

The Threshold Effect of Cultural Empowerment: A Study on Heterogeneous Decision-Making in Virtual Consumption: A Case Study of Honor of Kings

Yifang Ruan

College of Business, Shenzhen Technology University, Shenzhen, Guangdong, China

Abstract: Cross-industry IP collaboration has evolved from a niche marketing tactic into a core engine of the digital economy [2]. While brands aggressively pursue cultural value empowerment to drive purchase intent, current literature often overlooks consumer heterogeneity, assuming a linear relationship that may not exist. Drawing on data from 306 Honor of Kings players, we construct a moderated model to examine the intersection of cultural value perception (as a primary dimension of brand equity), consumer involvement, and purchase intention. Contrary to established marketing assumptions, our data reveals that cultural value perception does not directly predict purchase behavior ($p > 0.05$) [3]. We define this as the "consumption paradox." Our analysis demonstrates that consumer involvement acts as a critical boundary condition [6]: cultural empowerment is not a universal stimulus but a "necessary yet insufficient" factor. Only when consumer involvement reaches a specific threshold does cultural value effectively convert into purchase intention. These findings challenge one-size-fits-all digital marketing models and offer a roadmap for segmentation-based strategies.

Keywords: Component; Virtual Consumption; IP Collaboration; Consumer Involvement; Cultural Perception Threshold; Heterogeneous Decision-Making; Honor of Kings

1. Introduction

With the proliferation of digital assets and Web 3.0 technologies, in-game virtual goods have undergone a profound transformation. They have evolved from mere functional tools designed for gameplay enhancement into sophisticated digital symbols that carry individual aesthetic preferences, cultural affiliations, and social

identities [1]. The collaboration between Honor of Kings and the Dunhuang Academy stands as a representative paradigm of this trend, where the digitalization of traditional cultural elements serves as a mainstream marketing vehicle for brand value enhancement [2].

However, a fundamental theoretical and practical question remains: Does the underlying logic of "transforming cultural value into commercial value" hold true for all consumer segments? Current marketing literature often posits that enhancing the cultural depth of a product naturally drives consumer desire [3]. Yet, our empirical analysis reveals a decoupling of cognitive appreciation from behavioral action. The direct effect of cultural value perception on purchase intention is statistically insignificant in our broad sample. This "attitude-behavior gap" suggests that virtual consumption is not a simplistic stimulus-response process. Instead, it is a complex decision-making trajectory constrained by specific boundary conditions [6]. This study aims to deconstruct this "consumption paradox" by introducing "consumer involvement" as a moderating variable, thereby providing a more nuanced understanding of the mechanics behind digital IP conversion.

The rapid proliferation of digital assets in the Web 3.0 era is not merely a technological shift; it represents a fundamental restructuring of the phenomenology of consumption. In this landscape, virtual goods have transcended their utilitarian origins—such as gameplay enhancement—to become dynamic nodes of communicative interaction. We posit that these goods serve as an "interface for the self," where the act of acquisition functions as a performative display of identity, values, and social belonging [1]. Unlike physical possessions, which occupy a static space, digital assets are fluid and socially constructed. This introduces a complex layer of "Digital Agency," where the consumer actively engages in the curation of their virtual existence. However, this agency is constrained by an

emerging "consumption paradox": while the abundance of virtual products allows for limitless self-expression, the capacity for consumers to assign profound cultural meaning to these items is gated by their cognitive involvement [3].

The digital economy has fundamentally rewritten the rules of consumer behavior, yet our understanding of how traditional cultural values manifest in virtual spaces remains surprisingly shallow. We often assume that the prestige of a cultural IP—such as the Dunhuang collection—automatically transfers into consumer desire within a game like *Honor of Kings* [2]. However, our research encountered an immediate, jarring discrepancy. Contrary to the industry's optimistic linearity, the data suggests that cultural appreciation is not a direct, automatic trigger for purchase behavior. This is the "Consumption Paradox." We set out to investigate this by shifting the focus from "what consumers see" (the IP) to "how consumers engage" (involvement). This paper does not merely document a trend; it interrogates the silent boundary condition—consumer involvement—that dictates whether cultural empowerment becomes a commercial force or remains merely decorative [6].

