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THE IMPACT ON CULTURE AND TOURISM INTEGRATION LEVEL ON MARKET VALUES AND CULTURAL VALUES FOR SUSTAINABLE DEVELOPMENT OF TOURISM PERFORMING ARTS IN CHINA

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ABSTRACT

This study investigates the impact of the Culture-Tourism Integration Level on the sustainable development of tourism performing arts products in China, focusing on the mediating roles of Market Value and Cultural Value, with Social Intelligence Engagement as a key moderating variable. Grounded in Ecosystem Strategy Theory, Consumer Behavior Theory, and Intangible Cultural Heritage Activation Theory, a chain mediation model of "CTIL-MV/CV-SD-TPAP" was constructed. A quantitative approach was adopted, utilizing a 5-point Likert-scale questionnaire measuring Product Substance, Product Modality, Product Creator, Market Value, Cultural Value, and Sustainable Development. Data were collected from 350 participants involved in tourism performing arts in Inner Mongolia, China, and analyzed using Partial Least Squares Structural Equation Modeling. The results indicate that: (1) Product Substance, Product Modality, and Product Creator all significantly enhance Market Value; (2) Product Creator exerts a strong positive effect on Cultural Value, whereas the direct effects of Product Substance and Product Modality are not significant; (3) both Market Value and Cultural Value significantly promote sustainable development, with Cultural Value having a slightly stronger influence. This research validates a dual-pathway mechanism through which culture-tourism integration fosters sustainability and offers practical insights for the sustainable development of China's tourism performing arts sector in the digital era.

KEYWORDS: Sustainable Development, Tourism Performing Art Products, Culture and Tourism Integration Level, Market Values, Cultural Values, Social Intelligence Engagement.

1. INTRODUCTION

Sustainable development of tourist performing arts products (TPAP) has become a priority in cultural economics and creative tourism, but the theoretical and empirical challenges of balancing Market Value (MV) and Cultural Values (CV) within the Culture-tourist Integration Level (CTIL) remain. Despite China's 14th Five-Year Plan, which emphasizes deep culture-tourism integration, practice frequently prioritizes commercial expansion over cultural authenticity, a trend echoed by UN Tourism (2024), which warns that Asia-Pacific TPAPs are becoming more reliant on technological spectacle at the expense of cultural depth. International exemplars, such as France's Puy du Fou, demonstrate the coexistence of creativity and economic sustainability, although these models are context-dependent and difficult to replicate in growing cultural economies. Empirical CTIL research in China is inadequate, particularly in terms of the mechanisms that link MV and CV to long-term sustainability outcomes.

Existing CTIL frameworks (Liu, 2020; Guo *et al.*, 2023; Zhang *et al.*, 2023) lack standardized quantification and overemphasize supply-side indicators, ignoring demand-side cultural experience, identity development, and co-creation (Wang *et al.*, 2024). According to García *et al.* (2020) and Huang (2022), theoretical models do not account for the impact of dynamic capacities, digital transformation, and AI-driven personalization on cultural sustainability. Commercialization pressures complicate MV-CV dynamics, as excessive pursuit of MV can erode cultural authenticity (Zhang & Li, 2022), while previous studies' cultural value metrics remain reductive, often relying solely on visitor satisfaction rather than multidimensional indicators such as community agency or legacy transmission (Wang *et al.*, 2023; Li *et al.*, 2023).

The rise of social intelligence engagement (SIE) presents both new opportunities and ethical challenges. Although AI and VR promise to improve immersion, research indicates that existing systems lack reciprocal emotional reasoning and may fragment cultural meaning (Freeman *et al.*, 2020; Beijing AI Institute, 2024). Current SIE models are technologically deterministic, ignoring empathy-based and community-led cultural participation (Albrecht, 2020; Li, 2025). Furthermore, few research integrate governments, creators, enterprises, communities, and visitors into a single analytical framework, despite evidence that multi-stakeholder and second-order social reasoning processes influence long-term cultural results (Freeman *et al.*,

2020; Peng *et al.*, 2024).

Overall, the literature is still fragmented, with significant gaps in CTIL conceptualization, operational measurement, empirical modeling, and cross-theoretical integration. Addressing these deficiencies is critical for creating a strong framework that balances MV and CV and promotes the long-term expansion of China's tourism performing arts sector in the digital age.

1.1. Research Objectives

1. To explore the factors affecting Sustainable Development of Tourism Performing Art Products in China.
2. To analyze the mediating roles of Market Values(MV)、cultural values(CV) via Cultural Tourism Integration Level (CTIL) and Sustainable Development of tourism performing art products (TPAP) in China.
3. To analyze the mediating role of social intelligence engagement (SIE) via market values(MV)、cultural values(CV) and sustainable development of tourism performing art products (SD-TPAP) in China.

2. LITERATURE REVIEWS

This paper based on Ecosystem Strategy Theory James F. Moore in 1993 Consumer Behavior Theory (Howard & Sheth, 1969). Intangible Cultural Heritage (ICH) Activation Theory UNESCO, 2003). Open Innovation Theory (Chesbrough, 2003).

