

Research on the Impact of Game Community Interaction on the Consumption Behavior of Otome Game Players

Jingyi Liao

Communication University of China, Nanjing, Nanjing, Jiangsu, 211172, China

ABSTRACT

As an important branch of female-oriented games, the otome game has rapidly risen in the Chinese market in recent years. In 2017, "Love & Producer" pioneered the Chinese market, and by 2025, the market size has further expanded. The female user proportion exceeds 90%, showing a trend of youthfulness. Core players have strong consumption stickiness and emotional investment. The core gameplay of otome games is centered around love cultivation and plot interaction. They build player communities through social platforms and form unique community cultures through interactions such as topic discussions. Players deepen their understanding of the game in the community and are also easily influenced by the group to make impulsive purchases. However, there is a lack of academic research on the correlation mechanism between community interaction and consumption behavior in otome games, which requires systematic exploration. Based on social identity theory, uses and gratifications theory, and the consumption behavior model, this paper adopts the methods of literature analysis and questionnaire survey to analyze the community interaction patterns and consumption behaviors of otome game players. The research finds that community interaction influences players' consumption intentions through emotional connection and information sharing; players' identity recognition and sense of belonging in the community are the core driving forces for consumption. The research conclusions provide theoretical support and practical guidance for otome game operators to optimize community operation and increase user payment rates.

KEYWORDS

Otome games; Community interaction; Consumption behavior; Emotional resonance

1 Introduction

Against the backdrop of the rapid development of the digital entertainment industry, otome games, as the core segment of the female-oriented game market, are undergoing an unprecedented restructuring of the market landscape and a transformation in consumer behavior. Unlike the previously mentioned "four major otome games in China", since 2024, NetEase Interactive Entertainment's "Far Beyond the World" and Papergames's "Love and Deepspace" have disrupted the stable status quo of the domestic otome game market, creating a new situation of one dominant player and multiple strong competitors. This market upheaval has profoundly influenced the interaction patterns and consumption logic of the player base, providing a new context for studying the impact of game community interaction on consumer behavior.

The explosive growth of the otome game market in 2024 is essentially the result of the resonance between technological iteration and the upgrading of user demands. On one hand, 3D immersive dating games like "Love in Deep Space" have enhanced the visual experience through 3D modeling and real-time rendering technologies. On the other hand, "Beyond the World" has attracted a portion of online literature enthusiasts into the otome game audience by leveraging the "infinite flow" theme and its multi-time-space traversal setting, satisfying the demand for diversified plot designs from those outside the otome game circle and fostering highly sticky communities among new players as they explore the unknown world.

The evolution of otome game communities shows a trend of alienation from "emotional communities" to "identity training grounds". Through ritualized behaviors such as "controlling comments", changing usernames, chat boxes, and avatars related to "my bias" (a fan of a certain character), tight identity recognition systems have been established in community spaces like Weibo Super Topics, Xiaohongshu, and WeChat. Players are labeled as "fans of a certain character", and their community status is directly linked to their spending power and content output volume. This quantified evaluation standard has transformed emotional consumption into a symbol of power capital.

With the deep involvement of community interaction, the consumption motives of otome game players are undergoing a fundamental shift. The traditional "paying for love" model, where players purchase storylines and character outfits for emotional satisfaction, has given way to more symbolic consumption. The purchase of "goods" (game merchandise) is a concentrated manifestation of this trend. Players build "pain culture" spaces by collecting and displaying merchandise, materializing virtual character images into physical symbols and completing the identity transformation from "game players" to "cultural consumers".

2 Review of the current situation at home and abroad

2.1 Emotional labor and consumption motivation of otome game players

Emotional Labor:

Wang Yue, from a feminist perspective, pointed out that the subjectivity production of women in games has contributed to the growth and development of individual players, promoted the diversification of the game industry, and had a positive impact on eliminating gender stereotypes and biases and promoting social culture and progress. Otome game players build virtual intimate relationships through emotional labor, which is both a process of self-identity construction and a response to the settings of game developers. Players gain emotional discourse power in the game, pushing developers to reconstruct female-centered interactive experiences, forming a cycle of "emotional labor - subjectivity production - consumption feedback" ^[1].