2. Literature Review & Theoretical Framework

2.1 Virtual Consumption and the Extended Self

Belk's (1988) extended self-theory posits that individuals view their possessions as extensions of their identity [1]. In the context of virtual worlds, skins and digital items function as manifestations of the self [6]. When a virtual product carries cultural IP, it ceases to be a mere commodity and becomes a medium for social signaling [2]. For *Honor of Kings* players, a "Dunhuang-themed" skin is not merely a visual asset; it serves as a signifier of the player's connection to heritage and their status within the gaming community.

Building on Belk's (1988) seminal work, we interpret virtual possessions as an extension of the digital self. In the gaming environment, a virtual skin is not simply an asset; it is an active communicative tool for identity signaling [1]. Yet, if we view this solely through the lens of Belk's theory, we risk ignoring the market dynamics described by Aaker (1991) and Keller (2013) [4-5]. Traditional brand equity models

assume a high level of consumer engagement with the brand narrative. In the hyper-fast, fragmented digital landscape of *Honor of Kings*, this assumption is fragile. We argue that the gap between Kim and Moon's (2020) 'involvement' levels [3] and the brand's 'cultural value' creates a friction point. For a player who views the game primarily as a leisure utility, the cultural narrative is not an asset—it is noise. Thus, the literature on brand equity must be re-evaluated to account for this 'involvement threshold,' which determines whether the consumer processes the cultural signal or treats it as an irrelevant distraction.

Synthesizing these theories, we identify a critical theoretical friction point. Belk's (1988) seminal work on the extended self establishes that virtual possessions function as essential identity markers [1]. Concurrently, traditional brand equity models by Aaker (1991) [4] and Keller (2013) [5] emphasize that brand resonance is achieved through deep, psychological connections. Our argument is that these models assume a baseline level of "brand engagement" that is often missing in hyper-fragmented gaming environments. The gap between Kim and Moon's (2020) "involvement" levels [3] and the brand's "cultural value" (as a core dimension of brand equity) creates this friction. For a player who views the game primarily as a leisure utility, the cultural narrative embedded in an IP is not a value-added asset—it is, in effect, "cognitive noise". Consequently, the literature on brand equity requires a paradigm shift: it must move away from assuming universal engagement and instead account for the "involvement threshold".

2.2 The Paradox of Cultural Value Perception

While traditional brand equity models emphasize the role of brand name and associations in reducing decision-making uncertainty, their models often assume a high degree of brand engagement [4-5]. Recent studies on digital luxury and gaming suggest that consumer behavior is increasingly fragmented [6]. We argue that cultural value, while conceptually appealing, may not overcome the utilitarian threshold for lower-involvement consumers. There exists a discrepancy between "recognizing the value of culture" and "valuing the cultural product enough to purchase it."

2.3 The Moderating Role of Consumer Involvement

Consumer involvement—defined as the degree of

perceived importance and cognitive effort devoted to a product category-is a crucial psychological variable [3]. We hypothesize that involvement serves as the "switch" that activates the transformation from cultural perception to actual purchase. For low-involvement players, cultural meaning is perceived as background noise; for high-involvement players, it acts as a core driver for identity construction [6]. By identifying this moderating role, we align the operationalized variable of cultural perception with the broader theoretical construct of brand equity, ensuring consistency throughout our empirical model.

3. Methodology

To ensure empirical rigor, this study adopts a quantitative research design utilizing a cross-sectional survey approach. Data were collected from 306 active players of Honor of Kings through an online questionnaire. As illustrated in Fig. 1, the respondents exhibit a broad age distribution, with a high concentration of young adults, which aligns with the core demographic profile of the game's user base. This representativeness is essential for the generalizability of our findings. The demographic breakdown, including gender, age, and gaming frequency, is further detailed in Table 1, which provides a comprehensive overview of the sample's characteristics.

