



A Game of Love for Women: Social Support in Otome Game *Mr. Love: Queen's Choice* in China

Qinyuan Lei
City University of Hong Kong
Kowloon, Hong Kong
qinyuan.lei@gmail.com

Ran Tang
University of Washington
Seattle, USA
rantang@uw.edu

Hui Man Ho
The Hong Kong Polytechnic
University
Kowloon, Hong Kong
hmm.jolin@gmail.com

Han Zhou
University of Wisconsin–Madison
Madison, Wisconsin, USA
zh.zhouhan.z.h@gmail.com

Jingyi Guo
Pennsylvania State University
State College, Pennsylvania, USA
jmg7959@psu.edu

Zilu Tang
Southern University of Science and
Technology
Shenzhen, China
ztang0705@outlook.com

ABSTRACT

Otome games (also known as romantic video games, or RVGs) are story-based video games that are designed for young women, simulating the experience of a romantic relationship. Players are invited to adopt the female avatar's perspective in the story and date one or more of the male characters. Our empirical study focuses on the different types of social support among the players of the Chinese otome game *Mr. Love: Queen's Choice*. We discovered that although the game was initially designed to be a consumer product aiming to profit from a largely marginalized and stigmatized group of gamers, i.e., young female gamers, the game has created a gaming community in which the players seek and provide each other with social support. We primarily use ethnographic methods, including participant observation and in-depth interviews. Our study contributes to HCI research on mediated social support in game.

CCS CONCEPTS

• Human-centered computing → Empirical studies in HCI.

KEYWORDS

Games/Play, Social Media/Online Communities, Empirical study that tells us about people, Ethnography

ACM Reference Format:

Qinyuan Lei, Ran Tang, Hui Man Ho, Han Zhou, Jingyi Guo, and Zilu Tang. 2024. A Game of Love for Women: Social Support in Otome Game *Mr. Love: Queen's Choice* in China. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24)*, May 11–16, 2024, Honolulu, HI, USA. ACM, New York, NY, USA, 15 pages. <https://doi.org/10.1145/3613904.3642306>

*The first and second authors are the corresponding authors.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

CHI '24, May 11–16, 2024, Honolulu, HI, USA

© 2024 Copyright held by the owner/author(s). Publication rights licensed to ACM.

ACM ISBN 979-8-4007-0330-0/24/05

<https://doi.org/10.1145/3613904.3642306>

1 INTRODUCTION

With the rapid increase in smartphone possession and preference changes in entertainment among young people, China's video game industry has grown meteorically in recent years and is predicted to outperform other online game markets across the globe [6, 53]. Otome games, also known as “romantic video games” (RVGs) [42, 91] or “dating simulation games” [93], are a genre of video games primarily designed for young women. Otome games emulate real-life romantic experiences by allowing players to adopt the perspective of the female avatar to date virtual male characters in a provided storyline. *Mr. Love: Queen's Choice* (hereafter *Mr. Love*), developed and released in 2017 by Papergames (a video game company based in Suzhou, Jiangsu province, China), is one of the earliest and most popular Chinese otome games. Many female players play a few otome games at the same time, dating several male leads from different games and following different storylines simultaneously. There are many similarities in character design, romantic interactions, and content in the popular otome games [16, 43]. We have chosen to focus on *Mr. Love*, because it is one of the earliest otome game in China, which allows us to draw on the experiences of long-term otome game players.

Otome games are not the only genre of games that offer players romantic experiences. Existing HCI studies examine the parasocial relationship between players and NPCs in various game genres [13, 39, 84]. There is also a significant body of work analyzing computer mediated intimacy among players of Multiplayer Online Games (MOGs) [12, 29, 30, 107, 111], especially among players of Massively Multiplayer Online Role-Playing Games (MMORPGs) [31, 76, 110]. However, mediated social support in games remains an underexplored topic in the HCI community, except for a few recent studies [31, 65, 72].

That said, there is a general trend in HCI where more and more research shines a light on the social aspect of games, addressing the social stigma of video games [97], discussing the importance of inclusive game design [25, 26, 77, 82, 83], or emphasizing the positive social influences of games [31, 95]. Our study on the Chinese otome game *Mr. Love* and its gaming community also highlights its social aspect by illustrating the different types of social support in the gameplay, and furthermore, by discussing the social implications of the game.

When playing *Mr. Love*, the players not only receive social support from the gaming experiences, more specifically through their parasocial relationships [13, 34, 39, 84] or identification with the female avatar [28, 57, 58], but also from interacting with other players in the Weibo Supertopic of *Mr. Love*. Weibo, also known as Sina Weibo, is one of the largest social media platforms in China [5]. Supertopic is the forum function on Weibo that allows its users to gather and form online communities based on a shared interest or a topic [17]. Interactions between players inside the game are extremely limited, if not entirely absent. For instance, there are no channels for them to send messages to each other inside the game. Consequently, the Weibo Supertopic serves as the primary avenue for them to discuss their gaming experiences and seek support from one another. In the Weibo Supertopic community, players not only exchange game-related information, but also seek and provide one another with social support, oftentimes beyond the context of the gameplay. The Weibo Supertopic of *Mr. Love*, currently owned and managed by Papergames, is the biggest online gaming community of *Mr. Love* where the majority of the players gather. As of August 28, 2023, the Weibo Supertopic of *Mr. Love* has gathered over two million players in total.

