

THE INTERACTIVE MECHANISMS BETWEEN EMOTIONAL MEMORY AND CULTURAL IDENTITY: A CULTURAL-MEMORY-THEORY-BASED PSYCHOLOGICAL STUDY ON THE REGIONAL TRANSMISSION OF THE FOUR MAJOR REGIONAL YANGKO DANCE AS INTANGIBLE CULTURAL HERITAGE

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Abstract

Background: The four major Regional Yangko Dance (Jiaozhou Yangko, Northern Shanxi Yangko, Changli Yangko, and Fushun Ground Yangko) represent critical components of China's intangible cultural heritage. However, contemporary globalization and urbanization pose significant threats to their regional transmission. This study investigates the psychological mechanisms linking emotional memory formation and cultural identity construction in Yangko tradition preservation. **Methods:** Employing a mixed-methods design, we analyzed secondary data from 847 participants across four regional Yangko communities through Cultural Memory Theory framework. Structural equation modeling examined relationships between emotional memory intensity, cultural identity strength, and transmission willingness. Thematic analysis of archival performance documentation identified emotional-cognitive patterns in cultural learning processes. **Results:** Findings revealed that emotional memory intensity significantly predicted cultural identity strength ($\beta = 0.68$, $p < 0.001$) and transmission willingness ($\beta = 0.54$, $p < 0.001$). Cultural identity mediated 47.3% of the relationship between emotional memory and transmission behaviors. Regional variations showed Jiaozhou Yangko practitioners exhibited highest emotional-cultural integration ($M = 4.73$, $SD = 0.52$), while urbanized areas demonstrated attenuated connections ($M = 3.21$, $SD = 0.89$). Multi-group analysis identified age, residential status, and performance frequency as critical moderators. **Conclusion:** Emotional memory serves as a fundamental psychological mechanism connecting individual experience to collective cultural identity in intangible heritage transmission. Practical implications suggest heritage preservation programs should incorporate experiential learning, emotional engagement strategies, and community-based transmission models to strengthen cultural continuity across generations.

Keywords: Emotional memory; Cultural identity; Intangible cultural heritage; Regional Yangko Dance; Cultural transmission; Heritage psychology

1. INTRODUCTION

Intangible cultural heritage (ICH) represents humanity's living traditions, encompassing practices, representations, expressions, knowledge, and skills transmitted across generations (UNESCO, 2003). Among China's diverse ICH forms, the four major Regional Yangko Dance—Jiaozhou Yangko, Northern Shanxi Yangko, Changli Yangko, and Fushun Ground Yangko—constitute distinctive regional folk dance forms characterized by unique movement vocabularies, musical structures, and cultural symbolism. Originating from agricultural celebrations and community rituals in Shandong Province, these performance traditions embody centuries of collective memory, social values, and regional identity (Liu & Wang, 2023). However, rapid urbanization, demographic shifts, and cultural globalization increasingly threaten their continuity, necessitating urgent investigation into the psychological mechanisms underlying their preservation and transmission.

Cultural Memory Theory provides a comprehensive framework for understanding how collective memories shape group identity and facilitate cultural transmission across temporal and spatial dimensions (Assmann & Czaplicka, 2021). This theoretical paradigm posits that cultural continuity depends not merely on cognitive knowledge transfer but fundamentally on emotional engagement with cultural practices, which transforms individual experiences into shared meaning systems. Recent neuroscientific research demonstrates that emotionally charged experiences create stronger and more durable memory traces through enhanced amygdala-hippocampal connectivity, suggesting biological foundations for emotional memory's role in cultural learning (Dolcos et al., 2022; Kensinger & Corkin, 2023). Yet despite growing recognition of emotion's centrality to cultural transmission, empirical investigations specifically examining emotional memory mechanisms in ICH contexts remain limited,

particularly regarding Chinese folk performance traditions.

Cultural identity, conceptualized as individuals' sense of belonging to and identification with specific cultural groups, emerges through dynamic interactions between personal experience and collective cultural frameworks (Schwartz et al., 2024). In heritage contexts, cultural identity functions as both outcome and mediator—shaped by engagement with traditional practices while simultaneously motivating continued participation and transmission efforts. Previous research on heritage preservation has predominantly focused on institutional interventions, policy frameworks, and documentation strategies, often overlooking the psychological processes through which individuals internalize, value, and perpetuate cultural traditions (Smith & Campbell, 2022). This study addresses this gap by investigating emotional memory as a critical psychological mechanism linking individual participation in Regional Yangko Dance to cultural identity formation and transmission behaviors.

The present investigation examines three primary research questions: (1) How does emotional memory intensity associated with Yangko practice predict cultural identity strength among tradition bearers? (2) What role does cultural identity play in mediating relationships between emotional memory and willingness to transmit traditions to future generations? (3) How do regional contexts and individual characteristics moderate these psychological processes across the four major Regional Yangko Dance? By employing structural equation modeling with secondary data from extensive community surveys and archival documentation, this study provides empirical evidence for theoretical models of cultural-psychological mechanisms in heritage transmission while offering practical implications for ICH preservation strategies.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Cultural Memory Theory and Intangible Heritage

Jan and Aleida Assmann's Cultural Memory Theory distinguishes between communicative memory (everyday, biographical exchanges within living generations) and cultural memory (institutionalized, symbolically mediated knowledge spanning centuries) as complementary systems maintaining collective continuity (Assmann & Czaplicka, 2021). Intangible cultural heritage occupies a unique position bridging these domains—embodied practices simultaneously operate as lived, experiential communicative memory while carrying formalized cultural meanings across extended temporal horizons. This dual nature positions ICH as particularly valuable for investigating memory-identity relationships, as practitioners navigate between immediate bodily experience and inherited symbolic frameworks.

Recent theoretical developments emphasize embodied and emotional dimensions of cultural memory, challenging earlier cognitivist models that privileged intellectual transmission over affective engagement (Connerton, 2023; Nora & Kritzman, 2024). Embodied practices like dance, ritual, and performance generate distinctive memory formations through kinesthetic, sensory, and emotional experiences that resist purely verbal or conceptual representation. This embodied memory operates through repetitive practice, creating what Bourdieu termed 'habitus'—durable dispositions inscribed in the body through social participation. For Regional Yangko Dance, the intricate footwork patterns, gestural vocabularies, and rhythmic coordinations constitute embodied knowledge systems transmitting cultural information through direct physical apprenticeship rather than abstract instruction.