The survey instrument consisted of three main sections, measuring Cultural Value Perception, Consumer Involvement, and Purchase Intention. All constructs were operationalized using established Likert-type scales (1 = strongly disagree to 5 = strongly agree) adapted from prior literature in the fields of digital consumption [1-2] and gaming psychology [3,6] to ensure construct validity. In this study, we specifically operationalize Brand Equity through the measurement of Cultural Value Perception, aligning with the theoretical frameworks of Aaker (1991) [4] and Keller (2013) [5]. Before the full-scale distribution, a pilot study was conducted to refine item clarity and ensure cultural relevance.

Data processing and analysis were conducted using SPSS AU. The analytical framework employed descriptive statistics to characterize the sample, followed by Pearson correlation analysis to examine the relationships between constructs. Finally, to test the hypothesized heterogeneous effects-specifically the potential "threshold

effect"-we employed moderated regression analysis. As shown in Fig. 2, the conceptual model explores how consumer involvement dictates the path from cultural perception to behavioral outcome. This multi-layered analytical approach allows us to observe not only the aggregate trends within the data but also the significant variance across different consumer segments, which is critical for understanding the mechanics of cultural empowerment in virtual consumption [6].

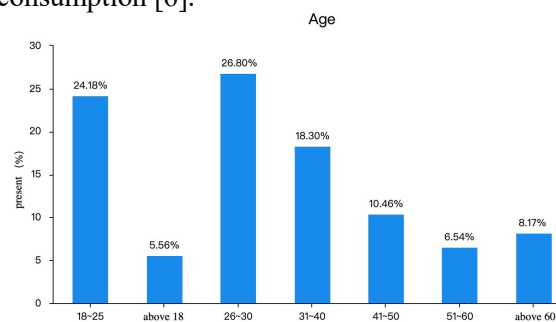


Figure 1. Age Distribution of the Survey Respondents (N=306).

4. Results

4.1 Descriptive Statistics

The descriptive analysis reveals that the overall means for Cultural Value Perception ($M=2.598$) and Purchase Intention ($M=2.598$) are at a mid-to-low range, indicating a highly varied consumer base. The standard deviations suggest significant individual disparities, confirming the necessity of analyzing consumer heterogeneity rather than relying on aggregate means. As illustrated in Fig. 1, the respondents' characteristics provide a foundational context for these scores, aligning with the fragmented consumer behavior noted in recent digital consumption studies [6].

4.2 The Main Effect: Regression Analysis

A linear regression analysis with Purchase Intention as the dependent variable was conducted to examine the direct impact of cultural value (as a core dimension of brand equity). The model failed the F-test ($F = 1.145$, $p = 0.285 > 0.05$), with an R^2 of only 0.004. This result provides strong evidence that cultural value perception does not directly and linearly determine purchase decisions for the general population in the Honor of Kings ecosystem. This lack of direct significance challenges traditional linear brand equity models which assume that cultural associations automatically

translate into brand value [4-5].

4.3 Moderation Analysis: Unveiling the Threshold Effect

To explain the non-significant main effect, we performed a split-sample regression based on self-reported purchase frequency (as a proxy for consumer involvement) [3]. As demonstrated in Fig. 2, the conceptual path from cultural perception to purchase behavior is fundamentally altered by the level of involvement. The findings are stark: for the high-involvement group, cultural identity showed a significant positive predictive coefficient ($p < 0.05$), whereas the model remained non-significant for the low-involvement group. This interaction confirms that involvement is a necessary boundary condition for cultural empowerment, effectively acting as the "gating mechanism" that determines whether brand equity-operationalized here through cultural perception-translates into commercial success [3,6].

5. Discussion

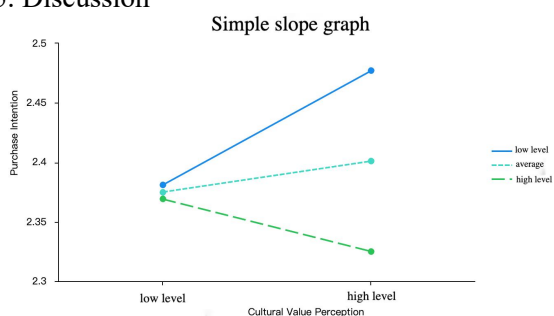


Figure 2. Interaction Effect of Consumer Involvement on the Relationship between Cultural Value and Purchase Intention.