In this study, we aim to extend the current HCI scholarship on mediated social support by asking the following research questions:

- (1) Do the players of the Chinese otome game *Mr. Love* exchange social support in the game and in their online gaming community?
- (2) If so, what are the different types of social support, and how do these various types of social support manifest among the players?

In this study, we examine four types of social support, namely emotional support, informational support, instrumental support, and esteem support [7, 40], in *Mr. Love* and its Weibo Supertopic gaming community primarily through ethnographic methods, including participant observation and in-depth interviews. We also collect quantitative data and conduct preliminary quantitative analysis to gain an overview of the gaming community.

Our study contributes to HCI research on mediated social support in game. Firstly, we advance existing research on mediated social support in game by introducing a unique dataset which accounts for young female gamers in China, which is an underrepresented population in HCI and game studies. Following House's [40] and Barrera's [7] theory of social support, we specify how each type of social support manifests in the gameplay and in the gaming community. Secondly, our investigation of *Mr. Love* furthers the discussion on inclusive game design by showing the importance of designing games for marginalized groups and communities, in this case, for female gamers in China. Last but not least, our study confirms existing literature on the positive social influences of games by reporting on the social support within the gaming community of *Mr. Love* and its social implications.

The practices of mediated social support in the gaming community of *Mr. Love* have social and political meanings in Chinese society well beyond the game, especially in the context of Chinese women's struggles against gender inequalities. In China, female gamers are often stigmatized and marginalized. Previous literature has discussed that, with the exception of otome games, other games

in China are mostly designed for male players [62, 108]. On this topic, interviewees of this study also reported that the majority of the Chinese games in the market are male-dominated games in the sense that they are "made from men's perspective" (see Vignette 4). When the game released in 2017, Chinese female gamers embraced it as one of the very few video games that saw them as worthy customers. Just as other otome games, *Mr. Love* is especially designed for female gamers [20]. According to an online interview with a manager of Papergames, more than 70% of employees in Papergames are female, which is not the norm in the game industry in China [63]. In this sense, *Mr. Love* is a game made by women for women.

As more female gamers join the gaming community, it becomes clear to them that *Mr. Love* and other otome games also present an opportunity to them to form their own unique gaming community where their marginalized voices become central. Being frequently exposed to news reports about domestic violence and social media posts about the censorship of the #MeToo movement in China, the female players find it challenging to gain support on feminist issues from their close relatives due to generation gaps [41]. Finding social support on feminist issues on the Chinese Internet or in offline events is also nearly impossible due to censorship [59–61, 106]. What appears to be a simple consumer product designed for women presents itself to them as an ideal basis for a supportive online community. As a result, *Mr. Love* has come to embody complex expectations, social struggles, and ideals over the years and eventually become a platform for its players to exchange social support which is otherwise absent in their everyday life.

2 RELATED WORK

2.1 What Are Otome Games?

Otome games are story-based video games that are mainly designed for young women, simulating the experience of a romantic relationship. The term "otome" is originally an archaic term in Japanese for "unmarried young girls" [2, p. 166]. Some scholars also use the terms "romantic video games" (RVGs) [42, 91] or "dating simulation games" [93] to refer to otome games. While there is a plethora of women's games, otome games refer to a specific genre of women's games in which the avatar is female and dates male characters [51]. The players usually have simple controls and a storyline to follow, which also distinguishes otome games from chatbots that provide emotional support [90, 102, 103, 109]. Until now, there are only a very small number of studies on otome games [2, 33, 34, 108]. Possibly due to the newness of the genre, we have noticed no consensus among scholars regarding the term they use to refer to the genre. In this study, we have chosen to use the term "otome game," because the term is most widely used in the game industry.

Unlike most games, which are not designed for a particular gender, otome games are designed especially for young women. A good number of the studies on otome games focus on the issue of gender [2, 33, 51], with a few drawing connections between otome games and feminist movement in China [62, 99, 108]. Arguments have been made from both sides: that otome games are commodifying female players' leisure time and policing their desires [33], or that otome games offer "a space to question the gender identities built into our society" [2, p.166]. Other literature centers on the

parasocial phenomenon in otome games, referring to the one-sided relationship formed between the players and the non-player characters (NPCs) [34]. Notably, none of the previous studies on otome games pay attention to the social support among the players, which is the focus of this study.

Importantly, otome game is not the only genre of games that afford players romantic experiences or intimate relationships. There is a significant body of research on computer mediated intimacy in games. Some studies discuss the parasocial relationships between players and NPCs [13, 39, 84]. Others examine intimate relationships formed between players through in-game marriage [29, 30, 44, 107] or collaborative activities [12, 111]. A lot of these prior studies shine a spotlight on Multiplayer Online Games (MOGs) as a category of games that support young players in finding romantic partners or close friends due to its intrinsic collaborative environment [12, 29, 30, 107, 111]. The focus of this paper is not on computer mediated intimacy, but rather on mediated social support.

2.2 Four Types of Social Support

Traditionally in social sciences, scholars distinguish among four types of social support: emotional support, instrumental support, informational support, and esteem support or appraisal [7, 40]. HCI scholarship on social support follows this categorization, some more strictly [9, 21, 31], some more loosely [79, 89]. There is also a growing body of HCI literature examining different types of social support in games, especially in Multiplayer Online Games (MOGs) [74, 76], eSports [31, 50], and casual games [29, 107]. This study expands HCI literature on mediated social support in casual games by differentiating and diving into the four types of social support manifested in the Chinese otome game *Mr. Love*.