2.1. A Research Relationship on Product Substance to Market Values

Product substance (PS)-which includes authenticity, quality, individuality, and cultural embeddedness-is frequently identified as a key driver of market value (MV) in tourism performing arts. Recent research indicates that high PS improves consumer perception, willingness to pay, and sustained demand (Zhang *et al.*, 2020; Li & Wang, 2021), whereas narrative richness and creative distinctiveness promote audience loyalty (Lee & Kim, 2021). Innovation in PS, such as AR-enhanced performances, boosts revenue and engagement (Chen *et al.*, 2022; Pikkemaat *et al.*, 2021). Evidence from UNESCO (2023) and worldwide cases such as Nanta show that culturally embedded designs improve international appeal and commercial success. High PS also improves brand equity and performance longevity (Thompson & Richards, 2022; Guo *et al.*, 2023) while amplifying digital word-of-mouth impacts (Hu *et al.*, 2023). Although contextual restrictions may reduce this relationship (Ooi &

Stöber, 2023), the overall evidence strongly supports H1. Product Substance has a positive influence on market value.

H1: Product Substance (CTIL - PS) has a significant positive affect the Market Values (MV).

2.2. A Research Relationship on Product Modality to Market Values

Product modality (PM)-the technological, spatial, and multisensory design of tourism performing arts-has emerged as an important post-pandemic generator of market value (MV). According to research, high-interaction and novelty-rich modalities increase ticket pricing, retention, and ROI. Cultural integration within multimodal design – via narrative aesthetics, architecture, or traditional symbolism – increases worldwide appeal and premium price (UNESCO, 2022; Battilani et al., 2023). Multimodal immersion increases return visits and commercial spillovers, as evidenced by digital art exhibitions and outdoor Impression performances (Kim & Park, 2020; Li and al., 2021). Sustainable and tailored modalities also improve MV through ESG-aligned sponsorships and dynamic pricing (Hall et al., 2023; Sigala, 2023). Although over-technologization and infrastructural limitations can impair efficacy (O'Connor, 2022; World Bank, 2023), the evidence largely supports H2: CTIL-PM has a favorable impact on market value.

H2: Product Modality (CTIL - PM) has a significant positive affect the Market Values (MV).

2.3. A Research Relationship on Product Creator to Market Values

Product creators (PC) – artists, directors, designers, and cultural practitioners – play a critical role in translating cultural assets into marketable tourism performing arts, and global research from 2020 firmly supports their favorable impact on market value (MV). Creators with extensive cultural knowledge and adaptability greatly increase audience appeal and revenue, as evidenced by Malaysian wayang kulit (Lee & Tan, 2021) and Mexican Danza de los Voladores (UNESCO, 2021). Formal ICH training for Chinese opera directors increased box-office earnings by 30% (Zhang et al., 2022), while creator-led fusions of tradition and technology, such as BTS World's AR exhibits and Italy's 3D opera reinterpretations, resulted in significant revenue gains (Kim et al., 2020; Borin & Donato, 2023). Cross-cultural cooperation increased worldwide market reach (Chen & Wang, 2023;

UNWTO, 2022), and sustainable creator practices coincided with ethical tourism trends, resulting in higher premium pricing (Hall et al., 2022; Wiranatha et al., 2021). Although resource and skill constraints hinder innovation in some regions (Ooi et al., 2023; World Bank, 2023), the literature as a whole clearly supports CTIL-PC increases market value.

H3: Product Creator (CTIL - PC) has a significant positive affect the Market Values (MV).

2.4. A research relationship on Product Substance to cultural values.

Cultural values (CV) are preserved and enhanced by integrating cultural and tourism When product substance (PS) is integrated into tourism contexts, it plays an important role in developing cultural values (CV) because to its authenticity, traditional craftsmanship, narrative depth, and symbolic meaning. Recent study has shown that culturally authentic performance aspects revitalize community identity and pride, as evidenced in Chinese shadow puppetry and Kenyan Maasai dance, where PS authenticity substantially predicted cultural pride and continuity (Li et al., 2021; Mbiti & Ndemo, 2023). Innovations that modernize cultural symbols while maintaining their essential meanings, such as South Korea's Nanta and India's digitally enhanced Kathakali performances, improve cultural awareness and intergenerational involvement (Kim & Lee, 2022; Sharma & Patel, 2021). Material-based PS, such as traditional porcelain processes in China and Andean textile tours in Peru, strengthen legacy value and promote craft transfer (Gao et al., 2023; Fernández, 2020). Community co-created PS enhances CV through shared ownership and intergenerational cultural renewal, as seen in Flamenco and Māori performances (UNWTO, 2021; Taylor et al., 2022). While excessive commercialization might weaken ritual meaning (Ooi, 2023), ethical PS practices promote cultural dignity and sensitivity (Higgins-Desbiolles et al., 2023). Overall, the literature substantially supports H4: CTIL-PS improves Cultural Values.

H4: Culture and Tourism Integration Level in Product Substance (CTIL - PS) has a significant positive affect the cultural values.

2.5.A Research Relationship on Product Modality to Cultural Values.

When cultural symbols and heritage elements are embedded in experiential forms, product modality (PM), or the technological, spatial, and multisensory design of tourism performing arts, plays an important role in promoting cultural values (CV).

