

# **Digitalisation for Cultural Sustainability: Using a 2D Educational Game to Preserve Traditional Chinese Funeral Knowledge**

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## **Abstract**

Digitalisation can play an important role in sustaining cultural knowledge and social values, particularly among younger generations who engage deeply with interactive media. This study explores how a 2D (2 Dimensional) educational horror game can preserve and transmit traditional Chinese funeral knowledge through experiential learning. The game, titled *Funeral Fun*, was developed in Unity, a game engine, with AI-assisted tools for visual and audio assets, and integrates funeral rituals into three mini-games that focus on ritual preparation, cultural knowledge, and appropriate behavioural conduct. Emotional tension and horror elements are used to enhance attention, memory, and engagement while maintaining a respectful representation of sacred practices.

A mixed descriptive quantitative and qualitative approach was adopted through user acceptance testing with 15 university students, using questionnaires that combined knowledge questions, Likert scale ratings, and open-ended feedback. The results show substantial improvements in ritual knowledge retention, high perceived educational value, and generally positive usability, with participants demonstrating understanding not only of procedural steps and taboos but also of underlying values such as filial piety and respect for the deceased.

The findings suggest that educational horror games can support digitalisation for cultural sustainability by linking cultural heritage, interactive learning, and future-ready digital literacy.

**Keywords:** digitalisation, cultural sustainability, game-based learning, interactive media, educational technology, Chinese funeral rituals

## Introduction

Video games have evolved from simple entertainment into an influential medium of cultural expression and storytelling. This development is particularly evident in the horror genre, which creates immersive and emotionally charged experiences that resonate with players at psychological and affective levels (Gantz, 2019). Horror titles such as *Detention and Devotion* demonstrate how folklore and spiritual traditions can be effectively woven into gameplay while maintaining strong entertainment value (Chen-Yi, 2020). Through carefully crafted atmospheres, narrative, and interactivity, horror games often leave lasting impressions on players. This immersive quality makes them especially suitable for conveying cultural knowledge and traditions, as players actively participate in and engage with the cultural elements embedded in the game world. Such interactivity enables deeper emotional and cognitive engagement with cultural content than is typically achievable through traditional mass media (Cerezo-Pizarro et al., 2023).

In parallel, there has been a growing concern about preserving traditional funeral practices and transmitting cultural heritage to younger generations (Tang & Wang, 2024). Although video games have emerged as a powerful cultural medium, they frequently fall short in accurately representing and educating players about specific practices, particularly those related to funeral rituals. Recognising this gap, recent studies have begun to examine how game mechanics and narrative design can be used to support interactive learning that goes beyond mere entertainment (Cerezo-Pizarro et al., 2023). Nevertheless, the potential of interactive digital media for cultural preservation within niche genres such as horror games remains under-explored (Chen-Yi, 2020).

In response to these issues, this study develops a 2D horror game that integrates elements of traditional Chinese funeral rituals into its narrative and gameplay. The game is implemented using the Unity game engine and supported by several AI tools, including ChatGPT and Hailuo AI for visual asset generation, ElevenLabs for sound design, and Suno AI for music creation.

Players explore funeral traditions through a series of culturally themed mini-games, encountering progressively challenging scenarios as they uncover family rituals and hidden truths. Player performance determines one of three possible endings, while mission failure triggers a scare sequence that both heightens tension and reinforces the importance of correctly performing the rituals in order to progress. Through this design, the study aims to demonstrate how horror games can function as an engaging medium for cultural education and the preservation of intangible heritage.

## Literature Review

### Games as Cultural Preservation Tools

Video games have become a major medium for cultural transmission, capable of reproducing, assimilating, and creating culture beyond traditional media such as movies and literature (Cerezo-Pizarro et al., 2023). Research demonstrates that video games influence culture in two ways: by reflecting existing cultural values and by transmitting complex cultural narratives through interactive experiences. The immersive and interactive nature of games makes them particularly effective in engaging younger generations with traditional practices and beliefs. Studies emphasise that interactive digital experiences can serve as robust tools for cultural transmission when designed with authenticity and respect for traditional practices (Cerezo-Pizarro et al., 2023).