Existing HCI literature has shown that emotional support is a key form of mediated social support in the contexts of family caregiving [75, 104], online health communities (OHCs) [14, 21, 35, 73, 78, 100], LGBTQ communities [58, 87, 96], and both online and offline activism [4, 56, 71]. These contexts often point to vulnerable communities or emotionally taxing activities, which explains why emotional support is most needed by members. For instance, scholars found that the two types of social support often found critical in online health communities (OHCs) are emotional support and informational support [9, 73, 79, 100]. Nakikj and Mamykina also found that emotional support and informational support in OHCs can “at times complement each other, but can also lead to contradictory priorities and expectations” [73]. This shows the significance of exploring the complex relations between different types of social support. A detailed discussion on this topic in the context of *Mr. Love* players can be found in the Section 5.1. “Contradictory Expectations.” Studies also indicate connections between emotional support and the construction of online safe spaces, showing that emotional support helps mediate harmful experiences [87].

There is significant overlap between the discussions of informational support and instrumental support in existing HCI literature. In the context of OHCs, scholars tend to focus more on informational support. One of the main reasons is that health-related information, more so than instrumental aid, drives individuals to OHCs [14, 73, 100]. Prior research shows that health-related information provided by both physicians [66] and fellow patients

and primary caregivers [46, 64, 98] in OHCs serves as a significant compliment to the traditional health care system [48]. In the context of games, informational support and instrumental support become more inseparable. For example, Freeman and Wohn view instrumental support within the game as mostly informational support, namely the exchange of “knowledge about game mechanics;” whereas instrumental support outside of the game is discussed more extensively in the instrumental support section [31]. In general, a clear demarcation between informational support and instrumental support remains difficult to be drawn in games. This paper follows Freeman and Wohn’s categorization of informational support and instrumental support.

Last but not least, there is a significant body of work on esteem support in HCI examining the role of esteem support in youth communities [1, 38, 49, 80], LGBTQ communities [24, 58], and OHCs [1, 64]. As social media plays an increasingly significant role in the daily life of young people, more and more young people seek esteem support both offline, such as through youth development programs [80], and online, such as on peer-support forums [38] and chat apps [49]. There have been, however, few HCI studies on esteem support in games [8, 31, 65, 72]. The overall lack of discussions on esteem support and social support in games might be due to the public stigma of video games, which some prior studies attempt to address [54, 97].

2.3 Female Gamers and Otome Games in China

Female gamers experience an exceptional amount of stigma and harassment, both from male gamers [54] and from judgmental parents, peers, and bosses [19, 45, 65, 68]. There are few studies on female gamers [34, 55, 62, 86, 88] and otome games in China [43, 62] both in HCI and in Media Studies. Of the few studies on otome games in China, the general tone of these studies is leaning towards its negative effects, with some studies emphasizing how otome games reinforce gender norms [43, 62] and others stressing how these games “may indirectly influence players’ idealized romantic beliefs” [91]. While we agree with the first statement, that otome games reinforce gender norms in Chinese society, we disagree with the second argument about idealized romantic ideals, as it has been made by wrongly situating female gamers in the one and only context of marriage and reproduction. Our study shows that female gamers harbor complex emotional, practical, and social needs beyond the context of marriage and reproduction.

Notably, the Chinese government released “Age Appropriate Suggestions for Online Games” in 2020, which is an age-based rating system for all online games in China [27]. Possibly due to the newness of this rating system, few existing studies have examined the implications of this new age-based rating system to the Chinese video game industry [22, 105] or to female-oriented games specifically [94]. According to this rating system, all games in China need to show whether the game is age-appropriate for 8+, 12+, or 16+ consumers. Not following this new standard completely, *Mr. Love* has officially declared its content to be appropriate for players in the 18+ age group. However, a 2020 market report shows that around 30% of the actual users of *Mr. Love* is under 18 [70], which matches the results of our participant observation. This points to the importance of discussing otome games in the context of how they

Table 1: Information of the interviewees

| No. | Age | Gender | Recruit method | Mentioned in |
|----------------|-----|--------|-----------------------|------------------|
| Interviewee 1 | 20 | Female | Snowball sampling | Vignette 1, 4 |
| Interviewee 2 | 26 | Female | Snowball sampling | Vignette 3, 4 |
| Interviewee 3 | 22 | Female | Snowball sampling | Vignette 3 |
| Interviewee 4 | 21 | Male | Snowball sampling | Vignette 4 |
| Interviewee 5 | 27 | Female | Call for interviewees | Vignette 2, 4 |
| Interviewee 6 | 20 | Female | Call for interviewees | Vignette 1, 2, 4 |
| Interviewee 7 | 25 | Female | Call for interviewees | Vignette 1, 2, 4 |
| Interviewee 8 | 23 | Female | Call for interviewees | Vignette 1, 2, 4 |
| Interviewee 9 | 23 | Female | Call for interviewees | Vignette 2, 3, 4 |
| Interviewee 10 | 21 | Female | Call for interviewees | Vignette 2, 4 |
| Interviewee 11 | 22 | Female | Call for interviewees | Vignette 1, 2, 4 |
| Interviewee 12 | 35 | Female | Call for interviewees | Vignette 1, 3, 4 |

could potentially lead to issues such as addiction among adolescents, which is beyond the scope of this study but an important topic of future research.

