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The Influence of Chinese cultural elements on Digital Cultural and Creative Products towards the Consumption of the Millennial Generation in China: A Case of a Digital Game

อิทธิพลขององค์ประกอบทางวัฒนธรรมจีนที่มีต่อผลิตภัณฑ์ทางวัฒนธรรมดิจิทัลและการสร้างสรรค์ต่อการบริโภคของกลุ่มคนรุ่นมิลเลนเนียลในประเทศจีน กรณีศึกษา: เกมดิจิทัล

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บทคัดย่อ

การศึกษานี้ศึกษาอิทธิพลขององค์ประกอบทางวัฒนธรรมจีนในเกมดิจิทัลที่มีต่อพฤติกรรมการบริโภคของคนรุ่นมิลเลนเนียลในประเทศจีน โดยเน้นเป็นพิเศษที่ผลิตภัณฑ์ทางวัฒนธรรมและสร้างสรรค์ดิจิทัล (CACP) โดยมีวัตถุประสงค์เพื่อ (1) สำรวจแรงจูงใจของคนรุ่นมิลเลนเนียลในการมีส่วนร่วมกับเกมดิจิทัลที่ผสมผสานองค์ประกอบทางวัฒนธรรมจีนเข้ากับผลิตภัณฑ์ทางวัฒนธรรมและสร้างสรรค์ดิจิทัล (CACP) (2) ตรวจสอบว่าองค์ประกอบทางวัฒนธรรมจีนเหล่านี้มีอิทธิพลต่อการบริโภคและประสบการณ์ของคนรุ่นมิลเลนเนียลอย่างไรผ่านการมีส่วนร่วมในเกมดิจิทัล และ (3) พัฒนาคำแนะนำเพื่อเพิ่มการมีส่วนร่วมของคนรุ่นมิลเลนเนียลกับเกมดิจิทัลที่ผสมผสานองค์ประกอบทางวัฒนธรรมจีนเข้ากับผลิตภัณฑ์ทางวัฒนธรรมและสร้างสรรค์ดิจิทัล (CACP)

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การวิจัยใช้แนวทางแบบผสมผสาน ทั้งวิธีเชิงปริมาณและเชิงคุณภาพ ผู้ตอบแบบสอบถามทั้งหมด 335 คนได้รับการสำรวจโดยใช้แบบสอบถาม ตามด้วยการสัมภาษณ์เชิงลึกกับเกมเมอร์หลัก 5 คน เพื่อให้เข้าใจทัศนคติของพวกเขาที่มีต่อการผสมผสานองค์ประกอบทางวัฒนธรรมจีนในเกมดิจิทัลอย่างลึกซึ้งยิ่งขึ้น ผลการวิเคราะห์เชิงปริมาณระบุว่าแรงจูงใจทั้งด้านประโยชน์ใช้สอยและความสุขได้รับอิทธิพลอย่างมากจากองค์ประกอบทางวัฒนธรรมของจีน ซึ่งส่งผลในเชิงบวกต่อการบริโภคเกมดิจิทัลของคนรุ่นมิลเลนเนียล โมเดลสมการเชิงโครงสร้างเผยให้เห็นว่าองค์ประกอบทางวัฒนธรรมของจีนส่งผลกระทบทั้งทางตรงและทางอ้อมต่อพฤติกรรมการบริโภค โดยแรงจูงใจด้านความสุขมีส่วนสำคัญต่อผลกระทบนี้ นอกจากนี้ ผลการวิจัยเชิงคุณภาพยังเน้นย้ำว่าองค์ประกอบทางวัฒนธรรมช่วยเพิ่มความดื่มด่ำและการเชื่อมโยงทางอารมณ์ของผู้เล่นกับเกม โดยเฉพาะอย่างยิ่งเมื่อองค์ประกอบเหล่านี้ผสานเข้ากับการเล่นเกมและเรื่องราวได้อย่างมีความหมาย ข้อมูลเชิงลึกเหล่านี้มีค่าสำหรับนักพัฒนาเกมและนักการตลาดที่ต้องการเพิ่มประสิทธิภาพผลิตภัณฑ์ของตนสำหรับประชากรคนรุ่นมิลเลนเนียล โดยปรับเนื้อหาเกมให้สอดคล้องกับอัตลักษณ์ทางวัฒนธรรมและการมีส่วนร่วมทางอารมณ์

คำสำคัญ: องค์ประกอบทางวัฒนธรรมของจีน ผลิตภัณฑ์ทางวัฒนธรรมและสร้างสรรค์ดิจิทัล การบริโภคของคนรุ่นมิลเลนเนียล เกมดิจิทัล

ABSTRACT

This study investigates the influence of Chinese cultural elements in digital games on the consumption behavior of the Millennial Generation in China, with a particular focus on digital cultural and creative products (CACP). The research aims to: (1) explore the motivations of Millennials to engage with digital games that incorporate Chinese cultural elements within Digital Cultural and Creative Products (CACP); (2) examine how these Chinese cultural elements influence the consumption and experiences of Millennials through their participation in digital games; (3) develop recommendations to enhance Millennial engagement with digital games featuring Chinese cultural elements on Digital Cultural and Creative Products (CACP).

The research employed a mixed-methods approach, combining both quantitative and qualitative methods. A total of 335 respondents were surveyed using questionnaires, followed by in-depth interviews with five core gamers to gain deeper insights into their attitudes toward the integration of Chinese cultural elements in digital games. The results of the quantitative analysis indicate that both utilitarian and hedonic motivations are significantly influenced by Chinese cultural elements, which, in turn, positively affect Millennials' consumption of digital games. The structural equation model reveals that Chinese cultural elements exert both directly and indirectly influences on consumption behavior, with hedonic motivations accounting for a significant portion of this effect. Furthermore, the qualitative findings highlight that cultural

elements enhance players' immersion and emotional connection with the game, particularly when these elements are meaningfully integrated into gameplay and narrative. These insights are valuable for game developers and marketers aiming to optimize their products for the Millennial demographic by aligning game content with cultural identities and emotional engagement.

Keywords: Chinese cultural elements, Digital Cultural and Creative Products, Consumption of the Millennial Generation, Digital Game

Introduction

With the rapid advancement of digital technology and mobile networks, the Digital Game industry has emerged as a dominant force in global cultural consumption. In China, this sector has evolved from an importer of foreign games into a powerhouse of domestic development, producing iconic titles such as King of Glory and Peace Elite, which have received widespread popularity (King and Delfabbro, 2018). These games represent technical achievements that embody unique elements of Chinese cultural elements, reflecting the broader cultural renaissance in the digital era Among the most active participants in this market are Millennials represent the first generation to grow up with the internet and digital entertainment. Their preferences and behaviors significantly shape the trajectory of cultural and creative industries. Beyond entertainment, digital games serve as platforms for identity expression, social interaction, and cultural engagement (Tanner, 2013). As Qiu (2020) points out, Millennials in China are consumers, creators, and disseminators of Chinese cultural content, revitalizing traditional cultural narratives through digital forms.

In this context, the integration of Chinese cultural elements into digital games has emerged as a compelling phenomenon that goes beyond visual aesthetics. It involves deep-seated values, historical narratives, philosophical symbols, and artistic styles embedded within game mechanics, character design, and storytelling. The strategic use of cultural elements within digital games satisfies players' visuals and contributes to cultural identity formation, emotional resonance, and behavioral engagement (Tu *et al.*, 2019). Understanding how Millennials respond to and internalize these cultural signals is critical to effective cultural and creative products (CACP) and the broader discourse on cultural consumption in digital contexts. This study is essential in addressing research gaps. First, existing literature on digital game consumption focuses on gameplay mechanics, monetization, and psychological

gratification. Chinese cultural elements shape motivational and behavioral outcomes is not studied enough. Second, few empirical studies explore the interplay between cultural identity and consumption behavior in digital games, especially in the Chinese market where cultural revival is state-supported and increasingly commercialized.

This study adopts a multidimensional perspective grounded in the Uses and Gratifications Theory, hedonic-utilitarian motivation theory, and the 5A consumer behavior framework, to explore how Chinese cultural elements influence Millennials' motivations and participation in digital games. Practically, the research offers actionable insights for developers and cultural policymakers by identifying strategies to enhance user engagement through culturally embedded game design. This research investigates how Chinese cultural elements, as embodied in digital games, shapes the motivational drivers and consumption patterns of China's Millennial generation. It aims to reveal the psychological, perceptual, and emotional mechanisms through which cultural content influences digital participation, thereby contributing to academic theory and industrial practice.