Games such as *Detention and Devotion* exemplify successful cultural integration in horror games. The story behind these two Taiwanese horror games depicts the White Terror of the 1960s, imposed on its people by the Kuomintang rule, and utilises horror based on folk beliefs to perform a critique of political oppression and to question cultural identity (Gregory & Katherine, 2022; Wu, 2022). For instance, players walk through the oppressive atmosphere of Martial Law and make choices while determining multiple possible outcomes. Such interactive storytelling provides depth to role-playing scenarios and allows players to express cultural identity and engage with political implications (Wu, 2022). These games have received positive recognition from both local and international audiences for their impact on preserving Taiwanese history and culture, demonstrating that horror games combining narrative depth with cultural elements can attract diverse audiences while maintaining traditional roots (Beadle, 2022).

### Horror Game Design and Cultural Integration

Horror games provide an effective platform for cultural storytelling through their capacity to create atmospheric and emotionally engaging experiences. The genre operates on the principle of recreational fear, a complex emotional experience combining fear and enjoyment (Andersen et al., 2020). Research indicates that moderate levels of fear enhance memory retention due to emotional arousal, following an inverted U-shaped curve (Bennion et al., 2013). This psychological mechanism makes horror games particularly suitable for educational purposes, as the emotional engagement strengthens learning and retention.

Effective horror game design relies on several key mechanisms. Storytelling can create empathy through players' emotional investment in characters and their struggles, while rewards and punishments motivate continued exploration and engagement (Fullerton, 2024). Environmental design elements of darkness, colour palette, and spatial audio add significantly to atmosphere and tension. Desaturated tones such as black, grey, and deep red elicit feelings of dread and unease;

similarly, well-considered use of colour can support guidance of player attention and heighten immersion (Kauranen, 2023). For example, *Resident Evil 5* and *The Last of Us* are examples of how colour grading and complementary colour harmony serve effectively to heighten realism and tension.

On the other hand, Chinese horror games effectively combine explicit and implicit horror elements to create culturally resonant experiences. Explicit horror utilizes jump scares, eerie imagery, and ghostly figures to startle players, while implicit Chinese horror builds unease through subtle cultural references, ritualistic symbols, and atmospheric tension (Liu, 2023; Zhang, 2024). Wang's research identifies four main themes in modern Chinese horror games: shared cultural symbols (ghosts, paper dolls, ancestral tablets), suspense through cultural objects (Taoist ritual items, Bagua symbols), exploration of the supernatural past (spirit calling, divination), and moral symbolism linking game narratives to filial piety, family continuity, and karma (Xinrui, 2024). Games like *Devotion* use Taiwanese religious symbols and family narratives that connect deeply with local culture, helping players feel the emotions and background behind the horror (Beadle, 2022). This careful weaving of tradition and eerie imagery gives Chinese horror its lasting power and demonstrates how horror games can renew cultural heritage while supporting commercial success (Wu, 2025; Xinrui, 2024).

### **Chinese Funeral Rituals and Digital Preservation**

Traditional Chinese funeral rituals represent rich cultural practices passed down through generations, embodying structured procedures and deep spiritual beliefs tied to Chinese values about life and death. In Chinese beliefs, upon death, the spirit transforms to continue influencing the world, making funeral ceremonies crucial farewell rituals for loved ones journeying to another world (Chang-Chen, 2015). Funerals provide families the final opportunity to demonstrate filial piety and bid farewell to the deceased (Chin, 2023).

Malaysian Chinese funeral practices typically involve laying out the body at the family home for one to three days, during which visitors keep vigil and family members attend religious services. The rituals involve elaborate procedures: the Nail Sealing Ceremony, procession to burial or cremation, and the "seven-seven rites" where families pray on the 7th, 14th, 21st, 28th, 35th, 42nd, and 49th days to assist the deceased in a peaceful transition to the afterlife (Chin, 2023; Poon, 2017). These rites are different for different regions but have the universal purposes of paying respect to the dead, their transition to the afterlife, and maintaining traditions and culture.