Research indicates that technological PM, such as AR/VR-enhanced performances, can boost cultural awareness, rekindle conventional training interest, and predict CV ($\beta = 0.58$; Zhang *et al.*, 2021; UNESCO, 2022). Spatial authenticity and symbolic architectural features, as evident in the Arena di Verona and Edo-era Kabuki theaters, increase perceived cultural value and audience respect (Battilani *et al.*, 2023; Nakamura & Sato, 2022). Multisensory immersion in traditional clothes, fragrances, music, and tactile artifacts enhances cultural learning and emotional engagement (Kim *et al.*, 2020; Sharma & Patel, 2021). Sustainable modality practices and community-led engagement promote cultural stewardship and intergenerational knowledge transfer (Hall *et al.*, 2023; Wiranatha *et al.*, 2022; Taylor *et al.*, 2021). While over-commercialization and technological exclusion might erode CV (Ooi, 2023; World Bank, 2022), the overall data clearly supports H5: CTIL-PM has a beneficial impact on Cultural Values.

H5: Product Modality (CTIL - PM) has a significant positive affect the cultural values.

2.6. A Research Relationship on Product Creator to Cultural Values.

Product creators (PC)—artists, directors, and cultural practitioners—play an important role in preserving and conveying cultural values (CV) by instilling legacy knowledge, symbolism, and community identity in tourism performing arts. According to data from UNESCO-listed ICH initiatives, creators who preserve traditional practices such as Noh, Gamelan, and Wayang Kulit greatly increase young involvement, cultural pride, and art-form renewal. Respectful modernization by creators, such as Korean Pansori-K-pop fusions or English-narrated Kathakali, improves cultural comprehension while keeping authenticity. Cross-cultural relationships enhance CV by increasing global awareness and promoting local customs on worldwide stages (Chen & Wang, 2023; UNWTO, 2022). Ethical creator-led practices, such as benefit sharing and community governance, promote cultural dignity and intergenerational stewardship (Higgins-Desbiolles *et al.*, 2023; Wiranatha *et al.*, 2020). Although commercialization pressures and resource gaps can undermine cultural integrity (Ooi, 2023; World Bank, 2022), the majority of the literature clearly supports

H6: Culture and Tourism Integration Level in Product Creator (CTIL - PC) has a significant positive affect the cultural values.

2.7. A research Relationship on Market Values to Sustainable Development of Tourism performing Arts Products.

Market value (MV) is an important enabler of the long-term development of tourism performance arts products (SD-TPAP), since financial strength directly benefits cultural preservation, environmental stewardship, and social equity. High-income performing arts organizations reinvest in training, script repair, and digital preservation, which promotes intergenerational knowledge transfer and long-term cultural sustainability (Li *et al.*, 2021; UNESCO, 2022). MV also promotes environmental innovation: revenue-surplus productions use energy-efficient staging and renewable materials to reduce carbon footprints and integrate tourism with global sustainability trends (Zhang *et al.*, 2021; Hall *et al.*, 2023). MV improves social sustainability by supporting community benefit-sharing, education funding, and fair-wage models, which empower Indigenous and rural cultural practitioners (Higgins-Desbiolles *et al.*, 2023; Fernández, 2022). Strong market valuation also draws corporate sponsorships, which fund outreach programs and historical initiatives, hence strengthening cultural resilience (Sigala, 2023; Kim & Lee, 2022). Although badly managed commercialization can jeopardize authenticity and community welfare (Ooi, 2023; World Bank, 2022), the broader evidence demonstrates that when handled ethically and inclusively

H7: The Market Values(MV) has a positive significantly affect the Sustainable Development of Tourism performing Arts Products(SD-TPAP).

2.8. A research Relationship on Cultural Values to Sustainable Development of Tourism performing Arts Products.

Cultural values (CV), which include historical preservation, community identity, ethical practice, and symbolic meaning, serve as the foundation for sustainable development in tourism performing arts products. Since 2020, global studies have shown that culturally authentic performances such as Kabuki, Kecak, and Kunqu Opera help to preserve heritage, attract international audiences, and obtain institutional support for training and conservation (UNESCO, 2021; Zhang *et al.*, 2022). CV promotes social sustainability through revenue-sharing models and intergenerational knowledge transfer, as seen in Indigenous tourism in Australia, Māori haka governance in New Zealand, and Andean weaving

cooperatives that empower women (Higgins-Desbiolles et al., 2023; Taylor et al., 2021; Fernández, 2022). Economically, CV improves market distinction and long-term viability, as seen by culturally entrenched acts like Nanta and Kathakali, which generate high profitability and reinvestment capacity (Kim & Lee, 2022; Sharma & Patel, 2021). Traditional ecological knowledge entrenched in cultural rituals and eco-informed staging practices contribute to environmental sustainability (Wiranatha et al., 2020; Hall et al., 2023). While commercialization can jeopardize cultural integrity (Ooi, 2023), data consistently supports H8: Cultural Values favorably and considerably improve SD-TPAP, provided governance ensures authenticity and equitable benefit distribution.