Research Questions

This study will explore the influencing factors of Millennial Generation s' participation in the digital games. This research direction will discuss the application of Chinese cultural elements in digital games and the impact on Millennial Generation s through in-depth analysis of Chinese cultural elements in digital games. It includes the types, forms of expression and cultural connotations of Chinese cultural elements, and analyzes how these designs meet the aesthetic and entertainment needs of Millennial Generation s. Specifically, the research will be carried out from the following aspects:

(1) What motivates of Millennial Generation to engage with digital games incorporating Chinese cultural elements on Digital Cultural and Creative Products (CACP)?

(2) How do the Chinese cultural elements on Digital Cultural and Creative Products (CACP) have influence on the participation of Millennial Generation in digital games?

(3) How can improve Millennial Generation participation of digital games that feature Chinese cultural elements on Digital Cultural and Creative Products (CACP)?

Research Objectives

(1) To explore the motivations of Millennial Generation to engage with digital games incorporating Chinese cultural elements on Digital Cultural and Creative Products (CACP)

(2) To examine the Chinese cultural elements on Digital Cultural and Creative Products (CACP) have influence on the consumption and experiences of Millennial Generation by participating in digital games.

(3) To develop recommendations that improve Millennial Generation's participation of digital games that feature Chinese cultural elements on Digital Cultural and Creative Products (CACP).

Benefits of Research

Theoretical significance: This study contributes to the theoretical understanding of cultural consumption behavior among Millennials in the digital age. By examining the interaction between Chinese cultural elements and user engagement in digital games, it enriches existing literature on cultural identity, media psychology, and digital cultural communication. It also provides a new perspective on how traditional culture can be decontextualized and experienced through interactive media.

Practical significance: Practically, this research offers valuable insights for game developers, cultural product designers, and policymakers aiming to promote Chinese cultural elements through digital platforms. It provides actionable suggestions on how to effectively integrate Chinese cultural elements into digital games to enhance user engagement, cultural resonance, and market competitiveness, thereby supporting cultural innovation and industry development.

Literature Review

1. Chinese cultural elements

Chinese cultural elements have recently been mentioned in a variety of fields and industries, and they have become one of the hottest fashion elements, which is not only evidence of the Chinese nation's prosperity (Brahm, 2002), but also an unavoidable result of traditional Chinese cultural elements serving as a source of inspiration to designers. Because

of the new oriental culture craze, many designers are following the trend of including more Chinese cultural elements into their designs to enhance the design connotation and design culture, which has a significant positive impact on the diffusion and inheritance of Chinese traditional culture (Qi *et al.*, 2021).

The core of Chinese cultural elements is more than just material (Chung, 2021); it is also the concentration and embodiment of Chinese cultural elements and spirit. When using Chinese cultural elements in design, not only the material likeness, but also the degree of spiritual compatibility; merely copying Chinese cultural elements into the design is not ideal. It is not recommended to just replicate Chinese cultural elements into the design. It may also be argued that the designer must investigate and resolve the issue of how to express the symbolic meaning and cultural spirit of Chinese cultural elements in the design, rather from simply adopting Chinese cultural elements in appearance and shape (Xu, 2023).

For poets, doctors, and individuals in general, Chinese cultural elements may include poems and songs, acupuncture and herbs, and imperial robes and seals. Chinese cultural elements are expressed in a variety of ways, including towering structures, hanging lanterns, enchanting dragons, stately emperors, delicate folding fans, secret tai chi diagrams, and antique-colored teapots (Chen *et al.*, 2021; Chung, 2021; Qi *et al.*, 2021; Xu, 2023). In short, "Chinese cultural elements" are any images, symbols, or customs that are unique to China, distinguishable from other countries and races, recognized by the majority of Chinese people (including overseas Chinese), reflecting and recognizing China, condensing the traditional culture and spirit of the Chinese nation, and embodying the dignity of the country and the nation's interests (Chen *et al.*, 2021; Xu, 2023). Introducing Chinese cultural elements has become a prominent trend in Digital Game design by combining real components of traditional Chinese cultural elements (Huang and Kong, 2021), such as clothes, craftsmanship, and hairstyles, game creators can provide players with a gaming appearance rich in Chinese features. Furthermore, the game's design includes intangible components such as philosophical, moral, ethical, faith, and religious aspects, which provide depth and cultural significance.

The categorization of intangible Chinese cultural elements is mainly focused more on the spiritual level of experience as opposed to tangible ones, elements and symbols in non-material forms. Intangible Chinese cultural elements refer to those things in non-material form that have artistic value historical value, and are various spiritual cultures created by human beings in the course of social and historical practice (Xu, 2023). The tangibility of Chinese cultural elements refers to the physical objects that embody the connotation of traditional Chinese cultural elements and the spirit of Chinese civilization, and that have been formed in

the course of the historical development of Chinese cultural elements (Chung, 2021; Qi *et al.*, 2021; Xu, 2023). This includes both creations that embody the labor and wisdom of the Chinese nation and natural objects that have been endowed with the meaning and spirit of Chinese cultural elements in the course of social development.

2. Cultural and Creative Products (CACP)

The concept of creative industries was born in the United Kingdom in 1998 from the UK Creative Industries Pathway Document, in which the UK Creative Industries Task Force provided the original definition of cultural and creative industries (Garnham, 2005). Chinese government's definition of "cultural and creative products" from abstract to concrete contains three key words: culture, creativity, and products (Qiu, 2020). The concept of "cultural and creative products" was first proposed in Taiwan in 2002. At the same time, cultural and creative industries have the following characteristics: a large number of employees and participants, high output value or high related efficiency, high growth potential, high originality or innovation, and high added value (Hsieh *et al.*, 2022). Industries that originate from creativity or cultural accumulation, and have the potential to create wealth and employment opportunities through the form and use of intellectual property, and to promote the enhancement of overall life.

Cultural and creative products do not belong to the rigid necessities of life and are in the zone between daily necessities and luxuries; some cultural and creative products belong to high-end luxuries. Consumers will get a high level of added value at the spiritual level after such cultural consumption, which is higher than in daily life (Hsieh *et al.*, 2022; Norvilitis *et al.*, 2006). Cultural and creative products originate from culture, and products with modern significance are called cultural and creative products only when the material or non-material with cultural connotations is re-created and re-designed. Cultural creative products are based on the concept of cultural creativity as the core; the artist, designer, or craftsman will have a spiritual level of understanding of the content of the materialization of the product; this is the non-material form of creativity infiltration in the process of design and production, created with cultural connotation, symbolic significance, aesthetic education function and other spiritual value of the cultural products and services (Hsieh *et al.*, 2022; Norvilitis *et al.*, 2006), Cultural creative products are known as cultural creative Derivatives or art derivatives, etc.

3. Digital Game with Chinese cultural elements

In digital games, the content that contains the most Chinese cultural elements is the determination of the game theme, which is reflected in the game theme itself on the one hand,

and the game with Chinese cultural elements as the theme on the other hand (Li *et al.*, 2019). The game theme itself embodies Chinese cultural elements, which refers to the game theme that contains a large number of Chinese cultural elements in online games, focusing on immortal digital games, martial arts digital games, ancient style digital games, and digital games with historical themes. Historical digital games can be subdivided into several categories, such as Three Kingdoms digital games, Journey to the West digital games, Warring States digital games, and so on. Games with Chinese cultural elements as the theme, because the theme of the game is identified as Chinese cultural elements, will inevitably also lead to a large number of Chinese cultural elements within the game. The names of the props in the Digital Game also have Chinese cultural elements, such as gold wound medicine, hemostatic herb, golden jade cream, etc., and the corresponding map scenes, character styles, weapons, and equipment, as well as illustrations and illustrations, will all appear Chinese cultural elements (Tang and Taguchi, 2021).

4. Motivation

In the 1950s, the study of consumer shopping motives included both rational and emotional components, and the academic community widely accepted the dualistic concept of utilitarian and hedonic incentives to explain consumer shopping motives. Tauber (1972) the first researcher to study shopping motivation, believed that shopping motivation can be divided into personal and social motivation, and proposed that consumers shop not only for the purpose of purchasing commodities, but also for recreation and self-fulfillment in the process of shopping (Tauber, 1972). Tauber's study is a landmark that has been widely quoted by subsequent generations.

