product design creates aesthetically valuable shapes and rich cultural connotations. The application of Chinese traditional culture to product design must not only reflect the essence of traditional culture, but also promote excellent traditional culture, improve the competitiveness of product design, facilitate the strong vitality of traditional culture, and realize common Chinese traditional culture and product design, achievement and growth.

China has its own unique and ancient traditional culture. Traditional culture contains the quintessence of the Chinese nation's spirit, with vigorous vitality and eternal value, rigorous product design and development. In this difficult period, the discovery of traditional Chinese culture has played a vital role in product design. Design is an important part of culture, and it participates in the construction of culture. In product design, using Chinese traditional culture to directly or indirectly display the cultural value of the product, through the design of product shape, gives it new cultural connotation, arouses people's emotional resonance, And meet people's aesthetic needs. In many design cases that successfully use traditional culture, such as Nordic design, Japanese design, etc., we need to accurately find the part that can be used in the national traditional culture and choose the best. Hua (2016) completed the product design with Chinese traditional cultural characteristics. This requires us to have in-depth research on traditional culture, be able to absorb nutrient essence, remove dross, and combine with modern products. Design concepts and industrial technology have perfected modern product design, giving product design a profound cultural heritage.

Additionally, it is innovative to apply graphics and symbols in traditional culture

in product design. Traditional Chinese culture has many forms of expression, of which an important part is traditional graphics and symbols. The integration of national symbols into product design can be achieved through three aspects: surface application of graphic symbols, innovative application and high-level integration. Chinese traditional graphics and symbols have visible form beauty, usable functional beauty, and perceivable and experienced social beauty. They have profound cultural connotations and carry the ideas and concepts of traditional Chinese culture. Among them, the surface application level of graphic symbols is relatively low, and the expression of thought and spirit is still lacking. High-level integration must be carried out on three levels: the external form of material, the internal embodiment of spirit, and the deep embodiment of culture. Integration involves all aspects of material, spiritual, cultural and customs. It is the perfect application of traditional culture in product design, and the high integration and unity of culture and design.

The visible forms, graphics and symbols in traditional Chinese culture show the aesthetic appeal, national cultural characteristics and value orientations of different historical periods and different ethnic regions. Product design can extract parts with obvious characteristics from it. In modern product design, the use of shapes for reference, through the transformation of generation, abstraction, symbolism, metaphor, decoration, etc., is important and more unique national symbols, examples, lines, and shapes are applied to product design. Moreover, traditional ideas and connotations are applied to product design. The Chinese national culture gives the product its unique charm. The application of national symbols in product design not only inherits the excellent culture of the Chinese nation, but also reflects the aesthetic personality of the Chinese nation. When applying graphic symbols from traditional culture to product design, it is necessary to combine modern design concepts and innovative design of graphic symbols, and then integrate them into modern product design to make it glow with new life and brilliance. It is also significant to inherit the concepts expressed in traditional culture through product design, combine technology and structural materials to complete the design process, and play an active role.

The idea of traditional cultural connotation is in product design. The unity of

man and nature is the basic spirit of Chinese traditional culture. Through the understanding of and attitude towards nature, the Chinese people's unique aesthetic and creative outlook have been formed. It is the source of the most profound essence of the Chinese nation's culture. The traditional cultural connotation of this fusion design has produced a unique national design concept and at the same time it has an impact on product design. The unity of man and man includes the connotation of the unity of man and god, and the unity of man and nature. Its influence focuses on the harmonious coexistence of man and nature.

When designing natural products, we usually focus on the harmony and unity of people and products. It's not an isolated individual behavior. It is important to choose a time, place, and reason. The craftsmanship and reasonable design produce excellent designs that include traditional Chinese culture. The design concept of neutrality and beauty affects the aesthetic feelings and aesthetic characteristics of traditional Chinese culture between people and products, and plays a special role in shaping the cultural character of Chinese product design, such as the special role of Hemei in product design. The weight and scale of product design should be moderate, and the use of different materials should be moderate and clever. The specific design principles are formal aesthetics such as scale and scale, contrast and unity, relationship and balance, etc., which should be maintained. Visual balance and coordination, the application of traditional cultural concepts of harmony between man and nature, and beauty as beauty in product design are the points where product design related theories and traditional Chinese national culture meet, and are important development directions. China's product design is a non-biological plant. As a product design of non-biological plants, China has a very rich non-material plant projects, and all designs have important cultural genes. These can absorb products. They are the source of the creation of cultural and creative products and point out the direction for the development of Chinese cultural skills. Cultural and creative products are product designs that adapt to modern society. They display traditional Chinese culture in the form of innovative designs. They must show the spiritual connotation of non-soft apples. Therefore, the added value of cultural and creative products endows them with rich connotations. Cultural and

creative products. The connotation and symbolic meaning are inherited from Hehongfei's (2015) plant culture. In the development process of cultural and creative products, non-material crops serve as inspiration providers and provide continuous nutrition for the creative products.

China's product design practice must link advanced design concepts with traditional Chinese culture. They cannot directly connect and apply, and refuse their surface treatment. Designers must have an understanding of traditional culture in the product design process, realize traditional culture, popularity, modern design creativity, refinement and use of traditional Chinese elements, inject strength into culture with product design, endow product culture and infiltrate culture, and complete traditional product design with Chinese characteristics. Chinese culture is the culture created by Chinese people. It has a history of 5,000 years of development. It occupies the long history of Chinese civilized society and affects the development of contemporary culture (Shome, 2012). Chinese traditional culture is the essence of the national spirit and has eternal value. In the design of Chinese products. In the critical period of development, we need to find a suitable cultural composition from the traditional Chinese excellent application tradition. Summarizing the positive influence of traditional culture on product design, based on traditional product design, it has a unique cultural background and nature. It can bring profound visual beauty and complete spiritual pleasure. In addition to the use value of traditional cultural products, the design has cultural value as well. Through design, people's sense of belonging and emotion is enhanced (Lee et al., 2017).

1.4 Research Questions and Significance of Object

1.4.1 Research questions

This research is a quantitative study, which aims to explore the influence of traditional cultural innovation product design on the perceptions of Chinese young generations on cultural development and product intentions. This research was conducted in Chengdu, Sichuan Province, and data were from young Chinese

consumers through online questionnaires. The overall purpose of this research is to study the factors that influence the cultural development outlook and product intentions of the younger generation in China.

RQ 1. Does product design with traditional cultural attributes have a significant impact on the product attitude of Chinese young consumers?

RQ 2. Does product design with traditional cultural attributes have a significant impact on the product purchase intentions of young Chinese consumers?

RQ 3. Does product design with traditional cultural attributes have a significant impact on the perceived novelty of Chinese young consumers?

RQ 4. Does product designs with traditional cultural attributes have a significant impact on the sustainability of products for young Chinese consumers?

RQ 5. Does product design with traditional cultural attributes have a significant impact on the perceived elasticity of Chinese young consumers?

1.4.2 Significance of the research

Through this research, it can help product design practitioners (1) understand what factors influence the consumer attitudes of young Chinese consumers in product design with traditional cultural attributes (2) verify the connection between cultural products and consumer behavior (3)) understand the impact of products with traditional cultural attributes on the young Chinese generation's perception of cultural development; (4) understand the impact of product design with traditional cultural attributes on the perception of traditional cultural attributes of Chinese young consumers.

1.5 Scope of Research

The study used a sample group (N = 433) to study several independent variables related to products attitude, purchase intention, perceived novelty, product sustainability, and perceived resilience that affect Chinese young people. The questionnaire will be distributed through a sample of 0 non-probabilistic snowballs to

collect data through the network, which is suitable for this study because the total population is unknown.

1.6 Research Method

Self-managed questionnaires were used to collect data on young Chinese people. The five-point Likert scale questionnaire aims to collect quantitative data on the factors that influence the consumption behavior of Chinese young people.

The study introduced a pilot study to check whether the questionnaire is constituted correctly to explore and verify the above research questions. Thirty-one college students participated in the preliminary survey. The researcher checked the internal consistency of the survey and revised the redundant questions to make the survey as reliable as possible. The survey was conducted in January 2021. In order to perform statistical analysis on the collected data, we use SPSS and AMOS. SPSS analysis software is used to test the reliability and demographic information of the measurement items. At the same time, AMOS analysis software is used to perform confirmatory factor analysis (CFA) on the research framework and analyze the structural equation framework (SEM).

1.7 Definition of Terms

1.7.1 Product attitude

The product attitude is defined as a certain degree of positive or negative mental state towards the product perceived from social or personal stimuli (Kim & Lennon, 2013).

It is true that the interpretation of culture is multidisciplinary and complex. In the context of product design research, Siu (2014) proposes an inner-intermediate-outer cultural model to describe how people interpret cultural meaning through product design; at the same time, he also believes that design products that carry the inner levels of culture can influence and change the way people think and behave in a constantly changing environment (Boothroyd, 1994). For this reason, people often encourage

people's reactionary behavior by innovating the inherent conceptual elements of traditional cultural attributes. However, this is rarely investigated in the sustainability research of traditional cultural attributes. In addition, the role of traditional cultural attributes in the contemporary cultural context is largely affected by people's attitudes. Cultural innovation products can become an important stimulus factor that affects consumers' perceptions of cultural development with local characteristics. In addition, empirical research compares user satisfaction at different cultural levels, and the results show that the inherent "intangible" culture is more effective in improving users' cultural satisfaction. Therefore, it is essential to develop cultural sustainability by improving consumers' attitudes towards cultural products (Luchs et al., 2016). Cultural innovation products involve the inherent hierarchical elements derived from traditional cultural attributes and are tested by perceiving the novelty of the product (See section 1 for details). A survey was conducted on the perceived sustainability and resilience of traditional cultural attributes to support consumers' understanding of cultural sustainability.