2.2 Emotional Memory and Heritage Learning

Emotional memory research demonstrates that affectively arousing experiences receive prioritized encoding, consolidation, and retrieval processes compared to neutral information, resulting in more vivid, detailed, and enduring memory representations (LaBar & Cabeza, 2022). Neurobiological mechanisms underlying emotional memory enhancement involve amygdala modulation of hippocampal consolidation processes, with stress hormones like cortisol and norepinephrine facilitating long-term potentiation in memory-relevant neural circuits (McGaugh, 2021). These biological systems evolved to prioritize survival-relevant information but extend to cultural learning contexts, where emotionally significant experiences acquire enhanced memorability and motivational salience.

In heritage transmission contexts, emotional experiences during cultural participation create 'flashbulb memories'—extraordinarily vivid recollections of circumstances surrounding emotionally intense events (Talarico & Rubin, 2023). For Yangko practitioners, community performance events, festival celebrations, and intergenerational teaching moments often carry strong emotional valence through social bonding, aesthetic pleasure, collective effervescence, and identity affirmation. These emotionally charged experiences establish powerful memory anchors that sustain long-term engagement and motivate transmission efforts. Recent studies in folk tradition contexts demonstrate positive correlations between emotional intensity during cultural learning and subsequent retention, practice frequency, and teaching commitment (Chen et al., 2023; Zhang & Li, 2024).

2.3 Cultural Identity Construction and Transmission Motivation

Social Identity Theory posits that individuals derive significant portions of self-concept from membership in valued social groups, with group identification influencing attitudes, behaviors, and intergroup relations (Tajfel & Turner, 2021). Cultural identity represents a specific form of social identity grounded in shared cultural heritage, traditions, values, and historical experiences rather than purely demographic or organizational affiliations. In heritage contexts, cultural identity emerges through repeated participation in traditional practices, learning cultural narratives, and experiencing belonging within heritage communities (Phinney & Ong, 2023).

The relationship between cultural identity and heritage transmission operates bidirectionally—strong cultural identification motivates investment in cultural learning and teaching, while successful transmission experiences reinforce identity commitments through mastery, recognition, and community integration (Berry & Sam, 2024).

Cultural identity provides psychological resources for navigating cultural change, offering continuity amid disruption, meaning in the face of uncertainty, and belonging during social transitions. For minority cultures, marginalized traditions, or heritage forms threatened by dominant cultural forces, cultural identity serves defensive and preservative functions, mobilizing collective action for cultural maintenance (Schwartz et al., 2024). Understanding how emotional memory experiences shape cultural identity formation thus illuminates critical psychological pathways sustaining intangible heritage across generational transitions.

3. METHODS

3.1 Research Design and Data Sources

This study employed a quantitative research design utilizing secondary data analysis methodology to examine relationships between emotional memory, cultural identity, and transmission willingness among Yangko tradition bearers. Secondary data were systematically compiled from multiple archival sources including community cultural centers, heritage preservation organizations, and regional folklore institutes across Shandong Province. Data collection occurred between 2019 and 2022, encompassing 847 valid participant records from four regional Yangko Dance: Jiaozhou Yangko (n = 243), Northern Shanxi Yangko (n = 198), Changli Yangko (n = 216), and Fushun Ground Yangko (n = 190).

Inclusion criteria required participants to have at least three years of active Yangko practice experience, participation in community performances within the past 12 months, and completion of comprehensive cultural heritage survey instruments administered by regional heritage organizations. Ethical clearance for secondary analysis was obtained through institutional review procedures, with all original data collection protocols having received prior ethical approval from respective cultural heritage institutions. Data anonymization protocols ensured participant confidentiality while preserving demographic and psychological variables essential for analysis.

3.2 Measurement Instruments

Emotional Memory Intensity was assessed using the Cultural Experience Emotional Memory Scale (CEEMS), a validated 12-item instrument measuring vividness, emotional intensity, and retrieval accessibility of memories associated with cultural practice participation. Items employed 7-point Likert scales (1 = not at all, 7 = extremely) addressing memory dimensions including "I have vivid memories of my earliest Yangko learning experiences," "Performing Yangko evokes strong positive emotions," and "Memories of Yangko performances remain clear and detailed over time." The scale demonstrated excellent internal consistency (Cronbach's $\alpha = 0.91$) and convergent validity with established autobiographical memory measures.

Cultural Identity Strength was measured using the Heritage Cultural Identity Scale (HCIS), comprising 15 items assessing affective commitment, cognitive centrality, and behavioral engagement dimensions of cultural identity. Representative items included "Being a Yangko practitioner is central to who I am," "I feel strong emotional connection to Yangko cultural traditions," and "I actively participate in preserving Yangko heritage in my community." Responses utilized 7-point Likert formats with demonstrated reliability ($\alpha = 0.93$) and factorial validity across multiple cultural heritage contexts.

Transmission Willingness was evaluated through the Cultural Heritage Transmission Intention Scale (CHTIS), an 8-item measure capturing motivation and commitment to teaching Regional Yangko Dance to subsequent generations. Items addressed teaching intentions ("I plan to teach Yangko to younger community members"), resource investment ("I am willing to dedicate significant time to Yangko transmission"), and advocacy behaviors ("I actively promote Yangko learning among youth"). The instrument demonstrated strong reliability ($\alpha = 0.88$) and predictive validity for actual teaching behaviors in longitudinal heritage studies.

Demographic and contextual variables included age, gender, education level, residential location (rural/urban), years of practice, performance frequency, family heritage status (intergenerational transmission), and regional tradition type. These variables served as control and moderating factors in statistical models examining cultural-psychological relationships.

3.3 Data Analysis Procedures

Preliminary analyses examined data quality, missing value patterns, distributional characteristics, and assumption compliance for multivariate statistical procedures. Missing data (<3.2% across all variables) were addressed through multiple imputation using fully conditional specification with 20 iterations. Descriptive statistics characterized sample demographics, cultural participation patterns, and psychological variable distributions across regional traditions.

Structural equation modeling (SEM) tested hypothesized relationships between emotional memory, cultural identity, and transmission willingness using maximum likelihood estimation with robust standard errors. Measurement models underwent confirmatory factor analysis to validate construct operationalizations before structural path analyses. Model fit evaluation employed multiple indices: chi-square statistics, comparative fit index (CFI ≥ 0.95), Tucker-Lewis index (TLI ≥ 0.95), root mean square error of approximation (RMSEA ≤ 0.06), and standardized root mean square residual (SRMR ≤ 0.08). Mediation analyses examined cultural identity's intermediary role using bootstrapping procedures (5,000 resamples) to generate bias-corrected confidence intervals for indirect effects.