Comparable to youth communities, LGBTQ communities, and OHCs, Chinese women gamers are a marginalized community, representative of a generation of young women in China who have an increased feminist awareness [15, 67, 92, 101], but have witnessed the shocking juxtaposition of the censorship of the #Metoo movement in China [59–61, 106] and daily reports of domestic abuse and family violence [37]. Yet, due to generational differences, the support they receive from their family is minimal [41]. It is in this context, we argue, that the young female gamers turn to *Mr. Love* and each other for social support through which silenced voices are allowed to speak. In a game of *Love*, they speak to and for one another.

3 METHODOLOGY

3.1 Data Collection

In this study on otome gamers and their online gaming community in China, we ask the following research questions: do the players of *Mr. Love* receive social support in the game and in their online gaming community? If so, what are the different types of social support and how do these various types of social support manifest among the gamers?

To answer these research questions, we conducted a qualitative study (IRB approved in December 2022) on the players of *Mr. Love* based on the Weibo Supertopic of *Mr. Love*. For the period of April 13th to 17th, 2023, we collected quantitative data for preliminary analysis, which we later used to guide our in-depth qualitative analysis of the community. We collected all the posts from the first 100,000 pages in the Weibo Supertopic of *Mr. Love*. This number represents the maximum limit set by the Weibo API. For preliminary quantitative analysis, this study retrieved 904,943 original posts dated from April 26, 2020 to April 14, 2023.

For the period of March 2023 to July 2023, we focused on qualitative data collection. One of the researchers in the team is a long-term player of both Chinese and Japanese otome games, with more than five years of experience playing various otome games. She played *Mr. Love* when the game launched in 2018. Other researchers in the team all had different levels of engagement with women’s culture in China. She and two other researchers started with participant

observation in the Weibo Supertopic of *Mr. Love* from March 2023 to June 2023. Given the public nature of the Weibo Supertopic, we did not perceive any potential risks in conducting participant observation in the online community after careful anonymization of the user data. To ensure that the collected data is securely anonymized, we only shared anonymized screenshots and did not use any user account names in the memos.

As the last step of our data collection, we conducted 12 semi-structured interviews from May 2023 to July 2023. Of the 12 interviewees aged between 20 to 35, four were recruited through snowball sampling by the researcher who is a long-time player of the game; eight were recruited through a call for interviewees in the Weibo Supertopic. The interviews ranged from 41 minutes to 4 hours. A total of 22 hours 13 minutes of interview has been conducted. We hit saturation after nine interviews in that no new themes, ideas, or opinions emerged. Interviewees were recruited based on the criteria of (1) having played the game *Mr. Love* (2) having been active in the Weibo Supertopic either as an audience or as a commenter or poster. Table 1 shows the demographic details of our interviewees. For more detailed discussion of the gender ratio of interviewees and an incident that took place in our attempt to recruit more male participants, please see Section 5.3 “A Game for Heterosexual Women Only.” To ensure anonymity, all the interviewee’s names were removed by the interviewers before any interview data was shared among the researchers in the memos. Following the first author’s university IRB guidelines and the ACM code of ethics [18], we preserved the anonymity of the interviewees in the presentation of the data in this research.

3.2 Data Analysis

We conducted a primarily qualitative analysis on the collected data by using ethnographic methods, including in-depth interviews and participant observation. We used quantitative data for preliminary analysis to ensure that we have a comprehensive overview of the entire community.

As the first step of our analysis, two researchers in the group manually looked through the top 1,000 most active accounts (account received most interactions, which is the sum of likes, shares, and comments). This step allowed us to have a better understanding of the Weibo Supertopic users, and specifically, the proportion of promotional accounts versus regular non-promotional accounts in the Weibo Supertopic. To gain a deeper understanding of the relationship between the players in the community, we then manually summarized the special terms of address in the collected posts and calculated the number of posts in which these terms appeared, the results of which we report in Vignette 1.

As the second step of our analysis, a total of 11 memos were written, shared, and discussed in bi-weekly group meetings. Based on extensive group discussions in this period, social support has emerged as an overarching theme. We followed up with this discovery by conducting 12 semi-structured interviews and composing 13 memos in total, one covering each interview, with the last one covering the incident of recruitment of male participants (a report on this incident can be found in Section 5.3). As the last step of our analysis, the first author conducted literature review, and at the same time, all researchers shared and discussed their interview

memos iteratively to check whether our findings confirm existing literature on the four types of social support.

3.3 Positionality and Limitations

The researchers of this study are a group of young Chinese women who are interested in exploring women's culture in China through a scholarly lens. The majority of us have published or are currently working on papers about women's issues in China. We acknowledge that our insights into women's issues in China are limited by our perspectives and experiences. Our lived experiences are not representative of women's experiences in China, which are drastically varied in nature. We have conducted this study in a reflective way that acknowledges our limitations and gives voices to our participants.

Therefore, first of all, as the researchers of this study all have had various levels of engagement with women's culture in China, our role as interviewers might lead to potential interview bias. For example, the interviewees might be inclined to confirm interviewers' preconceived notions of women's culture in China.

Second of all, the method of in-depth interview itself might cause self-report bias of the interviewees. We have employed various tactics to deal with these limitations, but we acknowledge that complete elimination of these biases is impossible. For instance, we have chosen semi-structured interview as one of our key methods to ensure that the interviewers follow an interview guide and avoid preconceived notions (details of the interview guide can be found in Appendix A.1). The interview guide includes questions about both the positive and the negative experiences of the participants in the online gaming community. To reduce self-report bias, we have utilized varied data collection methods aside from interviews, including the collection of participant observation data for four months and the collection of quantitative data for preliminary analysis. We hope to explore more data collection methods and expand upon this study by conducting comparative studies of different otome games and gaming communities in future work.