However, it is questionable whether these traditions will remain intact through changes in time as the younger generation holds different views. Many of the traditional funeral practices continue, but often they simplify, adjust, or adapt to the new environment such as urban or migrant communities (Huong & Duong, 2015; Zhao, 2024). Recent studies highlight growing interest in

preserving traditional funeral practices and transmitting cultural heritage to younger generations (Tang & Wang, 2024). From this challenge, opportunities have arisen to protect cultural heritage using digital methods. In this vein, interactive media, virtual archives, and games can be used to assist in preserving and teaching of these customs so that younger audiences can navigate their way through funeral rituals, understand their meaning, and engage in virtual experiences that support the continuation of culture (Cai & Liu, 2022; Guo, 2025; Yu, 2024). Integrating such traditional practices into new technologies may have the potential to ensure these funeral customs do not get lost.

### **Game Development Tools**

Unity was selected as the development platform for this study due to its comprehensive capabilities for 2D game development, cross-platform support, and advanced audio-visual features. Unity provides real-time editing capabilities, navigation systems for non-player character movement, and support for 3D (3 Dimensional) spatial audio effects essential for creating immersive horror experiences (Hussain et al., 2020). These features align with the research's objective of designing a culturally rich and usable horror game that integrates funeral rituals while ensuring an immersive visual and auditory experience for players.

### **Methodology**

This research adopts both a descriptive quantitative and qualitative approach to explore the integration of traditional Chinese funeral rituals within a 2D horror game. Data collection methods include literature review, observation, and user acceptance testing. The literature review provides foundational understanding of cultural transmission through games and interactive media in cultural education, covering relevant studies on game mechanics, cultural integration, and funeral rituals. In this case, these insights facilitate an effective implementation of cultural storytelling so as to engage players while not compromising on educational value.

### **Development Methodology**

The study follows the Waterfall Model of the Software Development Life Cycle (SDLC) due to its sequential workflow that enforces structured and disciplined development. Each phase must be completed before proceeding to the next, thus providing clear milestones throughout the process. The development phases include:

- i. Requirements Analysis: The game's concept and objectives were defined through literature review and supervisor consultation. The target audience was identified as university students aged 18-25, an age group particularly receptive to learning through interactive media. Past research demonstrates that integrating cultural narratives into games enhances

learning and engagement (Cerezo-Pizarro et al., 2023), while horror games like *Detention* and *Devotion* show how game narratives can preserve traditions through emotional connection (Wu, 2025). The primary objective was to use video games to teach traditional Chinese funeral customs while maintaining entertainment value.

- ii. Design: The design phase focused on pre-production, creating a narrative that weaves funeral traditions into the plot. Gameplay elements including puzzles, exploration, and narrative choices were designed to align with cultural and horror themes. A flowchart was created to map game logic and player progression, ensuring consistency with planned narrative and gameplay. The user interface was designed to be intuitive while enhancing the horror atmosphere. Visual and audio assets were identified to support the game's aesthetic and immersive qualities.
- iii. Development: Game implementation utilised Unity as the primary development platform due to its capabilities for 2D game development and cultural content integration. AI-assisted tools were employed for asset creation: ChatGPT and Runway for image generation, Hailuo AI for animations, and ElevenLabs for voice generation. Coding implemented game mechanics, player interactions, and event systems to create a cohesive immersive experience. The narrative was integrated with assets and gameplay, allowing players to explore and interact meaningfully with cultural content.
- iv. Testing: Extensive testing and debugging ensured smooth gameplay and technical stability. Fifteen university students from New Era University College (NEUC) participated in playtesting, providing feedback on game mechanics, logical flow, and user experience through User Acceptance Testing (UAT). This feedback was crucial for refining both technical aspects and cultural storytelling elements, ensuring the game met objectives for usability and educational effectiveness. The game was distributed to participants via private download for controlled testing purposes.