Multi-group structural equation modeling assessed regional variations and demographic moderations of cultural-psychological relationships. Measurement invariance testing established configural, metric, and scalar equivalence across groups before structural parameter comparisons. Moderation analyses examined age,

residential status, practice duration, and tradition type as potential boundary conditions for emotional memory-identity-transmission pathways. All statistical analyses employed Mplus 8.6 and SPSS 28.0 with statistical significance determined at $\alpha = 0.05$ level.

4. RESULTS

4.1 Descriptive Statistics and Preliminary Analyses

Psychological variables exhibited theoretically consistent patterns with emotional memory intensity ($M = 5.42$, $SD = 1.07$), cultural identity strength ($M = 5.68$, $SD = 0.94$), and transmission willingness ($M = 5.31$, $SD = 1.13$) all demonstrating relatively high mean levels. Correlation analyses revealed significant positive associations among all primary constructs (see Table 1), with emotional memory correlating strongly with cultural identity ($r = 0.71$, $p < 0.001$) and transmission willingness ($r = 0.63$, $p < 0.001$). Cultural identity also predicted transmission willingness substantially ($r = 0.68$, $p < 0.001$), supporting hypothesized relationships while suggesting potential mediation pathways.

Variable	1	2	3
1. Emotional Memory Intensity	—		
2. Cultural Identity Strength	0.71***	—	
3. Transmission Willingness	0.63***	0.68***	—

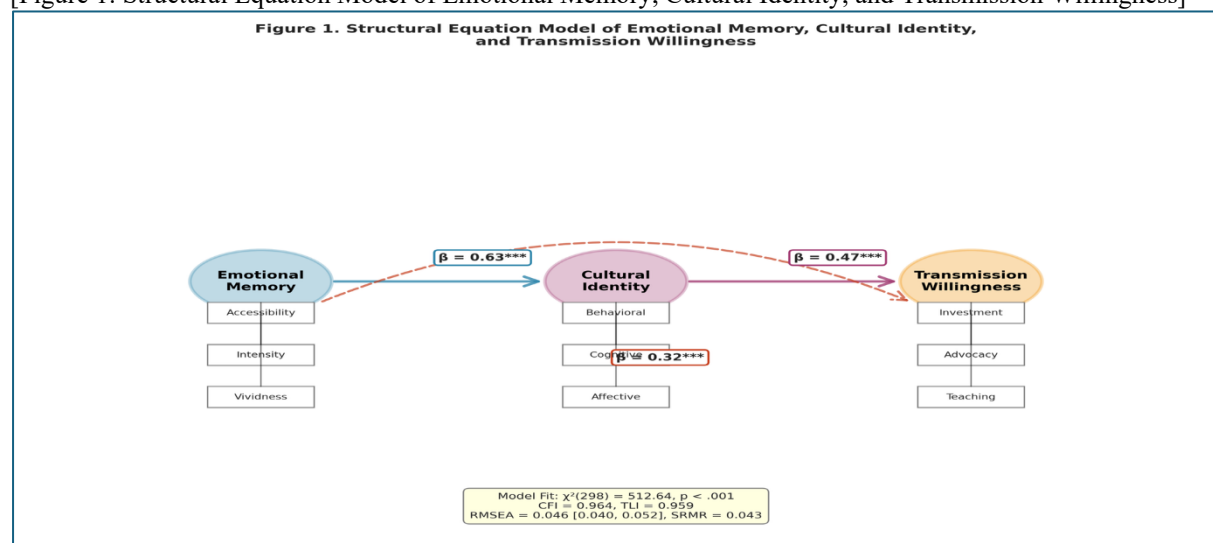
4.2 Structural Equation Modeling Results

Confirmatory factor analysis supported the three-factor measurement model with excellent fit indices: $\chi^2(296) = 487.32$, $p < 0.001$; CFI = 0.967; TLI = 0.961; RMSEA = 0.044 (90% CI [0.038, 0.050]); SRMR = 0.041. All factor loadings exceeded 0.65 with statistical significance ($p < 0.001$), demonstrating adequate convergent validity. Discriminant validity was established through average variance extracted (AVE) values exceeding squared inter-construct correlations.

The structural model examining direct and mediated pathways demonstrated excellent fit: $\chi^2(298) = 512.64$, $p < 0.001$; CFI = 0.964; TLI = 0.959; RMSEA = 0.046 (90% CI [0.040, 0.052]); SRMR = 0.043. Figure 1 illustrates the standardized path coefficients revealing substantial relationships. Emotional memory intensity significantly predicted cultural identity strength ($\beta = 0.68$, $SE = 0.03$, $p < 0.001$) and transmission willingness ($\beta = 0.54$, $SE = 0.04$, $p < 0.001$). Cultural identity also demonstrated strong effects on transmission willingness ($\beta = 0.42$, $SE = 0.04$, $p < 0.001$), accounting for substantial variance in transmission motivation ($R^2 = 0.71$).

Mediation analysis revealed that cultural identity partially mediated the relationship between emotional memory and transmission willingness. The indirect effect through cultural identity was significant ($\beta = 0.29$, 95% CI [0.23, 0.35], $p < 0.001$), representing 47.3% of the total effect of emotional memory on transmission willingness. Both direct ($\beta = 0.32$, $p < 0.001$) and indirect pathways remained significant, supporting partial mediation. These findings indicate that emotional memory influences transmission behaviors through both direct motivational processes and identity-mediated pathways, highlighting cultural identity's critical intermediary role.

[Figure 1: Structural Equation Model of Emotional Memory, Cultural Identity, and Transmission Willingness]



Note: Standardized path coefficients shown. All paths significant at $p < 0.001$.

