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The Impact of Product Design with Traditional Cultural Properties (TCPs) on Consumer Behavior Through Cultural Perceptions: Evidence from the Young Chinese Generation

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Abstract: Traditional Culture Properties (TCPs) have been regarded as one part of sustainable social and economic development. Culturally innovative products with elements derived from TCPs are obtaining increasing attention and is serving as a significant tool for communicating the aesthetics of product and underlying traditional culture. Recently, the crucial role of the young generation in inheriting TCPs' contemporary value has been heavily discussed. However, little in-depth research has distinguished and verified the link between cultural product and consumer behavior intermediated by the perceived cultural sustainability and resilience. This paper tries to investigate the impact of culturally innovative product design with TCPs on the young Chinese generation's perceptions of cultural development and product intentions. Empirical results indicate the significant positive effects of culturally innovative design on the young generation's perception of cultural sustainability and resilience, and how this interlinks with their purchasing behaviors. Managerial implications are also discussed in this study.

Keywords: cultural product; culturally innovative design; cultural sustainability; cultural resilience; traditional cultural properties (TCPs); young Chinese generation

1. Introduction

In the past few decades, the value of traditional culture has been underestimated or ignored in many countries under the process of western-centric modernization [1]. With a long history, China faces a dilemma on whether to transform or sustain its cultural traditions. Many traditional crafts and practices have disappeared continuously from daily life and been kept as heritage items or norms [2]. As documented in some empirical studies, the young Chinese generation has a low individual recognition of traditional culture in the context of modern society [3].

Fortunately, traditional culture has been included as one part of sustainable social and economic development since the 1990s. Culturally sustainable development (or cultural sustainability), firstly proposed by David Throsby, is rooted in the intergenerational consistency of traditions [4]. Such cultural sustainability emphasized on "cosmopolitan localism," is designed to sustain the local cultural forms and objects inter-generationally [5]. Meanwhile, the term of Traditional Cultural Properties (TCPs) 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 [6,7]. The rich historical association behind TCPs can nourish a nation's future development regarding cultural identity and satisfaction.

Furthermore, according to the UNESCO Declaration (1997) on the Responsibility of the Present Generations toward Future Generation, the present generation, especially the young people, should take responsibility for protecting and preserving our diversified traditional culture (cultural heritage) for future generations [8–10], since they are energetic and curious about the world [11]. In this way, it is a significant task and even an obligation for young people to preserve the TCPs [12,13].

With the recent changes of consumer needs and expectations, products with elements derived from TCPs are getting increasing attention and are serving as a significant tool communicating the aesthetics of product and underlying traditional culture, mainly by presenting the geographies, lifestyle and ethic characteristics of the local cultural group [14]. Nevertheless, more recent research reveals that the significance of products with relatively innovative cultural traits and its profound influences on user culture satisfaction stems from the inner intangible and behavioral level of TCPs [15].

Although the interlink between cultural sustainability and commodification of TCPs has been discussed [16,17], there is a lack of in-depth research to distinguish further and verify the inner connections between cultural product attitude, cultural perceptions and consequent consumer behavior from the young generation's perspective, which has profound effects on sustainable cultural development. For example, Zhan et al. [17] discuss current challenges and opportunities of craftsmanship in the Yangtze River Delta in China, and discuss how this traditional cultural capital can be incorporated into modern product design with a view of promoting a modern lifestyle with a local identity. There is also an interesting issue whether young people's attitudes of cultural product design affects their perceptions of cultural sustainability and resilience significantly, this can demonstrate the potential role of cultural product in the sustainability of TCPs. Chai et al. suggest that relatively innovative cultural design with more abstract elements of TCPs is more successful in satisfying young people's perceptual needs [15], but whether their purchasing behavior tends to be affected prominently in this way has not been confirmed yet. This may contribute to sustainable commercialization of TCPs.

To address these questions, we employ an empirical study to verify the impact of culturally innovative product design on young peoples' perceptions of TCPs' sustainability and resilience by analyzing their purchase intention and attitudes towards products. The relationships examined in this research can offer a more comprehensive understanding of the current commercialization and sustainability of TCPs. Concerning the practical perspective, the results can contribute to the marketing and design strategies in the field of cultural industries to benefit local cultural sustainability. From social perspectives, young generations' perceptions of culture inheritance and sustainability could be enhanced to a certain extent by this empirical study.

2. Literature Review

In this section, we present a theoretical background of the present research. Firstly, we discuss the definition and concept of the cultural product and culturally innovative product in the context of sustainable development, and how these products relate to TCPs and influence consumer attitudes. Secondly, the perceived sustainability and resilience of TCPs are introduced to propose the hypothetical relationship between cultural products and sustainable cultural development. Finally, from an economic perspective, we argue that the purchasing intention for cultural products is interlinked with how the consumer interprets the culture and cultural development.

