



Research on the Influence Mechanism of Intangible Cultural Heritage Handwork Experience Value on User Satisfaction -- Taking Immersion Experience as the Intermediary Variable

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Abstract. Intangible cultural heritage handwork experience has become an important form of cultural consumption for young groups. Based on experience value theory and immersive theory, this study constructs a model with five dimensions of experience value (entertainment, learning, aesthetic, evading, interaction) as independent variables, immersive experience as mediator, and satisfaction as dependent variable. A questionnaire survey collected 584 valid samples. SPSS analysis shows: all five dimensions significantly affect immersive experience; entertainment, learning, aesthetic, and interaction values directly affect satisfaction, while evading value does not; immersive experience significantly affects satisfaction and plays a partial mediating role for the first four dimensions, and a full mediating role for evading value. The study extends experience value theory to the ICH handwork context, verifying the mediating mechanism of immersive experience.

Keywords: Intangible Cultural Heritage handwork experience, Experience value, Immersive experience, Mediating effect.

1 Introduction

Intangible Cultural Heritage (ICH) handwork experience has become a popular cultural activity among young people as it combines traditional skills with modern life. Chinese policies such as the Opinions on Further Strengthening the Protection of ICH and the 14th Five Year Cultural Development Plan support the integration of ICH and tourism to promote living heritage and sustainable development. The rise of the experience economy has shifted consumer demand from products to memorable experiences (Pine & Gilmore 1998). ICH handwork experience meets this need because participants make objects by hand and gain emotional satisfaction from traditional culture. However, many ICH handwork projects face problems such as content similarity, weak interaction, and low immersion, which prevent positive psychological responses. For instance, a survey by the Hefei Municipal Committee of the Revolutionary Committee of the Chinese Kuomintang found that product homogeneity remains a serious chal-

lenge, with most ICH handwork products lacking innovation and practical applicability in modern life (Hefei CPPCC, 2025). Moreover, a commentary in Jiangxi Legal Daily noted that some ICH handwork experiences have been reduced to assembly-line production, where participants gain little understanding of the cultural connotations and craftsmanship spirit behind the skills (Jiangxi Legal Daily, 2025). Therefore improving ICH handwork design from a psychological perspective is important.

Examples of such ICH handwork include ceramic throwing, embroidery, tie-dyeing, bamboo weaving, paper cutting, and woodworking. Existing studies focus on heritage protection, destination image, and purchase intention, but few examine the full path from experience value to psychological state to satisfaction. Immersive experience is a highly focused and enjoyable state that plays a key role in handicraft work, yet it remains underexplored in ICH handwork research. This study asks two questions. First, do the dimensions of experience value affect users' immersive experience and satisfaction? Second, does immersive experience mediate the relationship between experience value and satisfaction? Using experience value theory and immersive theory, this quantitative research reveals how each dimension of experience value influences satisfaction, with a focus on the mediating role of immersive experience. Theoretically, this study extends experience value theory to the ICH handwork context and introduces immersive experience as a mediator. Practically, it offers suggestions for ICH workshops to enhance learning value, interaction value, and aesthetic value, thereby stimulating immersive experience and improving satisfaction. These findings support the living inheritance and sustainable development of ICH.

2 Theoretical Basis

2.1 Experience Value Theory

Experience value refers to consumers' subjective feelings during consumption, emphasizing emotional, cognitive, and sensory experiences beyond functional attributes (Mathwick et al., 2001). Pine and Gilmore (1998) proposed four experience dimensions: entertainment, education, aesthetics, and escapism. Intangible Cultural Heritage handwork experience involves participants learning and producing traditional crafts under guidance, featuring participation, immersion, and cultural transmission (Csikszentmihalyi, 1990). Immersion experience is a psychological state of complete absorption, high concentration, time distortion, and intrinsic enjoyment. Satisfaction is the overall evaluation of an experience (Oliver, 1980). This study integrates experience value theory and immersive theory to examine how experience value dimensions influence satisfaction through immersion experience in the ICH handwork context.