### **Game Design Structure**

The game consists of three major mini-games, each integrating different aspects of the funeral rituals. First, players are introduced to an introductory sequence, followed by Mini-game 1 Tutorial to explain the basic game mechanics. In this Mini-game 1, players must perform some ritual preparation activities: placing the correct tool (cloth, gauze, nail clippers) on the correct part of the body. There is also a hidden tool, the axe, which is hidden and influences the final ending. If the player overuses any tool, a jump scare occurs, and the tutorial restarts to make them learn about the ritual properly. Mini-game 2 consists of a video quiz in which players answer questions about customs concerning funerals. One can have a maximum of two mistakes; if there are three or more, the punishment will happen via the narrative and a restart. Mini-game 3 provides Quick Time

Events (QTE) of increasing difficulty, where the player will have to press the prompted buttons within time frames while avoiding wrong choices. Success or failure in this final stage will dictate which ending is achieved.

The game features three possible endings based on player performance:

**Table 1**

*Endings of the Game*

Endings	Conditions
True Ending	Achieved by using the secret axe in Mini-game 1, answering all questions correctly in Mini-game 2, and succeeding in Mini-game 3.
Normal Ending	Achieved by succeeding in Mini-game 3 but not meeting all True Ending requirements.
Bad Ending	Triggered by failing Mini-game 3.

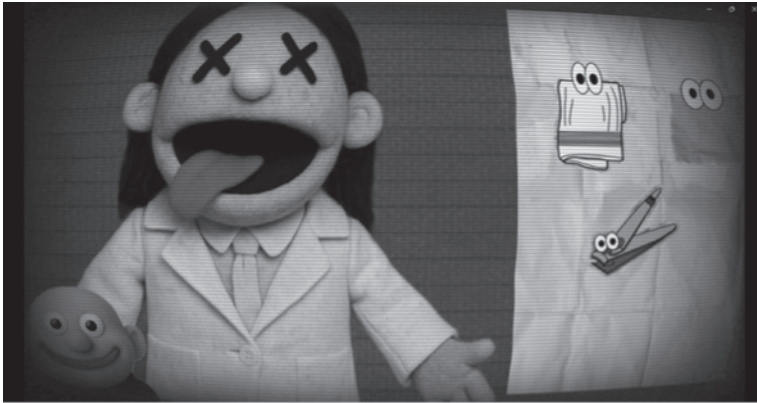
### Testing Method

User acceptance testing was conducted with 15 university students to determine the effectiveness of the game in cultural education and player engagement. The basis of the evaluation was three-fold: usability and functionality of game mechanics, knowledge and retention by the player of funeral rituals, and appreciation of cultural values represented through gameplay. Participants provided feedback through structured questionnaires targeting these dimensions, enabling both quantitative and qualitative analysis of the game's educational and entertainment value. This evaluation method ensures the game achieves its dual objectives of cultural heritage preservation and engaging gameplay.

## Analysis and Results

### Game Implementation

The completed game, titled *Funeral Fun*, successfully integrates three mini-games representing different stages of traditional Chinese funeral practices. Mini-game 1, as shown in Figure 1, involves ritual cleansing through drag-and-drop mechanics in which players use appropriate tools (cloth, gauze, nail clippers) to prepare the body, with a hidden axe tool affecting the final outcome. Mini-game 2 presents a video-quiz format that tests players' understanding of funeral customs and taboos, allowing a maximum of two mistakes before triggering narrative consequences. Mini-game 3, as shown in Figure 2, employs QTE mechanics with progressive difficulty that require players to perform the correct ritual actions within limited time windows.

**Figure 1***Mini-game 1 Tutorial Scene*

As previously mentioned, the game features three endings determined by player performance: The True Ending (achieved by discovering the secret axe, answering all questions correctly, and succeeding in all QTE sequences), Normal Ending (succeeding in gameplay but missing hidden elements), and Bad Ending (failing in mini-game 3). The visual design employs child-like puppet aesthetics that gradually shift toward psychological horror, which creates emotional contrast that enhances both engagement and cultural learning. Development utilised the Unity game engine with AI-assisted asset creation through ChatGPT, Runway, Hailuo AI for visuals, and ElevenLabs and Minimax AI for audio generation.