2.1. Cultural Product Design and Consumers' Attitude

Recently, cultural products have been discussed heavily in the context of cultural sustainability [14,17,18]. These discussions mainly emphasize innovatively introducing cultural elements, such as TCPs, into the modern product traits to improve the sustainable flow of cultural capital. Throsby proposes that culturally sustainable development (or cultural sustainability) is designed to sustain an intergenerational flow of cultural capital, which is rooted in the consistency of traditions [4]. It has implied that cultural capital should be contextualized and materialized across different generations in a purposeful and appropriate way. In this context, many studies follow this trend in specifying ways to achieve this,

such as the protection and management of intangible and tangible forms of heritage. Later the core of this has been transformed from the still preservation of cultural heritage into the interdependent inheritance within the economic system [19,20]. Some studies have shown the scholarly understandings of TCPs has been transformed into a more dynamic and intertemporal vitality of cultural value [21,22]. TCPs are regarded as living resources to inform the cultural and economic development in the current context; it has been exploited to nourish product design to improve users' cultural satisfaction, especially for the young generation [18,23]. This encourages a research topic on cultural-orientated design, with emphasis on the strategic methods used to apply and integrate cultural elements extracted or derived from local TCPs into modern product traits. Relevant empirical studies further verified the specific effects of cultural design on consumers' product attitudes [15].

However, critical comments have been proposed to draw the attention of researchers and designers beyond the surface manifestations of TCPs on the products' visual appearance when meeting the mass production market [18,24,25]. More efforts should be placed to the "capital flow" of the original value of TCPs, rather than using a superficial cultural recognizing stereotype. Consumers are looking for cultural products with innovative design integration. Meanwhile, "vitality" becomes an increasingly crucial word in the research area of cultural sustainability [26]. This challenges designers and researchers to jump out of the visual stereotypes, and instead to further explore the more profound nature and meaning of TCPs for the contemporary young generation. Some scholars have started to explore design solutions for cultural innovation [27,28]. To specify, design for cultural innovation (DfCI) is proposed to reinvent and encourage modern product design with unique local identities by strategically combing the inner meanings of TCPs, beyond the superficial visual symbols [29]. For example, Lin [28] illustrates how the TCPs could be transformed and applied into a unique modern twin plant pot which borrows the inner meaning of respecting nature from the aboriginal Linnak culture. Other relevant studies have been conducted in many countries, especially those with long historical traditions, including but not limited to China, South Korea, and Austria.

Admittedly, the interpretation of culture is complex and multi-disciplinary. In the context of product design research, Siu [30] proposes an inner-intermediate-outer cultural model to describe how people interpret the cultural meaning through product design; he also argues that the design artifacts carrying the inner level of culture can influence and change people's behavior and ways of thinking in changing contexts. For this reason, the people's reactional behaviors tend to be encouraged by innovating the elements of the inner conceptual level of TCPs [22]. However, this is seldom examined in the research of sustainability of TCPs.

Also, the role of TCPs in the contemporary cultural context is profoundly shaped by people's attitudes on a large scale [31]; culturally innovative products can be an essential stimulus to influence consumers' perception towards the cultural development with the local identity. Moreover, empirical studies were conducted to compare user satisfaction regarding different cultural levels, which show that inner "intangible" culture is more effective in enhancing users' cultural satisfaction [15]. Therefore, it has become crucial for developing cultural sustainability by improving consumer attitudes regarding cultural products. The culturally innovative products referring to the inner level element derived from TCPs is examined through perceived product novelty [32], the details of this are presented in Section 4. The perceived sustainability and resilience of TCPs are investigated to support the consumers' understanding of culturally sustainable development. In Sections 2.2 and 2.3, we describe the two terms of the perceived sustainability and resilience. Thus, we formulate the following four hypotheses based on the prior research findings presented above:

H1. *The perceived novelty of culturally innovative products has a positive impact on consumer perceptions of the sustainability of TCPs.*

H2. *The perceived novelty of culturally innovative products has a positive impact on consumer perceptions of the resilience of TCPs.*

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.*

2.2. Perceived Sustainability of TCPs

When cultural sustainability is gradually argued as a crucial component of anthropocentric development [33], TCPs have been increasingly discussed as the critical resources to sustain a nation's cultural identity, diversity, and vitality [34]. The reason for this seemingly draws on the core of sustainability that is human-centered development within cultural society shaped in history. In this case, human needs should be one of the critical considerations to retain sustainability in cultural discourse; this leaves room for researching how cultural sustainability is perceived through attitudes towards culturally innovative products that carried cultural capital.

As discussed in previous paragraphs, culturally innovative products can be a viable way to achieve the intergenerational flow of TCPs [14,17,18]. Human needs, in this context, are referring to a perceived value of traditional culture through product interaction and usage. In other words, a well-designed cultural product can be the stimulus to inform a consumer's positive recognition towards the TCPs. However, some research also argues that cultural design with mass consumer characteristics, such as excessive entertainment, would lead to a negative impact on cognition of TCPs [24,25,35,36]. For example, some relevant surveys have been conducted to determine how traditional culture is perceived in the context of cultural globalization within the young generation; the results show a disappointing evaluation and low expectations [37]. However, it is worth noting that one of the surveys examines the estimated functions of traditional culture in our contemporary society, where 42.41% of respondents recognized its positive role in daily life [38]. This is aligned with the more recent research that emphasizes the significant role of culturally innovative products as utilitarian or everyday objects [22]. Therefore, it reveals an inherent consumer assumption, which is that culturally innovative products play a significant role in the perceived sustainability of TCPs.