2.2 Intangible Cultural Heritage Handwork Experience

Intangible Cultural Heritage handwork experience involves participants learning and producing traditional crafts under the guidance of inheritors or instructors. It has three features: participation (hands-on activity), immersion (a focused, time-forgetting state), and cultural transmission (connecting users with traditional culture). These features

align with the experience economy (Pine & Gilmore, 1998) and immersive theory (Csikszentmihalyi, 1990; Wang, 2024). Previous studies have shown that experience value in cultural activities is multidimensional, including entertainment, learning, aesthetic, evading, and interactive aspects (Tseng et al., 2023; Zhan et al., 2023; Chang & Wang, 2023). Understanding how these dimensions operate in the ICH handwork context is essential for improving workshop design and user satisfaction.

2.3 Immersion Experience

Immersion experience is a psychological state of complete absorption, high concentration, time distortion, and intrinsic enjoyment (Csikszentmihalyi, 1975, 1990). Key features include challenge-skill balance, clear goals, immediate feedback, and a sense of control (Jackson & Marsh, 1996). In tourism and leisure research, immersion experience has been found to mediate the relationship between external stimuli and behavioral outcomes, such as experience quality, attitude, and satisfaction (Zeng & Chen, 2025; Zhang et al., 2026; Chang & Suh, 2025). However, its mediating role has not been systematically examined in ICH handwork contexts, which constitutes the primary research gap addressed by this study.

3 Research Models and Assumptions

3.1 Entertainment Value

Entertainment value refers to the happiness and pleasure users feel during the experience. Tseng et al. (2023) and Chang & Wang (2023) confirmed its positive role in experience value. In ICH handwork, a fun and enjoyable process helps users enter a focused, selfless immersive state and form positive evaluations. Thus (Figure 1):

H1: Entertainment value has a significant positive impact on immersion experience.

3.2 Learning Value

Learning value is the acquisition of new knowledge and skills. Tseng et al. (2023) found that educational experience positively affects satisfaction. Chang & Wang (2023) noted that gaining knowledge broadens horizons and enriches experience value. In ICH handwork, deep understanding of traditional techniques fosters concentration and investment. Thus (Figure 1):

H2: Learning value has a significant positive impact on immersion experience.

3.3 Aesthetic Value

Aesthetic value involves perception and appreciation of the environment and product appearance. Tseng et al. (2023) and Yang et al. (2023) showed that aesthetic factors positively influence immersion. In ICH handwork, beautiful surroundings and exquisite designs attract attention and deepen immersion. Thus (Figure 1):

H3: Aesthetic value has a significant positive impact on immersion experience.

3.4 Evading Value

Evading value means users temporarily evading from daily pressure and achieve relaxation. Tseng et al. (2023) and Zhan et al. (2023) verified that evading value positively affects immersive and satisfaction. In ICH handwork, the sense of withdrawal from busy routines helps users relax and become immersed. Thus (Figure 1):

H4: Evading value has a significant positive impact on immersion experience.

3.5 Interactive Value

Interactive value refers to communication and sharing with craftsmen and peers. Chang & Wang (2023) and Zhan et al. (2023) found that interaction enhances experience value and immersion. In ICH handwork, good interaction and joint participation strengthen emotional connection and involvement. Thus (Figure 1):

H5: Interactive value has a significant positive impact on immersion experience.

