Exploring Gender, Identity and Belongingness: The Role of AI-driven Social Features of the Gaming Platforms in Shaping Chinese Female Gamers' Experiences

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Keywords

artificial intelligence (AI), gaming, gender, female gamer, belongingness, China

INTRODUCTION

The development of digital technology has transformed gaming into a global cultural and economic force, making gaming platforms a powerful space for the negotiation of identity, culture, and commerce (Frissen et al. 2015). China leads the world in terms of gaming population and market income (Newzoo 2023; Ye 2023). Furthermore, the growth rate of Chinese female gamers and their game consumption has exceeded that of Chinese males in recent years (Insight and Info 2022). In 2024, the market size for female-oriented games in China increased by 124.1% year-on-year (Gamma Data 2024). Although they are still seen as passive consumers of gender-specific "pink" games (E. Y. Liu 2024), they increasingly participate in genres such as action-adventure and role-playing games traditionally associated with male gamers (Vermeulen and Van Looy 2016). At the same time, female gamers remain marginalised in China's public consciousness, with issues of harassment and sexism deeply impacting their participation (Sun 2020).

Existing research on gender and gaming often emphasizes Western contexts, focusing on challenges like harassment, sexism, and misrepresentation (Cote 2020; Rogstad 2022). There is far less research on how the Chinese context introduces unique cultural and social dynamics to gaming research. Few studies have explored how Chinese female gamers actively engage in male-dominated spaces shaped by local patriarchal values and powerful state-regulated platforms. Here, gaming for women is stigmatised by societal norms that associate it with masculine identity, which is further intensified by state-regulated platforms (G. Zhang and Hjorth 2019; T. Liu and Lai 2022). This environment reinforces harmful stereotypes and gendered discrimination that marginalise women's gaming participation (Sun 2020).

The increasing integration of AI technology within gaming platforms offers both opportunities and risks for Chinese female gamers. AI has the potential to create more

Proceedings of DiGRA 2025

inclusive, personalized gaming experiences, as evidenced by the use of large language models (LLMs) in serious games, which can address discriminatory elements in game design (Reichert et al. 2024). Recent advances in AI-driven social features within the gaming platforms—such as matching algorithms, non-player characters (NPCs) with adaptive behaviours, and personalised content recommendations— play a key role in shaping the virtual experience of belongingness and inclusion on gaming platforms (Ashktorab et al. 2020). Although AI-driven systems optimise user experience and drive innovation on gaming platforms, they pose ethical challenges, such as algorithmic bias and social injustice, especially when AI systems are not designed to challenge existing cultural norms (Chen et al. 2024). While research on AI in gaming often focuses on technical advancements (Kumar et al. 2025), its sociocultural implications remain understudied, especially for female gamers in a non-Western context, such as China.

To address these gaps, this research will focus on the social function of AI by exploring how AI-driven social features of gaming platforms shape the experience of Chinese female gamers and their identities, virtual belongingness, and inclusivity.

RESEARCH AIM AND OBJECTIVES

This study aims to critically examine the role of AI-driven social features in shaping the experiences of Chinese female gamers within culturally specific AI-driven gaming platforms. Drawing on Butler's performativity theory, belongingness theory, intersectionality, and feminist AI to explore two core dimensions: their contribution to the virtual belongingness of gaming platforms and their limitations in promoting inclusivity. Combining theoretical insights and practical analysis, the research provides feasible recommendations for designing gender-inclusive and culturally sensitive AI systems in gaming platforms.

To achieve the research aim, this research will explore the four following objectives, with a focus on AI-powered social features embedded within gaming platforms:

The first research objective, using Butlerian theorisation on the performativity of identity as a performative construct (Butler 1990; 1993), investigates how AI-powered social features such as matchmaking algorithms and adaptive NPCs enable and constrain the performative identities of Chinese female gamers.

The second research objective explores how AI-driven mechanisms on gaming platforms reflect or challenge the intersection of gender, culture, and socio-environmental privilege and oppression, using an intersectionality framework (Choo and Ferree 2010).

The third research objective uses belongingness theory (Baumeister and Leary 1995) to explore how personalised content and AI-enabled social features foster belongingness and emotional connection among Chinese female gamers.

The last research objective utilises feminist AI theory (Toupin 2024) and feminist design principles (Bardzell 2010) to examine the inclusivity of AI-powered gaming platforms and to provide recommendations for designing gender-inclusive AI and culturally sensitive systems in gaming platforms.

RESEARCH METHODOLOGY

A mixed-method approach will be employed to address the research questions outlined in this study—a quantitative survey, a qualitative content analysis of social media posts, and semi-structured interviews of female gamers and game developers in China.

Sample

The sampling criteria focus on female gamers in the age group 25-35[1], a generation uniquely shaped by the one-child policy and rapid urban educational investment (J. Zhang 2017), who now constitute significant consumers of digital entertainment (Song, Li, and Zou 2024). Participants must also:

- Living in first and second-tier cities in China[2].

- Actively participating in AI-powered video game platforms at least 6 hours per week[3].

The sample size for the semi-structured interviews will be 20-30 (Marshall et al. 2013), and participants will be recruited through Chinese social media. The duration of the interviews will last 60-90 minutes.

This study will apply thematic analysis. Thematic analysis consisted of three coding steps: open coding (initial data categorising), axial coding (organising categories), and selective coding (identifying themes) (Braun and Clarke 2012).

Research timetable

Time	Phase
2024-2025	Year 1: Survey & Online Content Analysis
2025-2026	Year 2: Literature Review & Interviews
2026-2027	Year 3: Analysis & Drafting
2027-2028	Year 4: Writing & Dissemination

Table 1: Four-year research plan (Please contact the author for a detailed version).

SIGNIFICANCE

By exploring the experiences of female gamers in China, this study attempts to bridge game studies, AI ethics, and gender studies to address the research gap in understanding gender-inclusive design in AI-driven gaming platforms. Given the context of Chinese culture and the increasing trend of video games among female gamers, this study contributes to the broader discussion about games, AI, culture, and gender, providing insights to guide game developers, operators of online gaming and policymakers in designing inclusive and culturally sensitive gaming environments. Therefore, this study aims to improve female representation and inclusivity in the gaming industry, and seeks to provide suggestions for the development of inclusive and culturally nuanced AI systems in gaming platforms.

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ENDNOTES

[1] Among Chinese gamers, the age group of 25-34 represents the most significant demographic, accounting for 37% of the total (Newzoo 2022). In Chinese culture, the age calculation differs from that of the West, and normally, people will add one year to their actual age (Ellis and Ellis 2011). So, this research will take the 25-35 age range.

[2] In my survey (n = 752, 2024), 73% of the respondents lived in tier 1 and 2 cities.

[3] In my survey (n = 752, 2024), 75.27% of the respondents spent more than 6 hours playing video games weekly.