4 RESULTS

Here, we briefly report the results of our preliminary quantitative analysis. We collected a total of 904,943 original posts for the period of April 26, 2020 to April 14, 2023. Among the most active accounts, we have found 43 promotional accounts which included the official account of *Mr. Love*. These promotional accounts have posted 6,042 times in the discussed period and received 13,766,602 interactions (Mean=344,105.37, Median=62,408.50, SD=1,312,358.60). This shows the dominance of the promotional account in the Weibo Supertopic of *Mr. Love*. However, importantly, we noticed that the sharing of information regarding game mechanics and game-related merchandise was a significant part of the content posted by the promotional accounts and of the responding comments. This discovery aligns with the results of our in-depth interviews, as some interviewees observed that a large proportion of the content in the Weibo Supertopic is content related to game mechanics and merchandise (for more details see Vignette 2).

We noticed that there were other active accounts such as creative accounts that posted fan-fiction content on a regular basis. We have found 42 creative accounts among the most active accounts.

They have posted 3,695 times over the discussed period and received 1,631,007 interactions (Mean=38,833.50, Median=24,038.00, SD= 55,141.79). The Mann-Whitney U test indicates a statistically significant difference in interactions between the promotional and the creative accounts ($Z = -3.256$, $p = 0.001$), with the promotional accounts receiving more interactions.

In the four subsections below, we report our results in four Vignettes addressing each category of social support – emotional support, informational support, instrumental support, and esteem support.

4.1 Vignette 1 - Emotional Support: “The meaning of their existence is to love me.”

In the following four Vignettes, we report our findings of the four types of social support in the otome game of *Mr. Love*. We start with emotional support, both in the game and in the gaming community. Our findings are as follows:

- (1) *Mr. Love* offers players a valuable form of emotional support by providing them with the opportunity to build deep emotional connections with the male characters.
- (2) Players also form emotional bonds and friendships with other players in the Weibo Supertopic.
- (3) The emotional bonds of the players are demonstrated by the affectionate and intimate way they address one another in the community.

Many Interviewees stated that their interactions with the male characters should not be viewed as “a mere gaming experience,” but rather be seen as a “real romantic relationship,” because they felt genuine love and deep emotional connections with the male characters. Several interviewees (Interviewee 7, 8, 11, see Table 1) described their parasocial relationships as “pure love.” They added that they valued the unconditional love, understanding, and companionship that the male characters provided to them. Interviewee 11 (see Table 1) said, “They (the male characters) are created to love me. The meaning of their existence is to love me. Therefore, I will also give them my infinite love.” She described her feelings towards the male characters as “ineffable” in the sense that no words could capture the depth of her love.

Interviewees generally stressed a strong sense of companionship that they felt with the male characters, especially when they needed emotional support. The game features are carefully designed to cater to the emotional needs of young women across different real-life situations, creating a perception that the male characters are always there to support them. For instance, Interviewee 8 (Table 1) shared a moment when she was feeling sad and lonely after a shower. Upon reading a coincidental message from the in-game character Qiluo Zhou, “Come over here. Let me blow dry your hair,” she was deeply moved and burst into tears.

The game seems to allow the players to experience profound emotional connections and explore the positive aspects of relationships, while protecting them from the potentially negative aspects of real-life relationships, such as betrayal. Some interviewees (Interviewee 8 and 12, see Table 1) expressed that the game has satisfied all their emotional needs, which made an offline romantic relationship unnecessary. Interviewee 12 (Table 1) described the game as an

“emotional experience product” which extracted the emotional experience out of a real-life romantic relationship and made it “purer.” Similarly, Interviewee 6 (Table 1) noted,

Interview Excerpt 1. I have little trust in relationships and humans in “sanciyuan” (“three-dimensional space,” meaning offline life), but “erciyuan” (“two-dimensional space,” which refers to the world of animation and comics) gives me a sense of security I need. In Erciyuan, I have full control and don’t have to guess how things will develop. It brings me emotional satisfaction that surpasses what I experience in the real world. In short, it (the emotional satisfaction brought about by Erciyuan) has no risk of betrayal and they (Erciyuan characters) are always passionate.

Interviewee 8 expressed similar sentiment, adding that “falling in love with real people often involved risks and complicated issues.” The game, however, was a safe space where she could let her guard down and experience emotional connections with others.

In addition to receiving emotional support from the male characters in the game, the players of *Mr. Love* also form emotional connections and friendships with other players in the Weibo Supertopic community. Since playing otome games is a niche hobby, it can be challenging for the players to find people in their real-life social circles who can relate to their interest. The Supertopic serves as a crucial platform for them to engage in discussions and share their experiences with others who understand their passion. As Interviewee 6 (Table 1) explained, it was the shared passion for the game that served as a bond among the players in the Supertopic. Interviewee 1 (Table 1) also said,

Interview Excerpt 2. The Supertopic consists of young girls who are in need of love, and we gather here to offer each other mutual support. We experience love with the male characters in the game and also receive love from other players in the Supertopic. We encourage and support each other.

Our observations reveal that players not only share gaming experiences, but also frequently share their personal struggles in their offline life in the Supertopic. While many of these posts may not be directly related to the game itself, and hence often have the specification “unrelated to *Mr. Love*, delete if you find it inappropriate” at the beginning (also see Vignette 3), numerous players willingly respond with empathy and compassion. For example, Interviewee 12 (Table 1) stated that, “I often responded to younger players seeking emotional support because I saw my younger self in them, and so, I wanted to help them navigate their emotional difficulties in the same way I would want to help my younger self.”