Accordingly, the perceived value of the culturally innovative product may inform the motivation of cultural sustainability, which may become an essential factor to encourage future sustainable behaviors. Based on the above theoretical observations, we present the following hypothesis:

H5. *The perceived sustainability of TCPs has a positive impact on product attitudes.*

2.3. Perceived Resilience of TCPs

A significant number of studies have been conducted to investigate how external physical applications sustain TCPs, such as the policy-making of cultural heritage [39,40]. Within these studies, the interpretations of cultural sustainability are associated with a physical constancy of cultural capital. Later on, an internal perspective is introduced to construct a resilient relationship based on the whole cultural system, which seeks to address the concerns that were discussed previously of some scholars regarding how to improve customer considerations of the inner vitality and viability of TCPs.

As per Hoiling's definition, resilience refers to the internal persistence of relationships that are capable of adapting to the changing external environment [41]. It can be interpreted as a process, capacity or outcome of successful adaptation that occurs despite challenges or threatening circumstances [42]. Though the theory of resilience has been built upon the eco-environmental concerns, it has been developed to inspire scholars to study cultural discourses with the consideration of positive adaptation. Clauss-Ehlers further develops a definition of "culturally-focused resilient adaptation" as the resilient outcomes that are activated by cultural traditions [43]. Some early studies focus on how cultural knowledge informs individuals and communities to overcome adversities [44]. The cultural value of local traditions is significant in reinforcing livelihood resilience [45].

In this study, we exploit the concept of perceived resilience to further examine the internal adaptation and capability of TCPs from consumers' perspective with consideration of cultural sustainability [46,47]. Based on these observations, we propose the following hypotheses:

H6. *The perceived resilience of TCPs is positively influenced by consumers' perception of the sustainability of TCPs.*

H7. *The perceived resilience of TCPs has a positive impact on product attitude.*

2.4. Purchase Intention of Cultural Product

Although many relevant studies focus on the theoretical relationship between design strategies of cultural products and culturally sustainable development, few empirical studies have been directed toward verifying how its perceived product attitude influences consumers' purchase intentions. Creative cultural knowledge can be transformed into product traits to trigger cultural interests of consumers, and also to generate economic values [48].

Throsby argues that the commercial circulation of cultural capital is a viable way to maintain local cultural diversity and vitality [49]. When a consumer chooses a cultural product that carried a specific cultural meaning of TCPs, it vitalizes and encourages a significant relationship with his/her lifestyle [50,51]. Thus, it is possible to assume that a fundamental link between purchasing the culturally innovative product and improving the sustainability of TCPs through the perspective of "intergenerational flow."

Previous studies address the critical role of attractive product design on marketing success [52]. Product traits, such as appearance, can influence consumer purchase attention on a large scale [53]. It is also argued that a product's symbolic value can even be the critical variant for product choice [54], as the ideal self-images of consumers can be expressed by choosing a specific product [55]. On the discourse of cultural products, the intended purchase of well-designed cultural products can be a way to express positive perceptions towards the developments of TCPs. Therefore, we have the following hypothesis for the product attitude and purchasing intentions relevant to culturally innovative products:

H8. *The product attitude of culturally innovative design has a positive impact on the purchasing intentions of consumers.*

3. Research Framework and Hypotheses

Based on our review of prior related research, we found that the perceived novelty of culturally innovative products plays a significant role in perceptions concerning TCPs' sustainable development; and its product attitude is crucial for consumers' purchasing intentions. In this section, we present a research framework that shows the impacts of culturally innovative product design and people's understanding of sustainability from a view of Chinese young people. This research framework would help us to have insights into the relationship between different variables and the effects of perceived novelty and the recognition of cultural development on consumers' behavior reactions.

Previous research on perception and maintenance of cultural development does not make clear the relationship between perceived sustainability and perceived resilience of culturally sustainable development, and the term of resilience is underestimated especially within the field of cultural development. However, regarding the potential risk of cultural decline, a type of system, including a cultural or ecological system, would maintain its sustainability and then recover from the impact [56,57].

Prior research of product novelty has concentrated on the effects of perceived novelty on product attitude [58], on purchasing intentions [59], or on product usability [60], and rarely rigorously explore and validate product novelty from a young generational perspective and in the context of the cultural product category. In particular, this would include the effects of culturally innovative product design on cultural perception, product attitude, and purchase intentions. Therefore, this research should divide the cultural perceptions into two sub-constructs to validate, namely the perceived sustainability and resilience of TCPs. This division of culture perceptions would provide us with insights into the possible effect of perception of cultural development to consumer behavior and its relationship with the perceived novelty of the culturally innovative product. In this way, it would help us to

make a judgement on whether it is valid to confirm that culturally innovative design is highly likely to influence young peoples' perceptions of TCPs with a sustainable perspective, influencing their purchase behavior as a result. Thus, we plan to validate not only the causality between the perceived sustainability and resilience of TCPs but also the relationship between perceived product novelty and the consequences.