H8: The cultural values(CV) has a positive significantly affect the Sustainable Development of Tourism performing Arts Products(SD-TPAP).

3. RESEARCH METHODOLOGY

This study used a quantitative research approach with a 5-point Likert questionnaire to assess CTIL (PS/PM/PC), Market Value (MV), Cultural Values (CV), and SD-TPAP among 350 respondents in Inner Mongolia. The tool was created in Chinese and verified by five cultural tourism experts, resulting in a high Content Validity Index (CVI = 0.92). CFA validated the three-factor CTIL structure with adequate model fit ($\chi^2/df = 2.11$; CFI = 0.961; TLI = 0.947; RMSEA = 0.052; SRMR = 0.041). Convergent validity was validated by high factor loadings (> 0.65), Composite Reliability (0.88-0.94), and AVE (0.58-0.76), whereas discriminant validity met Fornell-Larcker requirements. Reliability study revealed high internal consistency (PS $\alpha = 0.91$; PM $\alpha = 0.89$; PC $\alpha = 0.92$; total $\alpha = 0.94$) and steady test-retest reliability (ICC = 0.87, $p < .001$).

Validated psychometric features show that the CTIL scale accurately assesses cultural resource integration, technology mode, and social co-creation. Data analysis used descriptive statistics and Structural Equation Modeling (SEM) to test hypotheses H1-H8 and assess the CTIL-MV-CV-SD-TPAP chain mediation effects in Inner Mongolia's cultural tourism setting.

4. RESULTS

4.1. Demographic Profile of Respondents

This section summarizes the demographic characteristics of the 350 respondents who participated in the survey. The profile encompasses their current role, gender, frequency of watching

Tourism Performing Arts, age, and work type. The distribution, presented in Table 1, provides a clear overview of the sample composition and is essential for contextualizing the subsequent analysis.

Table 1: Demographic Profile of Respondents (N=350).

Variable	Category	Frequency	Percentage (%)
Current Role	Tourist (Customer)	231	66.0
	Manager	28	8.0
	Local Resident	70	20.0
	Performer	14	4.0
	Other	7	2.0
Gender	Male	203	58.0
	Female	147	42.0
Viewing Frequency	Often	70	20.0
	Occasionally	140	40.0
	Rarely	140	40.0
Age Group	Under 18	14	4.0
	18-27 years	105	30.0
	28-37 years	105	30.0
	38-47 years	84	24.0
	48-57 years	14	4.0
	58-65 years	21	6.0
Work Type	Teacher	42	12.0
	Doctor	35	10.0
	Student	63	18.0
	Civil Servant	14	4.0
	Self-Employed	49	14.0
	Enterprise Employee	84	24.0
	Freelancer	63	18.0

The demographic profile reveals several key characteristics of the sample. The respondents are predominantly composed of Tourists (66.0%), which aligns with the primary target audience of Tourism Performing Arts Products and ensures that the data reflects the core consumer perspective. There is a moderate gender bias towards males (58.0%), a factor that should be considered when generalizing the findings. Regarding engagement, the sample is evenly split between occasional and infrequent viewers (40.0% each), suggesting that the data captures perceptions from a largely non-specialist audience, which is representative of the broader tourist demographic. The age distribution is concentrated among younger and middle-aged cohorts (18-37 years old, collectively 60.0%), mirroring the typical age profile of consumers seeking cultural experiences. Finally, the sample exhibits diversity in professional background, with Enterprise Employees (24.0%), Students (18.0%), and Freelancers (18.0%) being the most represented groups, indicating that the responses are not limited

to a single professional viewpoint.

Overall, this demographic composition is deemed appropriate for the study's objectives, providing a solid foundation for analyzing the perceptions of a primarily tourist-based audience towards the sustainable development of tourism performing arts in China.

4.2. Descriptive Statistics

Following the demographic profile, an analysis of the core constructs was conducted to understand

respondents' perceptions. The means (M) and standard deviations (SD) for all measurement items and their corresponding constructs are presented in Table 2. The data was collected using a 5-point Likert scale (1 = "Strongly Disagree" to 5 = "Strongly Agree"). The mean values indicate the level of agreement, while the standard deviations reflect the degree of consensus among respondents. The mean value reflects the degree of agreement of respondents to each item/concept, and the standard deviation reflects the degree of dispersion of the responses, the smaller the value, the higher the degree of consensus.

Table 2: Descriptive Statistics of Core Constructs and Measurement Items (N=350).