1.7.2 Product purchase intention

Product purchase intention is defined as the customer's willingness to purchase a certain product or a certain service. This willingness is the result of a combination of many factors (Kim & Lennon, 2013).

1.7.3 Perceived novelty of the product

Perceived novelty is the quality of being new, or following from that, of being striking, unusual or original, of being striking, original or unusual (Kim & Chung, 2011).

In recent years, product design has focused on technological innovation, but technological innovation alone is not enough. We must consider how technological innovation can be combined with design innovation. The transformation of patents or intellectual property rights must rely on design, so original design is not just a concept or an idea, but it needs to be combined with a variety of disciplines and technologies to be transformed into productivity. "Original design" (original product design) has a lot

of knowledge related to design and is very systematic (Bocken et al., 2016).

With the application and development of anthropology, sociology, economics, psychology, semiotics and other knowledge in the field of design research, technology, materials, crafts, structure, production, as well as form, color, brand strategy and other factors affect products. It has a positive impact and changes in manufacturing, use, and service.

Design is not necessarily the most demanding high-tech science and technology, but to use the innovation of scientific and technological achievements to become something people need in life. The lifestyle should be a learning but also a responsibility of design. There can be unlimited pursuit of science and technology, but we need to advance the scope of design from a shallow product appearance design to a lifestyle that combines technology with concepts and lifestyles. Then it is necessary to solve the product detail design, the manufacturing, results and brand promotion, such as a complete and all-round original product design industry chain (Cheng et al., 2019).

This process also requires our designers to be more than just a formal supplier (product design) (Gürşen et al., 2020). From a conceptual idea to a mature product, designers need to break the old inertial thinking, use technological innovation and a new lifestyle that keeps up with the time, and apply it to all areas of life.

The methods of product innovation design include technical innovation design of products, personalized design of products and cultural innovation design of products. Independent innovation is mainly manifested in the following aspects:

Original product design creates product brand and enhances corporate competitiveness (Qin et al., 2019). The formation of a brand is the result of product personalization, and design is a prerequisite for creating product personalization. Design is also an important factor in corporate branding. Design can create the brand identity of the company's products and establish a unique style to visualize the value of the company.

Creative design companies can create intangible wealth for enterprises. At present, corporate competition is no longer a competition of tangible assets, and good corporate wealth also means a lot for companies. Creative design companies create

intangible wealth for enterprises mainly through the establishment of credibility among consumer groups through good design embodied in products, and to improve the social influence of enterprises. Product design is a safe investment for an enterprise, and the economic benefits of an enterprise are ultimately accomplished through design, which can help the enterprise achieve its business goals.

The originality of product design can maintain the competitive position of the enterprise and promote the growth and development of the enterprise (Lee et al., 2017). Establishing a corporate image can promote the sales of other products of the company. New products not only have stronger competitiveness, but also have more vigorous vitality, which can often create new consumer demand for such products. Original design improves corporate competitiveness.

In the modern market, successful companies can maximize their product design capabilities. Compared with developed countries such as Europe, America and Japan, China's industrial design started late, but it has been developing rapidly in recent years. Many well-known Chinese companies have benefited a lot from original product design (Bocken et al., 2016). I believe that in the near future, original product designs designed in China can also occupy a place in the international market.

Enterprises need to manufacture competitive products, which are recognized by consumers and obtain good sales. At the same time, they establish a good brand image in the eyes of the public through original product design, which in turn strengthens the company's market presence. Competitiveness produces a virtuous circle. Therefore, for an enterprise, the most fundamental task is to create a competitive original product, and at the same time involve the product brand, so that the enterprise's own products have unique vitality.

The originality of the product plays a decisive role in the development of the enterprise (Mutum, 2015). Innovation is the source of creating new value. The spirit and essence of innovation is "original." Originality is not only a spiritual pursuit, but also an inevitable requirement for social development (Donati & Rappuoli, 2013).

1.7.4 Product sustainability

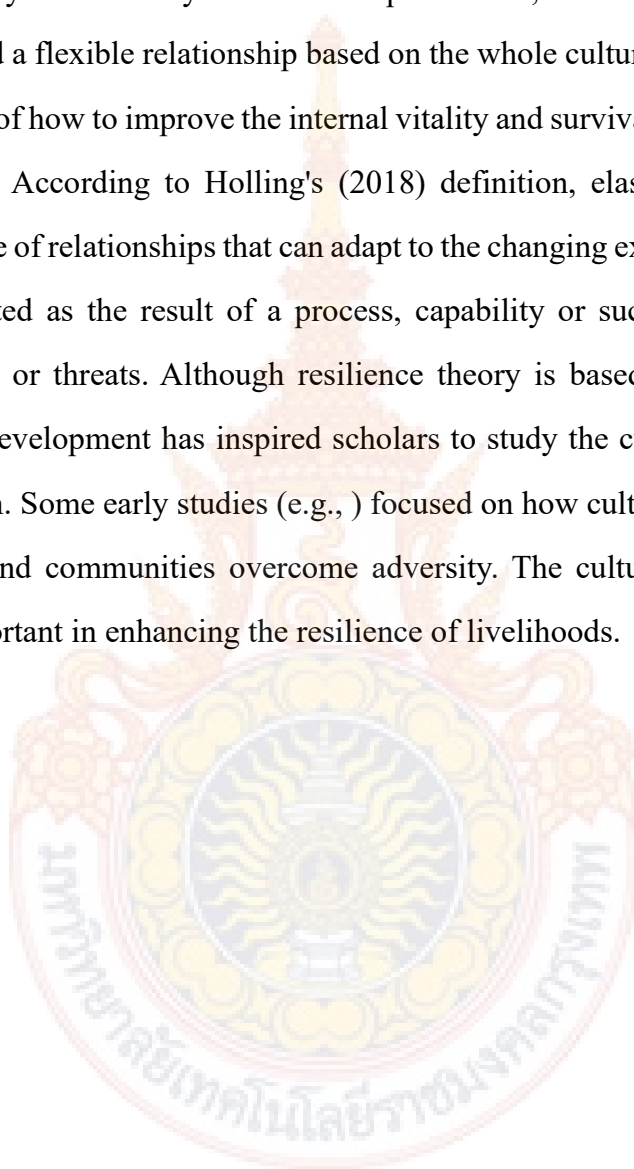
Perceived Sustainability of Traditional cultural attributes is gradually considered to be an important part of human-centered development, traditional cultural attributes are increasingly being discussed as a key resource for maintaining the cultural identity, diversity and vitality of a country. The reason seems to be borrowed from the core of sustainability, that is, human-oriented development in a cultural society formed by history (Jawahir et al., 2006). In this case, human needs should be one of the key considerations for maintaining the sustainability of cultural discourse. This leaves room for research on how to perceive cultural sustainability through attitudes towards cultural innovation products that carry cultural capital. As mentioned in the previous paragraphs, cultural innovation products can be a viable way to realize the intergenerational flow of traditional cultural attributes. In this case, human needs refer to the perceived value of traditional culture through product interaction and use. In other words, well-designed cultural products can stimulate consumers' positive recognition of traditional cultural attributes (Joseph et al., 1998). However, there are also studies that believe that cultural design with mass consumption characteristics, such as excessive entertainment, will have a negative impact on the perception of traditional cultural attributes. For example, some related surveys have been conducted to determine how the younger generation views traditional culture in the context of cultural globalization. The results show that the evaluation is disappointing and the expectations are low. However, it is worth noting that one of the surveys that examined the estimated function of traditional culture in our contemporary society, and 42.41% of the respondents acknowledged its positive role in daily life. This is consistent with the recent research, which emphasizes the important role of cultural innovation products as practical or daily necessities. Therefore, it reveals an inherent consumer assumption that cultural innovation products play an important role in the perceived sustainability of traditional cultural attributes (Horne, 2009).

1.7.5 Perceived resilience

Perceived resilience of traditional cultural attributes is the ability of a culture to

successfully respond to a crisis and quickly return to its precrisis state (Smith et al., 2012).

A large number of studies have been conducted to investigate how external physical applications maintain traditional cultural attributes, such as the decision-making of cultural heritage. In these studies, the explanation of cultural sustainability is related to the physical stability of cultural capital. Then, the internal perspective is introduced to build a flexible relationship based on the whole cultural system, trying to solve the problem of how to improve the internal vitality and survivability of traditional cultural attributes. According to Holling's (2018) definition, elasticity refers to the internal persistence of relationships that can adapt to the changing external environment. It can be interpreted as the result of a process, capability or successful adaptation, despite challenges or threats. Although resilience theory is based on the ecological environment, its development has inspired scholars to study the cultural discourse of positive adaptation. Some early studies (e.g.,) focused on how cultural knowledge can help individuals and communities overcome adversity. The cultural values of local traditions are important in enhancing the resilience of livelihoods.



CHAPTER 2

LITERATURE REVIEW

2.1 Definition

2.1.1 Product design

Product design is defined as creating a new product for a company to sell to its customers. Through the process of generating new products, a very wide range of coefficients are generated and ideas are effectively generated and developed (Boothroyd, 1994).

Product design is the whole process of conveying a kind of idea using reasonable planning, detailed and thorough planning, and conveying it through a variety of sensory forms. People transform the world through labor, create civilization, create material wealth and spiritual wealth, among which the most basic and key creative activity is creation. Design is the advance planning of creation activities, and the planning technique and planning process of all creation activities can be understood as design.