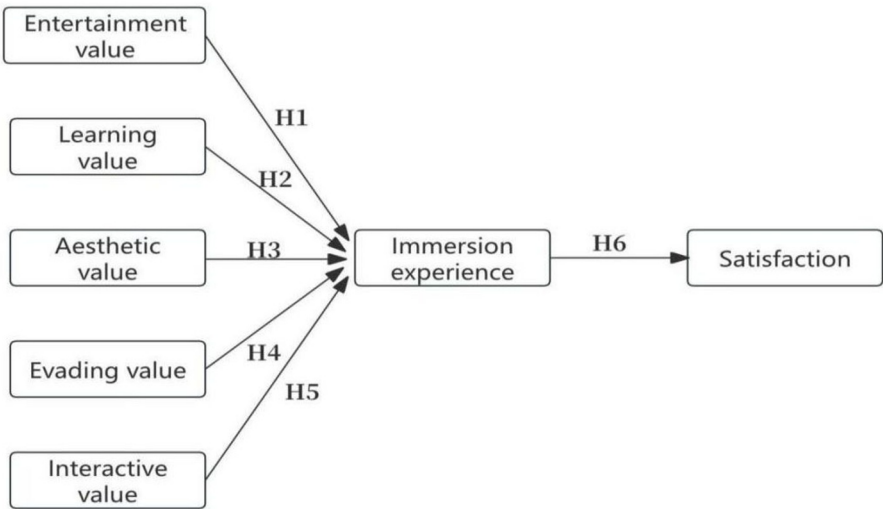


Fig. 1. Hypothetical model of user satisfaction with the workshop.

3.6 Satisfaction and the Mediating Role of Immersion Experience

Satisfaction is the overall evaluation and emotional response to the ICH handwork experience (Oliver, 1980). In this study, satisfaction serves as the final outcome variable. Immersion experience, as an internal psychological state, is proposed to mediate the relationship between experience value and satisfaction. Specifically, when users perceive high levels of entertainment, learning, aesthetic, evading, or interactive value from the handwork activity, they are more likely to enter an immersive state characterized by focused attention, time distortion, and loss of self-consciousness. This im-

mersive state, in turn, enhances their overall satisfaction with the experience. Previous studies have confirmed such mediating mechanisms in other contexts (Zeng & Chen, 2025; Chang & Suh, 2025; Zhang et al., 2026). Therefore, the following hypothesis is proposed. Thus (Figure 1):

H6: Immersion experience has a significant positive impact on satisfaction.

4 Research Methods

In this study, a model of users' satisfaction with intangible cultural heritage workshops was constructed, which was referenced and modified on the basis of the existing scale to adapt to the background of this study. We used the 5-point Likert scale: from 1 (totally disagree) to 5 (totally agree). The specific variable measurement is shown in the table below(Table 1).

Table 1. Variable and measurement description.

Variable	Item	Source
Entertainment value	I think participating in the process of hand experience makes me feel happy.	Tseng et al., (2023) Chang &Wang, (2023)
	I think the hand experience is full of fun.	
	I think hands experience activities make me feel relaxed and happy.	
Learnining value	I think I learned new knowledge about craft through hands experience.	Zhan et al. (2023)Chang &Wang, (2023)
	There is a clear explanation of process knowledge in the whole process of manual experience.	
	I think this experience made me interested in craft culture.	
Aesthetic value	I think the appearance or shape of the handmade works is very attractive to me.	Tseng et al., (2023)Yang et al.,(2023)
	I think the layout and environment of most handmade experience places are very aesthetic.	
	I think the atmosphere of most hands-on experience places makes me feel comfortable.	
	I like the color and texture of my hand-made works very much.	
Evading value	Participating in the hands-on experience can make me temporarily forget the troubles of daily life.	Zhan et al., (2023)
	I think I can get away from my busy life in the handicraft experience workshop.	
	I think participating in the hands-on experience can feel relaxed physically and mentally.	
	I have a good interaction with the craftsman/instructor.	
Interactive value	I enjoyed this experience with my friends/family.	Chang &Wang, (2023)
	During the experience, I have the opportunity to communicate and share with others.	
	Through hands-on experience, I met people with similar interests.	

Immersive experience	In the process of hand experience, my movements are natural and smooth, without deliberate thinking.	Zeng &Chen, (2025)Chang &Suh,(2025)
	In the hands-on experience, I feel that time passes faster than usual.	
	In the hands-on experience, I forgot everything around me and completely devoted myself to hands-on activities.	
	I am satisfied with my opponent's overall experience.	
Satisfaction	I think the hands-on experience is a satisfying experience.	Arya(2026)
	I would like to recommend others to experience similar hand activities.	