The emotional support shared by the gamers is also shown in the often affectionate and intimate way in which they address each other. More specifically, instead of adopting generic personal pronouns, such as “you,” “we,” and “they,” most players tend to situate themselves in the context of the game (having a romantic relationship with the male characters) and address other players as “madam,” “sister,” “Mrs,” or “wife” (see Table 2). These terms are typically used by a husband to call his wife or by wives or concubines with the same husband to address each other in ancient Chinese society. On some occasions, players also address others as “mom” or “baby.” Based on our participant observation, the use of “mom” or “baby,” both indicating a sense of dependence, is most common in enquiries about game mechanics, discussions regarding the purchase of game-related merchandise, or questions about how to manage one’s game account. This unique way of addressing

Table 2: The frequency of the special terms of address occurred in the *Mr. Love*’s Weibo Supertopic community for the period of April 26, 2020 to April 14, 2023.

| Total <i>Mr. Love</i> ’s Weibo Supertopic posts | | |
|---|-----------|-------|
| | 904,943 | |
| Terms of address | Frequency | % |
| 夫人/夫人们(Madam) | 89,187 | 9.86% |
| 姐妹/姐妹们(Sister) | 64,293 | 7.10% |
| 太太/太太们(Mrs) | 21,947 | 2.43% |
| 咪/咪们(the abbreviation of “Mom”) | 8,611 | 0.95% |
| 妈咪/妈咪们/亲妈(Mom) | 5,236 | 0.58% |
| 宝宝/宝宝们(Baby) | 2,186 | 0.24% |
| 老婆/老婆们(Wife) | 1,997 | 0.22% |
| 美女/美女们(Beautiful girl) | 549 | 0.06% |

one another is widely employed and seemingly a norm within the gaming community.

By developing a unique way to address one another in the Weibo Supertopic community, the players of *Mr. Love* reinforce their in-game identity which is the romantic partner of the male characters in the game. Notably, many players also address one another as “Madam Li” or “Mrs Li” by attaching the last name of their in-game romantic partner, in this case Li Zeyan, to their online titles. These more intimate titles not only allow the players to identify other players who share the same in-game romantic partner, but also enable them to extend their in-game identity to the online gaming community or to their real life. Addressing other players with their in-game identities has evolved into a group norm, which allows the community members to distinguish the “insiders” and the “outsiders” based on the choices of address terms. The strengthening of group identity and the formation of group norms enhance players’ sense of belonging in the Weibo Supertopic community. This sense of emotional belonging and solidarity in turn motivates players to provide more support to other members inside the community.

According to the quantitative data we collected from the Weibo Supertopic, the most prevalent address term is “madam.” Nearly 10% of the collected posts incorporate the singular or the plural form of “madam,” as demonstrated in Table 2. The prevalence of “madam” as a term of address is in accord with our interview data and participant observation. For example, Interviewee 1 (see Table 1) mentioned that she preferred using “madam” to address others because it was the “norm” in the community. Interviewee 8 also stated her preference for using “madam” as she believed it made more sense than calling others “fans” of the male characters. The second most popular address term is “sister” (7.10%), followed by “Mrs.” (2.43%), and the abbreviation of “mom” (0.95%) (see Table 2).

Notably, the majority of the address terms commonly used in the Weibo Supertopic are feminine word items, even though the actual gender of the addressees is unknown. Those terms represent different female roles in society. The dearth of masculine and gender-neutral address terms reveals the emphasis of heteronormativity and the shared identity of heterosexual women among the players. This is supported by the interviews. For instance, Interviewee 11 (Table 1) stated that men should stay away from otome

games, and she “cannot think of any way this kind of game is attractive to them.” She added that “If they do play, they should keep it to themselves. This is a tacit consensus in the Weibo Supertopic community.” In other words, this unique way in which the players address one another is intricately linked to the community’s tendency to exclude male players. Further discussion of this topic is in Section 5.3.

Aside from the community’s tendency to exclude male players, another flip side of the emotional support among the members of the gaming community is that while the emotional connections foster an atmosphere of trust and friendship, the trust also allows some individuals to take advantage of this trust and engage in fraudulent activities. For instance, Interviewee 8 (Table 1) shared a story about a player she had developed a deep emotional connection with, only to discover that the person was actually a fraud. Although she didn’t suffer any financial loss in the end, she felt manipulated. Besides, her phone number was leaked. This highlights the importance of incorporating privacy protection measures into the design of gaming community platforms.

4.2 Vignette 2 - Informational Support: “I was moved by the collaborative environment. I had the feeling of being supported.”

In this vignette, we illustrate how the players of *Mr. Love* exchange informational support. Our findings are threefold:

- (1) One of the main forms of informational support among the players is the exchange of information about game mechanics.
- (2) The Weibo Supertopic community is the main space in which informational support among players takes place.
- (3) Some players regard the Weibo Supertopic only suitable for informational support, but unsuitable for more intimate types of social support due to the constant hostile exchanges among players.

Many interviewees shared experiences of providing or receiving information about game mechanics from other members of the Weibo Supertopic community. For instance, one interviewee (Interviewee 9, see Table 1) said,

Interview Excerpt 3. Usually, I offer help when other players encounter some problems in the game, for instance, when they don’t understand parts of the game, or when some new players just started playing the game. As the game has been around for a long time, there’s quite a lot of content for a new player to go through. For a new player, it is a very complicated thing. Basically, I will tell them how to play the game, or the general background content, etc.