2.1.2 Traditional cultural attributes

Traditional Chinese culture has a long history, and its basic spirit is to pay attention to the golden mean, pay attention to ethics and good reputation, and value righteousness over profit. The influence of traditional culture on consumption in today's society is becoming more and more obvious, and culture has quietly become a new consumption gimmick (Kuo, 2015). Therefore, re-understanding our traditional culture and discovering new traditional values will play an incalculable role in the development of social economy and culture. Moreover, the values, ways of thinking, lifestyle, and consumption concepts of traditional Chinese culture also have their own uniqueness. Studying this uniqueness, especially the impact of traditional Chinese culture on people's consumer psychology and behavior, is important for Chinese companies'

participation in international competition and marketing, which is of great significance (Zhou et al., 2013).

Meanwhile, the term of Traditional Cultural Properties was widely accepted as a documented guideline to assess and protect any forms and objects rooted in a community's historical beliefs, customs, and practices.

2.2 Previous Research on The Product Design with Traditional Cultural

Cultural and creative products of traditional culture are the inevitable product when technology and experience accumulate to a peak with the continuous development and progress of human history. They are the most important part of cultural and creative industries (Zhou et al., 2013). Cultural and creative products of traditional culture are cultural products that designers understand, integrate and reconstruct the essence of traditional culture after in-depth analysis of traditional culture, and "recreate" by adding new cultural elements to ordinary products in combination with the characteristics of the times and the aesthetic standards of the public, which improves the value of the product itself to a certain extent (Kuo, 2015). Cultural and creative products are different from general products. They are no longer just functional goods, but organic products containing spiritual culture and artistic inspiration. Their spiritual value is far greater than the functional value. It not only meets people's basic needs, but also meets people's spiritual needs. It can help people awaken their sense of national belonging and cultural identity when traditional cognition is gradually indifferent (Liu & Xiang, 2020). It plays a good role in promoting the dissemination of culture and economic development. With a long history, China's fine traditional culture can not be explained by words alone. It is an irreplaceable natural treasure house for cultural and creative products. The combination of Chinese traditional culture and cultural and creative products can create products with more national characteristics (Lee et al., 2017).

2.3 Previous Research on The Influence of Product Design with Traditional Cultural Attribute on Purchase Intention

Chen and Lin (2017) regard supervisors, employees and customers as the main research objects of the research questionnaire. A total of 300 questionnaires were issued and 236 valid questionnaires were returned, with a recovery rate of 79%. The research results show that: 1. Product design and purchase intention, 2. Statistical education and product design, 3. Statistical education and purchase intention are significantly and positively correlated. Based on the research results, suggestions are made to help the continuous yield management of Chinese toy manufacturers' future product designs (Chen & Lin, 2018).

Homburg, Schwemmler, and Measurement (2015) defines product design and its dimensions through extensive literature review and consumer interviews. Using data from three samples (6,418 American consumers and 1,083 and 583 European consumers), the authors developed and validated a new scale to measure product design in terms of aesthetics, function, and symbolism. In addition, they studied the influence of these design dimensions on purchase intention, word of mouth, and willingness to pay. The results show that the design dimension has a positive impact on willingness to pay, and also has a positive impact on willingness to buy and word of mouth, and directly and indirectly have a positive impact on brand attitudes (Homburg et al., 2015).

The influence of changes in the form of personification in Chowdhury, Karmakar, Ghosh, and Chakrabarti (2014)'s research observation room on purchase intentions takes visual effects and pleasure as the overall human factor. The whole research is divided into three parts. The first part is the influence of the anthropomorphic form of the research room on anthropomorphism. The second part is the degree of anthropomorphization, the relationship between the anthropomorphic visual experience, pleasure, and the will to buy. The last part of this description deals with the impact of research on visual effects and pleasure on the will to purchase anthropomorphic products. The current research results show that the view of

anthropomorphism is the type of anthropomorphic form. The participants perceive more visual attractiveness and pleasure to products (chairs) with a higher anthropomorphic appearance. In addition, anthropomorphic chairs that are more visually attractive and pleasant are more likely to be purchased. Therefore, it can be concluded that if human factors such as attractiveness and pleasure can be enhanced, anthropomorphic chairs may have good market acceptance (Chowdhury et al., 2014).

Tariq, Rafay Nawaz, Musarrat Nawaz, and Butt (2013) conducted a cross-sectional study of 362 people to explore the factors that influence the purchase intentions of Pakistani FMCG consumers. Variables such as brand image, product quality, product knowledge, product participation, product attributes and brand loyalty are studied as determinants of consumers' purchase intention, and it is found that they are positively correlated with purchase intention. The last section discusses the impact of these results on marketers and makes recommendations. Research shows that there is a strong relationship between brand loyalty and purchase intention. It is of great significance to build loyalty by establishing better relationships with customers and providing customer-driven quality and attribute standards. The most important phenomenon is the relationship between distribution channels (manufacturers, wholesalers and retailers) and customers to build loyalty among customers.

Mirabi, Akbariyeh, and Tahmasebifard (2015) conducted a study on consumer willingness in 2015 to investigate the factors that affect the purchase intention of Bono brand ceramic tiles. In this study, a 25-question questionnaire prepared by the researcher was used. The statistical population includes customers of Bono tiles, and 384 people were randomly sampled to answer the research questionnaire. In order to evaluate the validity of the questionnaire, content validity and structure validity are used, and its reliability is 0.936 measured by Cronbach's alpha. The data obtained from the questionnaire were analyzed using confirmatory factor analysis and multiple regression analysis for analysis. Therefore, according to the results of this study, the two variables of product quality, brand advertising and name have the greatest impact on customers' purchase intention, while the two variables of packaging and price have no significant impact on customers' purchase intention (Mirabi et al., 2015).

Table 2.1 Summary of previous study

No.	Topic	Author	Variables	Objective
1	Emotional Contagion Effects on Product Attitudes	Daniel J.Howard Charles Gengler	Facial Expressions, Product Attitudes, Emotional Contagion, Manipulation Checks.	emotional contagion effects, product attitudes, emotional contagion, consumer behavior.
2	Effects of price, brand, and store information on buyers' product evaluations	William B. Dodds, Kent B. Monroe, Dhruv Grewal	Objective price, Perception of price, Perceived Quality, Perceived Sacrifice, Perceived Value, Willingness to Buy	price, brand, store information, product quality, product value.
3	Measures of perceived sustainability	Juran Kim, Charles R. Taylor, Kyung Hoon Kim and Ki Hoon Lee	Economic sustainability, Social sustainability, Environmental sustainability, Value equity, Brand equity, Relation equity	perceived sustainability; sustainability; measures of perceived sustainability; customer equity; customer equity driver
4	Firm's resilience to supply chain disruptions: Scale development and empirical examination	Saurabh Ambulkar, Jennifer Blackhurst *, Scott Grawe	Supply Chain Disruption orientation, Resource Reconfiguration, Risk Management Infrastructure, Firm Resilience,	Supply chain Resilience Scale development Risk management

5	Consumer purchase intention for organic personal care products	Hee Yeon Kim and Jae-Eun Chung	Consumer values, attitude, Subjective norms, Perceived behavioral control, Past experiences with organic products	Consumer behavior, Value analysis, Purchasing, Personal hygiene,
6	Product Perceived Quality and Purchase Intention with Consumer Satisfaction	Asma Saleem, Abdul Ghafar, Muhammad Ibrahim, Muhammad Yousuf & Naveed Ahmed	Customer satisfaction, Product Perceived Quality, Purchase Intention	product perceived quality, customer satisfaction, and purchase intention
7	Measuring psychographics to assess purchase intention and willingness to pay	Nelson Barber, Pei-Jou Kuo, Melissa Bishop and Raymond Goodman	Self-transcendence; Conservation values; Self-enhancement values; Environmental consequences; Individual consequence.; Purchase intention	Purchase intention, Willingness to pay, Sustainable, Psychographics, Market segmentation, Consumer behavior

8	Green product purchase intention: impact of green brands, attitude, and knowledge	Norazah Mohd Suki	Position, Attitude, Knowledge, Products Purchase Intention.	Partial least squares, attitude, knowledge, position, products purchase intention
9	Consumer behavior and purchase intention for organic food: A review and research agenda	Jyoti Rana & Justin Paul	Health Consciousness Quality & Safety Environment Friendly Willingness to Pay Certification Fashion Trend & Unique Life Style Social Consciousness	Consumer attitude Purchase intention Organic food Organic farming Green products

2.4 Research Hypothesis Development

This research aims to explore the influence factors of product design with traditional cultural attributes on the behavior of young Chinese consumers, including: product attitude, purchase, perception, novel intention, perceived sustainability and perceived elasticity factors, and put forward hypotheses.

2.4.1 Relationship between the perceived novelty of culturally innovative products and perceived sustainability, perceived resilience, product attitudes, purchase intentions

The study of traditional culture is complex and multidisciplinary. In the field of product design research, researchers have proposed an internal-Chinese-foreign cultural model to study how people interpret the meaning of traditional culture through product design (Siu, 2005). We need to design products that carry the internal levels of culture can influence and change people's ever-changing Behaviors and ways of thinking in the environment. Because of this, people's product attitude or consumers' purchase intention are often encouraged because of the perceived novelty of culturally innovative products. However, this is rarely considered in the study of the perceived resilience of traditional cultural attribute (Chai et al., 2018).