2.1.1 The driving force of community interaction on consumption

Emotional support in community interaction also enhances players' willingness to pay. Wang Yanyun pointed out that community interaction prompts players to project their expectations of their real selves onto their avatars. Under the influence of a sense of identity, the bond between the real self and the virtual avatar becomes stronger, allowing players to more personally perceive the value of paid products. At the same time, the study found that both instrumental and interpersonal interactions in game communities have a significant positive impact on players' willingness to pay. Interpersonal interaction has a significant positive impact on avatar identification, and avatar identification can positively predict players' willingness to pay ^[2]. In otome game communities, emotional support and identification among players enhance their sense of belonging and loyalty to the game, thereby promoting consumption behavior.

2.1.2 The path of community interaction influencing consumption

2.2 The transformation of emotional energy and identity symbols

Zhuge Davi proposed that the interaction ritual chain in game communities promotes cultural identity and consumption behavior through the cycle of "emotional energy - symbolic capital - interaction ritual" ^[3]. In otome game communities, players' emotional projection onto virtual characters is transformed into consumption of peripheral products, and exclusive symbols within the community become catalysts for consumption behavior. For example, otome game players convert emotional energy into material support by purchasing character peripherals, forming a "emotion - consumption" closed loop.

Existing research provides a multi-dimensional perspective for understanding the relationship between community interaction and consumption behavior in otome games. Community interaction in games, through emotional connection, identity construction, and symbolic consumption, profoundly influences the consumption decisions of otome game players. Future research needs to further combine technological changes and social cultural contexts to reveal the complex dynamic mechanisms of female-oriented cultural consumption in the digital age. At the same time, game developers and community managers should pay attention to the ethical boundaries of emotional labor, avoid alienating players' emotions into consumption tools, and promote the healthy and sustainable development of the industry.

3 Research design

This study focuses on players of otome games as the research subjects and employs a questionnaire survey method. The research tool used is Wenjuanxing, and a questionnaire was designed covering aspects such as basic player information, community interaction, and consumption behavior.

Firstly, the initial questionnaire was sent to three respondents, inviting them to fill it out. Based on their feedback, the questionnaire content was modified and adjusted accordingly. Subsequently, the author encouraged friends who play otome games to forward the questionnaire to other players and game social groups through a "snowball" method. Additionally, the questionnaire was posted on multiple mainstream social platforms such as Xiaohongshu, Weibo, and WeChat, with relevant otome game topics. This distribution method not only helps to expand the audience range of the questionnaire but also ensures the accuracy of the respondents, thereby obtaining relatively concentrated and effective data.

A total of 147 questionnaires were collected. Questionnaires with filling times shorter than 60 seconds and those with perfunctory responses were deleted, leaving a final valid sample size of 144.

3.1 Research contents

3.1.1 Forms and Dimensions of Community Interaction

Analyze the impact of UGC creation, role-playing and emotional exchange, and participation in community activities on consumption behavior.

3.1.2 Manifestations and Characteristics of Consumption Behavior

Categorically count data such as in-game purchases, peripheral product consumption, and paid service usage, and analyze consumption motives and characteristics.

3.2 Variable definitions

3.2.1 Independent variables

Types of game community interaction (discussing game plots/characters, participating in fan creation/discussion, sharing strategy/activity information, etc.), interaction frequency, interaction time, etc.

3.2.2 Dependent variables

Players' consumption behaviors (purchasing virtual items, consuming peripheral products, subscribing to game memberships, etc.).

4 Data analysis and research findings

4.1 Sample description

4.1.1 Gender distribution

Among the players surveyed, 100% were female, which aligns with the market positioning of otome games as primarily targeting female players.

4.1.2 Age distribution

The majority of players were aged between 18 and 24, accounting for approximately 90%. Players in this age group typically have a higher willingness to consume and stronger social needs.

4.1.3 Occupation distribution

Students made up the largest proportion, at about 81%. This might be related to the fact that students have more time and energy to engage in game community interactions.

4.1.4 Disposable income

Players with a monthly disposable income of 1,001 to 3,000 yuan accounted for about 60%.

4.1.5 Time of contact with otome games

Players who have been in contact with otome games for 1 to 3 years accounted for approximately 45.8%, those for 3 to 5 years accounted for about 22.9%, and those for more than 5 years accounted for about 14.5%, indicating a certain degree of loyalty among players.