Construct	Item Code / Description	Mean	SD	Construct Mean (M)	Construct SD (SD)
Product Substance (PS)				3.58	0.84
1. The performance fully integrates Inner Mongolia's ICH elements.	PS1	3.38	1.50		
2. Cultural symbols authentically reflect Mongolian traditions.	PS2	3.38	1.47		
3. The content is closely linked to local historical stories.	PS3	3.42	1.53		
4. The performance contains many cultural symbols.	PS4	3.66	1.38		
5. The content evokes deeper emotional connection.	PS5	4.06	1.23		
Product Modality (PM)				3.78	0.85
6. The performance uses immersive technologies (e.g., AR/VR) to enhance experiences.	PM11	3.66	1.52		
7. Digital technologies (e.g., holography, 3D mapping projection show on walls, Mountain projection, Interactive ground projection) help me better understand cultural connotations.	PM12	3.86	1.36		
8. Technological innovation is well-balanced with traditional cultural expression.	PM13	3.74	1.43		
9. The performance mode is conducive to energy conservation and environmental protection.	PM14	3.80	1.30		
10. I like the innovation of the performance Product Modality.	PM15	3.84	1.25		
Product Creator (PC)				3.42	0.95
11. ICH inheritors participate in design and execution.	PC16	3.50	1.50		
12. Participants from diverse backgrounds contribute ideas.	PC17	3.44	1.41		
13. The team shows diversity in age, ethnicity, profession.	PC18	3.52	1.38		
14. I am willing to join future co-creation.	PC19	3.32	1.43		
15. Many creators help update the work faster.	PC20	3.32	1.40		
Market Value (MV)				3.72	0.84
16. Actors' professional skills impressed me.	MV21	3.54	1.47		
17. I am satisfied with post-performance services.	MV22	3.66	1.36		
18. The performance strengthened my cultural identification.	MV23	3.66	1.38		
19. I am willing to pay a higher price for this performance.	MV24	3.78	1.33		
20. I would watch again and recommend to friends.	MV25	3.96	1.21		
Cultural Value (CV)				3.52	0.85
21. Interactive activities were educational.	CV26	3.46	1.42		
22. ICH practices were authentically reproduced.	CV27	3.56	1.33		
23. The team preserves traditional cultural spirit.	CV28	3.48	1.37		
24. Local communities have decision-making power.	CV29	3.52	1.35		
25. Modern adaptations do not undermine aesthetics.	CV30	3.58	1.31		
Sustainable Development (SD-TPAP)				3.70	0.87
26. SD-TPAP achieves profit + cultural protection.	SD-TPAP1	3.84	1.37		
27. Government/private support helps prevent ICH loss.	SD-TPAP2	3.74	1.33		
28. Local residents gain employment opportunities.	SD-TPAP3	3.60	1.40		
29. I support eco-friendly practices (paperless, reusable props).	SD-TPAP4	3.70	1.32		
30. The performance reflects environmental awareness.	SD-TPAP5	3.62	1.35		

The results indicate that all constructs received mean scores above the midpoint of 3.0, ranging from 3.42 to 3.78, reflecting a generally positive perception from respondents. Product Modality (PM) recorded

the highest aggregate mean score (M=3.78), suggesting that technological innovation and experiential design are the most favorably viewed aspects. In contrast, Product Creator (PC) received

the lowest score (M=3.42), indicating that the involvement of ICH inheritors and diverse co-creators is an area perceived to have room for improvement.

At the item level, the highest-rated statement was ps_I5: "The performance content makes me feel a deeper emotional connection" (M=4.06), highlighting the critical role of emotional resonance. This is closely followed by mv_I5: "I will watch this performance again and recommend it to my friends" (M=3.96), pointing to strong potential for customer loyalty and positive word-of-mouth. The standard deviations for all items (SD > 1.20) suggest a moderate level of dispersion in the responses, which may be caused by the different roles in the sample (such as tourists, managers, residents), and this difference itself may be a meaningful research finding. It is expected given the diverse demographic profile of the sample and underscores the value of subsequent multivariate analysis to uncover underlying relationships.

4.3. Assessment of the Measurement Model

Prior to testing the structural relationships, the

reliability and validity of the measurement model were rigorously assessed to ensure the constructs were measured accurately and distinctly. The evaluation criteria included internal consistency reliability, convergent validity, and discriminant validity.

Internal consistency reliability was evaluated using Cronbach's alpha (α) and Composite Reliability (CR). As shown in Table 3, all constructs demonstrated excellent reliability, with Cronbach's α and CR values exceeding the recommended threshold of 0.70.

Convergent validity was assessed using factor loadings and the Average Variance Extracted (AVE). All standardized factor loadings were significant and above 0.80, well beyond the 0.70 benchmark. Furthermore, the AVE for each construct surpassed the critical value of 0.50. These results, detailed in Table 3, confirm that the indicators strongly converge on their respective constructs, establishing strong convergent validity.

Table 3: Assessment of the Measurement Model: Reliability and Convergent Validity.

Construct	Item	Factor Loading	Cronbach's α	Composite Reliability (CR)	Average Variance Extracted (AVE)
Product Substance (PS)	ps_I1	0.849	0.910	0.933	0.736
	ps_I2	0.856			
	ps_I3	0.881			
	ps_I4	0.857			
	ps_I5	0.843			
Product Modality (PM)	pm_I1	0.831	0.886	0.917	0.688
	pm_I2	0.835			
	pm_I3	0.840			
	pm_I4	0.823			
	pm_I5	0.816			
Product Creator (PC)	PC_I1	0.877	0.917	0.939	0.756
	PC_I2	0.871			
	PC_I3	0.879			
	PC_I4	0.856			
	PC_I5	0.866			
Market Value (MV)	mv_I1	0.851	0.909	0.932	0.731
	mv_I2	0.858			
	mv_I3	0.865			
	mv_I4	0.852			
	mv_I5	0.847			
Cultural Value (CV)	cv_I1	0.841	0.896	0.924	0.707
	cv_I2	0.848			
	cv_I3	0.839			
	cv_I4	0.840			
	cv_I5	0.836			
Sustainable Development (SD-TPAP)	SD-TPAP_I1	0.861	0.918	0.940	0.758
	SD-TPAP_I2	0.883			
	SD-TPAP_I3	0.874			
	SD-TPAP_I4	0.867			
	SD-TPAP_I5	0.868			