Motivation serves as a pivotal driver for users' behaviors and intentions. Early studies categorized users' behavioral motivations into extrinsic and intrinsic motives. Extrinsic motivation arises from external conditions, whereas intrinsic motivation stems from individuals' inherent needs. With the advent of the Internet, some scholars have ventured to explain consumers' online shopping behaviors through motivation theory (Choi and Kim, 2004; Hsu and Lu, 2007; Koo, 2009). Research on online shopping motivation reveals that hedonic and utilitarian motives are the reasons for online activities (Childers *et al.*, 2001; Wolfinbarger and Gilly, 2001). Hedonic motivation primarily refers to the degree of enjoyment experienced during the user experience, while utilitarian motivation pertains to the anticipated utility of products or services (Hu and Jiang, 2020). Both play significant roles in consumers' online behaviors.

The hedonic and utilitarian motives are indispensable in satisfying consumer needs during the purchase process. When motives are fulfilled consumers are more likely to feel

satisfied with the shopping experience, subsequently influencing their purchase intentions. Consumers' purchase decisions are influenced by hedonic and utilitarian motives, and a bias toward purchasing hedonic products has been observed. Analyzing the purchase process through the lens of hedonic and utilitarian motives, with flow experience, underscores their importance in fostering such an experience (Lopez *et al.*, 2006). In online shopping, the website environment is crucial, and integrating elements related to both utilitarian and hedonic aspects can enhance the environment and optimize user experience (He *et al.*, 2022). Consumers' decisions to buy things are influenced by practical (utilitarian) and emotional (hedonic) reasons (He *et al.*, 2022).

Holbrook and Hirschman (1982) proposed hedonic motivation, which states that the buying experience is about entertainment and enjoyment. Tauber was expanded upon by Westbrook and Blake (1985), who introduced choice optimization and predicted utility. Babin *et al.* (1994) contended that utilitarian and hedonistic values are essential. Childers *et al.* (2001) divided consumer motivation into utilitarian and hedonic motivations. Research shows that both utilitarian and hedonic motivations drive purchase behavior in Digital Game environments.

5. The Relationship between Chinese cultural elements on CACP and Consumption in digital games

Research on the integration of Chinese cultural elements in digital games involves multiple dimensions, ranging from the selection of elements to the effects on player experience and cultural dissemination, which also reflects the complexity and diversity of digital games as a cultural product in the context of globalization. Studies on the integration of Chinese cultural elements into digital games mainly involve the cultural adaptability of element selection, the influence of player experience, and the effect of cultural dissemination (Bradley and LaFleur, 2016). Consumers gain epithetical symbolic value through experience, and the product transcends the object's function and is elevated to the logic of representation, with diverse social values and meanings (Orefice and Santoni, 2018).

According to Holbrook's (1982) product classification framework, cultural activities fall under the category of services (Holbrook and Hirschman, 1982), and Digital Game are inextricably related to cultural and artistic qualities; making the content they supply a type of service. Holbrook and Hirschman (1982) believe that the features of Digital Game are expressed in the following aspects: intangibility. Services are intangible and fundamentally experiences that prospective buyers cannot inspect before acquiring an art piece. As a result, people typically perceive a higher amount of risk when purchasing intangible items because they cannot check them out beforehand or return them in large quantities (Wu, 2021). As a

result, whether or not detailed explanations and effective intermediaries are offered prior to purchasing digital games influences the consumer's propensity to buy. Intangibility is a feature of film products, for example (Hu and Jiang, 2020).

Consumption occurs during the development of digital games, and after consumption, they cannot be physically retained; they are immediate, intangible experiences, and because each person's feelings differ, the resulting experience will likewise be unique (Fang and Deng, 2021; Hu and Jiang, 2020). Consumers gain symbolic value through experience, and the product transcends its functional aspect to become a representation of diverse social values and meanings (Orefice and Santoni, 2018).

Aware: Players become aware of a game through various channels, such as advertisements, social media, live streaming platforms, or friend recommendations (Zhang, 2019). This initial exposure is crucial for sparking interest and setting the stage for further engagement.

Appeal: The game's cultural elements, such as its visuals, storyline, character design, or gameplay mechanics, create an emotional and cognitive connection, enhancing its appeal and driving players to seek more information (Fang and Deng, 2021).

Ask: Players actively search for information about the game, including gameplay guides, community discussions, and user reviews (Hu and Jiang, 2020). This stage deepens their understanding and involvement in the Digital Game environment.

Act: Players download, install, and start playing the game, experiencing its core gameplay and potentially making in-game purchases or becoming long-term players (Fang and Deng, 2021). This stage represents a significant increase in Digital Game participation.

Advocate: Players who have had a positive experience become loyal advocates, endorsing the game through content creation, social media, and recommendations to others (Wu, 2021). This advocacy enhances their own Digital Game experience and encourages new players to participate.

The 5A stages are integral to understanding how cultural elements in digital games influence player engagement and participation, from initial awareness to active advocacy. The

unique characteristics of digital games as cultural products further enhance this experience, creating a cycle of engagement and advocacy supported by the literature on Digital Game consumption and cultural impact.

6. The Relationship of Chinese cultural elements on CACP in Digital Games on Consumers' Motivations

Human behavior is driven by a set of motives (Deci and Ryan, 1985). Psychologists consider motivation to be an internal force that stimulates and maintains an individual's behavior and causes it to be toward a goal (Travica, 2005). In digital games, game elements have an impact on participants' motivation (Lopez *et al.*, 2006). The influence of Chinese cultural elements in digital games on consumers' hedonic and utilitarian motivations is reflected in the following aspects:

- Cultural Identity and Sense of Identity

The impact of Chinese cultural elements incorporated in digital games on consumers' cultural identity and sense of identification. This impact on enhancing consumers' motivation is the content of Chinese cultural elements incorporated in digital games, including storyline, character set, scene background, music, art style, etc. (Babin *et al.* 1994). Consumers' identification with Chinese cultural elements, including familiarity, and recognition. Hedonic motives are hedonism-based motives related to experiences such as satisfaction and pleasure (Shang *et al.*, 2020). Consumers' feelings of identification with Chinese cultural elements during the game experience, such as the resonance or emotional connection with the elements in the game, generate satisfaction and pleasure (KŐszegi and Rabin, 2006). Chinese cultural elements influence consumers' hedonic and utilitarian motives and Chinese cultural elements influence consumers' playing time, willingness to pay, and other behaviors related to game goals (Hsu *et al.*, 2010).

- Emotional Connection and Gaming Experience

When Chinese cultural elements are incorporated into digital games, consumers' motivation can be enhanced. First of all, Chinese cultural elements can trigger consumers' emotional identification and sense of belonging to their own culture, creating a deeper emotional connection with the game. This emotional connection will trigger emotional investment in the game, making consumers enjoy the game process more and experience the fun and satisfaction brought by the game (Moon and Kim, 2001). Secondly, through Chinese

cultural elements, the game can present a unique cultural atmosphere and artistic style, thus creating a unique game experience (Ong *et al.*, 2022). This unique gaming experience will attract more consumers and stimulate their interest in and desire to purchase the game. In addition, consumers tend to associate an emotional connection to games with purchase decisions, and consumers will see purchasing a game as a way to continue interacting with the emotional experience and community in the game world (Ho *et al.*, 2012). Therefore, by enhancing emotional connection and the gaming experience, Chinese cultural elements in digital games can not only enhance consumers' gaming engagement and loyalty but also stimulate their positive motivation to purchase and drive the growth of game sales.

- Aesthetic Appeal and Game Selection

Incorporating Chinese cultural elements into digital games can enhance consumers' functional and hedonic motives by improving aesthetic appeal and game selection. The inclusion of Chinese cultural elements can enhance the aesthetic value of the game, including game graphics, music, and character design, thus enhancing consumers' aesthetic enjoyment. This enhanced aesthetic appeal will make consumers more inclined to choose games with Chinese cultural elements because they tend to appreciate and enjoy this unique cultural style (Dholakia *et al.*, 2004).

Chinese cultural elements also enrich the content and gameplay of games, providing consumers with more diversified game choices. When faced with diverse game choices, they will consider functional motives based on their own needs and preferences, such as choosing games related to their interests or games with specific game characteristics. At the same time, Chinese cultural elements will also increase the entertainment of the game, which further strengthens consumers' hedonic motives (Wang and Fesenmaier, 2004). Consumers are more willing to choose game experiences that can bring pleasure and entertainment, and Chinese cultural elements are precisely to fulfill this demand. Therefore, by enhancing aesthetic appeal and game selection, Chinese cultural elements in digital games can not only satisfy consumers' functional demand for game quality and content but also enhance their hedonic motivation for gaming, thus promoting game sales and user experience (Gracely *et al.*, 2003).