4.2 Analysis of community interaction

4.2.1 Common community platforms

Official forums/APPs, social media (Weibo, Xiaohongshu, Douyin), instant messaging tools (WeChat, QQ groups), video platforms (Bilibili, YouTube), and fan fiction/fan creation platforms (Lofter, AO3) are all commonly used by players. Among them, social media is used most frequently, accounting for about 95%.

4.2.2 Interaction time

The average daily interaction time of players in the game community mainly falls within 10 to 30 minutes and 30 to 60 minutes, accounting for 38% and 26% respectively.

4.2.3 Interaction types

Discussing game plots/characters, participating in fan creation/discussion, and sharing strategies/activity information are the main interaction types of players, accounting for 60%, 45%, and 40% respectively.

4.2.4 Interaction frequency

Players who occasionally reply to messages account for a relatively high proportion, about 63%, indicating that the interaction enthusiasm of most players in the community needs to be improved.

4.3 Analysis of consumption behavior

4.3.1 Consumption intention

75% of players indicated that they had made purchases due to the behavior of other players in the community, suggesting that community interaction has a significant impact on players' consumption intentions.

4.3.2 Consumption scenarios

Seeing other players share screenshots/videos of character plots/card faces/skins, the trend of "card drawing" and "card collecting" in the community, other players showing limited edition items/characters/merchandise, community members discussing time-limited activities or gift packs, and official announcements of recharge discounts are the main scenarios that prompt players to make purchases.

4.3.3 Consumption types

Virtual items, physical merchandise, game memberships/subscriptions, and fan creation-related consumption are the main types of consumption for players, accounting for 90%, 89%, 45%, and 36% respectively.

4.3.4 Influencing factors of consumption

The community atmosphere has a certain influence on players' consumption decisions. About 40% of players stated that even without direct consumption guidance, they would be more willing to pay for the game due to the community atmosphere.

4.4 Research findings and discussion

4.4.1 Main research findings

(1) Player group characteristics: The main players of otome games are young women, with a relatively high proportion of students. They have moderate disposable income and a certain degree of loyalty to the games. Questionnaire 22 (What do you think is the most attractive feature of the otome game community to you?) shows that the core needs of players in the community are concentrated at the emotional level. Among them, "emotional resonance" ranks first with 62 high-frequency mentions, which is highly consistent with the emotional needs of the player group.

(2) Community platform usage habits: Social media is the most commonly used community platform by players, and there are individual differences in interaction time and frequency. Players' interactions in the community not only involve emotional exchanges but also include practical needs such as "real-time strategies", reflecting the dual attributes of community platforms as both emotional resonance and tool services.

(3) The impact of community interaction on consumption behavior: Different interaction types and scenarios can prompt players to have differentiated consumption behaviors. Questionnaire 23 data reveals a polarization in consumption psychology: 68.6% of players stated that they "would not follow others' high consumption", but there are still some players with negative emotions such as "kitchen anxiety" and "financial anxiety". This indicates that comparisons and displays in the community (such as showing recharge records and rare items) are potential triggers for consumption impulses.

(4) The mechanism of community atmosphere: A sense of belonging and emotional connection significantly influence

consumption decisions. Even without direct consumption guidance, players may still pay due to the community atmosphere. Although "social belonging" is mentioned less frequently, as an extension of emotional resonance, it, along with "freedom of creation" and "high-quality secondary creations", constitutes the multi-dimensional attractiveness of the community atmosphere, further strengthening the role of emotional connection in promoting consumption willingness.

(5) Deepening the influence mechanism of community interaction: Community interaction affects consumption behavior through three mechanisms: information sharing, emotional resonance, and social recognition. "Emotional resonance" as the core attraction, triggers deep emotional projection through character plots, forming an emotional resonance mechanism; the existence of "kitchen anxiety" in Questionnaire 23 (When seeing other players' high consumption behavior in the community, do you have the idea that "you also need to consume to keep up"?) reflects the influence of the implicit rule of "true love should spend money" under the social recognition mechanism on consumption decisions; while the high-frequency demand for "real-time strategies" reflects the tool role of the information sharing mechanism in consumption guidance.