Figure 1 presents the research framework and hypotheses developed by the above reasoning. As shown in the figure, there are eight hypotheses formulated to answer the research questions stated above.

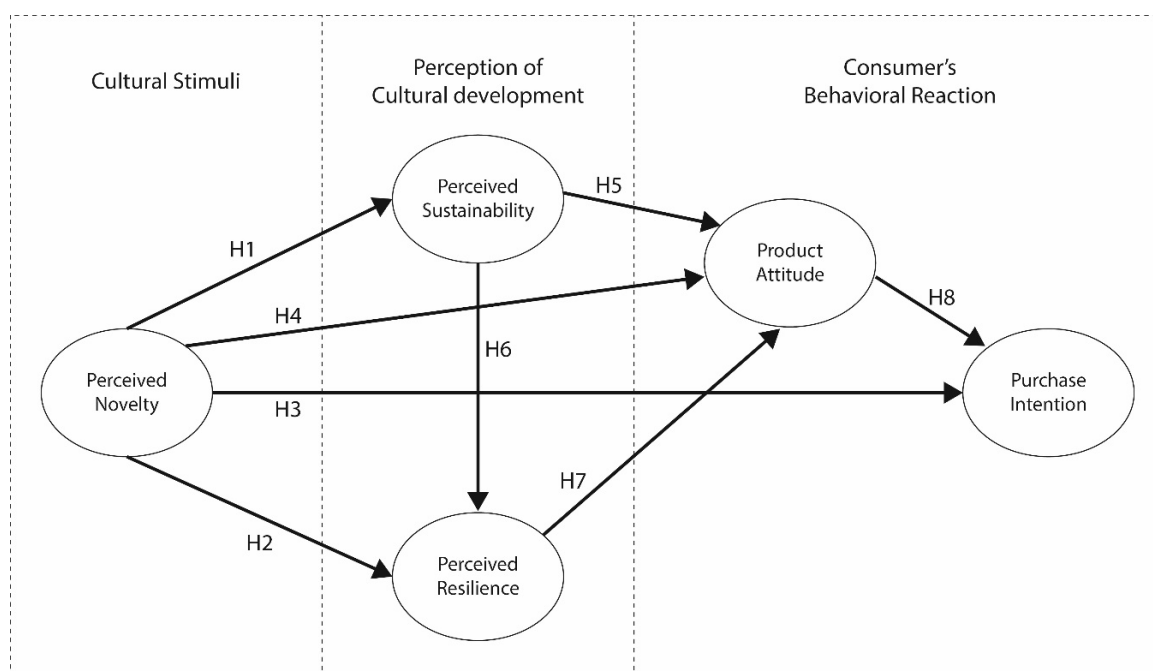
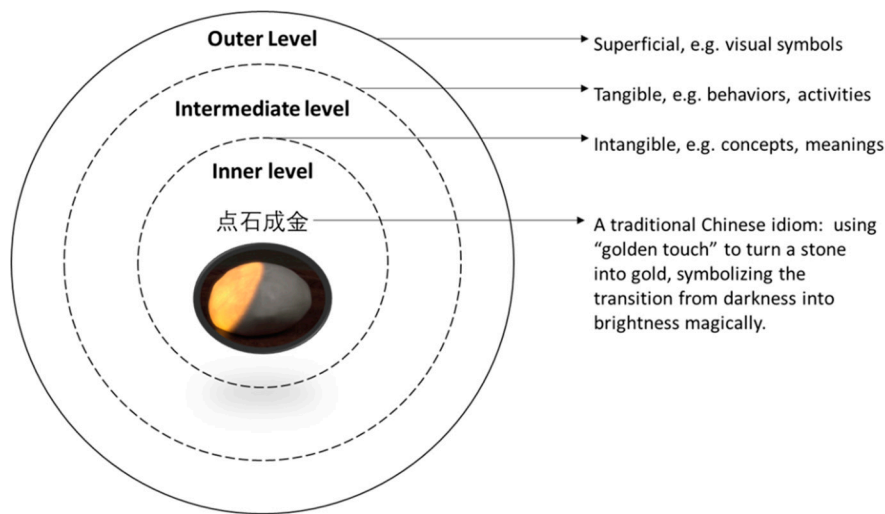


Figure 1. The conceptual framework of hypotheses.

4. Research Methods

To test our research framework, we employed an empirical study using data from student survey responses from Anhui Normal University (AHNU), which is located in the eastern part of China. Founded in 1928, Anhui Normal University is the largest university in Anhui Province and is also one of the largest normal universities in China, containing more than 43,800 students from various regions spread throughout China (<http://www.ahnu.edu.cn/3209/view>). For that reason, the sample selected could represent a general picture of Chinese young people, thereby making it possible to assess Chinese young people's responses accurately. Inspired by the traditional Chinese idiom "Touch stone and turn it into gold (点石成金)," 3 professional product designers worked together to design a culturally innovative lamp which exploited the meaning of this traditional idiom to symbolize the lamp function. The meaning of the idiom, as the inner level cultural capital from Chinese TCPs, was integrated into this modern lamp design concept to elicit for consumers the subtle cultural feelings behind traditional Chinese culture. Figure 2 shows the design concept, appearance, and functionality of this lamp with an explanation of the meaning behind it. Participants were first exposed to this lamp design for 10 s and then answered the questions stated in the survey.