7. Relevant Research Theories

- Uses and GratificationsTheory (U &G)

The Uses and Gratifications Theory (U & G) posits that media users are active agents who consume media to fulfill specific psychological and social needs, such as entertainment,

information, identity construction, and social connection (Raacke and Jennifer, 2008). In the context of this study, U & G provides a conceptual basis for understanding why Millennials are drawn to digital games that incorporate Chinese cultural elements. These games offer entertainment and enable players to express cultural identity, experience emotional resonance, and connect with traditional values. U & G helps explain the intrinsic motivations behind Millennials' selective engagement with culturally themed digital content (Chuang, 2015).

- Hedonic and Utilitarian Motivation Theory

The hedonic and utilitarian motivation theory distinguishes between two primary types of consumer motivation: hedonic, which relates to pleasure, emotional satisfaction, and experiential value; and utilitarian, which pertains to efficiency, goal achievement, and functional benefits (Babin *et al.*, 1994; Holbrook and Hirschman, 1982). In culturally embedded digital games, tangible Chinese cultural elements—such as traditional clothing, architecture, and game mechanics—can satisfy utilitarian motivations by supporting strategic gameplay and enhancing usability. In contrast, intangible cultural aspects—like philosophy, storytelling, and aesthetics—fulfill hedonic motivations by providing immersion and emotional fulfillment. This dual-motivation framework supports the design of measurement constructs that capture the diverse values influencing game participation.

- 5A Consumer Journey Model

The 5A Consumer Journey Model outlines the sequential stages of consumer behavior: Aware, Appeal, Ask, Act, and Advocate. This model is particularly suited for analyzing digital consumption behavior, where user interaction and social influence play key roles (Holbrook and Hirschman, 1982). Within this study, the 5A model provides a structured lens to observe how Millennials progress from initial exposure to culturally themed digital games (Awareness), develop interest through cultural appeal (Appeal), seek more information (Ask), decide to participate (Act), and eventually promote the game to others (Advocate) (Fang and Deng, 2021). It connects motivational factors with observable behaviors, bridging psychological intent and cultural consumption outcomes in the digital gaming context.

Conceptual Framework

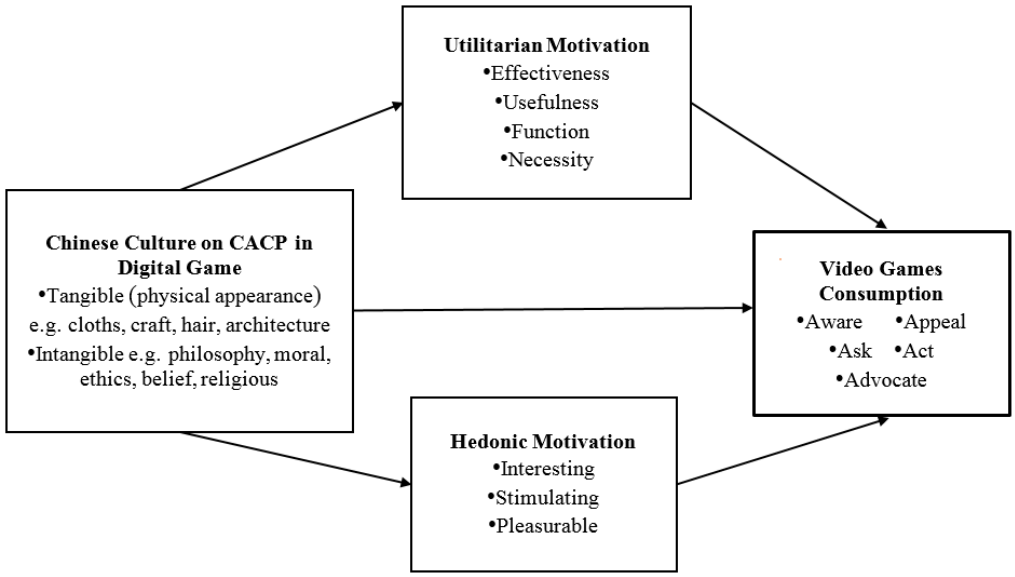

Figure 1: The Conceptual Framework

Source: Researcher (2024)

When Chinese cultural elements are incorporated into digital games, it manifests through tangible and intangible elements, including classical philosophy, moral values, and spiritual beliefs. This integration creates a layered gaming experience that blends visual aesthetics with cultural symbolism, enhancing the cognitive and emotional dimensions. This research framework is grounded in the Uses and Gratifications Theory (U&G), which posits that users actively seek out media to satisfy specific psychological and social needs. In the context of digital games, Millennials engage with culturally enriched content to fulfill needs such as cultural identity expression, aesthetic appreciation, and emotional immersion. These needs align with two dominant motivational dimensions: utilitarian motivation (goal-oriented, functionality-driven) and hedonic motivation (pleasure, emotional resonance), as proposed by Hedonic and Utilitarian Motivation Theory (Babin *et al.*, 1994; Holbrook and Hirschman, 1982). Specifically, tangible cultural elements contribute to utilitarian motivation by offering task-based rewards, skill-enhancing features, and familiar cultural signifiers that aid in navigation and problem-solving. In contrast, intangible cultural elements foster hedonic motivation by evoking nostalgia, cultural pride, and emotional connection through immersive storytelling and symbolic meaning. This study adopts the 5A Consumer Journey Model (Aware, Appeal, Ask, Act, Advocate) as a behavioral framework to examine how exposure to Chinese cultural elements

influences the stages of game engagement. By combining these theories, the study clarifies the psychological mechanisms underlying digital game consumption, model construction, and the interpretation of player behavior in the Chinese cultural context.

Main Assumption: The research model has a good fit with the empirical data.

Research Methodology

This research adopted quantitative and qualitative methods as mix method to comprehensively explore the consumption of Chinese cultural elements in digital cultural and creative products among the millennial generation. Extensive data on the target group's consumption behaviors in digital games, preferences for cultural elements, and related experiences were collected. Questionnaires were distributed through various channels such as social media, gamer communities, and email to obtain a statistically significant and broad sample, revealing overall trends and common characteristics. Building upon this foundation, in-depth interviews with five core gamers provided insights into their attitudes towards Chinese cultural elements, personal preferences, gaming design experiences, and key factors influencing dissemination and recommendation. The quantitative research provides macro-level data support for the study, while the qualitative research further delves into individuals' deep-seated motivations and specific viewpoints. These approaches complement each other, providing comprehensive and in-depth research evidence for optimizing and innovating digital cultural and creative products.

The population under study for this research is the Millennial Generation s engaged in Digital Game participation, experience and consumption. The Millennial Generation s refers to individuals born between 1980 and 2000. This generation, ranging in age from 20 to 40, is at the peak of their consumption and career development. The population of Millennial Generation s in China, defined as individuals born between 1980 and 2000, is estimated to be around 728 million (China Daily, 2024). The population is concentrated in mainland China, influenced by Chinese cultural elements and social backgrounds significantly. Moreover, they constitute the primary consumer group for digital cultural and creative products.

This study follows sample size recommendations for Structural Equation Modeling (SEM). According to Hair *et al.* (2014), the recommended minimum sample size should be 10 times the observed variables. Given that this study contains 50 observed variables, a sample size of at least 500 is recommended. Hoelter’s (1983) Critical N evaluates the adequacy of the

sample size for SEM analysis. At the 0.05 significance level, Hoelter's N was 276, suggesting that the minimum sample size required for the model to be considered acceptable is 276.

From the calculation formula of the given 728 million, estimates were obtained based on data released on the official websites of Chinese government. The sample size equals 276 compared with Taro Yamane's reliability level of 95% (f = ±5%) and various errors; the sample size is equal to 276.To account for potential non-responses and ensure robustness, the sample size is rounded up to 400. Therefore, the required sample size is 400, with a confidence level of 95% (f=±5%), acknowledging potential variations in error margins. Given this sample size of 400, the present study necessitates conducting a random sampling survey of 400 Millennial Generation s to ensure that the difference between the sample mean and the population mean does not exceed 0.5 with a 95% confidence level.

The quantitative data were collected via an online survey distributed through platforms such as WeChat, Bilibili communities, game user forums, and university campuses for one month (March 2025). Out of 400 distributed questionnaires, 335 valid responses were received, achieving an 83.75% response rate. To deepen the understanding, semi-structured interviews were conducted with five gamers who had rich experience with digital games. These qualitative data complemented the quantitative findings by exploring emotional connection, cultural resonance, and gameplay perceptions. This mixed-methods design enabled triangulation, thus enhancing the reliability and depth of the study's findings.