(6) Practical implications expansion: Game developers need to attach importance to community operation. In Questionnaire 24 (What suggestions do you have for the community operation of game developers?), players further detailed the directions: players frequently mentioned "strengthening management", "maintaining comment atmosphere", etc., requiring developers to build a healthy ecosystem from three aspects: rule-making, content review, and official response. This complements the original practical implications of "creating a good community atmosphere".

4.4.2 Summary

This study confirms that the type, frequency, and time of community interaction are closely related to the consumption behavior of otome game players. The sense of belonging and emotional connection in the community atmosphere are the core driving forces. Questionnaire data further clarify that emotional resonance is the cornerstone of community attractiveness, and consumption behavior is influenced by both rational and irrational factors, while the level of community governance indirectly affects player experience and willingness to pay.

4.4.3 Management suggestions

4.4.3.1 Core suggestion

Strengthen community governance and build a healthy community environment. Game developers should construct an orderly ecosystem from three dimensions: rules, content, and interaction:

(1) Rule layer: Formulate transparent community conventions, release the "Community Behavior Code", clearly prohibit behaviors such as advertising, provoking disputes, and privacy leakage, and provide a rapid reporting and punishment mechanism.

(2) Content layer: Implement a tiered review mechanism, adopt an "AI initial screening + manual recheck" model for UGC content, and focus on monitoring sensitive words and malicious comparisons. (3) Interaction Layer: Optimize the official response process, establish an official customer service team, and ensure that there are official personnel online to respond to players' concerns during peak hours.

4.4.3.2 Guide positive interaction behaviors

(1) Event Planning: Centering on the core of "emotional resonance", organize character-specific topic collection and player emotional story sharing activities to extend the in-game emotional experience.

(2) Topic Setting: Increase non-consumption-oriented topics such as "Zero-Cost Strategy" and "Plot Discussion" to dilute the consumerist atmosphere in the community.

4.4.3.3 Community atmosphere creation

(1) Positive Content Incentive Program: Set up a "High-Quality Content List" and offer game-related rewards for high-value content such as guides and fan creations.

(2) Conflict Mediation Mechanism: Add community atmosphere administrators and give them the role of "mediators" to provide guiding responses to controversial topics and prevent escalation of emotions.

4.4.3.4 Precision marketing and consumption ecosystem optimization

(1) Rational Consumption Guidance: The game official should add consumption limit settings and a recharge cooling-off period function, and explicitly oppose "consumption coercion".

(2) Economic System Adjustment: Players' mention of "lowering prices" reflects their sensitivity to the game's economic system. The game official can offer "loyalty discounts" to frequent players based on data such as player activity and payment habits, and send "returning player gift packs" to low-activity players.

4.4.3.5 Enhance manufacturer participation: break the "official-player" barrier

Two-way Communication Channels: Release monthly questionnaires to collect suggestions, regularly publicize optimization progress, and build an "Official-Player" co-governance ecosystem. Game manufacturers need to upgrade

community operation from "problem handling" to "ecosystem co-construction", and build a two-way feedback bridge between players and manufacturers through refined governance, economic system optimization, community culture cultivation, official in-depth participation, and activation of neutral users.

5 Conclusion

This paper focuses on the impact of community interaction in otome games on players' consumption behavior. Based on theories such as social identity theory, it explores the relationship between the community interaction patterns and consumption behavior of otome game players through literature analysis and questionnaire surveys.

The research subjects are otome game players. After adjustments, the questionnaires were distributed through multiple channels, and 144 valid samples were collected. The analysis found that the players are mainly young women, with a high proportion of students, and have a certain degree of loyalty to the games. Social media is the main community platform, and the interaction types are diverse. Consumption behavior is influenced by community interaction in multiple aspects.

Specifically, community interaction affects consumption behavior through three mechanisms: information sharing, emotional resonance, and social identity. Emotional resonance is the core attraction, and a sense of belonging and emotional connection are important drivers of consumption decisions. There are also cases where some players have consumption impulses due to comparisons within the community.

Based on the research results, this paper provides management suggestions for game developers, such as strengthening community governance, guiding positive interaction, creating a good atmosphere, optimizing the consumption ecosystem, and increasing the participation of developers, to provide theoretical and practical guidance for otome game operators to optimize operations and increase user payment rates.

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