(a) The lamp design concept and the cultural level model (the model is adapted from Siu's dimension of culture [30]).



(b)

Figure 2. (a) illustrates how this selected design of culturally innovative product fits the inner cultural level of TCPs; (b) illustrates the detailed process of the “点石成金” Lamp design. After a user touches the surface of the stone-like lamp, the golden glow is gradually illuminated. It corresponds to the meaning of “touch a stone and turn it into gold.” This concept from the traditional Chinese idiom is meant to symbolize the subtle and magical transition from the darkness into brightness.

4.1. Measures

Table 1 illustrates the measures that have been used to examine the research hypotheses 1–8. There are five measures related to the research framework. Measurement items and scales were adapted from the relevant studies. Then, a survey was composed based on the measurement items and related demographic questions.

Table 1. Measures for the Research Model.

Measure	Definition	Measure Items	Reference
Product Attitude	The product attitude means that an acquired or predisposed mental state regarding a product with some degree of negativity which is perceived from a social or personal stimuli.	This lamp is desirable. This lamp is pleasant. This lamp is attractive.	Howard and Gengler, 2001
Purchase Intention	The willingness of a customer to buy a certain product or a certain service is known as purchase intention.	I am willing to buy this lamp. The likelihood for me to purchase this lamp is high. The probability that I would consider buying this lamp is high.	Dodds et al.1991
Perceived Novelty	Perceived novelty is the quality of being new, or following from that, of being striking, original or unusual.	This lamp satisfies my sense of curiosity. I feel like I'm exploring new worlds regarding this lamp.	Unger & Kernan, 1981
Perceived Sustainability	Perceived sustainability of TCPs as it relates to sustainable development, has to do with the maintaining of cultural beliefs, cultural practices, heritage conservation, culture as its own entity, and attempts to answer the question of whether or not any given cultures will exist in the context of the future.	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.	Kim et al., 2015
Perceived Resilience	Perceived resilience of TCPs is the ability of one culture to successfully cope with a crisis and to return to pre-crisis status quickly.	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.	Ambulkar et al. 2015

4.2. Survey Procedure and Response Rate

A pilot study was introduced to examine whether the survey was properly formed to explore and validate the research questions above. 29 college students participated in this pilot survey, and we checked the consistency of this survey and revised the redundant questions, making this survey as clear as possible. The survey was carried out in November 2018.

In order to get an insight into Chinese young people's perception of the research framework discussed above, a total of 1329 questionnaires were sent randomly to undergraduate students using

WeChat, QQ or other messenger apps as retrieved from AHNU academic secretaries for students of various regions. A total of 433 unique and usable responses were received (a response rate of 32.5%).

5. Findings

In order to perform a statistical analysis of the data collected, we used SPSS 20.0 for Windows and AMOS 24.0. The SPSS analytical software was used to test the reliability of measurement items and demographical information. Meanwhile, AMOS analytical software was used to run a confirmatory factor analysis (CFA) of the research framework, test the hypotheses 1-8, and analyze the structural equation framework (SEM).

The demographic information of the participants is given in Table 2. The largest age group in the sample was age 19, which accounted for 31.87% of the total respondents. The next-largest age groups were the age 18 and age 20 groups, whose proportions was 28.64% and 28.41% respectively.

Table 2. Demographic Information of the Participants.

Attributes	Value	Frequency	Percentage (%)
Gender	Male	120	27.71%
	Female	313	72.29%
Age	16–17	20	4.62%
	18	124	28.64%
	19	138	31.87%
	20	123	28.41%
	21–35	28	6.47%

5.1. Reliability and Validity

Reliability suggests the extent to which a measurement item is viewed the same way under the same condition with the same subjects. Reliability coefficients and Cronbach's alphas would test the internal consistency of measurement items within the questionnaire. The result of Cronbach's alphas in the survey is shown in Table 3. All the constructs were all above 0.70 which works as a threshold [60]. In addition, competitive reliability (C.R.) in the column is also above the threshold. Therefore, the measurement items of this survey are considered to be reliable.

Table 3. Reliability and Unidimensionality.

Construct	Cronback's Alpha	Variable	Standardized Factor Loading	C.R. (t-value)	SMC	AVE	Composite Reliability
Product Attitude	0.912	Att1	0.884	-	0.814	0.803	0.925
		Att2	0.903	24.336	0.815		
		Att3	0.902	22.589	0.781		
Purchase Intention	0.935	PI1	0.893	-	0.797	0.831	0.936
		PI2	0.942	31.085	0.887		
		PI3	0.899	28.183	0.808		
Perceived Novelty	0.892	No1	0.865	-	0.748	0.808	0.894
		No2	0.932	24.445	0.869		
Perceived Sustainability	0.955	CS1	0.905	-	0.819	0.848	0.944
		CS2	0.956	42.928	0.914		
		CS3	0.901	34.872	0.812		
Perceived Resilience	0.953	CR1	0.903	-	0.815	0.874	0.954
		CR2	0.950	34.413	0.903		
		CR3	0.951	34.556	0.904		

Construct validity refers to the extent of correspondence between a construct and its operationalization. Regarding the construct validity of our research framework, it could be assessed by

evaluating (1) unidimensionality, (2) convergent validity, (3) discriminant validity, and (4) nomological validity [60].