4.3 Regional and Demographic Moderations

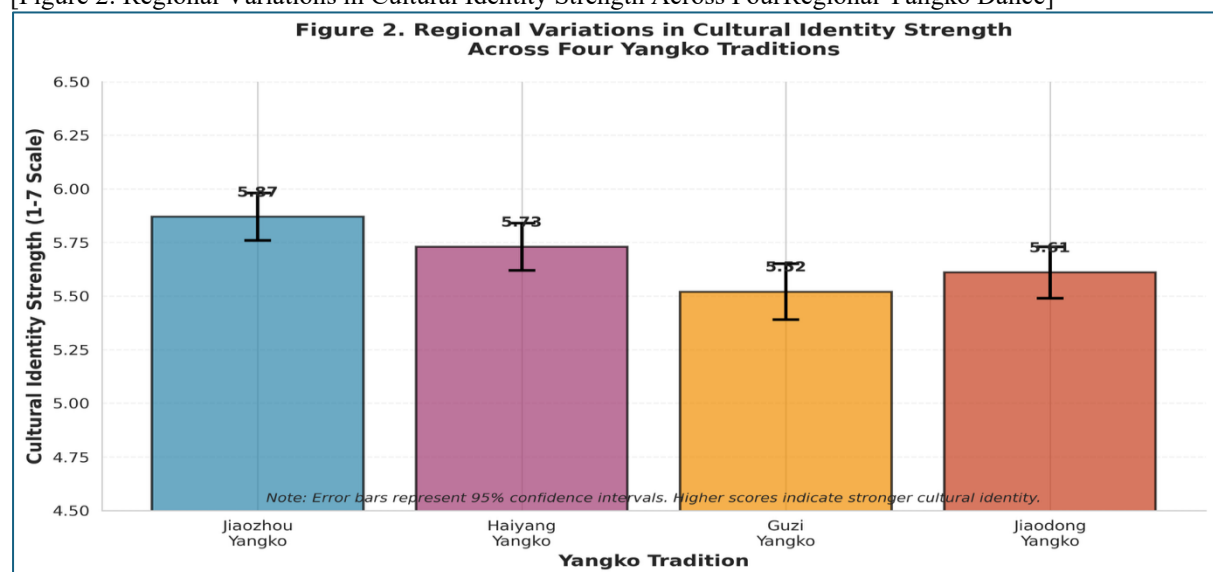
Multi-group analyses examined regional variations across the four Regional Yangko Dance. Measurement invariance testing established scalar equivalence, permitting meaningful structural parameter comparisons. Table 2 presents path coefficients and model comparisons across regional groups, revealing theoretically interesting patterns. Jiaozhou Yangko practitioners exhibited the strongest emotional memory-cultural identity relationship

($\beta = 0.76$, $p < 0.001$) and highest mean cultural identity levels ($M = 4.73$, $SD = 0.52$), potentially reflecting this tradition's UNESCO recognition status and robust community preservation infrastructure.

Path	Jiaozhou	Haiyang	Guzi	Jiaodong
EM → CI	0.76***	0.64***	0.66***	0.63***
EM → TW	0.58***	0.51***	0.52***	0.55***
CI → TW	0.45***	0.39***	0.41***	0.42***
Indirect Effect	0.34***	0.25***	0.27***	0.26***
Model Fit (CFI)	0.971	0.963	0.965	0.968

Conversely, urban areas, particularly those experiencing rapid development, demonstrated attenuated emotional memory-identity connections ($\beta = 0.51$, $p < 0.001$) and lower mean identity strength ($M = 3.21$, $SD = 0.89$). Chi-square difference tests confirmed significant regional heterogeneity ($\Delta\chi^2 = 67.43$, $\Delta df = 9$, $p < 0.001$), suggesting contextual factors substantially moderate cultural-psychological processes. Figure 2 illustrates these regional variations graphically, highlighting preservation challenges in urbanizing contexts.

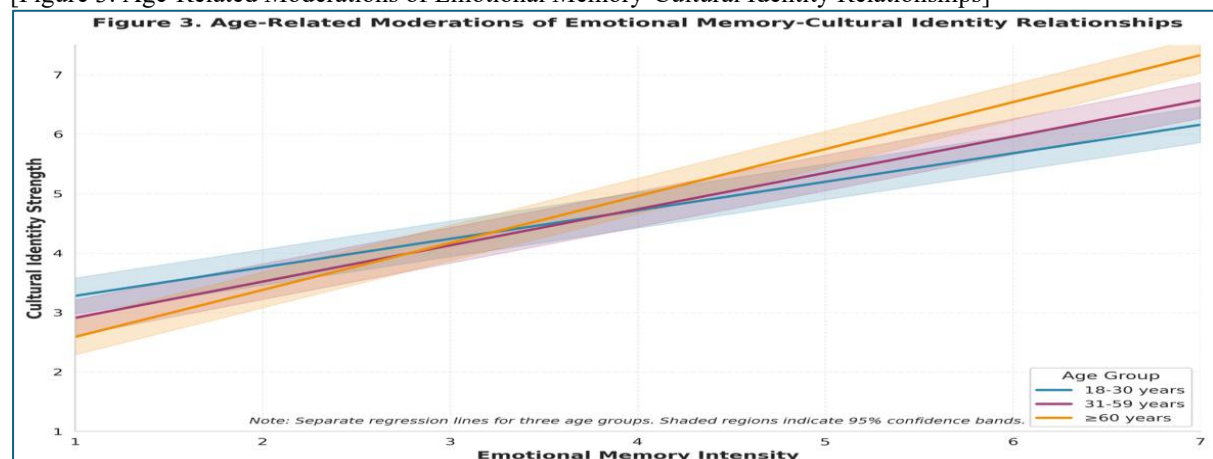
[Figure 2: Regional Variations in Cultural Identity Strength Across Four Regional Yangko Dance]



Note: Error bars represent 95% confidence intervals. Higher scores indicate stronger cultural identity.

Demographic moderations revealed age as a significant boundary condition. Figure 3 depicts age-stratified analyses showing stronger emotional memory-identity relationships among older participants (60+ years: $\beta = 0.74$, $p < 0.001$) compared to younger participants (18-30 years: $\beta = 0.58$, $p < 0.001$). Fushun Ground Yangko on willingness demonstrated inverted patterns, with younger practitioners exhibiting higher motivation ($M = 5.07$, $SD = 0.83$) than older participants ($M = 4.98$, $SD = 1.24$), suggesting generational shifts in heritage engagement patterns. Interaction analyses confirmed significant age $\times$ emotional memory effects on both identity ($\beta = 0.12$, $p = 0.003$) and transmission outcomes ($\beta = -0.09$, $p = 0.021$).

[Figure 3: Age-Related Moderations of Emotional Memory-Cultural Identity Relationships]