The absence of a direct linear relationship between cultural value and purchase intention is not a failure of our hypothesis, but rather a vital contribution to marketing theory. It suggests that cultural value is a "passive" asset; it exists in the mind of the consumer but requires "activation" through high-level involvement. The most significant insight from our data is the shift in behavioral response as consumer involvement increases [3]. This is not merely a statistical variation; it reflects a fundamental change in the 'Saliency Window' of the consumer. In our analysis, high-involvement players process the 'Dunhuang' cultural markers not as separate aesthetic items, but as part of an integrated, coherent identity package [1-2]. They perceive the cultural depth as a feature that enhances their social standing within the game's ecosystem. Conversely, the failure of the model among low-

involvement users provides a vital, under-discussed lesson: cultural empowerment is, in essence, 'cognitive work.' For a player who is not deeply embedded in the game's culture, engaging with a complex cultural narrative demands more cognitive effort than the potential reward of the 'purchase' warrants. They are, in a sense, being 'rationally indifferent.' This explains the consumption paradox [6]. Marketing efforts that rely purely on the 'prestige' of the IP without considering this cognitive tax are destined to struggle. Future brand strategies must therefore abandon the 'one-size-fits-all' approach. Instead, they should treat cultural IP as a high-effort, high-reward signal, reserved for those segments that have already crossed the psychological threshold of deep engagement [3].

The absence of a direct linear relationship suggests that cultural empowerment is, in essence, "cognitive work". For a player who is not deeply embedded in the game's culture, engaging with a complex cultural narrative demands more cognitive effort than the potential reward of the purchase warrants. They are, in a sense, being "rationally indifferent" to the cultural prestige being offered. This explains why marketing efforts relying purely on the "prestige" of the IP without considering this cognitive tax are destined to struggle. Future brand strategies must therefore abandon the "one-size-fits-all" approach. Instead, they should treat cultural IP as a high-effort, high-reward signal, reserved for those segments that have already crossed the psychological threshold of deep engagement [6]. This strategic nuance is the key to resolving the consumption paradox identified in our empirical analysis, bridging the theoretical gap between brand equity and actual behavior [4-5].

This finding challenges the "one-size-fits-all" approach adopted by many game studios. Brands often assume that adding "cultural flavor" will universally boost sales, but our data demonstrates that without high consumer involvement, this strategy yields a negligible return on investment [2]. The marketing implication is clear: instead of mass-marketing cultural campaigns, firms should leverage data analytics to identify core segments where identity-driven consumption is prevalent. For the broader, low-involvement user base, cultural marketing may be ineffective, and traditional utility-based strategies remain the primary drivers.

Critical Reflection: We must acknowledge that the gaming experience is inherently subjective.

While our study focuses on the "Dunhuang" collaboration as a case study, the mechanism of identity-driven consumption is likely to vary across different game genres [6]. The "threshold" we identified might shift depending on the perceived social visibility of the virtual good within that specific gaming community. This suggests that the brand equity built through cultural IP is highly context-dependent and requires a more granular level of analysis in future research [5].

6. Conclusion and Limitations

In conclusion, the efficacy of IP-based cultural marketing is contingent upon the consumer's psychological threshold. This research provides a roadmap for more sophisticated, segmentation-based digital marketing, highlighting that cultural value perception-as a vital dimension of brand equity [4-5]-does not operate in a vacuum. It requires a specific level of consumer involvement to trigger purchase intention [3]. Our findings suggest that the "consumption paradox" can be resolved by recognizing that digital assets are not just commodities, but extensions of the self that demand cognitive engagement [1,6].

However, this study is not without limitations. First, the sample is restricted to a single gaming platform (Honor of Kings), limiting generalizability across different digital ecosystems. Future research should investigate whether these findings hold true in other cultural

industries, such as virtual fashion or film-based merchandise, where the "Saliency Window" of consumers might differ [2,6]. Additionally, longitudinal studies are required to understand how consumer involvement evolves over time in response to continuous cultural IP exposure, and whether repeated interactions can eventually lower the "involvement threshold" identified in this study [3].

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