In addition, traditional cultural innovation products can become an important stimulus factor that influences consumers' perceptions of cultural development with local characteristics. By improving consumers' attitudes towards cultural products, it becomes vital to the development of cultural sustainability. Through the perception of product novelty, it examines cultural innovation products that involve inner elements derived from the traditional cultural attribute, and studies the traditional cultural attribute's performed sustainability and performed resilience to influence consumer product attitudes and consumer behavior (Chakrabarti & Khadilkar, 2003).

For this reason, the perceived novelty of culturally innovative products tend to affect perceived sustainability, perceived Resilience, product attitudes and purchase intentions. In view of the large amount of literature support on the perceived novelty of culturally innovative products, which may help to improve perceived sustainability, perceived resilience, product attitudes and purchase intentions, then these hypotheses can be expected:

H1. The perceived novelty of culturally innovative products has a positive impact on consumer perceptions of the sustainability of traditional cultural attribute .

H2. The perceived novelty of culturally innovative products has a positive impact on consumer perceptions of the resilience of traditional cultural attribute.

H3. The perceived novelty of culturally innovative products has a positive impact on purchase intentions.

H4. The perceived novelty of culturally innovative products has a positive impact on product attitudes.

2.4.2 Relationship between the perceived sustainability and product attitudes

Cultural innovation in products is a feasible way to realize the development and dissemination of traditional culture. In the process of using well-designed traditional cultural products, consumers will increase their sense of identity with traditional culture. In other words, consumers can generate perceived value to traditional culture by using or interacting with products (Horlings, 2015). However, some studies believe that excessive cultural design and transitional entertainment design will negatively affect consumers' perception of traditional culture. A recent study showed that 42.41% of respondents believe that traditional culture has a positive impact on their daily lives (Qin et al., 2019).

For this reason, perceived sustainability of traditional cultural attributes tend to affect product attitudes. In view of the large amount of literature support on the perceived sustainability of traditional cultural attribute, which may help to improve the product attitudes of consumers, then this hypothesis can be expected:

H5. The perceived sustainability of traditional cultural attribute has a positive impact on product attitudes.

2.4.3 Relationship between the perceived resilience and perceived sustainability

A large number of studies on cultural heritage protection and cultural heritage policy formulation have investigated how external physical applications affect traditional cultural elements. In similar studies, the perceived resilience of traditional cultural attribute occupies an important position (Cerquetti & Ferrara, 2018). Later, more studies introduced internal perspectives to construct elastic relationships based on the sustainability of the entire cultural system, to resolve consumers' concerns about the resilience and viability of traditional cultural elements (Almansa Sánchez, 2013).

Given all literature supports the perceived resilience of traditional cultural attribute which might be influenced by consumers' perception of the sustainability of traditional cultural attribute, then this hypothesis can be expected:

H6. The perceived resilience of traditional cultural attribute is positively influenced by consumers' perception of the sustainability of traditional cultural attribute.

2.4.4 Relationship between the perceived resilience and product attitude

According to Hoiling's definition, resilience refers to the internal persistence of the relationship that can adapt to the changing external environment (Holling, 1973). It can be understood as the process, ability, or result of successfully adapting to a challenge or threatening environment. Although resilience theory mainly applies and solves ecological and environmental problems, researchers have developed it into a discourse that actively studies cultural adaptability.

Some researchers have focused their research on using traditional cultural knowledge to help individuals and communities overcome difficulties in the early stages. For this reason, the perceived resilience of traditional cultural attribute tended to affect product attitudes. In view of the large amount of literature support on the perceived resilience of traditional cultural attribute, which may help to improve the product attitudes of consumers, then this hypothesis can be expected:

H7. The perceived resilience of traditional cultural attribute has a positive impact on product attitude.

2.4.5 Relationship between the product attitude and consumers' purchase intention

Attitude and intention appear in many research theories about human behavior, such as Theory of Reasoned Action (TRA), Theory of planned behavior (TPB), and Davis' (1989) technology acceptance model (Ajzen & Fishbein, 1975; Davis, 1985; AJZEN, 1991). In the field of consumer behavior research, there are few empirical studies directly verifying how their perceived product attitude affects consumers'

purchase intentions. Some researchers believe that traditional cultural elements can become product features, thereby stimulating consumers' interest in culture and generating purchase intentions is significantly meaningful. Previous research has addressed the critical role of attractive product design for marketing success. Product characteristics can influence consumer purchases (Kim & Chung, 2011).

Given all literature supports on the product attitude of cultural innovation design, which may help to improve the consumers' purchase intention, then this hypothesis can be expected:

H8. The product attitude of cultural innovation design has a positive influence on consumers' purchase intention.



CHAPTER 3

RESEARCH METHOOLOGY

This chapter covers population and sample selection, data collection, research methods and reliability analysis of research instruments. Therefore, the additional information in this chapter is as follows.

3.1 Conceptual Framework

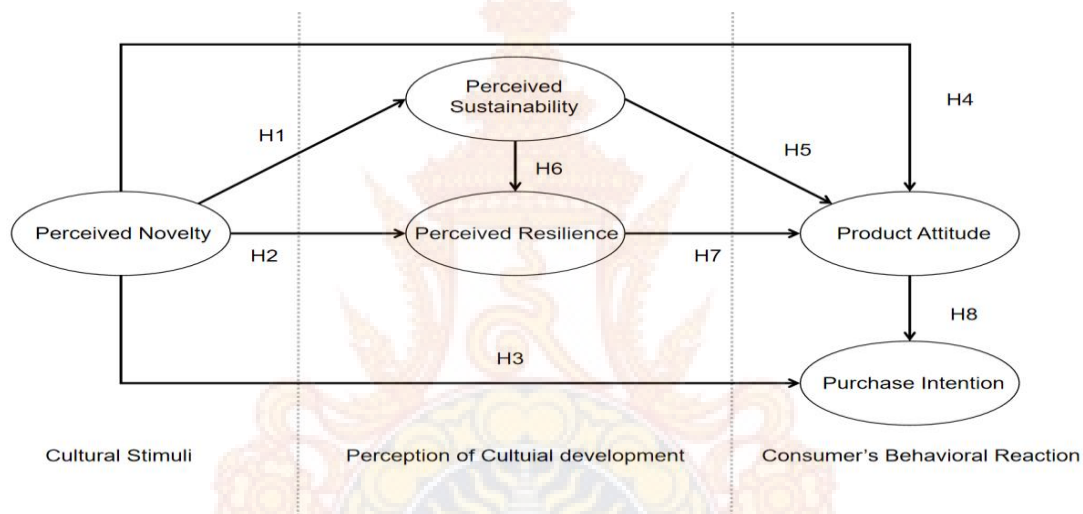


Figure 3.1 The conceptual framework of this research

3.2 Research Design

The research aims to examine the relationship between the influence of Perceived Resilience, Product sustainability, Perceived novelty of the product, Product Attitude, and Product purchase intention with young Chinese consumers buying products with traditional cultural style designs. In order to investigate the relationship between Perceived Resilience, Product sustainability, Perceived novelty of the product, Product Attitude, Product purchase intention and the relationship between young Chinese consumers buying products with traditional cultural styles, a survey was conducted to collect data. Participants are required to complete a questionnaire. The

survey showed that the respondents' responses were completely anonymous, but other demographic information in the questionnaire included age and gender. The privacy of interviewees is protected. All interviewees were voluntary and agreed to use the data set to answer. There are many types of research, which are suitable for exploratory research, descriptive research and contingency research. However, in this research, the appropriate type of research is based on descriptive research, which refers to describing the answer to elaborate the research question. The significance of descriptive research focuses on the characteristics of the individual and the characteristics of the entire sample, which can support the provision of useful information for the solution of the problem. Well, this type of research is most suitable for collecting data and describing the relationship between measured variables. In addition, this research also uses survey technology, which is to collect raw data of more than 400 young people by distributing questionnaires. Their attitude towards product design with traditional culture and several related factors that may be affected are included.

3.3 Population and sample selection

3.3.1 Population

The data used in this study was obtained through an online survey of young people in China. This research uses China's online crowdsourcing platform named Questionnaire Star, which provides functions equivalent to Amazon Mechanical Turk.

3.3.2 Sample Size

The researcher will determine sample size by applying an equation proposed by Yamane (1967) at confidences level of 95% and precision levels = 0.05

Anticipated effect size: 0.1 ?

Desired statistical power level: 0.8 ?

Number of latent variables: 5 ?

Number of observed variables: 14 ?

Probability level: 0.05 ?

Calculate!

Minimum sample size to detect effect: 1,599

Minimum sample size for model structure: 232

Recommended minimum sample size: 1,599

Figure 3.2 The sample size of this research

3.4 Design of Questionnaire and scale

This study uses a questionnaire, which creates a review of the relevant literature to collect data. The questionnaire can be divided into two parts:

Part 1: Closed-end questions about the demographic characteristics of the participants, including gender, and income.

1. Gender

☐ Male

☐ Female

2. Income (monthly)

☐ Less than 3000 RMB

☐ 3001-6000 RMB

☐ 6001-9000 RMB

□More than 9001 RMB

Part 2: 14 closed-ended answer questions about 5 factors that influence purchase intention, including:

Table 3.1 Number of questionnaires for 5 factors that affect purchase intention

Product Attitude	3 Questions
Purchase Intention	3 Questions
Perceived Novelty	2 Questions
Perceived Sustainability	3 Questions
Perceived Resilience	3 Questions

This part is measured on an interval scale by using a Five-point Likert Scale to measure the level of agreement.

Table 3.2 Five-point Likert Scale

Strongly Agree	5 points
Agree	4 points
Neutral	3 points
Disagree	2 points
Strongly Disagree	1 points

The following questions are the further meaning of each question mentioned in the questionnaire.