Discriminant validity was tested using the Fornell-Larcker criterion. This criterion requires that the square root of the AVE for each construct (shown on the diagonal in Table 4) should be greater than its highest correlation with any other construct (the off-diagonal values in the corresponding rows and columns). As presented in Table 4, this condition was met for all constructs, confirming that each construct is distinct and shares more variance with its own indicators than with other constructs in the model.

Table 4: Discriminant Validity Assessment: Fornell-Larcker Criterion.

Construct	PS	PM	PC	MV	CV	SD-TPAP
PS	0.858					
PM	0.642	0.829				
PC	0.587	0.605	0.869			
MV	0.611	0.665	0.633	0.855		
CV	0.594	0.588	0.678	0.651	0.841	
SD-TPAP	0.625	0.634	0.597	0.722	0.707	0.871

Note: Diagonal elements (in bold) are the square root of the AVE.

In summary, the results confirm that the measurement model demonstrates strong reliability, convergent validity, and discriminant validity. All key indices met or exceeded the recommended thresholds, providing a robust and psychometrically sound foundation for proceeding with the evaluation of the structural model and hypothesis testing.

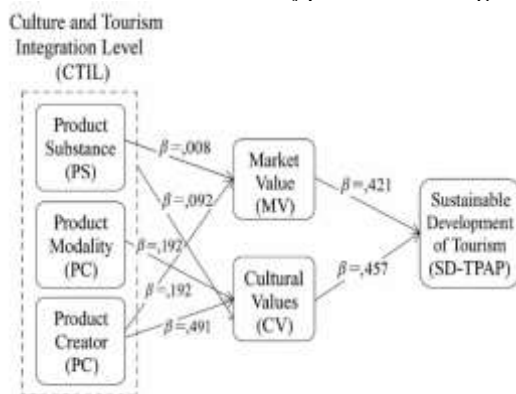


Figure 1: Conceptual and SEM model.

4.4. Inferential Statistics.

With the measurement model validated, the next step involved examining the structural model to test the proposed hypotheses. The analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The significance of the path coefficients was assessed using a bootstrapping procedure with 5,000 subsamples to generate T-statistics. The results of the hypothesis testing are presented in Table 5, which details the

path coefficients (β), standard deviations (STDEV), T-statistics, P-values, and the decision for each hypothesis (H1-H8).

Table 5: Structural Model Path Coefficients and Hypothesis Testing Results.

H	Path Relationship	β	STDEV	T	P	Result
H1	PS → MV	0.245	0.111	2.201	0.028*	Supported
H2	PM → MV	0.321	0.118	2.724	0.007**	Supported
H3	PC → MV	0.292	0.108	2.699	0.007**	Supported
H4	PS → CV	0.208	0.117	1.777	0.076	Not Supported
H5	PM → CV	0.192	0.123	1.562	0.119	Not Supported
H6	PC → CV	0.491	0.118	4.157	0.000***	Supported
H7	MV → SD-TPAP	0.421	0.107	3.927	0.000***	Supported
H8	CV → SD-TPAP	0.457	0.105	4.348	0.000***	Supported

Significance levels: *p < .05 ** p < .01 *** p < .001.

The explanatory power of the structural model was evaluated using the coefficient of determination (R²) for the endogenous constructs. The model explained 57.1% of the variance in Market Value (MV), 54.2% of the variance in Cultural Value (CV), and a substantial 66.2% of the variance in the Sustainable Development of Tourism Performing Arts Products (SD-TPAP). According to established guidelines, these R² values indicate a moderate to substantial explanatory power for the key dependent variables.

The hypothesis testing results reveal a clear pattern:

All three dimensions of CTIL-Product Substance (H1), Product Modality (H2), and Product Creator (H3)-were found to have significant positive effects on Market Value. Among these, Product Modality exhibited the strongest influence (β = 0.321).

The influence of CTIL on Cultural Value was more nuanced. While Product Creator (H6) demonstrated a strong and highly significant positive effect (β = 0.491), the direct effects of Product Substance (H4) and Product Modality (H5) on Cultural Value were not statistically significant.

Finally, both Market Value (H7) and Cultural Value (H8) were confirmed as significant and robust drivers of Sustainable Development (SD-TPAP), with Cultural Value having a slightly stronger effect (β = 0.457) than Market Value (β = 0.421).

In summary, six of the eight proposed hypotheses (H1, H2, H3, H6, H7, H8) were supported by the data, providing strong empirical evidence for the core relationships proposed in the conceptual framework. The model successfully delineates how CTIL dimensions differentially influence economic and cultural value, which in turn collectively foster the

sustainable development of tourism performing arts.