**Figure 2***Normal Ending Scene*

## User Acceptance Testing (UAT) Results

Two types of testing were used to validate both the technical stability and educational outcomes of the game. Developer Testing was performed during development to catch issues early, ensuring that basic functions such as scene loading, object interactions, and audio playback worked correctly. For instance, developers identified and fixed problems such as a missing button action on the main menu and sound effects not playing in Mini-game 2 by using Debug.Log. This ensured the game was technically sound before being presented to players. Then, UAT was performed once the full game was developed and ready for external evaluation. UAT involved 15 players from NEUC aged 18-25, representing different academic and gaming backgrounds. They were required to complete the game and submit their feedback through a technical UAT form and a Google Form for cultural understanding. These reports helped to ensure the game met both functional and educational goals.

A total of 15 participants, aged 18–25 years, represented diverse gaming backgrounds: 60% casual gamers who play occasionally, 26.7% beginners who seldom play games, and 13.3% regular gamers. Participants completed the entire game and provided feedback through structured UAT forms and a Google Form assessing cultural knowledge retention and learning effectiveness.

The testing demonstrated high success rates across all cultural knowledge questions. Regarding funeral symbolism and purpose, 86.7% of participants correctly identified the deeper cultural meanings beyond procedural understanding. All participants successfully identified the correct sequence of traditional funeral phases (preparation, vigil, burial), indicating that the game effectively taught the logical progression of funeral practices through gameplay mechanics.

Understanding of specific ritual practices showed strong retention rates. For the bathing ritual, 93.3% of participants correctly identified its significance as a spiritual and familial duty rather than purely practical hygiene. The concept of cultural taboos was correctly understood by 93.3% of participants, demonstrating effective communication that taboos represent culturally specific prohibitions rather than universal rules.

Knowledge of vigil night practices revealed particularly strong learning outcomes. Incense maintenance requirements were recognised by 93.3% of participants, while 80% correctly identified cat-related taboos, culturally specific superstitions that may seem unusual to modern audiences but are deeply rooted in traditional beliefs about spiritual contamination. These high recognition rates indicate successful integration of specific cultural elements into gameplay experience.

For coffin sealing practices, 93.3% of participants correctly identified zodiac-related restrictions, suggesting exceptional learning effectiveness for this cultural element that connects to broader Chinese cultural knowledge. The behavioural guideline of avoiding looking upward during sealing was recognised by 80% of participants, corresponding to the QTE mechanics in Mini-game 3 where players practiced appropriate ritual behaviour. The requirement of emotional restraint (avoiding tears falling into the coffin) was understood by 66.7% of participants, demonstrating

good comprehension of sacred moment protocols.

Regarding overall educational effectiveness, 86.7% of participants rated the game as helpful with scores of 4 or 5 on a 5-point scale, providing strong validation of the game's educational objective. This generally positive response, combined with high cultural knowledge retention rates, confirms that the interactive learning approach successfully transmitted cultural knowledge through horror game mechanics.

Usability assessment showed that 66.7% found the game "very clear and easy to understand", while 26.7% reported "a little confusion in some parts" and 6.7% found it "mostly clear". These results indicate effective user interface design and tutorial implementation, though opportunities exist for further clarity improvements.

Qualitative feedback identified several areas for enhancement. Three participants noted that background music volume occasionally overshadowed voice narration, affecting comprehension. Four participants requested subtitle implementation during dialogue and instructional sequences to improve accessibility. Two participants suggested enhancing horror-themed visual elements and animations to better align with mature audience expectations. Technical feedback included minor audio synchronisation issues and suggestions to reduce Mini-game 3 QTE difficulty for improved accessibility.

## Discussion

The findings of this study indicate that a 2D educational horror game can be an effective medium for transmitting culturally specific knowledge about traditional Chinese funeral rituals to younger audiences. High correctness rates across most cultural knowledge items (often between 80 to 100%) and the fact that 86.7% of participants rated the game as helpful (4 or 5 on a 5-point scale) suggest that the game successfully supported both understanding and retention of ritual sequences, symbolism, and taboos. These results are consistent with prior research showing that interactive media can deepen cultural learning more effectively than traditional mass media, particularly when players are actively engaged in narrative and decision-making processes (Cerezo-Pizarro et al., 2023).