Table 3.3 Summary of source for questionnaire items

	Source
Product Attitude	
This product is desirable	Howard and Gengler, 2001
This product is pleasant.	
This product is attractive.	
Purchase Intention	
I am willing to buy this product.	Dodds et al.1991
The likelihood for me to purchase this lamp is product.	
The probability that I would consider buying this product is high.	
Perceived Novelty	
This product satisfies my sense of curiosity.	Unger & Kernan, 1981
I feel like I’m exploring new worlds regarding this product.	
Perceived Sustainability	
I am full of confidence in traditional culture.	Kim et al.,2015
I think traditional culture has a good future.	
I’d be happy to tell my friends about this traditional culture experience.	
Perceived Resilience	
I think traditional culture can respond quickly to the impact of various shocks.	Ambulkar et al. 2015
I think traditional culture have enough capacity to adapt to all kinds of impact.	
I think traditional culture can quickly adjust operations to cope with all kinds of impact.	

3.5 Collection of Data

In order to perform statistical analysis on the collected data, we use SPSS 20.0 for Windows and AMOS 24.0. SPSS analysis software was used to test the reliability

and demographic information of the measurement items. At the same time, AMOS analysis software was used to conduct confirmation factor analysis (CFA) on the research framework, test hypotheses 1-8, and analyze the structural equation framework (SEM).

AMOS is a software that uses structural equations to explore the relationship between variables. Using AMOS can obtain more accurate and rich comprehensive analysis results than using factor analysis or regression analysis alone. AMOS has analysis of variance, covariance, hypothesis testing, etc. (Tarhini et al., 2013). Based on the above advantages, in this research, AMOS software is used. Confirmatory factor analysis (CFA) is a statistical analysis of social survey data. It tests whether the relationship between a factor and the corresponding measurement item conforms to the theoretical relationship designed by the researcher. Confirmatory factor analysis (CFA) is often tested through structural equation modeling. In actual scientific research, the process of confirmatory factor analysis is also the process of testing the measurement model (Phillips, 2013). The strength of confirmatory factor analysis (CFA) is that it allows researchers to clearly describe the details of a theoretical model, so confirmatory factor analysis is used in this study.

3.6 Research Methodology

3.6.1 Descriptive Statistics Analysis

The data is presented in the form of tables, graphs and the figure below to draw the profile of the respondents and the distribution of factors that influence the willingness of college students to purchase products with traditional cultural elements. The calculation of averages, frequency distributions, and percentage distributions are the most common forms of aggregated data (Zikmund, 2003).

3.6.2 Reliability Test

Cronbach's alpha test was used to test the reliability of each variable. If a measure has a minimum alpha score of 0.6 and an overall reliability of 0.7 or higher, it has good reliability (Bagozzi & Yi, 1988). The greater the accuracy factor is, the more confidence the measurement shows. Scholar DeVellis (1991) outlines the following: 0.60~0.65 (preferably not); 0.65~0.70 (minimum acceptable value); 0.70~0.80 (very good); 0.80~0.90 (very good) Therefore, a good reliability scale or questionnaire should be within an acceptable range of 0.80 to 0.70 to 0.80. The sub-scale is preferably above 0.70, and is acceptable between 0.60 and 0.70. Therefore, it is necessary to conduct a pretest to check whether the research tool can be used for the main study.

Table 3.4 Criteria of reliability

Cronbach's Alpha Coefficient	Reliability level	Desirability level
0.8-1.00	Very high	Excellent
0.70-0.79	High	Good
0.50-0.69	Medium	Fair
0.30-0.49	Low	Poor
Less than 0.30	Very Low	Unacceptable

3.6.3 Correlation test

CPDA data analysis can measure the strength of the correlation between two variables in the correlation coefficient. The correlation coefficient most commonly used in data analysts is called the Pearson product-moment correlation coefficient. It is used to measure the strength of linear correlation between variables measured by interval or ratio scales. The sign and absolute value of the correlation coefficient describe the direction and magnitude of the relationship between the two variables. The phase relationship value in the data is between -1 and 1. The greater the absolute value of the correlation coefficient, the stronger the linear relationship. The strongest linear relationship is represented by the correlation coefficient -1 or 1. The weakest linear

relationship is represented by the correlation coefficient equal to zero. A positive correlation means that if one variable becomes larger, the other variable tends to become larger. A negative correlation means that if one variable becomes larger, the other variable tends to become smaller.

3.6.4 Path Analysis

The main purpose of this research is to understand the impact of the perceived novelty of cultural innovation products on the sustainability and resilience of traditional cultural attributes. In order to analyze the relationship in the research framework, we conducted a path analysis based on the structural equation model (SEM). Structural equation model (SEM) is a statistical method to analyze the relationship between variables based on the covariance matrix of variables, so it is also called covariance structure analysis. The structural equation model belongs to multivariable statistical analysis, which integrates two statistical methods of factor analysis and path analysis. At the same time, it can test the direct relationship between explicit variables (measurement topic), latent variables (the meaning of measurement topic) and error variables in the model, as well as the direct effect, indirect effect and total effect of the influence of active independent variables on dependent variables (Kurdi et al., 2020).

CHAPTER 4

DATA ANALYSIS

4.1 Reliability Test of Research Instrument

Descriptive research is a common project research method. It refers to the different factors faced by different aspects of research, data collection, and data recording, and focuses on the static description of objective facts. Most marketing research is descriptive. Researching customers' purchase intentions for products with traditional designs of their culture is defined as marketing research. Therefore, the company's marketing operations strategy may use descriptive research.

The purpose of descriptive research includes describing the characteristics of fixed groups, estimating the relationship among product attitude, product sustainability, perceived novelty of the product, perceived resilience, and product purchase intention among young Chinese consumers, and making predictions accordingly.

Quantitative research is used to determine the number of things in a certain amount of scientific research, that is, using many questions and phenomena to represent samples, and then analyze, test, and explain to obtain meaningful research methods and processes. The sample survey is not a comprehensive survey. This is a survey method used to survey certain units of all interviewees and estimate and extrapolate all responses based on this. This study uses online and offline questionnaires to collect the necessary information. Communication with the target sampling group is a simple method. Researchers distributed the questionnaire via the Internet.

Cronbach's alpha test was employed to test the reliability of the question for each variable. The reliability assessment is defined as Cronbach's alpha. If a measure has a minimum alpha score of 0.6 and an overall reliability of 0.7 or higher, it has good reliability (Bagozzi & Yi, 1988). Therefore, it is necessary to do a pre-test to check whether the research tool can be used in the main study. A pilot study was introduced to check whether the questionnaire was constituted correctly to explore and verify the above research questions. 29 Chinese young people participated in the preliminary

survey. We checked the internal consistency of the survey and revised the redundant questions to make the survey as reliable as possible.

Table 4.1 Reliability test for questionnaire from each dimension

Variable	Alpha Test	Number of Questions
Product Attitude	0.912	3
Purchase Intention	0.935	3
Perceived Novelty	0.892	2
Perceived Sustainability	0.955	3
Perceived Resilience	0.953	3

As can be seen from the above table, pre-test data were collected from 29 samples. The Alpha reliability values of all variables are greater than 0.6. Therefore, the questionnaire can be used for the main study.

Table 4.2 Demographic data

Variables	Frequency (f)	Percentage (%)
Male	120	27.71%
Female	313	72.29
Total	433	100%

Notes: N=433

As shown in Table G, approximately 72.29% (N = 313) of the participants were women, while men accounted for 27.71% (N = 120).

Table 4.3 Frequency of Monthly Income

Variables	Frequency (f)	Percentage (%)
Below 3000 RMB	80	18.5%
3001-6000 RMB	169	39%
6001-9000 RMB	157	36.3%
More than 9001 RMB	27	6.2%
Total	433	100%

Notes: N=433

As shown in the table, about 39% (N = 169) of participants have a monthly income between 301-6000 yuan, and participants with a monthly income of less than 3000 yuan accounted for 18.5% (N = 80). 6001-9000 yuan accounted for 36.3% (N = 157), and income above 9001 yuan accounted for 6.2% (N = 27).

4.2 Mean and Standard Deviation

Table 4.4 Averaged variances expected

Variable	C.R.	AVE
Product Attitude		0.811
This product is desirable	-----	
This product is pleasant.	24.314	
This product is attractive.	22.186	
Purchase Intention		0.828
I am willing to buy this product.	-----	
The likelihood for me to purchase this lamp is product.	30.998	
The probability that I would consider buying this product is high.	28.201	
Perceived Novelty		0.813
This product satisfies my sense of curiosity.	-----	
I feel like I'm exploring new worlds	24.502	

regarding this product.		
Perceived Sustainability		0.842
I am full of confidence in traditional culture.	-----	
I think traditional culture has a good future.	42.899	
I'd be happy to tell my friends about this traditional culture experience.	35.015	
Perceived Resilience		0.869
I think traditional culture can respond quickly to the impact of various shocks.	-----	
I think traditional culture have enough capacity to adapt to all kinds of impact.	34.782	
I think traditional culture can quickly adjust operations to cope with all kinds of impact.	34.601	

Notes: N=433

The study uses maximum likelihood (ML) estimation to evaluate the CFA framework. To make it clear, the standards we use in this framework include comparative fit index (CFI), root mean square residual (RMSR), goodness of fit index (GFI), and adjusted goodness of fit index (AGFI). And then, the convergent validity refers to the degree of mutual connection between two measures that should theoretically establish a connection. Separately, the threshold of convergence validity is evaluated by the critical ratio (CR, value equal to or greater than 2), standardized factor load (value equal to or greater than 0.5), and expected average variance (AVE, equal to or greater than 0.5). In the research framework, the lowest CR (= 22.186) is much higher than the “2” threshold; the smallest normalized factor load (= 0.869) exceeds the “0.5” threshold, and the calculated lowest AVE (= 0.811) is much higher than the 0.50 threshold. Therefore, the convergent validity of the research framework is considered acceptable. Identifying whether concepts or metrics that are not relevant to the validity test are irrelevant.