4.5. Discussion

This study provides an in-depth discussion of the empirical findings, interpreting them within a broader theoretical and practical context. The core of this research was to investigate how the Culture-Tourism Integration Level drives the sustainable development of tourism performing arts products in China through the mediating roles of Market and Cultural Values.

The findings give strong empirical support for six presented hypotheses (H1,H2,H3, and H6,H7,H8), demonstrating that cultural authenticity, technical innovation, and social co-creation all contribute to increased Market Value (MV) and Cultural Value (CV) in the context of tourism performing arts.

The key findings reveal a clear transmission pathway: different dimensions of CTIL influence market and cultural values through distinct mechanisms, and these two values, in turn, jointly form the cornerstone of sustainable development. The following sections discuss the key findings by integrating them with theory and prior research.

4.5.1. Product Substance (PS) - Market Value (MV)

This hypothesis confirms Validation and Limits of "Content is King".The support for Hypothesis H1 (Product Substance -> Market Value) aligns strongly with theoretical expectations and existing empirical work. This result confirms that deeply integrated intangible cultural heritage elements, authentic cultural symbols, and emotionally resonant narratives are key drivers for enhancing consumers' willingness to pay and brand loyalty.

These findings support the Resource-Based View (Barney, 1991), positing that unique, inimitable cultural resources form the basis for sustainable competitive advantage, which contends that the unique traits incorporated in performance narratives, costumes, and music are significant intangible assets that create long-term advantage. Furthermore, the incorporation of local intangible cultural heritage—such as Inner Mongolia's long-song and horse-head fiddle—converts traditional expressions into commercial cultural goods while preserving authenticity. This twin achievement of cultural embeddedness and economic viability supports the idea that PS serves as a foundation for both financial return and heritage preservation.

It also resonates with Consumer Behavior Theory, indicating that consumers are not just purchasing a performance but also the cultural

authenticity and emotional experience behind it. This finding is consistent with previous research indicating that authentic cultural material, artistic excellence, and symbolic distinctiveness greatly increase consumer readiness to pay and audience loyalty (Zhang et al., 2020; Lee & Kim, 2021). PS has good reliability and validity indices, indicating that respondents clearly identified cultural integration and artistic depth as factors of perceived market competitiveness.

However, it is noteworthy that the direct effect of Product Substance on Cultural Value was not significant, suggesting that possessing rich cultural resources is insufficient on its own; these resources require effective "translation" and presentation—reliant more on Product Creators and Modality—to fully communicate their intrinsic cultural value to the audience.

4.5.2. Product Modality (PM) - Market Value (MV)

This hypothesis confirms Technology as a Core Market Driver. Hypothesis H3 (Product Modality to Market Value) was supported and demonstrated the highest path coefficient among the three dimensions affecting Market Value. This result strongly indicates that, in the current consumption environment, technological innovation and experiential design are the most effective levers for enhancing the market appeal of tourism performing arts. Means such as immersive technologies, digital projections, and eco-friendly stage design create novel, interactive, and high-quality sensory experiences that directly cater to modern tourists' pursuit of "immersion" and "shareability," thereby significantly boosting the economic returns of the product. This is consistent with Chen et al. (2022), who discovered that digitally enhanced cultural performances resulted in 35% higher revenue and engagement rates. This perfectly illustrates the core principle of the Experience Economy, which creates value by designing memorable and personal experiences. This study, therefore, elevates technology from a mere auxiliary tool to a strategic driver of market value, providing clear guidance for managerial resource allocation.

However, the balance between innovation and authenticity is crucial; excessive technology spectacle may result in cultural superficiality, as underlined by UN Tourism (2024).

4.5.3. Product Co-creation (PC) and Cultural Value (CV)

This hypothesis confirms The Central Role of Human Agency in Cultural Transmission.

Hypothesis H6 (Product Creator -> Cultural Value) was not only supported but also exhibited the strongest effect size among all paths. This finding is one of the core theoretical contributions of this research. It unequivocally establishes the central role of "people" – including ICH inheritors, artists, and local communities–in the integration of culture and tourism. Product Creators act as "gatekeepers" and "translators" of culture; their deep involvement is fundamental to ensuring cultural authenticity, vitality of transmission, and depth of value.

This finding resonates with the essence of Intangible Cultural Heritage Activation Theory and Open Innovation Theory, emphasizing that cultural innovation must originate from and serve the community, requiring knowledge exchange among diverse actors. This outcome is consistent with Freeman *et al.* (2020) and Albrecht (2020), who contend that stakeholder participation promotes empathy-based collaboration and shared ownership of cultural assets. It explains why Product Substance alone is insufficient to transmit cultural value–without the interpretation and activation by "Creators," cultural symbols risk remaining empty displays.

In the current study, strong item loadings for PC characteristics such as "community participation," "creator diversity," and "audience engagement" imply that TPA projects that use participatory design not only maintain cultural life but also build local identity and pride. These findings support the stakeholder theory perspective, emphasizing the importance of multi-actor collaboration across the government, business, and community sectors in ensuring sustainable cultural tourism.