We used confirmatory factor analysis (CFA) to examine the unidimensionality of the research framework. Unidimensionality refers to the extent to which a measurement scale has only one dimension, and CFA is introduced to examine whether measures of a construct are consistent with a researcher's understanding of the nature of that construct (or factor). In this research framework, a CFA was computed for each of the five constructs to determine whether the 14 indicators measured the construct they were assigned to adequately. We used a Maximum likelihood (ML) estimation to evaluate the CFA frameworks. To specify, the criteria we used in this framework contains the Comparative Fit Index (CFI), the Root Mean Square Residual (RMSR), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), and so forth.

Next, convergent validity refers to the extent to which two measures of constructs that theoretically should be related, are related to each other. Individually, the threshold of convergent validity is evaluated through critical ratios (CR, value are 2 or above), standardized factor loadings (value are 0.5 or above), and averaged variances expected (AVE's, value are 0.5 or above) [61,62]. In our research framework, the minimum CR (=22.589) was much higher than the '2' threshold; the minimum standardized factor loading (=0.865) exceeded the '0.5' threshold, and the lowest AVE calculated (=0.803) was well above the 0.50 threshold. Thus, convergent validity for the research framework is considered to be acceptable.

Discriminant validity tests whether concepts or measurements that are not supposed to be related are unrelated. We calculated the correlation coefficients of our research framework. Table 4 shows that the most significant coefficient is 0.796, a coefficient of correlation between cultural sustainability and cultural resilience and that the square of this number, 0.633, is not as large as 0.803, the minimum AVE for product attitude. Therefore, discriminant validity of our research framework is acceptable [60].

Table 4. Correlation matrix of the constructs.

Construct	AVE	CS	CR	NO	ATT	PI
Perceived Sustainability (CS)	0.848	1				
Perceived Resilience (CR)	0.874	0.796 **	1			
Perceived Novelty (NO)	0.808	0.521 **	0.509 **	1		
Product Attitude (ATT)	0.803	0.577 **	0.552 **	0.693 **	1	
Purchase Intention (PI)	0.831	0.387 **	0.427 **	0.700 **	0.630 **	1
Mean		5.94	5.56	4.98	5.17	4.18
S.D.		1.24	1.28	1.47	1.33	1.49

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

Finally, nomological validity refers to a comparison of at least two constructs and that those constructs have a possible linkage. The coefficient between the perceived sustainability and perceived resilience, 0.796, was rather high, we thus performed a multi-collinearity test. Variance inflation factors (VIF) would evaluate the nomological validity with the threshold of 10 or less. Calculation of VIF in our research framework showed that VIF's ranged from 4.355 to 6.181, ruling out the potential threat of multi-collinearity in this research; namely, the nomological validity of this research framework is acceptable.

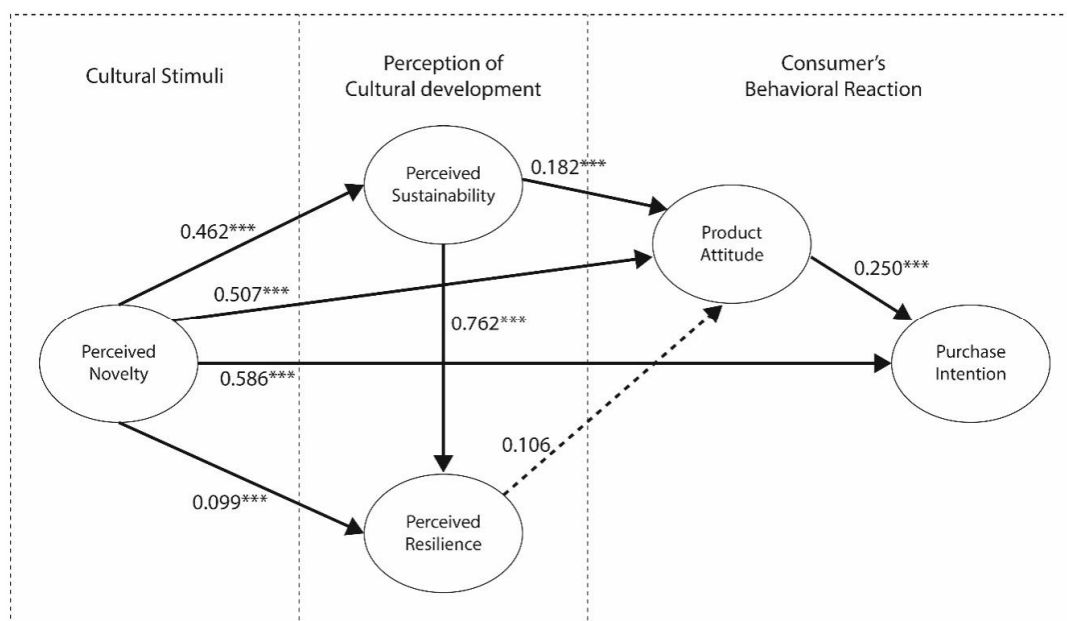
Meanwhile, the goodness of fit of the research framework with absolute fit indices and incremental fit indices was assessed as shown in Table 5. To specify, SRMR (standardized root mean square residual), GFI&AGFI (goodness-of-fit index), RMSEA (root mean square error of approximation), NFI (normed fit index), IFI (incremental fit index), TLI (Tucker–Lewis index), and CFI (comparative fit index) were all within the respective thresholds. Thus, the research framework was considered to be fitted to the responses collected.