Table 4.5 Correlation matrix of the constructs

Construct	AVE	CS	CR	NO	ATT	PI
Perceived Sustainability(CS)	0.842	1				
Perceived Resilience(CR)	0.869	0.781 **	1			
Perceived Novelty(no)	0.813	0.535 **	0.509 **	1		
Product Attitude(ATT)	0.811	0.568 **	0.561 **	0.691 **	1	
Purchase Intention(PI)	0.828	0.379 **	0.431 **	0.702 **	0.628 **	1
S.D.		1.26	1.29	1.45	1.34	1.46
Mean		5.96	5.53	4.92	5.11	4.20

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Notes: N=433

The study calculated the correlation coefficient of the research framework. The highest effective coefficient is 0.781, which is the correlation coefficient between Perceived Resilience (CR) and Perceived Sustainability, and the square of this value of 0.691 is not greater than the minimum AVE value of product attitude 0.811. Therefore, the discriminative validity of the research framework is acceptable.

4.3 Hypothesis Test

The main purpose of this research is to understand what impact the novelty of cultural innovation products will have on the perception of traditional cultural attributes' sustainability and resilience, thereby affecting consumer behavior. In order

to analyze the relationship in the research framework, the researchers conducted a path analysis based on the structural equation model (SEM). Figure 3 shows the output of this analysis, and Table 10 shows the standardized coefficients for each path and the hypothetical results.

Table 4.6 Hypothesis testing

Hypothesis	Path	Standardized Coefficient	C.R. (t-Value)	Standard Error
H1	Perceived Novelty - > Perceived Sustainability	0.463 ***	11.641	0.039
H2	Perceived Novelty - > Perceived Resilience	0.097 ***	3.055	0.034
H3	Perceived Novelty - > Purchase Intention	0.593***	9.187	0.066
H4	Perceived Novelty - > Product Attitude	0.517***	12.334	0.043
H5	Perceived Sustainability - > Product Attitude	0.184***	2.729	0.065
H6	Perceived Sustainability - > Perceived Resilience	0.757***	18.301	0.041

H7	Perceived Resilience - > Product Attitude	0.107	1.610	0.068
H8	Product Attitude - > Purchase Intention	0.249***	3.559	0.068

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

N=433

According to the data in Table 11, H1 $\beta=0.463$, $p < 0.01$, this hypothesis is accepted. H2 $\beta=0.097$, $p < 0.01$, this hypothesis holds. H3 $\beta=0.593$, $p < 0.01$ this hypothesis is accepted. H4 $\beta=0.517$, $p < 0.01$, the hypothesis holds. H5 $\beta=0.184$ $p < 0.01$ the hypothesis is accepted. H6 $\beta=0.757$, $p < 0.01$ this hypothesis is established. H7 $\beta=0.107$, the P value fails to show significance, so the hypothesis is not established. H8 $\beta=0.249$, $p < 0.01$, this hypothesis holds.

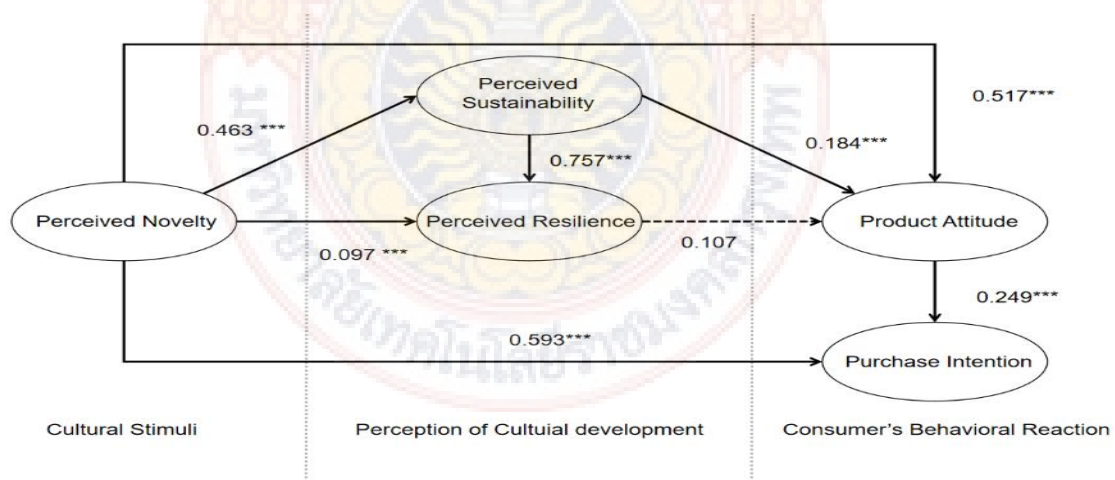


Figure 4.1 Path coefficients resulting from structural equation modeling (SEM)

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

N=433

CHAPTER 5

CONCLUSION AND DISCUSSION

5.1 Conclusions

This study has made a number of theoretical contributions to the commercialization and sustainability of traditional cultural factors. The results of the study firstly verify from the statistical data that the moderate commercialization of cultural capital often has a positive contribution to participants' perceptual knowledge of traditional cultural factors. It can be preliminarily understood that the inherent intangible aspect of commercial development of cultural capital is a feasible way to improve the materialization of traditional cultural elements and promote the modern lifestyle with local cultural characteristics. In addition, the study found that the novelty of cultural and creative products will affect consumers' purchase intention and attitude. This in turn will have a positive impact on the cognition of traditional cultural factors from the perspective of the sustainability and resilience of the younger generation. Therefore, this study also tends to answer the question whether the commercialization of cultural capital can provide information for sustainable development. Previous studies have explored how design centered cultural products affect consumers' cultural perception. This study presents a quantitative study to understand consumers' attitudes towards cultural innovative design and sustainability. In this study, young people's cognition of sustainability is greatly affected by the novelty of cultural products, which means that in the context of cultural sustainability, relatively more innovative design can improve people's cognition of traditional culture. Future research can further study the economic model and strategy, improve the understanding of traditional cultural factors. For example, scholars specialized in cultural sustainability should pay more attention to the role of transferring traditional cultural factors to the younger generation through the commercialization of cultural innovation products. This study first considers the sustainability and flexibility of traditional cultural factors in the research framework to investigate how young consumers' attitudes towards cultural products

depend on their views on cultural development. Consumers' awareness of cultural development is often an influencing factor, because they evaluate specific products with important cultural significance from the internal level of traditional cultural factors. The results show that the cognition of traditional cultural factors on cultural sustainability significantly affects consumers' product attitude. It can be inferred that people's motivation and identity for cultural development have a potential impact on the commercialization of cultural capital. In the future, more research should start from consumers' views on cultural development and study the marketing strategy of cultural products.

In addition, some practical suggestions are put forward. This study believes that the novelty of cultural products is a factor beyond the surface material level, while the profound influence of cultural products with internal intangible factors is studied from the traditional cultural factors. The results further show that cultural innovative design plays an important role in shaping young consumers' purchase intention. From the perspective of statistics, managers and designers of cultural industry should be encouraged to develop more innovative products from the internal level of traditional cultural factors. In addition, scholars and designers should explore more innovative cultural product design methods and applications while considering cultural sustainability. Future research should expand the research mode of this study to the context of cultural innovation design derived from traditional cultural factors.

5.2 Results and Discussion

The results showed that seven of the eight hypotheses were supported. It was found that the significant path coefficients for the novelty of cultural products were 0.463 and 0.097, respectively, and were found to affect the perceived sustainability and resilience of traditional cultural factors, verifying H1 and H2. This finding is attributed to the fact that product characteristics derived from the inherent aspects of traditional cultural factors have played an important role in improving the sustainability and resilience awareness of the younger generation. Especially young consumer groups need stronger and more spiritual media to understand the inner connection between

themselves and cultural development, and transcend the direct idealism of cultural sustainability. In addition, young consumers are more willing to accept innovative design expressions and cultural beliefs about social and environmental responsibility. Related research conducted by other researchers also shows the strong motivation of young consumers for green buying behavior. In addition, the perceived sustainability and flexibility of traditional cultural factors also depend on the performance of cultural design. This means that consumers tend to recognize the potential role of traditional cultural factors through relatively innovative design expressions, which is consistent with the previous discussion.

In addition, the perceived novelty of cultural innovation products reveals a significant correlation between the perceived sustainability and elasticity of traditional cultural factors, and the coefficient supporting H6 is 0.757. This research shows for the first time evidence of how perceived sustainability affects the perceived elasticity of traditional cultural factors. The connection between the two concepts is essential to support the theory of cultural sustainability in the context of people-oriented development. This finding is consistent with other researchers' research on sustainable innovation. They believe that design is an important driving factor in changing people's perceptions of sustainability. At the same time, the perceptual link between the sustainability and resilience of traditional cultural factors reveals the fact that a more sustainable attitude can enhance consumers' confidence in traditional cultural factors, thereby allowing consumers to understand the influence of traditional cultural factors.