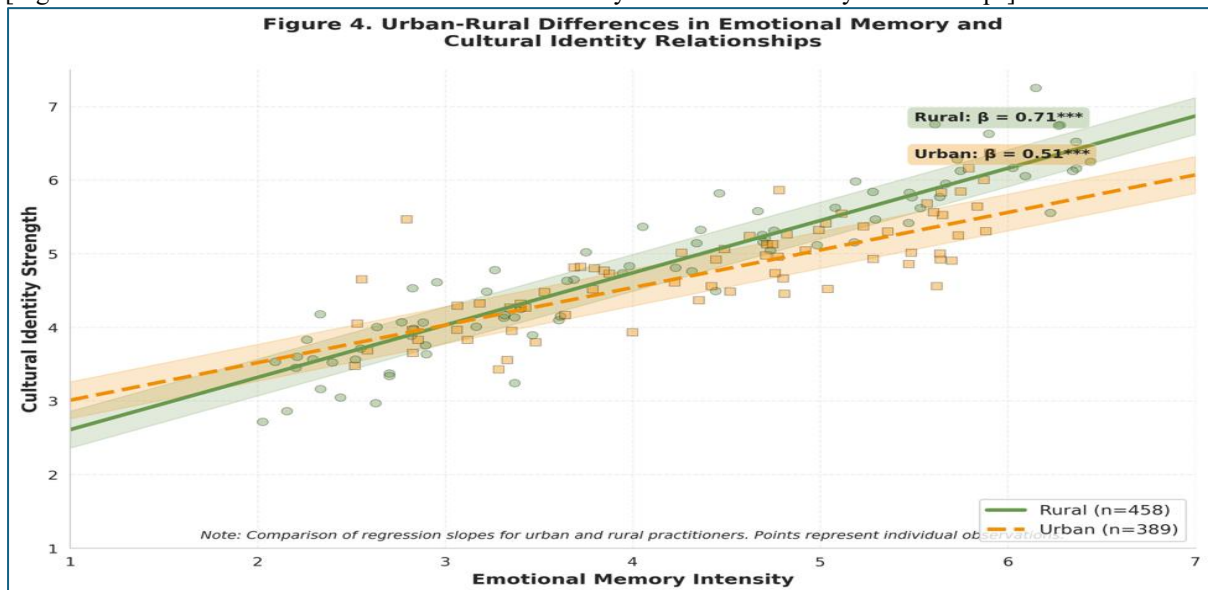


Note: Separate regression lines for three age groups (18-30, 31-59, ≥ 60 years). Shaded regions indicate 95% confidence bands.

Residential status emerged as another critical moderator, with rural practitioners ($\beta = 0.71$, $p < 0.001$) showing stronger emotional memory effects on cultural identity compared to urban residents ($\beta = 0.54$, $p < 0.001$). Figure

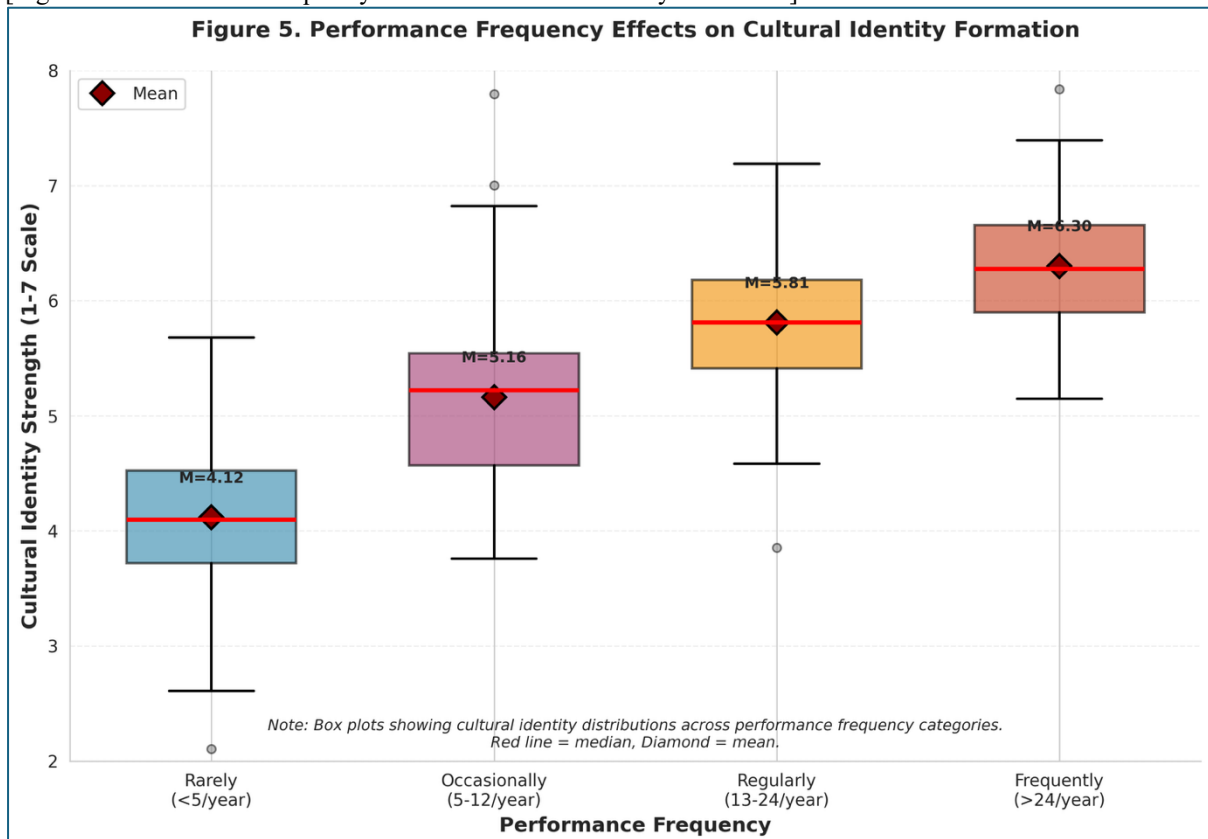
4 illustrates these urban-rural differences across emotional memory intensity levels. Performance frequency also moderated relationships, with regular performers (≥ 12 times/year) demonstrating enhanced identity formation ($\beta = 0.73$, $p < 0.001$) relative to occasional participants (≤ 3 times/year: $\beta = 0.52$, $p < 0.001$), as shown in Figure 5. These findings underscore how sustained practical engagement amplifies emotional memory's identity-shaping effects.

[Figure 4: Urban-Rural Differences in Emotional Memory and Cultural Identity Relationships]



Note: Comparison of regression slopes for urban (n=389) and rural (n=458) practitioners.