The following figure was the proposed (initial) structural equation model in this study. From this model, there were latent variables: CEDG mean Chinese cultural elements in Digital Game Measurement (Qi *et al.*, 2021); UM mean Utilitarian Motivation, HM mean Hedonic Motivation Measurement (Babin *et al.*, 1994; Childers *et al.*, 2001; Hu and Jiang, 2020), DGC mean Digital Game Consumption Measurement (Wu, 2021, Hu and Jiang, 2020). Chinese cultural elements on digital cultural and creative products (CACP) refer to a blend of tangible and intangible aspects of Chinese cultural elements, expressed through innovative and technology-driven creations. Utilitarian Motivation means the effectiveness, usefulness, functionality, necessity. Hedonic Motivation means the interesting, stimulating and pleasurable of a product and service. Digital Game consumption is a full-chain behavioral process in which players move from understanding the game, developing interest, actively exploring, and experiencing it firsthand to positively supporting and promoting it. This research has adopted 5A (Aware, Appeal, Ask, Act, Advocate) marketing to consider Digital Game consumption which consumers have experience and participation in digital games.

Validity and Reliability

For validity test, Item Objective Congruence (IOC) Index is used to evaluate the quality of items. Practitioners need to determine the content validity rating for each item.

- Score: 1, if experts determine that the item measures the attribute.
- Score: -1, if experts believe the item does not measure the attribute.
- Score: 0, if experts are unsure whether the item measures the intended attribute.

The evaluation results of questionnaire items related to respondents' background information and the influence of Chinese cultural elements in digital games on players' motivations. The first part covers general demographic variables such as gender, age, education level, and gaming experience, all of which received full agreement from three experts with an IOC value of 1, indicating that these items are considered highly relevant and appropriate for the research objectives. The second part explores how tangible and intangible Chinese cultural elements in digital games—such as costumes, architectural styles, plots, moral values, and religious content—influence players' perceptions and experiences. It also includes items assessing utilitarian motivation, particularly the sense of effectiveness gained from completing tasks and overcoming challenges. All items in this section were likewise rated with an IOC value of 1 by the experts, confirming their content validity and alignment with the intended constructs. In this research, the overall Item-Objective Congruence (IOC) is 1.00, indicating that all items were rated as highly relevant and appropriate by all three experts, demonstrating excellent content validity.

For reliability test, after evaluating the IOC values, all questions were found to have scores between 0.67 and 1.00, indicating that the questionnaire met the validity criteria. A pilot test was then conducted by collecting data from 30 individuals similar to the target sample group. The reliability of each question within each variable was assessed for internal consistency using Cronbach's Alpha (α-Coefficient). A coefficient of 0.7 or higher was considered acceptable (Hair *et al.*, 2014). The reliability results, analyzed using SPSS for Windows, are presented in Table 1.

Table 1: The reliability value of the questions

Variables	Questions	Indicators	Cronbach's Alpha
Chinese cultural elements on CACP	10 items	CEDG1- CEDG10	0.882
Unitarian Motivation	12 items	UM1- UM12	0.844
Hedonic Motivation	9 items	HM1- HM9	0.835
Digital Consumption	19 items	DGC1- DGC19	0.864
Total	**50items**		**0.856**

Research Results

1. Demographic and Behavior

The study employed a mixed-methods approach, combining quantitative and qualitative research, to comprehensively understand and evaluate the consumption of Chinese cultural elements in digital cultural and creative products among the millennial generation. Respondents were categorized based on gender, age, educational background, and gaming experience, showcasing the diversity and representativeness of the sample. In gender, there were 197 male respondents, accounting for 58.8% of the total sample, and 138 female respondents, representing 41.2%. The gender distribution indicates a majority of male participants, suggesting a higher level of engagement among males in digital cultural and creative products.

2. Assessment of Normal Distribution of Observed Variables

Table 2: Normal Distribution of Observed Variables

Chinese cultural elements in Digital Game	SI	Interpretation	KI	Interpretation
CEDG1	-0.827	Normal	0.005	Normal
CEDG2	-0.880	Normal	0.127	Normal
CEDG3	-0.919	Normal	0.057	Normal
CEDG4	-0.818	Normal	-0.023	Normal
CEDG5	-0.901	Normal	0.121	Normal
CEDG6	-0.630	Normal	-0.397	Normal
CEDG7	-0.596	Normal	-0.421	Normal
CEDG8	-0.652	Normal	-0.363	Normal
CEDG9	-0.662	Normal	-0.377	Normal
CEDG10	-0.796	Normal	-0.078	Normal

Utilitarian Motivation	**SI**	**Interpretation**	**KI**	**Interpretation**
UM1	-0.657	Normal	-0.404	Normal
UM2	-0.708	Normal	-0.386	Normal
UM3	-0.667	Normal	-0.375	Normal
UM4	-0.695	Normal	-0.375	Normal
UM5	-0.741	Normal	-0.250	Normal
UM6	-0.754	Normal	-0.194	Normal
UM7	-0.878	Normal	0.078	Normal
UM8	-0.691	Normal	-0.341	Normal
UM9	-0.697	Normal	-0.423	Normal
UM10	-0.813	Normal	-0.122	Normal
UM11	-0.929	Normal	0.134	Normal
UM12	-0.900	Normal	0.049	Normal
Hedonic Motivation	**SI**	**Interpretation**	**KI**	**Interpretation**
HM1	-0.747	Normal	-0.382	Normal
HM2	-0.716	Normal	-0.305	Normal
HM3	-0.687	Normal	-0.482	Normal
HM4	-0.650	Normal	-0.496	Normal
HM5	-0.773	Normal	-0.306	Normal
HM6	-0.744	Normal	-0.396	Normal
HM7	-0.838	Normal	-0.168	Normal
HM8	-0.805	Normal	-0.181	Normal
HM9	-0.801	Normal	-0.168	Normal
Digital Game Consumption	**SI**	**Interpretation**	**KI**	**Interpretation**
DGC1	-0.777	Normal	-0.186	Normal
DGC2	-0.662	Normal	-0.412	Normal
DGC3	-0.692	Normal	-0.325	Normal
DGC4	-0.776	Normal	-0.239	Normal
DGC5	-0.816	Normal	-0.209	Normal
DGC6	-0.920	Normal	0.058	Normal
DGC7	-1.012	Normal	0.183	Normal
DGC8	-0.704	Normal	-0.505	Normal
DGC9	-0.716	Normal	-0.380	Normal
DGC10	-0.685	Normal	-0.400	Normal
DGC11	-0.805	Normal	-0.314	Normal
DGC12	-0.662	Normal	-0.557	Normal
DGC13	-0.715	Normal	-0.406	Normal

DGC14	-0.604	Normal	-0.535	Normal
DGC15	-0.752	Normal	-0.328	Normal
DGC16	-0.729	Normal	-0.302	Normal
DGC17	-0.678	Normal	-0.436	Normal
DGC18	-0.848	Normal	-0.085	Normal
DGC19	-0.918	Normal	-0.039	Normal

Table 2 presents the assessment of the normal distribution of all 50 observed variables using skewness index (SI) and kurtosis index (KI). The skewness values for all items range between -1.012 and -0.596, and the kurtosis values fall between -0.557 and 0.183, all lie within the acceptable thresholds (±2 for skewness and ±7 for kurtosis), indicating that the data exhibit approximate univariate normality. Therefore, the distribution of observed variables meets the assumptions required for conducting Structural Equation Modeling (SEM).

3. Results of The Analysis of Chinese cultural elements On Digital Cultural and Creative Products towards the Consumption of Digital Game

The statistical analysis results reveal that participants generally hold a positive attitude toward Chinese cultural elements in digital games, with mean values across 10 questions ranging from 3.64 to 3.87 and standard deviations between 1.09 and 1.16, indicating consistent yet varied perceptions of specific cultural elements. For utilitarian motivation, the mean values range from approximately 3.65 to 3.88, with UM11 (3.884) and UM7 (3.872) showing the highest levels of agreement, suggesting that respondents strongly identify with these functional factors in their decision-making. The standard deviations (1.115–1.168) reflect moderate variability in responses. Regarding hedonic motivation, mean scores across nine items fall between 3.70 and 3.83, with HM7 (3.833) scoring highest, indicating respondents' strong recognition of enjoyment-related factors, though responses show variability (SD = 1.131–1.189). In terms of Digital Game consumption, the 19 questions have mean scores ranging from 3.53 to 3.86, reflecting generally active and positive gaming behavior, with notable divergence in responses for items like DGC8 (SD = 1.256) and DGC12 (SD = 1.252), highlighting differing habits and preferences among players.