The novelty of cultural innovative products directly affects the attitude of young consumers, and the coefficient is 0.517. The influence coefficient of traditional culture on product attitude is 0.184, which supports H4 and H5. This shows that the novelty and sustainability of cultural products can significantly improve the product attitude and cognition of the younger generation. This is because the concept of cultural capital is not a static asset, but tends to encourage more innovative design thinking and convey the profound cultural vitality of traditional cultural factors. Previous studies tried to explore different ways to improve consumers' awareness of cultural products. Shen et al. (2015) put forward the modern transformation design of traditional cultural products.

This finding verifies that cultural design rooted in the immaterial cultural level is an effective way to innovate the traditional elements of cultural products and enhance the concept of consumption. Chai et al's (2018) research also found a similar phenomenon that they did not find any form of superficial cultural elements attractive to consumers.

On the other hand, the impact of perceived elasticity on product attitude is not significant, therefore, H7 is not supported. The path coefficient of 0.107 shows that consumers' behavior towards new cultural products has less connection with how they view the elasticity of traditional cultural factors in the cultural context. From the current research results, it can be inferred that although the perceived sustainability of traditional cultural factors plays a vital role in shaping consumers' attitudes towards cultural products, perceived flexibility means that design interventions may affect the development of traditional cultural factors. The relatively negative impact is consistent with some of the key studies discussed in the previous article. For example, from the consumer's point of view, cultural products will be interpreted as the process of deep cultural value reduction of traditional cultural factors. Other scholars have made similar inferences, believing that cultural designs that include excessive entertainment have a negative impact on people's perception of traditional cultural factors.

Moreover, the influence of the perceived novelty of cultural product on the attitudinal purchase intention was confirmed with the coefficient of 0.593, so the H3 was verified. This statistical evidence first establishes the theoretical relationship between the novelty of cultural products and purchase intention. Our finding can support Leong et al., Chai et al., and Lin's(2018) previous studies that higher cultural level design of cultural products can strengthen consumer attitudes and further verify its impact on consumers' purchase intention (Chai & Ngai, 2015).

Finally, it confirmed the influence of consumers' attitudes towards cultural products on purchasing behavior. H8 is supported because the coefficient of this relationship is 0.249. Although some studies have verified the influence of consumer brand attitudes on purchase intention in green marketing, this discovery first establishes the theoretical relationship between product attitude and purchase intention in cultural product discourse. From this result, it can be reasonably assumed that the novel features

of product design can encourage large-scale cultural product consumption.

5.3 Limitations

This study also has some limitations in theory and methodology. Since the sample recruited in this study is from a normal university, and most of them are female. Consequently there may be gender bias in the sample, which may affect the results. Further research will be carried out in a comprehensive university, and gender will be balanced to a certain extent, strengthening the current results. Cultural cognition related to traditional cultural factors may not only be limited to perceived resilience and sustainability, but other potential variables may also affect the results here. In future research, we may introduce other factors. At the same time, more efforts should be made to study the perceptual resilience of traditional cultural factors, and how to deal with the shadow of modernization should be evaluated and measured from the internal perspective.

5.4 Research contributions

This study contributes to the research on the application methods of existing traditional cultural elements in product design. Previous research lacks empirical research on the introduction of traditional cultural elements into product design. This research fills the gap in this research by studying the role of product design that includes traditional cultural elements in influencing young consumers' product attitudes and willingness to consume, which has never been studied before. The results of this study provide more evidence for previous studies on the benefits of introducing traditional cultural elements into product design. In addition, the results of this research also provide additional contributions to the development and protection of traditional culture. The results show that applying traditional cultural elements to product design is beneficial and allows young people to identify traditional culture more.

5.5 Practical contributions

Traditional cultural elements are a design element often used by product designers. Therefore, it provides a reference for product designers to use traditional cultural elements in the design process to increase the sales of the products they design (Qin et al., 2019). According to the results of this research, product designs that include traditional cultural elements are favored by young people. This study also shows that the purchase or use of products containing traditional cultural elements can enhance young people's sense of identity with traditional culture, which will also become an opportunity for the development and protection of traditional culture (Luchs et al., 2016). Collectively, the integration of traditional cultural elements into product design helps to enhance consumers' product attitudes and purchase intentions,. It is conducive to traditional culture to enhance the influence of traditional culture among young people, and it has the effect of protecting and developing traditional culture. Therefore, it is recommended that product designers be able to integrate traditional cultural elements into product design and design high-quality products that contain traditional cultural elements.

5.6 Future research

The suggestion of future research is that the model in this research can be carried out in different ethnic groups, religions, cultures and countries, such as people who believe in Buddhism in Southeast Asian countries. The results can be compared with this study. Moreover, a comparative study between two or more regions will make the results more general and can apply the results to more people.

BIBLIOGRAPHY

- AJZEN, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. <https://doi.org/10.1080/10410236.2018.1493416>
- Ajzen, I., & Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological Bulletin*, 82(2), 261–277. <https://doi.org/10.1037/h0076477>
- Almansa Sánchez, J. (2013). Cultural Heritage and the Challenge of Sustainability. *AP: Online Journal in Public Archaeology*, 3, 5–45.
- Amberg, N., & Fogarassy, C. (2019). Green Consumer Behaviour in Cosmetic Market. *Resources*, 8(137), 1–19.
- Bang Nguyen Dilip S. Mutum. (2015). Predictors of Purchase Intention toward Green Apparel Products: A Cross-Cultural Investigation in the US and China. *The Eletronic Library*, 34(1), 1–5.
- Bocken, N. M. P., Pauw, I. De, Bakker, C., Grinten, B. Van Der, Bocken, N. M. P., Pauw, I. De, Bakker, C., & Grinten, B. Van Der. (2016). *Product design and business model strategies for a circular economy*. 1015(June). <https://doi.org/10.1080/21681015.2016.1172124>
- Boothroyd, G. (1994). Product design for manufacture and assembly. *Computer-Aided Design*, 26(7), 505–520. [https://doi.org/10.1016/0010-4485\(94\)90082-5](https://doi.org/10.1016/0010-4485(94)90082-5)
- Cerquetti, M., & Ferrara, C. (2018). Marketing research for cultural heritage conservation and sustainability: Lessons from the field. *Sustainability (Switzerland)*, 10(3). <https://doi.org/10.3390/su10030774>
- Chai, C., Shen, D., Bao, D., & Sun, L. (2018). Cultural Product Design with the Doctrine of the Mean in Confucian Philosophy. *Design Journal*, 6925, 1–23. <https://doi.org/10.1080/14606925.2018.1440842>
- Chai, J., & Ngai, E. W. T. (2015). Multi-perspective strategic supplier selection in uncertain environments. *International Journal of Production Economics*, 166, 215–225. <https://doi.org/10.1016/j.ijpe.2014.09.035>
- Chakrabarti, A., & Khadilkar, P. (2003). A measure for assessing product novelty. *DS 31: Proceedings of ICED 03*. http://www.designsociety.org/download-publication/24076/a_measure_for_assessing_product_novelty
- Chen, H. C., & Lin, M. H. (2018). A study on the correlations among product design, statistics education, and purchase intention - A case of toy Industry. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(4), 1189–1195. <https://doi.org/10.29333/ejmste/81119>
- Cheng, F. F., Wu, C. S., & Leiner, B. (2019). The influence of user interface design on consumer perceptions: A cross-cultural comparison. *Computers in Human Behavior*, 101, 394–401. <https://doi.org/10.1016/j.chb.2018.08.015>
- Choi, K. R., & Yu, C. (2011). Sustainable design for Asian housings: Traditional culture, lighting and aesthetics. *Indoor and Built Environment*, 20(5), 485–487. <https://doi.org/10.1177/1420326X11424336>
- Chowdhury, A., Karmakar, S., Gosh, S., & Chakrabarti, D. (2014). Purchase Intention of Antropomorphic Chair is Influenced by Visual Attractiveness and Pleasure.

- International Review of Applied Engineering Research*, 4(2), 133–140.
- Cor, E., & Zwolinski, P. (2015). A Protocol to address user behavior in the eco-design of consumer products. *Journal of Mechanical Design, Transactions of the ASME*, 137(7). <https://doi.org/10.1115/1.4030048>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982–1003. <https://doi.org/10.1287/mnsc.35.8.982>
- Dinda, B., Silsarma, I., Dinda, M., & Rudrapaul, P. (2015). Oroxylum indicum (L.) Kurz, an important Asian traditional medicine: From traditional uses to scientific data for its commercial exploitation. *Journal of Ethnopharmacology*, 161, 255–278. <https://doi.org/10.1016/j.jep.2014.12.027>
- Donati, C., & Rappuoli, R. (2013). *Reverse vaccinology in the 21st century: improvements over the original design*. 1–18. <https://doi.org/10.1111/nyas.12046>
- Ely, A. J., Henaulu, A. K., & Umanailo, M. C. B. (2020). Sustainable traditional cultural for tourism fisherier with canvas business model on the Ambon Island. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 0(March), 2561–2567.
- Emilien, G., Weitkunat, R., & Lüdicke, F. (2017). Consumer perception of product risks and benefits. *Consumer Perception of Product Risks and Benefits*, April, 1–596. <https://doi.org/10.1007/978-3-319-50530-5>
- Fred D. Davis. (1985). *A TECHNOLOGY ACCEPTANCE MODEL FOR EMPIRICALLY TESTING NEW END-USER INFORMATION SYSTEMS: THEORY AND RESULTS* [Wayne State University (1980)]. <https://doi.org/10.1126/science.146.3652.1648>
- Gasarch, W. (2015). REVIEW OF MARKETING RESEARCH. In *ACM SIGACT News* (Vol. 46, Issue 2). <https://doi.org/10.1145/2789149.2789154>
- Gürşen, A. E., Özkan, E., & Bozbay, Z. (2020). Using visual art in product design and consumer responses: The moderating role of product type. *Contemporary Management Research*, 16(4), 229–254. <https://doi.org/10.7903/CMR.20645>
- Haase, J., Wiedmann, K. P., & Bettels, J. (2020). Sensory imagery in advertising: How the senses affect perceived product design and consumer attitude. *Journal of Marketing Communications*, 26(5), 475–487. <https://doi.org/10.1080/13527266.2018.1518257>
- Haryanto, B., Nusantara, A. C., & Budiman, S. (2015). How sexuality in elegance of advertising and congruency of product influence brand evaluation? (the study of consumer behavior using an experimental design approach). *Mediterranean Journal of Social Sciences*, 6(4), 118–129. <https://doi.org/10.5901/mjss.2015.v6n4p118>
- He, X., Zhan, W., & Hu, Y. (2018). Consumer purchase intention of electric vehicles in China: The roles of perception and personality. *Journal of Cleaner Production*, 204, 1060–1069. <https://doi.org/10.1016/j.jclepro.2018.08.260>
- Holling, C. S. (1973). Resilience and stability of ecological systems. *Annu. Rev. Ecol. Syst.*, 4, 1–25.