The outcomes also support theoretical work on recreational fear and emotional memory. By embedding cultural content within a horror structure, using jump scares as feedback, multiple endings as consequence mechanisms, and QTE to reinforce embodied ritual behaviour, the game leverages moderate fear and suspense to enhance attention and recall. This aligns with findings that emotional arousal can improve memory retention when appropriately moderated (Andersen et al., 2020; Bennion et al., 2013). The user acceptance data, including high perceived usefulness and generally positive usability feedback, indicates that the balance between fear, narrative tension, and learning was largely successful, although some participants found specific mechanics, for example QTE difficulty and audio mixing, in need of refinement.

From the perspective of digitalisation and cultural sustainability, the study demonstrates how accessible game technologies and AI-assisted content creation can be mobilised beyond commercial and industrial contexts to support social and cultural goals. The use of Unity and AI tools for visual and audio asset generation enabled the development of a resource-efficient yet pedagogically rich application centred on intangible cultural heritage. This represents a concrete instance of digitalisation contributing to sustainable knowledge ecosystems, where cultural memory, values such as filial piety, and community practices are preserved and transmitted through contemporary media that resonate with younger generations (Tang & Wang, 2024; Yu, 2024).

The study makes several contributions. Conceptually, it proposes a design framework in which funeral rituals are mapped onto game mechanics at three levels: procedural practice (ritual sequence), conceptual understanding (symbolism and taboos), and behavioural embodiment (ritual conduct under time pressure). Empirically, it provides evidence that culturally themed horror games can achieve both educational and entertainment objectives without sacrificing either, suggesting that cultural sustainability and engagement need not be in tension (Wu, 2025). Methodologically, it illustrates how user acceptance testing can be used to evaluate not only technical functionality but also cultural learning outcomes and affective responses, offering a replicable model for similar game based cultural projects.

The findings also prompt a broader reflection on the contemporary necessity of cultural preservation. In modern society, traditional funeral culture is increasingly outsourced to large, commercialised cemeteries and funeral companies, leading to a standardisation and often simplification of the rituals. As these practices become monopolised by corporate entities, one might question whether there is still a necessity for the younger generation to learn the intricate details of traditional funeral rites. However, this study argues that while the logistical execution of funerals may be outsourced, the underlying cultural literacy and core values such as filial piety, reverence for ancestors, and distinct cultural identity must not be lost to commercial homogenisation. Educational games like *Funeral Fun* serve as a critical counterbalance, ensuring that the deeper philosophical meanings behind the rituals are preserved and understood, rather than reduced to mere transactional services.

However, several limitations in this study must be acknowledged.

1. Sample size and diversity: The sample comprised only 15 university students from a single institution, all within the 18 to 25 age range, which restricts the generalisability of the findings to broader or older populations. To enhance the robustness and generalisability of these findings, it is highly recommended that future studies include a larger and more diverse sample size of at least 30 participants, which should be a primary focus in subsequent phases of usability testing and user acceptance evaluation.

2. Cultural representation: The game currently focuses on a generalised representation of

Malaysian Chinese funeral practices. In reality, these practices are highly nuanced, categorised by distinct dialect groups, regional differences, and varying religious beliefs.

3. AI tool limitation: While AI-assisted tools greatly facilitated asset creation, their use risks introducing stylistic biases or aesthetic limitations.

4. Absence of cultural consultant: Given the highly sensitive nature of funeral culture, a significant limitation of this current phase was the absence of a dedicated funeral culture consultant. To mitigate the risks of overreliance on AI and ensure cultural accuracy and respectfulness, future development phases must actively incorporate the expertise of cultural consultants. Subsequent iterations of the game should also aim to design branching narratives that allow players to choose and explore different dialect specific funeral traditions.

5. Short-term measurement: The study examined short-term learning effects immediately after gameplay; future research should assess long term retention and include control groups exposed to conventional teaching methods to better evaluate comparative effectiveness.