4. Measurement Model

The data results present the fitting indices of the Digital Game consumption structure model. The findings reveal that all the fitting indices of the model fall within the recommended threshold ranges. The CMIN/DF value is 2.023, which is lower than 3, indicating that the

model's complexity is moderate. The GFI is 0.946, and the AGFI is 0.920, suggesting that the model performs well in overall fitting. The RMSEA is 0.055, placing it within the range of good fit. The IFI, NFI, TLI, and CFI are all above 0.93, which supports the excellent fitting degree of the model. Therefore, the structural model demonstrates a high degree of goodness-of-fit, with strong explanatory power and credibility.

The data results display the Average Variance Extracted (AVE) and Composite Reliability (CR) indices for latent variables. The findings indicate that the CR values for all variables exceed 0.7, demonstrating good internal consistency among the constructs. The measurement instruments exhibit high reliability. All AVE values are above 0.5, indicating good convergent validity for the constructs. The CR for Digital Game Consumption (DGC) reaches 0.870, suggesting consistency among its measurement dimensions. Although the CR values for Utility Motivation (UM) and Hedonic Motivation (HM) are slightly lower than those of other variables, they are acceptable. The measurement structure of this model possesses a solid foundation of reliability and validity, making it suitable for further structural path analysis.

Table 3: AVE and CR of Model

Path Relationship			Estimate	AVE	CR
TE	<---	CEDG	0.788		
IE	<---	CEDG	0.751	0.593	0.744
EF	<---	UM	0.774		
US	<---	UM	0.747		
FU	<---	UM	0.685		
NE	<---	UM	0.621	0.503	0.801
IN	<---	HM	0.752		
ST	<---	HM	0.721		
PL	<---	HM	0.741	0.545	0.782
AW	<---	DGC	0.800		
AP	<---	DGC	0.729		
AS	<---	DGC	0.758		
AC	<---	DGC	0.741		
ADV	<---	DGC	0.754	0.573	0.870

Note: CEDG is Chinese cultural elements in Digital Game. UM is Utilitarian Motivation. HM is Hedonic Motivation. DGC is Digital Game Consumption.

The correlation analysis results reveal that the $\sqrt{\mathrm{AVE}}$ values of all variables surpass their respective correlation coefficients with other variables, indicating good discriminant validity

among the constructs. This suggests that each dimension is theoretically independent, and the measurement results are distinct.

There are significant positive correlations between Chinese cultural elements (both tangible and intangible) and the dimensions of utilitarian motivation, hedonic motivation, and Digital Game consumption. Most correlation coefficients range from 0.2 to 0.5, reaching significance levels ($p<0.01$ or $p<0.05$), implying that Chinese cultural elements exert a certain degree of influence on users' motivations and consumption behaviors. Tangible elements exhibit relatively high correlations with perceived utility ($r = .379$) and perceived awareness ($r = .443$), suggesting that cultural elements may positively affect users' perceived value and cognitive behaviors. Moderately significant correlations are observed among the four dimensions of utilitarian motivation (efficacy, practicality, functionality, and necessity), with the highest correlation coefficient being $r = .556$, indicating that these dimensions are interrelated while maintaining a degree of construct independence. Strong correlations also exist among the dimensions of hedonic motivation, such as fun, excitement, and pleasure (e.g., fun and pleasure: r=.557), suggesting that sensory stimulation and psychological pleasure accompany users' enjoyment. The correlation coefficients among the five dimensions of Digital Game consumption (cognition, attraction, exploration, action, and advocacy) are generally high, with the highest reaching $r = .620^{**}$, indicating the continuity and inherent interconnection of users' consumption behaviors across various stages. See in the table 4 the correlation matrix of the 50 Observed Variables below.

Table 4: The Correlation Matrix of the 50 Observed Variables

	AD	AC	AS	AP	AW	PL	ST	IN	NE	FU	US	EF	IN	TA
√□□□	0.809	0.782	0.830	0.746	0.815	0.812	0.750	0.828	0.731	0.792	0.762	0.798	0.769	0.812
TA	.443**	.363**	.398**	.379**	.443**	.318**	.316**	.284**	.356**	.315**	.379**	.339**	.592**	0.812
IN	.378**	.378**	.451**	.347**	.424**	.287**	.323**	.318**	.309**	.294**	.284**	.310**	0.769	
EF	.480**	.423**	.434**	.476**	.453**	.178**	.192*	.313**	.469**	.556**	.539**	0.798		
US	.498**	.442**	.407**	.427**	.470**	.213**	.181**	.355**	.461**	.522**	0.762			
FU	.273**	.266**	.261**	.241**	.262**	.189**	.120*	.302**	.479**	0.792				
NE	.297**	.228**	.286**	.254**	.282**	.216**	.129*	.278**	0.731					
IN	.408**	.368**	.374**	.356**	.413**	.557**	.533**	0.828						
ST	.341**	.308**	.343**	.346**	.358**	.546**	0.750							
PL	.329**	.377**	.328**	.343**	.350**	0.812								
AW	.594**	.594**	.620**	.583**	0.815									
AP	.544**	.520**	.578**	0.746										
AS	.533**	.566**	0.830											
AC	.587**	0.782												
AD	0.809													

NOTE: * p<0.05 ** p<0.01 *** p<0.001. TA mean Tangible Elements, INE mean Intangible Elements, EF mean Effectiveness, US mean Usefulness, FU mean Functionality, NE mean Necessity, IN mean Interesting, ST mean Stimulating, PL mean Pleasurable, AW mean Aware, AP mean Appeal, AS mean Ask, AC mean Act, AD mean Advocate.

According to the table 5, these five dimensions also exhibit significant positive correlations with utilitarian and hedonic motivations, reflecting the strong explanatory power and driving force of consumption motivations in Digital Game engagement behaviors. The data validate the good discriminant validity of the constructs. The study unveils significant associations among Chinese cultural elements, user motivations, and Digital Game consumption behaviors, laying a foundation for subsequent structural model analysis.

5. Hypothesis Test: **Structural Equation Model**

From the perspective of the core index CMIN/DF (chi-square value divided by degrees of freedom), with a value of 1.449, which is significantly lower than 5 and close to the ideal range (<3), it suggests that the model as a whole fit well. Among the various fit indices, RMSEA is 0.042, well below 0.08, indicating that the model's approximation error is small and possesses strong explanatory and predictive power. CFI (0.969), IFI (0.948), and TLI (0.944) all exceed the ideal threshold of 0.90, further supporting the model's excellent fit. Although NFI is 0.849, GFI is 0.837, and AGFI is 0.820, slightly below 0.9, they still fall within the acceptable range of 0.8 to 0.9, suggesting that the model's performance on the sample data is acceptable. Despite some fit indices being slightly below the ideal values, the key indices (RMSEA, CFI, IFI, TLI) all perform exceptionally well. Combined with the favorable performance of CMIN/DF, it can be concluded that the integrated model exhibits a good overall fit and is suitable for subsequent path analysis and hypothesis testing. The model's fit is excellent, and capable of effectively explaining the data structure.

Table 5: Results of Structural Equation Modeling

Path Relationship			Estimate	S.E.	C.R.	P	Standardized Estimate
HM	<---	CEDG	0.588	0.085	6.920	***	0.558
UM	<---	CEDG	0.640	0.085	7.510	***	0.611
DGC	<---	HM	0.350	0.072	4.873	***	0.330
DGC	<---	UM	0.434	0.078	5.545	***	0.407
DGC	<---	CEDG	0.306	0.097	3.157	0.002	0.274

NOTE: * p<0.05 ** p<0.01 *** p<0.001.