- Homburg, C., Schwemmler, M., & Kuehnl, C. (2015). New product design: Concept, measurement, and consequences. *Journal of Marketing*, 79(3), 41–56. <https://doi.org/10.1509/jm.14.0199>
- Horlings, L. G. (2015). The inner dimension of sustainability: Personal and cultural values. *Current Opinion in Environmental Sustainability*, 14, 163–169. <https://doi.org/10.1016/j.cosust.2015.06.006>
- Horne, R. E. (2009). Limits to labels: The role of eco-labels in the assessment of product sustainability and routes to sustainable consumption. *International Journal of Consumer Studies*, 33(2), 175–182. <https://doi.org/10.1111/j.1470-6431.2009.00752.x>
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65(1), 19–51. <https://doi.org/10.2307/2657288>
- Jawahir, I. S., Dillon, O. W., Rouch, K. E., Joshi, K. J., & Jaafar, I. H. (2006). “Trends in the Development of Machinery and Associated Technology” TOTAL LIFE-CYCLE CONSIDERATIONS IN PRODUCT DESIGN FOR SUSTAINABILITY: A FRAMEWORK FOR COMPREHENSIVE EVALUATION University of Kentucky. 11–15.
- Joseph, F., Jeff, M., & David, S. (1998). Measuring Product Sustainability. *The Journal of Sustainable Product Design*, July 1998.
- Kim, H. Y., & Chung, J. E. (2011). Consumer purchase intention for organic personal care products. *Journal of Consumer Marketing*, 28(1), 40–47. <https://doi.org/10.1108/07363761111101930>
- Kim, J., & Lennon, S. J. (2013). Effects of reputation and website quality on online consumers’ emotion, perceived risk and purchase intention: Based on the stimulus-organism-response model. *Journal of Research in Interactive Marketing*, 7(1), 33–56. <https://doi.org/10.1108/17505931311316734>
- Kuo, C.-H. P. (2015). The Qing Dynasty and Traditional Chinese Culture by Richard J. Smith. *China Review International*, 22(1), 68–70. <https://doi.org/10.1353/cri.2015.0011>
- Kurdi, B. Al, Alshurideh, M., Salloum, S. A., Obeidat, Z. M., & Al-dweeri, R. M. (2020). An empirical investigation into examination of factors influencing university students’ behavior towards elearning acceptance using SEM approach. *International Journal of Interactive Mobile Technologies*, 14(2), 19–41. <https://doi.org/10.3991/ijim.v14i02.11115>
- Lee, S., Ko, E., Chae, H., & Minami, C. (2017). A study of the authenticity of traditional cultural products: focus on Korean, Chinese, and Japanese consumers. *Journal of Global Scholars of Marketing Science*, 27(2), 93–110. <https://doi.org/10.1080/21639159.2017.1283794>
- Liu, T., & Xiang, W. (2020). To Explore the Inheritance of Computer Multimedia Art Design Based on Traditional Chinese Cultural Elements. *Journal of Physics: Conference Series*, 1574(1). <https://doi.org/10.1088/1742-6596/1574/1/012019>
- Luchs, M. G., Swan, K. S., & Creusen, M. E. H. (2016). Perspective: A Review of Marketing Research on Product Design with Directions for Future Research.

- Journal of Product Innovation Management*, 33(3), 320–341.
<https://doi.org/10.1111/jpim.12276>
- Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A Study of Factors Affecting on Customers Purchase Intention Case Study : the Agencies of Bono Brand Tile in Tehran. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2(1), 267–273.
- Phillips, L. W. (2013). Bogazzi_Assesing Construct Validity in Organizational Research. *Administrative Science Quarterly*, 36(3), 421–458.
<http://www.jstor.org/stable/2393203>
- Qin, Z., Song, Y., & Tian, Y. (2019). The impact of product design with Traditional Cultural Properties (TCPs) on consumer behavior through cultural perceptions: Evidence from the young Chinese generation. *Sustainability (Switzerland)*, 11(2).
<https://doi.org/10.3390/su11020426>
- Shome, R. (2012). Asian modernities: Culture, politics and media. *Global Media and Communication*, 8(3), 199–214. <https://doi.org/10.1177/1742766512459119>
- Siu, K. W. M. (2005). Culture and design: A new burial concept in a densely populated metropolitan area. *Design Issues*, 21(2), 79–89.
<https://doi.org/10.1162/0747936053630151>
- Smith, J. W., Anderson, D. H., & Moore, R. L. (2012). Social Capital, Place Meanings, and Perceived Resilience to Climate Change. *Rural Sociology*, 77(3), 380–407.
<https://doi.org/10.1111/j.1549-0831.2012.00082.x>
- Tarhini, A., Hone, K., & Liu, X. (2013). Factors Affecting Students' Acceptance of e-Learning Environments in Developing Countries:A Structural Equation Modeling Approach. *International Journal of Information and Education Technology*, 3(1), 54–59. <https://doi.org/10.7763/ijiet.2013.v3.233>
- Wang, C. L., Chen, Z. X., Chan, A. K. K., & Zheng, Z. C. (2000). The influence of hedonic values on consumer behaviors: An empirical investigation in china. *Journal of Global Marketing*, 14(1–2), 169–186.
https://doi.org/10.1300/J042v14n01_09
- Wedowati, E. R., Singgih, M. L., & Gunarta, I. K. (2018). A study of consumer preferences for customized product design. *MATEC Web of Conferences*, 204, 1–7. <https://doi.org/10.1051/mateconf/201820401002>
- Zhao, H. H., Gao, Q., Wu, Y. P., Wang, Y., & Zhu, X. D. (2014). What affects green consumer behavior in China? A case study from Qingdao. *Journal of Cleaner Production*, 63, 143–151. <https://doi.org/10.1016/j.jclepro.2013.05.021>
- Zhou, Q. B., Zhang, J., & Edelheim, J. R. (2013). Rethinking traditional Chinese culture: A consumer-based model regarding the authenticity of Chinese calligraphic landscape. *Tourism Management*, 36, 99–112.
<https://doi.org/10.1016/j.tourman.2012.11.008>
- Zikmund, W.G. (2003). *Business Research Methods*, (7th ed). Thompson South-Western: Ohio.

APPENDICES

Appendix 1: Questionnaire's Cover Page

Thank you very much for filling out this questionnaire. This questionnaire aims to measure the impact of customer product design with traditional cultural attributes on the behavior of young Chinese consumers. To complete this questionnaire, you may need one to five minutes. This questionnaire is part of the personal research of Thai master's students. Please read each question carefully and make sure that all answers are your true thoughts. All this information is for academic purposes only.

Part A: Closed answer questions about the demographic characteristics of the participants, including gender, and income.

1. Gender

☐Male

☐Female

2. Income (monthly)

☐Less than 3000 RMB

☐3001-6000 RMB

☐6001-9000 RMB

☐More than 9001 RMB

Part B: closed-ended answer questions about 5 factors that influence purchase intention, including:

Please write a '√' in the box to show you agree or disagree with the following statements
1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

Variables	1	2	3	4	5
Product Attitude					
This product is desirable					
This product is pleasant.					
This product is attractive.					
Purchase Intention					
I am willing to buy this product.					
The likelihood for me to purchase this lamp is product.					
The probability that I would consider buying this product is high.					
Perceived Novelty					
This product satisfies my sense of curiosity.					
I feel like I'm exploring new worlds regarding this product.					
Perceived Sustainability					
I am full of confidence in traditional culture.					
I think traditional culture has a good future.					
I'd be happy to tell my friends about this traditional culture experience.					
Perceived Resilience					
I think traditional culture can respond quickly to the impact of various shocks.					
I think traditional culture have enough capacity to					

adapt to all kinds of impact.					
I think traditional culture can quickly adjust operations to cope with all kinds of impact.					



BIOGRAPHY

NAME

Jiding Geng

ACADEMIC

BACKGROUND

Bachelor's Degree with a major in Industrial Design from Shandong Institute of Light Industry, Shandong, China in 2008 and Master's Degree in Management at Rajamangala University of Technology Krungthep, Bangkok, Thailand in 2021

EXPERIENCES

Lecturer at Sichuan University of Media and Communications from year 2008 to present