These limitations do not negate the value of the study but rather indicate directions for future work, including larger and more diverse participant samples, longitudinal designs, comparative studies with non-game learning approaches, and adaptation of the framework to other cultural domains. Taken together, the discussion underscores the potential of educational horror games as a form of socially oriented digitalisation that supports cultural sustainability and future ready skills such as digital literacy, critical reflection, and intercultural empathy.

## Conclusion

This study examined how a 2D educational horror game can be used to preserve and transmit knowledge of traditional Chinese funeral rituals to younger generations. The game, titled *Funeral Fun*, integrates ritual preparation, cultural knowledge testing, and ritual behaviour into three interconnected mini games with multiple narrative endings. The design links correct ritual performance to narrative reward and incorrect performance to horror-based consequences. The findings from user acceptance testing with university students show high levels of cultural knowledge retention, positive perceptions of educational value, and generally satisfactory usability. These results indicate that the game is able to meet its dual aims of engagement and cultural education.

The results also support the idea that interactive digital media can enhance learning about culturally sensitive and complex practices. By combining narrative, atmosphere, and carefully moderated fear, the game encourages attention, reflection, and emotional involvement. Participants not only recalled procedural steps and taboos but also demonstrated a deeper understanding of underlying values such as filial piety, respect for the deceased, and the communal significance

of funeral rituals. This extends existing work on emotional memory and game based cultural transmission into the relatively less explored area of funeral culture within the horror genre.

Beyond the specific focus on Malaysian Chinese funeral practices, the study contributes to ongoing discussion on digitalisation and cultural sustainability. The research shows how accessible game technologies and AI-assisted tools can be applied to support intangible cultural heritage, rather than being confined to economic productivity or industrial optimisation. In this way, educational games can help sustain cultural memory, promote multicultural understanding, and nurture learners who are both digitally competent and culturally aware.

At the same time, several constraints of the study must be recognised. The sample size was small and drawn from a single institution, and all participants were students in a relatively narrow age range. The evaluation concentrated on immediate learning outcomes and did not measure long term retention or changes in attitude. The game content reflects one regional configuration of Chinese funeral practices and does not represent the full diversity of Chinese communities. These constraints point to the need for further work with larger and more diverse groups of participants, longer term studies, and comparative research that contrasts game-based learning with conventional teaching approaches.

In conclusion, this study demonstrates that an educational horror game can function as a meaningful bridge between traditional cultural practices and contemporary digital experience. By embedding authentic ritual content in an engaging interactive format, *Funeral Fun* provides an example of how digitalisation can support not only innovation and efficiency, but also the continuity of cultural heritage and the development of future ready learners who appreciate the cultural depth behind everyday practices.

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## References

- Andersen, M. M., Schjoedt, U., Price, H., Rosas, F. E., Scrivner, C., & Clasen, M. (2020). Playing with fear: A field study in recreational horror. *Psychological Science*, *31*(12), 1497–1510. <https://doi.org/10.1177/0956797620972116>
- Beadle, J. J. L. (2022). Of horror games and temples: Religious gamification in contemporary Taiwan. *British Journal of Chinese Studies*, *12*(2), 11–45. <https://doi.org/10.51661/BJOCS.V12I2.189>
- Bennion, K. A., Ford, J. H., Murray, B. D., & Kensinger, E. A. (2013). Oversimplification in the study of emotional memory. In *Journal of the International Neuropsychological Society* (Vol. 19, Issue 9, pp. 953–961). Cambridge University Press. <https://doi.org/10.1017/S1355617713000945>
- Cai, W., & Liu, Y. (2022). The value of immersive media in expanding Chinese public cultural participation and its realization path from the perspective of cultural education. *Frontiers in Psychology*, *13*, 915913. <https://doi.org/10.3389/FPSYG.2022.915913/BIBTEX>
- Cerezo-Pizarro, M., Revuelta-Domínguez, F. I., Guerra-Antequera, J., & Melo-Sánchez, J. (2023). The cultural impact of video games: A systematic review of the literature. In *Education Sciences* (Vol. 13, Issue 11). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/educsci13111116>
- Chang-Chen, K. (2015). *A study of “ablution ritual” changes in Kaohsiung and Ping Tung area as examples* [University of South China]. <https://ndltd.ncl.edu.tw/cgi-bin/gs32/gswweb.cgi?o=dnclcdr&s=id=%22103NHU00672024%22.&searchmode=basic>
- Chen-Yi, W. (2020). *Gaming the past and reflecting on the present: The experience and interpretation of historical horror video game “Detention” by young Taiwanese players*.
- Chin, B. R. J.-H. (2023). *Malaysian Chinese funeral rituals: A study of special rituals for unnatural death*. <https://doi.org/10.7302/21603>
- Fullerton, T. (2024). *Game design workshop: A playcentric approach to creating innovative games*. CRC Press.
- Gantz, M. (2019). *Analysis of the horror genre and its implementation in video games*. <https://doi.org/10.13140/RG.2.2.10759.34728>
- Gregory, A. S., & Katherine, A. (2022). View of teaching through the uncanny: Red candle games’ devotion. *British Journal of Chinese Studies*, *12*(2). <https://bjocs.site/index.php/bjocs/article/view/195/214>
- Guo, M. (2025). Integrating digital technology into Chinese culture as a new paradigm in cultural preservation and innovation. *International Journal of Philosophy of Culture and Axiology*, *22*(3), 569–591.