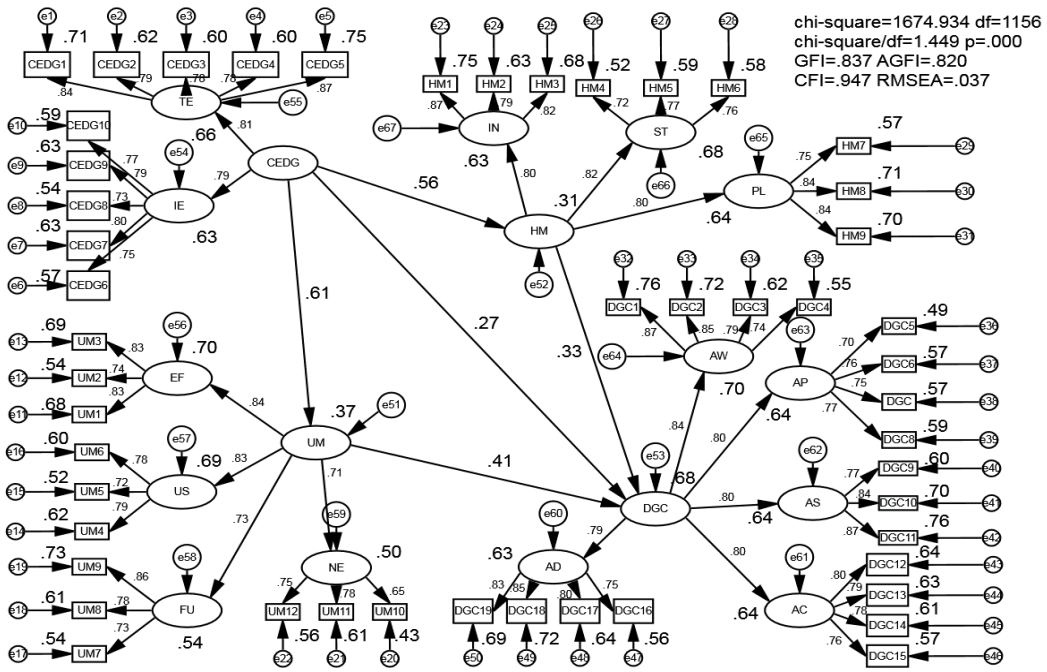

Figure 2: Structural Equation Model

The data presents the results of path analysis from the structural equation model, designed to examine the relationship pathways. From the perspective of standardized regression coefficients (Standardized Estimate), CEDG exerts the influence on UM (standardized coefficient = 0.611), demonstrating that Chinese cultural elements in digital games significantly and positively stimulate users' utilitarian motivation. The impact of CEDG on HM (0.558) suggests that Chinese cultural elements also effectively stimulate users' hedonic motivation. This indicates that Chinese cultural elements not only satisfy players' pursuit of practicality and functionality but also bring about enjoyable and stimulating gaming experiences. Regarding the influence of motivation on consumption behavior, the standardized coefficient of UM on DGC is 0.407, and that of HM on DGC is 0.330, both indicating significant positive impacts. This suggests that utilitarian and hedonic motivations significantly promote players' game consumption behavior, with utilitarian motivation having a slightly stronger effect than hedonic motivation. The path from CEDG to DGC is also significant (standardized coefficient = 0.274, p = 0.002), indicating that Chinese cultural elements have a direct and positive impact on players' consumption behavior.

Table 6: Results of Utilitarian Motivation and Hedonic Motivation Indirect Effects Tests

Path	Effect	SE	t	p	LLCI	ULCI	Percentage
CED ->DGC Total Effect	0.548	0.045	12.09	0.000	0.459	0.638	-
CEDG->HM->DGC Indirect Effect	0.152	0.027	-	-	0.104	0.207	27.7%
CEDG->UM->DGC Indirect Effect	0.125	0.024	-	-	0.081	0.175	22.8%
CEDG ->DGC Direct Effect	0.271	0.046	5.928	0.000	0.181	0.361	49.5%

To validate the mediating effects within the structural equation model, the Process plugin in SPSS was employed for analysis, utilizing the Bootstrap mediating effect test method. Specifically, the Bootstrap ML approach was adopted, with 5000 repeated sampling iterations, to examine the mediating effects. The analysis of the indirect impact of Chinese cultural elements in digital games (CEDG) on Digital Game consumption behavior (DGC) through utilitarian motivation (UM) and hedonic motivation (HM) further elucidates the pathways and proportions of the mediating mechanisms.

The total effect of CEDG on DGC was 0.548, with a p-value of 0.000, indicating a significant overall impact. Chinese cultural elements, on the whole, exert a strong positive influence on players' consumption behavior. The indirect effect of CEDG on DGC through HM was 0.152, with a confidence interval (LLCI=0.104, ULCI=0.207) that did not include zero, suggesting a significant indirect pathway. This indirect effect accounted for approximately 27.7% of the total impact, indicating that Chinese cultural elements can indirectly promote consumption behavior by enhancing players' sense of enjoyment, stimulation, and fun (hedonic motivation). The indirect effect of CEDG on DGC through UM was 0.125, with a significant confidence interval (LLCI=0.081, ULCI=0.175).

6. Qualitative Analysis

A total of 5 interviewees were selected for this interview, adhering to the norm that the number of participants in a focus group discussion typically ranges from 6 to 12, ensuring in-depth and diverse discussions. The five participants not only guaranteed the breadth, encompassing multi-dimensional perspectives but also controlled the number to ensure that each interviewee had ample opportunity to speak, facilitating in-depth exploration of the impact of Chinese cultural elements in cultural and creative products. Through a detailed qualitative analysis, several key themes emerged that reflect how these elements contribute to gaming experiences and engagement.

Diverse Gaming Preferences

The interviews revealed that participants had diverse gaming preferences, shaped in part by gender. Male players generally preferred strategy-based and role-playing games, which offered greater depth, complexity, and tactical engagement. In contrast, female participants gravitated toward narrative-driven mobile games and visual novels, valuing strong storylines, aesthetic appeal, and emotional resonance. This divergence highlights the importance of tailoring game design and cultural integration to different player profiles and expectations.

Attitudes toward Chinese cultural elements

Participants expressed a generally positive attitude toward the inclusion of Chinese cultural elements in games, especially when these elements were authentically represented. Traditional clothing, mythology, historical architecture, and folklore were particularly appreciated. However, there was a shared criticism of games that used these elements only as superficial visuals. Players were quick to dismiss games that lacked meaningful narrative or mechanical connections to the cultural features, emphasizing the need for thoughtful and purposeful cultural integration.

Cultural Elements and Immersion

Immersion was identified as a central component of player engagement. Participants noted that their connection to the game world deepened when cultural elements were well-integrated into gameplay and storylines. Features such as interacting with historically inspired characters, participating in traditional festivals, or playing through story arcs based on Chinese myths enhanced emotional involvement. Importantly, players valued cultural elements not simply for their presence, but for how seamlessly and naturally they were embedded in the game experience.

Role of Social Media and Content Sharing

Social media platforms such as Bilibili and WeChat played a significant role in game discovery and community engagement. Participants often encountered new games through short-form promotional videos, livestreams, and user-generated content (UGC). They reported sharing game experiences, screenshots, and story discussions online, which contributed to the viral spread of culturally themed games. Peer recommendations and social visibility were powerful motivators in influencing their gaming choices.

Game Recommendation Factors

When it came to recommending games to others, participants prioritized emotional engagement and gameplay innovation. A compelling storyline, relatable or memorable characters, and fresh game mechanics were commonly cited as reasons to recommend a game. While Chinese cultural elements initially attracted interest, they were not the sole factors driving recommendations. Instead, it was the overall quality of the narrative experience and the novelty of gameplay that ultimately influenced whether players would share and endorse a game within their communities.

The integrated analysis of quantitative and qualitative findings offers a comprehensive understanding of how Chinese cultural elements embedded in digital cultural and creative products (CACP) influence Millennial Generation s' engagement with digital games, aligning closely with the study's research questions and objectives. Quantitatively, the structural equation modeling results confirm that Chinese cultural elements (CEDG) significantly affects consumption behavior (DGC) both directly and indirectly through utilitarian motivation (UM) and hedonic motivation (HM). Notably, the mediating role of hedonic motivation accounts for approximately 27.7% of the total effect, highlighting the importance of enjoyment, stimulation, and fun in motivating consumption. The qualitative interviews provide nuanced insights into the motivational mechanisms uncovered in the quantitative phase. Interviewees emphasized the emotional resonance and cultural immersion of traditional Chinese cultural elements, which deepen their enjoyment and enrich the gaming experience.