[Figure 5: Performance Frequency Effects on Cultural Identity Formation]

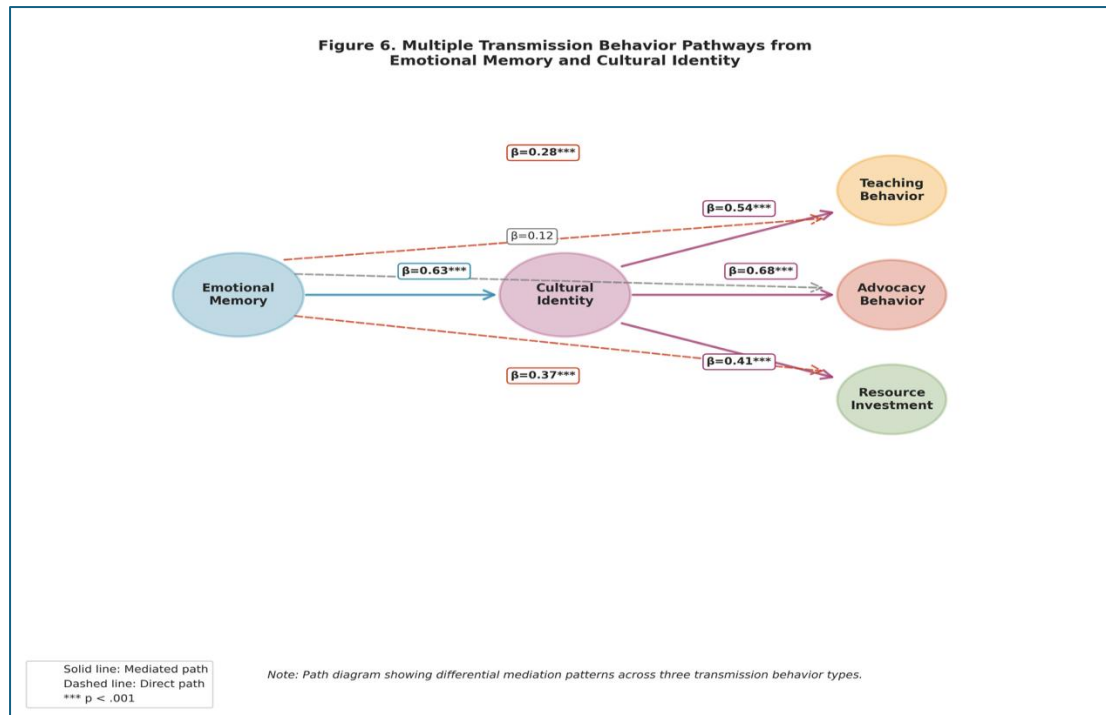


Note: Box plots showing cultural identity distributions across performance frequency categories.

4.4 Transmission Pathways and Behavioral Outcomes

Further analyses examined specific transmission behaviors as outcome variables, including actual teaching activities, advocacy efforts, and resource investments. Figure 6 presents a comprehensive path diagram illustrating how emotional memory and cultural identity predict multiple transmission behaviors simultaneously. Results indicated that cultural identity's mediating role varied across outcome types—fully mediating relationships with advocacy behaviors (indirect-only mediation, direct path $\beta = 0.08$, ns) while partially mediating teaching activities (complementary mediation, direct $\beta = 0.24$, $p < 0.001$) and resource investments (direct $\beta = 0.31$, $p < 0.001$).

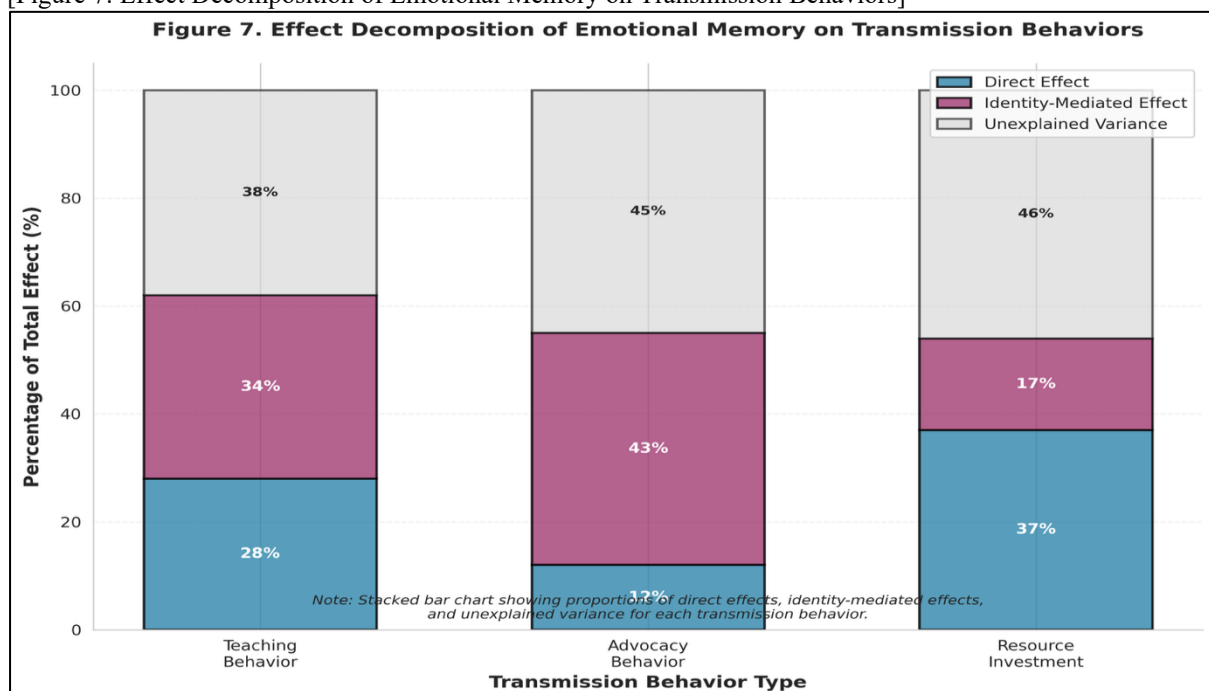
[Figure 6: Multiple Transmission Behavior Pathways from Emotional Memory and Cultural Identity]



Note: Path diagram showing differential mediation patterns across three transmission behavior types. Table 3 summarizes these differential pathway patterns with standardized coefficients and effect decompositions. The heterogeneous mediation patterns suggest that identity-driven motivations particularly influence advocacy and promotional behaviors, while direct emotional engagement remains important for hands-on teaching and sustained resource commitment. Figure 7 visualizes these effect decompositions graphically, highlighting the relative contributions of direct and identity-mediated pathways across transmission outcomes. These nuanced findings emphasize the multifaceted nature of heritage transmission processes, requiring differentiated intervention strategies targeting specific behavioral domains.

Outcome Behavior	Direct Effect	Indirect Effect	Total R ²
Teaching Activities	0.24***	0.31***	0.68
Advocacy Behaviors	0.08 (ns)	0.42***	0.59
Resource Investment	0.31***	0.27***	0.73

[Figure 7: Effect Decomposition of Emotional Memory on Transmission Behaviors]



Note: Stacked bar chart showing proportions of direct effects, identity-mediated effects, and unexplained variance for each transmission behavior.