- Huong, T., & Duong, T. (2015). *Cultural resilience and identity in contemporary death rituals of The Chinese Hoa in Ho Chi Minh City*. Cornell University.
- Hussain, F., Hussain, A., Shakeel, H., Uddin, N., & Ghouri, T. L. (2020). Unity game development engine: A technical survey. *University of Sindh Journal of Information and Communication Technology (USJICT)*, 4(2), 73–81. <http://sujo.usindh.edu.pk/index.php/USJICT/>
- Kauranen, A. (2023). *How colours guide the player in video games* [Tampere University of Applied Sciences]. [https://www.theseus.fi/bitstream/10024/796721/2/Kauranen\\_Aino.pdf](https://www.theseus.fi/bitstream/10024/796721/2/Kauranen_Aino.pdf)
- Liu, R. (2023). Chinese-style horror in gaming: The most terrifying and the least terrifying topic. *Communications in Humanities Research*, 20(1), 52–58. <https://doi.org/10.54254/2753-7064/20/20231287>
- Poon, H.-T. (2017) 霹靂州客家人的喪葬習俗研究——以金寶鎮為個案研究 [*Hakkanese funeral culture in Perak: A case study in Kampar town.*] [Unpublished master's thesis] Universiti Tunku Abdul Rahman.
- Tang, Y., & Wang, Z. (2024). Preserving the past: Digital strategies for cultural heritage in modern China. *Profesional de La Informacion*, 33(3). <https://doi.org/10.3145/epi.2024.ene.0321>
- Wu, C. (2022). From detention to devotion: Historical horror and gaming politics in Taiwan. *British Journal of Chinese Studies*, 12(2), 46–62. <https://doi.org/10.51661/bjocs.v12i2.166>
- Wu, C. (2025). Save the children: Youth narratives and historical learning in three Taiwanese horror video games. *International Journal of Taiwan Studies*. <https://doi.org/10.1163/24688800-20251390>
- Xinrui, W. (2024). *The representation of Chinese traditional death and life values in Chinese horror video games*. Erasmus School of History, Culture and Communication Erasmus University Rotterdam.
- Yu, X. (2024). Digital technology and the revival of Chinese excellent traditional culture. SHS Web of Conferences, 181, 4033. <https://doi.org/10.1051/SHSCONF/202418104033>
- Zhang, R. (2024). Research on the creative principles of Chinese thriller films. *Proceedings of the 2024 International Conference on Language, Education and Psychology (LNEP)*, 64(1), 29–34. <https://doi.org/10.54254/2753-7048/64/20240939>
- Zhao, Y. (2024). *Funeral rituals in village-turned-residential communities: Transformation, conflicts, and management strategies*. 412–418. [https://doi.org/10.2991/978-2-38476-344-3\\_49](https://doi.org/10.2991/978-2-38476-344-3_49)