Research Discussion

The motivations driving Millennial Generation's engagement with digital games featuring Chinese-element-integrated digital cultural and creative products (CACPs) are multifaceted, stemming from both instrumental and hedonic dimensions. These players not only pursue practical gains—such as knowledge acquisition, cognitive challenges, and skill enhancement—but also seek aesthetic pleasure and emotional resonance. The study reveals a strong relationship between Chinese cultural elements and both motivational pathways, with standardized path coefficients of 0.611 (instrumental) and 0.558 (hedonic), respectively, echoing the findings of Qi *et al.* (2021). Furthermore, cultural imagery, mythological symbols, traditional attire, and narrative depth significantly enhance immersion and generate a sense of cultural belonging which in line with Huang and Kong (2021). Qualitative insights further emphasize players' desire for deep integration of cultural content and gameplay, favoring

interactive narratives over superficial cultural overlays which corresponding with Xu's (2023) work. Ultimately, Chinese cultural elements serve as content-level attractors that form a psychological pathway from initial interest to deeper engagement and eventual consumption by stimulating both utilitarian and hedonic motivations that in line with Chung (2021). Game designers who effectively achieve content-mechanism integration can unlock Millennials' willingness to engage and foster stronger cultural identification.

The incorporation of Chinese cultural elements into digital cultural and creative products (CACPs) significantly enhances the gaming engagement of Millennial Generation by influencing cultural identification, emotional resonance, immersion, social propagation, and innovation. Millennials, more attuned to cultural identity than other age groups, seek media that reflect their heritage—making traditional attire, mythological narratives, and historical symbols particularly impactful in reinforcing cultural connections corresponding with Hu and Jiang (2020), Chen *et al.* (2021) and Qi *et al.* (2021). However, these elements not only elicit curiosity and pride but also encourage deeper time and monetary investment in games. Seamless integration of Chinese cultural elements into game mechanics and narratives further strengthens immersion and emotional engagement, transforming gameplay into a culturally rich experience in line with the work of Qi *et al.* (2021). Additionally, innovative design that embeds Chinese cultural elements into core gameplay—not merely as visual decoration—boosts player interest and satisfaction as Chung (2021) put. Social propagation through platforms like Bilibili and WeChat enables players to share experiences and emotional connections, reinforcing community engagement and increasing the games' visibility which same aspect of Xu (2023). Together, these dimensions foster a holistic engagement model where Chinese cultural elements transcend aesthetics to become central drivers of long-term player loyalty and emotional investment.

The engagement of Millennial Generation in digital cultural and creative product (CACP) games incorporating Chinese cultural elements is significantly enhanced through the effective integration of cultural depth, innovative gameplay, emotional resonance, and social dissemination. Rather than relying on superficial visual aesthetics, meaningful fusion of Chinese cultural elements—such as mythology, philosophy, and traditional customs—with core game mechanics and narratives fosters cultural identity and sustained immersion corresponding with Tu *et al.* (2019). Innovative technologies such as VR, AR, and AI enhance interactivity and immersion, aligning with Fang and Deng's (2020) view that such tools deepen user engagement. Storylines rooted in values like family, loyalty, and sacrifice foster emotional connection, reinforcing cultural identity as noted by Hu and Jiang (2020). Social platforms like Bilibili and WeChat enable user-generated content and community sharing, supporting Xu's

(2023) findings on digital cultural dissemination. Cross-industry collaborations and marketing via short videos and live streams expand reach and impact, consistent with Wu (2021). Collectively, these elements create a multi-dimensional engagement model that meets Millennials' desire for cultural connection, innovation, and meaningful digital experiences (Hu and Jiang, 2020).

This study makes multiple theoretical contributions at the intersection of digital cultural and creative products (CACPs) and Millennial Generation's Digital Game consumption behavior. The research incorporates Chinese cultural elements into the motivational and consumption path model of games, detailing how cultural factors influence consumption behavior through dual channels of utilitarian and hedonic motivations. Combining mixed methods, the study quantitatively verifies path effects while using qualitative interviews to reveal players' needs for deep cultural content integration and group differences. This study is the first to systematically explore the synergistic effects of technological innovations (such as VR/AR) and social media platforms on cultural gaming experiences.

Based on empirical data and interview findings, the researcher argues that Chinese cultural elements, as the core content in digital games, promotes consumption by enhancing players' knowledge needs satisfaction (utilitarian motivation) and strengthening the emotional appeal and immersion of the gameplay (hedonic motivation). The mediating role of hedonic motivation is significant, indicating that emotional and pleasurable experiences are keys to the success of cultural games. Players' cultural identity and diverse gaming preferences require differentiated cultural integration for different groups. Uniform design cannot meet the needs of all players. The study emphasizes that mere superficial use of cultural symbols cannot sustain user interest. Only through deeply integrating cultural elements with game mechanics, aided by advanced technologies and social media dissemination, can effective cultural identity and community belonging be formed, thus promoting long-term engagement and consumption.

Although this study verifies the positive impact of cultural elements on motivation and consumption, certain limitations must be noted. The diversity of cultural identity means that different players have varying acceptance of content. While technological integration has potential, large-scale application is limited by costs and user habits. Social media dissemination significantly promotes cultural games, but it also brings risks of information overload and cultural homogenization.

Implication and Suggestion from the Finding

Based on the empirical analysis and qualitative interviews conducted in this study, several practical implications emerge regarding the influence of Chinese cultural elements on the Digital Game consumption behavior of Millennial Generation. These implications span digital cultural and creative product (CACP) development strategies, game content design, user engagement, and marketing promotion. Not only do they offer actionable guidance for game developers, but they also present effective pathways for promoting the digital dissemination of traditional Chinese cultural elements.

A key finding is the importance of deeply integrating cultural content with gameplay mechanics to enhance product appeal. Millennials show strong interest in Chinese cultural elements, especially when these elements are embedded meaningfully within core game functions. Developers are advised to avoid treating cultural content as mere decorative “skins” and instead weave it into gameplay through mission design, character abilities, item systems, and storylines—particularly in strategy and role-playing games. This “mechanics-embedded” approach fosters cultural immersion, player engagement, and long-term user loyalty.

Stimulating both instrumental and hedonic motivations should be central to content development and user conversion. Structural equation modeling shows that Chinese cultural elements positively affect players’ practical motivations (e.g., learning and problem-solving) and emotional motivations (e.g., aesthetic enjoyment and cultural resonance), which in turn drive consumption behavior. Therefore, content design should balance functional and emotional value—offering educational and strategic gameplay to promote cognitive engagement, alongside rich narratives and visual experiences to enhance emotional satisfaction and encourage sharing.

Social media platforms play a critical role in content dissemination. Millennials often engage with games via platforms like Bilibili, WeChat, and Douyin. Developers should design content that is easily shareable—such as plot twists, character development arcs, and hidden cultural references—and promote user-generated content (UGC). Community-building initiatives, including co-creation of cultural designs, cultural challenges, and festival-themed in-game events, can deepen user belonging and expand cultural reach within player communities.

Cross-industry collaboration and cultural IP partnerships further enhance CACP value. Cooperation with cultural institutions (e.g., museums and heritage organizations), universities, or media platforms can enrich game content with professional cultural knowledge. IP linkages

with well-known cultural works (such as The Classic of Mountains and Seas, Dream of the Red Chamber, or Chang'an 30,000 Miles) can broaden user demographics, strengthen brand identity, and reinforce emotional and cultural connections with players.

Lastly, precision operations based on behavioral and motivational data are crucial for improving user retention. Developers should leverage player behavior analytics—such as time spent, task preferences, and social activity—to build motivational segmentation models and personalized recommendation systems. This enables tailored content delivery: strategy-based challenges for instrumental users and narrative-rich updates for hedonic users. Such personalized strategies help achieve a "thousand users, thousand experiences" effect, enhancing both user satisfaction and product lifecycle value.

In conclusion, effectively integrating Chinese cultural elements into digital cultural and creative products requires in-depth cultural understanding, user insight, and systematic dissemination strategies. By aligning cultural design with behavioral economics, developers can simultaneously meet users' diverse motivational needs and achieve commercial success.

Suggestion for Further Research

Future research endeavors should aim to broaden the sample size and geographical coverage, encompassing players from a wider array of cultural backgrounds and age groups, to bolster the generalizability and external validity of the findings. It is proposed that future studies incorporate a longitudinal research design to investigate the evolving impact of Chinese cultural elements within prolonged gaming experiences, thereby offering a dynamic understanding of the mechanisms underlying the evolution of motivation and behavior. Furthermore, future research could employ multi-dimensional measurements of players' immersion and emotional responses through the integration of neuropsychological or physiological data (e.g., eye-tracking, electroencephalography), thereby enhancing the objectivity and granularity of the research. Lastly, it is recommended that future studies delve deeper into the relative effects of distinct types of Chinese cultural elements (e.g., visual symbols, narrative motifs, ritual mechanisms) on stimulating consumer behavior, providing more pragmatic theoretical underpinnings for the precise integration of cultural content and game mechanics.

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