Data were collected from April to June 2025 through online and offline channels. Offline distribution took place at ICH handwork venues in Nanchang and Jingdezhen, including the Jingdezhen Ceramic Workshop, Jiangxi Provincial Museum experience area, and several private studios. Online distribution used Questionnaire Star and ICH-related social media groups (WeChat, Weibo). A total of 638 questionnaires were collected, yielding 584 valid responses (91.53% effective rate).

Among the valid respondents, all had participated in ICH handwork activities. The most common activities were ceramic throwing (42.1%), embroidery (23.5%), and tie-dyeing (15.8%). Their most recent experience occurred in independent studios (45.2%), museum-based areas (28.6%), tourist attraction craft zones (16.4%), or online community events (9.8%). Gender was 40.4% male and 59.6% female; age was mainly 18-35 years (60.3%). Most respondents had 1-2 prior handwork experiences (47.4%). All had used online platforms to access ICH content.

5 Data Analysis

5.1 Reliability and Validity Test

Reliability refers to the consistency and stability of the questionnaire test results, and reliability analysis is to analyze the validity of the scale. Generally, the reliability coefficient is above 0.70, which meets the requirements of metrology. This paper uses spss27 statistical software to test, and the results show that the Cronbach α coefficient of the questionnaire is greater than 0.8, indicating that the reliability of the questionnaire is very good. (Table 2)

Table 2. Reliability analysis.

Cronbach reliability analysis		
Number of items	Sample size	Cronbach α coefficient
7	584	0.887

Data source: self drawn by the author.

Validity test includes convergent validity and discriminant validity. Confirmatory factor analysis is used to test convergent validity. The measured item kmo=0.923, the value is higher than 0.8, indicating that these data are suitable for factor analysis. The

dominance of Bartlett's spherical test was close to 0 ($p < 0.001$). It can be seen from table 4 that the validity of the questionnaire was very good. (Table 3)

Table 3. Validity analysis.

KMO and Bartlett Spherical test		
Bartlett Spherical test	KMO value	0.923
	Approximation	1868.578
	Degree of freedom	21
	p-value	0.000

Data source: self drawn by the author.

5.2 Correlation Analysis

All variables showed significant positive correlations ($p < 0.01$), with correlation coefficients ranging from 0.429 to 0.631, supporting further regression analysis.

5.3 Regression Analysis

Regression analysis is to judge the influence of independent variables on dependent variables. According to the analysis results in Table 3, the entertainment value, learning value, aesthetic value and interactive value of constants in this model have a significant positive impact on satisfaction, and the corresponding non standardized regression coefficients are 0.157 ($p < 0.001$), 0.160 ($p < 0.01$), 0.239 ($p < 0.001$) and 0.201 ($p < 0.001$) respectively. The positive effect of evading value on satisfaction was weak, and the corresponding non standardized regression coefficient was 0.049 ($p > 0.05$). (Note: ***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$)

Table 4. Regression analysis of independent variable and dependent variable.

	Satisfaction				
	<i>B</i>	Standard Error	<i>t</i>	<i>p</i>	β
Constant	0.402	0.092	4.374	0.000	-
Entertainment value	0.157***	0.040	3.935	0.000	0.161
Learning value	0.160***	0.049	3.283	0.001	0.152
aesthetic value	0.239***	0.047	5.107	0.000	0.234
Evading value	0.049	0.040	1.226	0.221	0.050
Interactive value	0.201***	0.045	4.480	0.000	0.194

Data source: self drawn by the author.

According to the analysis results in Table 4, the entertainment value, learning value, aesthetic value, evading value and interaction value of constants in this model significantly positively affect the immersion experience, and the corresponding non standardized regression coefficients are 0.074 ($p < 0.05$), 0.263 ($p < 0.001$), 0.213 ($p < 0.001$),

0.167($p < 0.001$) and 0.174($p < 0.001$) respectively. (Note:***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$)

Table 5. Regression analysis of independent and mediating variables.