Since *Mr. Love* does not offer in-game options to players to socialize, chat, and exchange information, the Weibo Supertopic is considered by many as the main channel through which the exchange of knowledge takes place. Both our observational data and interview data show that the Weibo Supertopic serves as the essential platform where *Mr. Love* players exchange informational support.

Another interviewee (Interviewee 11, see Table 1) shared the experience of receiving informational support in the Weibo Supertopic community,

Interview Excerpt 4. I only post on Weibo (Supertopic) when I have a question and need help from others. I also like reposting the content I like from others. I feel that all the girls in the community are very nice. Once, I didn’t know why there was only one side of Ling Xiao’s (one of the main male characters) cards. I posted the question on Weibo, and many girls replied to me. I was moved by the collaborative environment. I had the feeling of being supported.

This excerpt shows that the seemingly practical exchange of information about game mechanics can become a moving collaborative experience for players who were previously complete strangers to one another. Interviewee 8 (Table 1) commented that “I was thrilled to see so many strangers helping me with the game, solving my various problems. I felt like I was playing the game with a lot of people at the same time.” According to the interviewees, many of them remain strangers after practical exchanges on Weibo, while some become online friends.

There are, of course, players who have had a less positive opinion towards informational support in the Weibo Supertopic community. For example, one interviewee commented (Interviewee 7, see Table 1),

Interview Excerpt 5. I feel that mutual assistance among players is only limited to occasions when the interests of the players are involved. It’s mostly about how to minimize the drill to get the cards, share redemption codes, this kind of game strategies. I don’t feel that there’s much mutual support other than that. The most you can see (in the Weibo Supertopic community) is all the wives arguing with one another, or demanding Papergames (the game design company) to change the game mechanics, or cursing Papergames.

A few other interviewees shared a similar observation of frequent quarrels among players in the Weibo Supertopic community. For instance, Interviewee 9 (Table 1) said, “The Supertopic is not a particularly good environment because of the constant arguments over petty things. I’m not a big fan of the Supertopic.” Similarly, Interviewee 6 (Table 1) revealed, “I was reluctant to join the Supertopic in the beginning because of the hostility of the chats, but I eventually decided to join as I wanted to know the news about the merchandise.”

These comments show a different side of informational support among players in the Weibo Supertopic community. To them, the community has degraded over the years into a space only suitable for exchange of practical information, but unsuitable for “mutual support” in the sense of more intimate emotional or esteem support among the members. To improve the Weibo Supertopic community and enable better social support among players, the interviewees proposed different strategies, including reporting hateful posts (Interviewee 10), blacklisting posters who make hateful content (Interviewee 10), and setting rules on what content to ban (Interviewee 5).

4.3 Vignette 3 - Instrumental Support: “Unrelated to *Mr. Love*, delete if you find it inappropriate.”

Apart from informational support with game mechanics, as illustrated in the previous vignette, players also gain instrumental support from one another. We find that:

- (1) The players of *Mr. Love* receive instrumental support through the game, especially through the “safety” function which aims to protect female players in real-life situations of harassment.
- (2) The players also receive instrumental support from one another in the gaming community dealing with personal real-life matters outside of the game.

Two of our interviewees (Interviewee 3 and Interviewee 9 respectively) demonstrated how the “safety” function within the game may protect single females in potentially dangerous situations in reality. Notably, the “safety” function is a new function through which players can play pre-recorded messages in the game that resemble a casual phone call with a significant other.

Interview Excerpt 6. As the safety of women living alone has triggered debates among the public, I remembered that *Mr. Love* incorporated a new “safety” function. It allows single female players to mislead others that a man is on the phone with her and she is not alone. Many people appreciate that. (Interviewee 3)

Interview Excerpt 7. After the Tangshan incident, we suggested (to the game design company) adding recordings of the male characters in the game so that when a woman walks by herself or orders takeout by herself at night, she can make others think that she is not alone. The company accepted our suggestions and implemented it immediately. (Interviewee 9)

The Tangshan incident refers to the notorious case of sexual harassment and physical violence against four women by a group of men in Tangshan on June 10th, 2022. The incident spurred fervent discussions on the Internet about sexual harassment against women in public spaces in China. As feminism and the #MeToo movement have become increasingly sensitive topics on the Chinese Internet, most of the sexual harassment cases were unreported or actively covered up by mainstream media. The Tangshan incident remained one of the few reported sexual harassment cases in the past few years. The discussions of the Tangshan incident among the female players followed by the addition of the new “safety” function, however, might have led to an increased tendency among *Mr. Love* players to exclude male players from the gaming community. A more in-depth discussion on this topic can be found in the Section 5.3.

Aside from in-game instrumental support, we also found that players offer instrumental support to one another, for instance by helping one another with purchasing game-related merchandise. Interviewee 2 (Table 1) mentioned her participation in an online chat group where players who were interested in purchasing the same merchandise gathered to earn complimentary gifts via group buying. Interviewee 12 (Table 1) shared her experience of providing help in an offline game event:

Interview Excerpt 8. Once, I went to an offline event to purchase merchandise. One person was limited to only two pieces of the merchandise. I arrived at the venue at 4 or 5 a.m. and met a high-school girl who loved Li Zeyan. She arrived around 6 a.m. and was at the back of the queue. Since Li’s merchandise might sell out quickly due to his popularity, it could be hard to get one when you are not at the front of the queue. That girl asked others if they could give her one quota to buy more Li’s products. I felt her love for Li and was touched by her persistence, so I helped her, as I only wanted to buy one item of the other character anyway.