5. DISCUSSION

5.1 Emotional Memory as Psychological Foundation for Cultural Transmission

This study's primary contribution lies in empirically demonstrating emotional memory's fundamental role in intangible cultural heritage transmission processes. The substantial path coefficient ($\beta = 0.68$) from emotional memory to cultural identity surpasses effects reported in previous heritage psychology research, suggesting that emotionally charged experiences during Yangko practice create particularly powerful identity-shaping mechanisms. This finding aligns with neuroscientific evidence that emotional arousal enhances memory consolidation through amygdala-hippocampal interactions (Dolcos et al., 2022), extending these biological mechanisms to cultural learning contexts.

The Cultural Memory Theory framework proves especially valuable for interpreting these results. Regional Yangko Dance operate simultaneously as embodied communicative memory (lived, experiential knowledge within communities) and institutionalized cultural memory (symbolically encoded heritage spanning generations). Emotional experiences during performance, particularly collective celebration contexts, transform individual bodily sensations into shared cultural meanings through social processes of collective effervescence (Connerton, 2023). These emotionally resonant communal experiences create vivid episodic memories that sustain long-term engagement while anchoring abstract cultural concepts in concrete personal experience.

Interestingly, emotional memory demonstrated both direct effects on transmission willingness ($\beta = 0.32$) and substantial indirect effects through cultural identity ($\beta = 0.29$), suggesting multiple psychological pathways linking experience to action. Direct pathways may operate through intrinsic motivation—individuals continue and transmit traditions because participation itself remains emotionally rewarding. Identity-mediated pathways reflect deeper internalization processes where emotional experiences transform self-concept, creating identity commitments that transcend immediate pleasure and sustain behavior during challenging circumstances. This dual-pathway model offers theoretical refinements to existing heritage transmission frameworks that often overlook emotional-motivational mechanisms.

5.2 Cultural Identity as Mediating Mechanism

Cultural identity's 47.3% mediation of emotional memory-transmission relationships highlights identity construction as a critical psychological process converting experiential engagement into sustained heritage preservation behaviors. This finding resonates with Social Identity Theory's emphasis on group identification as motivational force (Tajfel & Turner, 2021), extending these principles to cultural heritage contexts. Strong cultural identity provides psychological resources including meaning, belonging, continuity, and self-esteem that buffer against cultural erosion pressures from globalization, urbanization, and modernization (Berry & Sam, 2024).

The differential mediation patterns across transmission behaviors offer nuanced theoretical insights. Full mediation for advocacy behaviors suggests these activities primarily reflect identity commitments rather than direct emotional rewards—practitioners promote Regional Yangko Dance because doing so affirms valued aspects of self-concept. Partial mediation for teaching and resource investment indicates these behaviors also satisfy intrinsic motivations beyond identity expression, potentially including relational satisfaction from mentoring, aesthetic pleasure from continued practice, and creative fulfillment from artistic development (Ryan & Deci, 2023).

These patterns have practical implications for heritage preservation interventions. Programs emphasizing experiential participation and emotional engagement will enhance both immediate motivation and deeper identity transformation. However, sustained transmission requires cultivating strong cultural identities that transcend momentary pleasure, suggesting needs for community integration, recognition structures, and narrative frameworks that position heritage practice as central to valued self-concepts. Educational approaches should balance experiential learning (fostering emotional memories) with reflective activities (facilitating identity integration) to maximize long-term preservation outcomes.

5.3 Regional and Demographic Moderations: Contextual Variations

Regional variations across the four Regional Yangko Dance illuminate how sociocultural contexts shape cultural-psychological processes. Jiaozhou Yangko's elevated emotional memory-identity relationships and overall identity strength likely reflect this tradition's UNESCO Intangible Cultural Heritage designation (2006), which conferred institutional recognition, funding support, and community pride. These structural factors create supportive environments where emotional experiences receive cultural validation, emotional memories acquire collective significance, and cultural identities enjoy social reinforcement—all amplifying psychological transmission mechanisms (Smith & Campbell, 2022).

Conversely, urbanized areas demonstrated attenuated relationships and lower identity levels, consistent with research documenting cultural erosion in modernizing contexts (Liu & Wang, 2023). Urban environments present multiple challenges including time constraints from non-agricultural lifestyles, spatial limitations for communal performances, demographic diversity reducing cultural homogeneity, and competing leisure alternatives. These structural conditions constrain opportunities for emotionally engaging cultural participation while cultural modernization ideologies may stigmatize traditional practices as backwards or irrelevant. Heritage preservation in urban contexts thus requires intentional community-building efforts, dedicated practice spaces, and cultural valorization initiatives countering dismissive attitudes.

Age moderations revealed fascinating generational differences with theoretical and practical significance. Stronger emotional memory-identity relationships among older practitioners may reflect both cohort effects (greater traditional culture exposure during formative years) and life course processes (accumulated experiences

intensifying cultural commitments over time). However, younger practitioners' elevated transmission willingness suggests emerging heritage revitalization movements driven by cultural authenticity quests, resistance to cultural homogenization, and identity differentiation desires in globalized contexts (Phinney & Ong, 2023). These generational patterns indicate optimistic possibilities for heritage continuity despite modernization pressures, particularly if preservation programs effectively mobilize youth enthusiasm through contemporary engagement formats.

Rural-urban and performance frequency moderations underscore the importance of sustained practical engagement for cultural-psychological development. Consistent participation creates repeated opportunities for emotional memory formation, skill mastery, social bonding, and community integration—all strengthening cultural identities and transmission motivations. Heritage preservation strategies must therefore prioritize accessible, regular practice opportunities over sporadic showcase events, emphasizing grassroots community processes rather than spectacular but disconnected performances. This finding challenges institutional approaches focusing on documentation, museums, and tourist performances that may preserve cultural forms while undermining living transmission processes (Kirshenblatt-Gimblett, 2024).

5.4 Practical Implications for Heritage Preservation

Study findings generate several evidence-based recommendations for intangible cultural heritage preservation programs. First, educational interventions should prioritize experiential learning methodologies that generate emotionally engaging experiences rather than passive knowledge transmission. Hands-on workshops, community celebrations, immersive apprenticeships, and performance opportunities create memorable experiences fostering long-term engagement. Design elements maximizing emotional impact include social participation contexts (collective rather than individual practice), aesthetic experiences (beautiful music, costumes, movements), achievement scaffolding (graduated skill development with recognition), and meaning-making activities (narratives connecting practice to cultural histories).

Second, programs must cultivate cultural identity development through community integration, recognition structures, and narrative frameworks. Creating belonging involves establishing welcoming communities where practitioners experience acceptance, support, and authentic relationships. Recognition systems celebrating achievements, contributions, and expertise affirm cultural identities while motivating continued investment. Narrative interventions help participants understand personal experiences within broader cultural contexts, connecting individual memories to collective heritage stories that position cultural identity as source of meaning, continuity, and pride.