4.5.4. CTIL and Sustainable Development Outcomes (Economic + Cultural)

This hypothesis confirms Establishing a Twin-Pillar Model. The support for Hypotheses H7 and H8 jointly validates the "Twin-Pillar Model for Sustainable Development" proposed in this study. This demonstrates that high levels of culture-tourism integration result in synergistic benefits in terms of economic profitability and cultural transmission, as shown by Zhang *et al.* (2023) and Wang *et al.* (2024). Market Value provides the necessary economic sustainability for the operation, reinvestment, and innovation of tourism performing arts products. Cultural Value, conversely, ensures the cultural sustainability and long-term viability of the product, preventing it from losing its soul due to over-commercialization. The two are synergistic and indispensable.

This study further found that the influence of Cultural Value on Sustainable Development was slightly higher than that of Market Value, sending a strong signal that a solid cultural foundation is the root of long-term sustainable development for tourism performing arts. A product that pursues short-term economic gains at the expense of cultural authenticity will eventually be sifted out by the market. This integrated model moves beyond previous discussions that focused predominantly on either economic or cultural dimensions, offering a more comprehensive and dialectical theoretical framework for understanding the sustainable development of tourism performing arts.

4.6. Recommendation Agenda

Based on the descriptive statistics and hypothesis testing results, this study proposes the following targeted recommendations for action:

Strengthening the Central Role of the "Product Creator": The study showed that the "Product Creator" construct had the lowest mean score but the strongest impact on Cultural Value. This indicates that the current investment in the participation of ICH inheritors and local communities is severely inadequate, yet its return is extremely high. Therefore, the solution is that management and policy levels must establish an institutionalized "Creator Empowerment Mechanism," including fair compensation agreements, intellectual property protection, and deep involvement in creative decision-making, elevating their role from "performers" to "cultural partners."

Deepening the Emotional Link of "Product Substance": Item ps_I5 (emotional connection) received the highest score, indicating that emotional engagement is the most effective tool for moving the audience. However, scores for other items concerning ICH elements and cultural symbols were relatively lower. The solution is that creators should not be content with the superficial display of cultural symbols but should focus on transforming cultural resources into profound emotional narratives. Product development should revolve around "how to tell a story" rather than "how to display symbols."

Leveraging "Product Modality" as a Market Driver: "Product Modality" had the highest mean score and was the strongest driver of Market Value. The solution is that industry organizations and enterprises should continuously invest in the R&D and application of cutting-edge experience technologies, viewing them as a source of core competitive advantage. Concurrently, their application in energy conservation and

environmental protection should be promoted, aligning market advantages with sustainable development goals.

Promoting the Synergistic Evaluation of the Twin Value Pillars: Given that both Market and Cultural Values drive sustainable development, the solution is that policymakers and industry rating agencies should develop and adopt integrated performance evaluation systems that include both economic and cultural indicators. This would guide the industry away from focusing solely on box office revenue and towards healthy, sustainable value creation.

4.7. Research Contribution

Three major theoretical breakthroughs are presented in this paper. First, it creates and validates a multidimensional CTIL scale for future empirical research. Second, it shows that Product Modality drives Market Value and Product Creator promotes Cultural Value in CTIL's sustainability effects. Third, it presents a Twin-Pillar Model that reframes MV and CV as synergistic drivers of sustainable development in tourism performing arts rather as trade-offs.

These findings offer practitioners and policymakers practical advice. ICH inheritors and local communities should lead the creative process through co-creation and equitable benefit-sharing while investing in technology. Culture, technology, and business should be taught together in schools to foster creativity. Industry associations should set cultural value evaluation standards, and government agencies should prioritize "Creator Participation" and "Cultural Value Output" when subsidizing and approving projects.

Economic growth and decent work (SDG 8), cultural heritage protection and sustainable communities (SDG 11), and responsible production and ecologically conscious design (SDG 12) are promoted by this study.

5. CONCLUSION

This study shows how diverse CTIL elements impact the sustainable growth of tourism performing arts products through economic and cultural channels, advancing culture-tourism integration. Validating a multidimensional CTIL scale, identifying the dual mechanisms by which Product Modality increases Market Value and Product Creator increases Cultural Value, and proposing the Twin-Pillar Model of sustainability provides a comprehensive theoretical lens for reconciling commercial viability with cultural authenticity. The empirical evidence shows that sustained cultural tourism requires creator agency, legacy continuity, and community participation, not technology spectacle or market-driven techniques. This study provides a timely roadmap for policymakers, industry leaders, and cultural practitioners to create economically resilient, culturally meaningful, and socially inclusive tourism performing arts ecosystems as the global cultural economy navigates rapid digital transformation and increased sustainability demands.

Overall, the study confirms that the Culture-Tourism Integration Level (CTIL)—anchored in Product Substance, Product Modality, and Product Co-creation—functions as a comprehensive framework explaining how cultural authenticity and innovation jointly enhance both Market Value and Cultural Value in tourism performing arts. The supported hypotheses provide strong evidence that integrating cultural heritage with technological and participatory dimensions not only elevates audience experience but also advances the sustainable transformation of China's cultural tourism industry in the digital era.

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