Table 5. Goodness of Fit Test.

Category	Measure	Acceptable Values	Value
Absolute fit indices	Chi-square		216.411
	d.f.		68
	Chi-square/d.f.	1–5	3.183
	GFI	0.90 or above	0.936
	AGFI	0.90 or above	0.901
	SRMR	0.08 or below	0.062
Incremental fit indices	RMSEA	0.05–0.08	0.071
	NFI	0.90 or above	0.968
	IFI	0.90 or above	0.978
	TLI	0.90 or above	0.970
	CFI	0.90 or above	0.978

5.2. Path Analysis

The chief aim of this study is to understand what the effects are of the perceived novelty of culturally innovative products on perceptions of the sustainability and resilience of TCPs, thus influencing consumer behavior. In order to analyze the relationship in the research framework, we conducted a path analysis based on the Structural Equation Model (SEM). Figure 3 shows the output of this analysis and Table 6 shows the standardized coefficient of each path and the results of the hypotheses.

**Figure 3.** Path Coefficients Resulting from Structural Equation Modeling (SEM).**Table 6.** Hypothesis Testing.

Hypothesis	Path	Standardized Coefficient	Standard Error	C.R. (t-Value)	Result
H1	Perceived Novelty -> Perceived Sustainability	0.462 ***	0.040	11.661	Accepted
H2	Perceived Novelty -> Perceived Resilience	0.099 ***	0.032	3.045	Accepted
H3	Perceived Novelty -> Purchase Intention	0.586 ***	0.064	9.183	Accepted
H4	Perceived Novelty -> Product Attitude	0.507 ***	0.041	12.324	Accepted
H5	Perceived Sustainability -> Perceived Resilience	0.762 ***	0.042	18.306	Accepted
H6	Perceived Sustainability -> Product Attitude	0.182 ***	0.067	2.737	Accepted
H7	Perceived Resilience -> Product Attitude	0.106	0.066	1.608	Rejected
H8	Product Attitude -> Purchase Intention	0.250 ***	0.070	3.562	Accepted

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

6. Results and Discussion

Results show that seven of the eight hypotheses were supported. The novelty of cultural products, which yielded significant path coefficients of 0.462 and 0.099 respectively, was found to affect the perceived sustainability and resilience of TCPs, verifying H1 and H2. This finding is attributed to the fact that product traits derived from the inner level of TCPs play a significant role in improving the perceptions of sustainability and its resilience within the young generation. This is particularly true in that the young consumer group needs the more powerful and spiritual medium to understand the internal relationship between themselves and cultural development beyond the direct idealism of cultural sustainability. Also, young consumers are more open to accepting innovative design expressions and cultural beliefs concerning social and environmental responsibility. For example, a relevant study conducted by Lee [63] also shows a strong motivation of young consumers' green purchasing behaviors. Furthermore, the perceived sustainability and resilience of TCPs is decided by the performance of cultural design; this means that consumers tend to recognize the potential role of TCPs through relatively innovative design expressions, which aligns with the discussion in Section 2.1.

Also, the perceived novelty of culturally innovative product reveals a significant association between the perceived sustainability and resilience of TCPs, with the coefficient of 0.762 supporting H6. This study presented the first evidence of how perceived sustainability influences the perceived resilience of TCPs. The connection between these two concepts is essential to underpin the theory of cultural sustainability in the context of human-centered development. This finding is consistent with Niedderer et al.'s study of sustainable innovation; they argued that design is a significant driver to change the way people think about sustainability [36]. Meanwhile, the link between the perceived sustainability and resilience of TCPs revealed the fact that a more sustainable attitude can reinforce a consumer's confidence in TCPs, thereby informing the consumer's understanding of the cultural vitality of TCPs.

Young consumers' product attitudes are influenced by the novelty of culturally innovative products directly with the coefficient of 0.507, and the perceived sustainability of TCPs plays an intermediary role upon the product attitude with the coefficient of 0.182, supporting H4 and H5. This showed both the novelty of cultural products and perceived sustainability could significantly improve product attitudes and perceptions from the younger generation. This is because the concept of cultural capital is not a still and immobilized asset, but tends to encourage more innovative design thinking to convey the profound cultural vitality of TCPs. Previous research has tried to explore different methods to improve consumer perceptions of cultural products. Shin et al. proposed that traditional cultural product design should be reinvented regarding modernization [29], this finding verified that cultural design rooted in inner intangible cultural level is an effective way to innovate the traditional elements of cultural products, and improve consumer attitudes. A similar observation was made in Chai et al.'s research where cultural elements with superficial forms were not found to be attractive to consumers [15].