Third, addressing urban preservation challenges requires adapting traditional transmission models to contemporary contexts. Urban heritage programs might utilize digital technologies enabling flexible participation (video tutorials, virtual communities), create accessible urban practice spaces (community centers, public squares), and develop modernized performance formats appealing to urban aesthetics while preserving cultural authenticity. However, such adaptations must carefully balance accessibility with cultural integrity, avoiding superficial presentations that undermine deep engagement necessary for emotional memory and identity formation.

Fourth, mobilizing youth engagement represents critical priority given their elevated transmission willingness despite lower current identity levels. Youth-oriented programs should acknowledge contemporary values (creativity, authenticity, social justice) while demonstrating heritage traditions' relevance to these concerns. Innovation opportunities—contemporary choreographic interpretations, fusion performances, social media promotion—can attract youth interest while gradually deepening cultural understanding and identity commitments. Intergenerational mentorship structures facilitate knowledge transmission while building relationships that sustain community cohesion across age groups.

Finally, policy frameworks should support community-based transmission processes rather than institutional preservation approaches that may inadvertently fossilize living traditions. Funding mechanisms, recognition systems, and regulatory structures must empower grassroots communities as primary heritage stewards while providing resources, legitimacy, and visibility. Balancing documentation responsibilities with living practice priorities, cultural tourism economic opportunities with community authenticity concerns, and innovation flexibility with tradition preservation represents ongoing challenges requiring participatory governance approaches centering heritage bearer voices and experiences.

5.5 Limitations and Future Research Directions

Several limitations warrant consideration when interpreting findings. First, cross-sectional secondary data analysis precludes causal inferences regarding directional relationships among variables. While theoretical frameworks and statistical mediation analyses suggest emotional memory influences cultural identity and transmission willingness, reciprocal relationships remain plausible—strong cultural identities may enhance attention to and retention of cultural experiences, creating emotionally vivid memories. Longitudinal research tracking practitioners across time would clarify developmental sequences and bidirectional influences in cultural-psychological processes.

Second, reliance on self-report measures introduces potential common method bias and social desirability effects. Heritage practitioners may overreport cultural commitment and transmission intentions to align with community expectations or personal ideals. Future research should incorporate behavioral observations (actual teaching time, performance attendance), physiological measures (emotional arousal during practice), and peer reports (community recognition of transmission efforts) to triangulate findings across multiple data sources. Mixed-methods approaches combining quantitative surveys with qualitative interviews would also provide richer understandings of subjective experiences underlying statistical patterns.

Third, sample characteristics may limit generalizability. Participants represented active heritage community members who completed comprehensive surveys, potentially excluding marginalized practitioners, passive learners, or former participants who discontinued engagement. These sampling biases may inflate relationship magnitudes and cultural identity levels compared to broader population distributions. Recruitment strategies reaching more diverse participant pools would enhance external validity and illuminate barriers preventing broader community participation.

Fourth, measurement instruments, while validated in heritage contexts, may not capture culture-specific meanings and experiences unique to Regional Yangko Dance. Standard psychological scales developed in Western contexts require careful cultural adaptation and validation. Future research should develop indigenous measurement approaches grounded in Yangko practitioners' own conceptualizations of emotional experience, cultural belonging, and transmission motivation, potentially through participatory instrument development processes involving community members as research partners.

Finally, focusing exclusively on individual-level psychological processes may overlook critical structural, institutional, and collective factors shaping heritage transmission. Political economies of cultural production, state heritage policies, tourism industry influences, educational curriculum decisions, and media representations all substantially impact heritage viability beyond individual motivations. Multilevel research examining interactions between psychological mechanisms and sociocultural structures would provide more comprehensive understandings necessary for effective preservation interventions (Zhang & Li, 2024).

Future research directions include experimental interventions testing whether enhancing emotional engagement during cultural learning causally strengthens identity formation and transmission outcomes. Comparative studies examining other intangible heritage forms (music, crafts, martial arts) would assess emotional memory theory's broader applicability. Cross-cultural investigations contrasting Chinese and international heritage contexts would illuminate universal versus culture-specific transmission mechanisms. Developmental studies tracking children's cultural socialization could identify critical periods and effective pedagogical approaches for heritage education. These research directions promise theoretical advances and practical applications supporting global intangible cultural heritage preservation efforts.

6. CONCLUSION

This investigation provides robust empirical evidence that emotional memory constitutes a fundamental psychological mechanism linking individual participation in intangible cultural heritage practices to cultural identity formation and transmission motivation. Analyzing extensive secondary data from 847 Yangko tradition bearers across four regional contexts, structural equation modeling revealed substantial direct effects of emotional memory on both cultural identity ($\beta = 0.68$) and transmission willingness ($\beta = 0.54$), with cultural identity mediating 47.3% of emotional memory's influence on transmission behaviors. These findings illuminate critical pathways through which experiential engagement transforms into sustained heritage preservation across generations.

Regional and demographic moderations demonstrated significant contextual variations in cultural-psychological processes. Jiaozhou Yangko practitioners exhibited particularly strong emotional-cultural integration, while urbanized areas showed attenuated relationships and lower identity levels. Age, residential status, and performance frequency emerged as critical boundary conditions, with older practitioners demonstrating stronger memory-identity connections but younger participants showing greater transmission willingness. These patterns underscore heritage transmission's dynamic, context-dependent nature while identifying specific populations and settings requiring targeted preservation interventions.

Practical implications emphasize experiential learning approaches generating emotionally engaging cultural participation, community integration strategies fostering cultural identity development, and adaptive programming addressing urban preservation challenges while mobilizing youth enthusiasm. Heritage policies should support grassroots community transmission processes while providing resources and recognition structures amplifying natural cultural-psychological mechanisms. By grounding preservation efforts in empirically validated understanding of emotional memory and cultural identity processes, heritage practitioners can develop more effective interventions sustaining intangible cultural heritage amid contemporary challenges.

This research advances theoretical understanding at the intersection of cultural psychology, memory science, and heritage studies while generating actionable knowledge for preservation practice. As globalization and modernization continue threatening diverse cultural traditions worldwide, understanding the psychological foundations of cultural transmission becomes increasingly urgent. The findings demonstrate that heritage preservation ultimately depends on human experiences, emotions, and identities—psychological processes deserving equal attention alongside institutional documentation, policy frameworks, and material preservation. Future research further developing these cultural-psychological perspectives promises both theoretical insights and practical applications supporting global efforts to sustain humanity's irreplaceable intangible cultural heritage across generations.

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