	Immersive experience				
	<i>B</i>	Standard Error	<i>t</i>	<i>p</i>	β
Constant	0.193	0.086	2.247	0.025	-
Entertainment value	0.074*	0.037	2.001	0.046	0.076
Learning value	0.263***	0.045	5.782	0.000	0.248
aesthetic value	0.213***	0.044	4.903	0.000	0.208
Evading value	0.167***	0.037	4.458	0.000	0.169
Interactive value	0.174***	0.042	4.164	0.000	0.167

Data source: self drawn by the author

As shown in Table 5, immersion experience partially mediated the relationships between entertainment, learning, aesthetic, interaction values and satisfaction. Specifically, for entertainment value, the direct and indirect effects were $B = 0.313$ and 0.342 respectively ($p < 0.001$); for learning value, $B = 0.377$ and 0.280 ; for aesthetic value, $B = 0.403$ and 0.264 ; for interaction value, $B = 0.364$ and 0.302 . In contrast, evading value showed a different pattern: its direct effect was non-significant without immersion ($B = 0.049$, $p = 0.221$), but became significant after including immersion ($B = 0.225$, $p < 0.001$), while the indirect effect via immersion was also significant ($B = 0.375$, $p < 0.001$). Therefore, immersion experience fully mediates the relationship between evading value and satisfaction. This means that the sense of evading obtained from handwork does not directly improve satisfaction; instead, it must be transformed through an immersive psychological state to generate a positive evaluation.(Table 6)

Table 6. Regression analysis between variables.

	Unstandardised coefficient		Standardization coefficient	<i>t</i>	<i>p</i>
	<i>B</i>	Standard Error	Beta		
Constant	1.103***	0.080	-	13.740	0.000
Immersive experience	0.496***	0.036	0.498	13.864	0.000
Entertainment value	0.313***	0.038	0.321	8.277	0.000
Immersive experience	0.342***	0.039	0.343	8.844	0.000
Learning value	0.377***	0.045	0.357	8.354	0.000
Immersive experience	0.280***	0.043	0.282	6.590	0.000
aesthetic value	0.403***	0.042	0.395	9.524	0.000
Immersive experience	0.264***	0.041	0.265	6.395	0.000

	Unstandardised coefficient		Standardization coefficient	t	p
	B	Standard Error	Beta		
Evading value	0.225***	0.040	0.230	5.564	0.000
Immersive experience	0.375***	0.041	0.377	9.121	0.000
Interactive value	0.364***	0.042	0.351	8.610	0.000
Immersive experience	0.302***	0.041	0.303	7.441	0.000

Data source: self drawn by the author

6 Conclusion

Based on experience value theory and immersive theory, this study quantitatively examined how each dimension of experience value influences satisfaction in ICH handwork experience, focusing on the mediating role of immersive experience. The five dimensions—entertainment, learning, aesthetic, evading, and interactive values—all significantly and positively affect immersive experience, with learning value having the strongest impact and entertainment value the weakest. Immersive experience significantly and positively affects satisfaction, and it plays varying mediating roles. For entertainment, learning, aesthetic, and interactive values, immersive experience acts as a partial mediator: these values directly affect satisfaction and also indirectly through immersive experience. For evading value, the direct effect on satisfaction is not significant; its influence is fully mediated by immersive experience. Theoretically, this study extends experience value theory to ICH handwork practice, confirms the bridging role of immersive experience, and enriches quantitative ICH research. Practically, ICH workshops should enhance learning value through better explanation, increase interactive value via user-craftsman exchanges, improve aesthetic value by optimizing spatial design, and for evading value, design immersive-triggering activities such as ritual creation and challenge matching to convert evading needs into satisfaction.

This study has limitations. The sample is predominantly young and female, and cross-sectional data cannot fully establish causal order. Future research should expand the sample range and adopt experimental or longitudinal designs to test causal pathways and explore other potential moderating variables.

Disclosure of Interests

The authors have no competing interests to declare that are relevant to the content of this article.

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