On the other hand, the influence of the perceived resilience on product attitude was not significant; therefore, H7 was not supported. The path coefficients of 0.106 indicate that consumer behavior towards novel cultural products is less connected with how they perceive the resilient adaptability of TCPs in the cultural context. We can infer from the present finding that, although the perceived sustainability of TCPs plays a vital role in shaping the consumer attitudes towards cultural products, the perceived resilience implies that design intervention may create a relatively negative influence on the development of TCPs, which is aligned with some critical studies discussed in Section 2.1. For example, the cultural products would be interpreted as a process to decrease the profound cultural value of the TCPs from the consumer's perspective. A similar inference was made by Qin [25], which proposed that cultural design which included excessive entertainment would lead to a negative impact on the people's cognition of TCPs.

Moreover, the influence of the perceived novelty of cultural product on the attitudinal purchase intention was confirmed with the coefficient of 0.586, the H3 was verified. This statistical evidence

firstly builds the theoretical relationship between the novelty of cultural products and purchase intentions. Our finding can support Chai et al., Leong et al., and Lin's previous studies that higher cultural level design of the cultural product can strengthen consumer attitudes [15,27,28], and further verify its influence on consumers' purchase intentions.

Finally, the influence of consumer attitudes towards cultural product on the purchase behavior was confirmed. H8 was supported as the relationship ended up with a coefficient of 0.250. Although some studies also had verified the impact of consumer's brand attitude on purchase intention in green marketing [64], this finding first builds the theoretical relationship between product attitudes and purchase intentions on the discourse of cultural products. From this result, it is reasonable to assume that novel traits of product design can encourage the consumption of cultural products on a large scale.

7. Conclusions

This study makes several theoretical contributions to the field of commercialization and sustainability of TCPs. Our findings first statistically verify that appropriate commercialization of cultural capital tends to have a positive contribution to the perceptual recognition of TCPs by young people. It can also support a preliminary understanding that commercial exploitation of inner intangible levels of cultural capital is a viable way to improve the materialization of TCPs and promote modern lifestyles with the local cultural identity [4–7]. Also, we found that the perceived novelty of culturally innovative products influences the purchasing intentions of customers and their consumption attitudes. This in turn positively affects perceptions of TCPs from the perspectives of sustainability and resilience in the younger generation [5]. As a consequence, this research also tends to answer those questions of whether commercialization of cultural capital can inform sustainable development.

Previous research examines how a cultural product with design emphasis influencing consumers' cultural perception remains limited; this study submitted quantitative research to understand consumer attitudes toward culturally innovative design and sustainability. In this study, the young generation's perceptions of sustainability are significantly influenced by the perceived novelty of the cultural product, that means a relatively culturally innovative design can be a viable way to improve their recognition of traditional culture in the context of cultural sustainability. Future studies can further investigate the economic models and strategies to improve recognition of TCPs. For example, scholars of cultural sustainability should place more attention on communicating the role of TCPs to the young generation through commercialization of culturally innovative products.

This study first considers the perceived sustainability and resilience of TCPs in its research framework in order to understand how young consumers' attitudes of cultural products were determined by their perceptions of cultural development. Consumer awareness of cultural development tends to be an influential factor as they evaluate a particular product that carries significant cultural meanings from the inner level of TCPs. Our finding shows that the perceived cultural sustainability of TCPs significantly influences the product attitudes of consumers. In this way, we can infer that people's motivation and recognition of cultural development plays a potential role in the commercialization of cultural capital. More future studies should investigate the marketing strategies of cultural products with a view towards consumer perceptions of cultural development.

8. Managerial Implications

Regarding managerial implications, some practical suggestions are also revealed. In this study, the novelty of cultural products is to go beyond the superficial material level elements, and to study the profound impact of cultural products with inner intangible level elements from TCPs. The findings further reveal that culturally innovative design plays a significant role in shaping purchasing intentions of young consumers. Statistically, it shows that more efforts should be made to encourage the managers and designers in this field of cultural industry to develop more innovative products derived from the inner level of TCPs. Moreover, scholars and designers should investigate more innovative design methods and applications of cultural products with considerations of cultural sustainability. Future

research should extend the research model of this study in the context of culturally innovative design derived from TCPs.

9. Limitations

This study also has some limitations in theory and methodology. Since the sample recruited in this study is in a normal university where the majority gender is female (<http://www.ahnu.edu.cn/3209/view>), a gender bias might exist in our sampling which could potentially influence the result [63].

Further studies would be implemented in a comprehensive university where gender would be balanced to some degree, strengthening the current result. The cultural perceptions related to TCPs may not only be limited to the perceived resilience and sustainability, but there might be other potential variables that also influence the result here. In future studies, we might introduce other factors. Also, research on the perceived resilience of TCP should exert more efforts to evaluate and measure how to confront the shadow of modernization in the context of globalization from an internal perspective.

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