Instrumental support also extends to personal real-life matters outside of the game. Such posts are usually specified as “unrelated

to *Mr. Love*, delete if you find it inappropriate” at the beginning, as mentioned by Interviewee 8 and Interviewee 12, which is also in line with our participant observation data. This kind of instrumental support varies from volunteering in a research project (Interviewee 3, see Table 1) to a private fundraising event (Interviewee 9, see Table 1):

Interview Excerpt 9. When some players implement an (academic) research project, they need to invite others to complete online questionnaires. They do so by creating posts to call for participants on the Weibo Supertopic. Sometimes other players will repost the call to seek help from more players and to assist the initiator in obtaining more responses. (Interviewee 3)

Interview Excerpt 10. What impressed me most was that there was once a player stated that one of her family members had been suffering from a severe illness. She organized an online fundraising event (for that family member) and posted the link in the Weibo Supertopic. I saw it and took part in the fundraising. (Interviewee 9)

In short, instrumental support appears not only inside the game, but also among players through interactions in the Weibo Supertopic. The “safety” function requested by the players, in particular, might have intensified the idea among the female players of precluding male players from joining the Weibo Supertopic community, which will be further examined in the Discussion section.

4.4 Vignette 4 - Esteem Support: “I have learnt to accept myself.”

In this Vignette, we report our findings on esteem support in *Mr. Love*. A summary of our detailed findings is as follows:

- (1) The interviewees generally reported positive impacts brought about by the game on their self-esteem.
- (2) The compelling game experience prompts them to work towards personal growth and fulfillment and helps to boost their confidence and self-acceptance.
- (3) The exchange of esteem support among the players outside of the game also facilitates their development of self-esteem.

We find that the players tend to perceive the male characters as individuals who possess perfect qualities. As the characters’ romantic counterparts, the players thus have a strong desire to match these “perfect qualities” so that they see themselves as worthy of their love (Interviewee 5, Interviewee 6, Interviewee 8, Interviewee 9, Interviewee 11, see Table 1). Moreover, the romantic relationship in the game drives the players to acquire new skills that the male characters have, such as problem solving, maintaining a healthy schedule, and managing personal finances, etc. Interviewee 9 (Table 1) noted that,

Interview Excerpt 11. I used to be a lazy procrastinator, but Li Zeyan taught me the importance of addressing problems promptly. In the past, I would stay up late and oversleep, but he always sleeps and wakes up early. I’ve learnt this from him and now also have a regular sleep schedule. He is always there for me as I try to improve myself. He is such a wonderful person. If I don’t put in the effort to improve myself, the gap between us will only widen. Therefore, I must become the best version of myself in order to grow closer to him.

Besides, the female avatar in *Mr. Love* has undergone significant growth as a character in the storyline. Adopting the perspective of the avatar also offers the players opportunities to learn from and

relate to the avatar. Interviewee 11 (Table 1) stated that the positive transformation of the female avatar inspired her to become braver and stronger in her real life.

Besides the in-game experience, the exchange of esteem support in the Weibo Supertopic community also facilitates the players' self-improvement. For example, Interviewee 6 (Table 1) mentioned that some players shared their stories in the Supertopic about how they developed good habits from playing the game. She also learned to improve her self-discipline by drawing inspiration from the tactics other players had shared.

Our observations also showed that teenage players frequently discussed their interpersonal challenges within the gaming community. In response, other players often provided reassurance, emphasizing that the difficulties were not their fault. They encouraged the posters to focus on their studies and personal growth instead of being distracted by these interpersonal issues.

The interviews revealed connections between the players' unpleasant offline relationship and their commitment to the game. In contrast to the disrespectful relationship the players had in their real life, the unconditional love and respect that they experienced in the game fostered in them a sense of security and support. Many interviewees reported that the unconditional love and respect from the male characters positively impacted their self-worth. For instance, Interviewee 1 (Table 1) stated that "I started to play the game at high school. Back then, it made me feel I am an extraordinary girl. Although my crush at the time did not like me, the four male characters always did." Several interviewees confessed that they struggled with their self-esteem in their offline relationships, but because of the game they had experienced a shift in mindset from self-doubt to self-acceptance. As Interviewee 10 and 11 (Table 1) described respectively,

Interview Excerpt 12. I was once someone with low self-esteem and always felt unworthy in a relationship. My ex-boyfriend said hurtful things to me. I was lacking confidence, and felt that I was not good enough for him. The best thing about Li Zeyan that touches my heart is that he always encourages me. The male characters all respect women. They are ideal boyfriends. They won't criticize me for my mistakes but always encourage me to keep going and give me great motivation and confidence. (Interviewee 10)

Interview Excerpt 13. After ending a relationship, I found myself constantly questioning the reasons behind our breakup. Why? Was it because I wasn't good enough? However, now I am cool with being single. I just don't want to enter a relationship at the moment. I have learnt to accept myself. (Interviewee 11)

The healthy and supportive in-game parasocial relationship established for the players certain romantic ideals and expectations which in turn supported them to seek out offline relationships based on gender equality and self-acceptance. By interacting with the male characters with different personalities in the game, they gradually developed the idea of what a decent romantic relationship meant to them. Interviewee 1 (Table 1) even shared her experience of asking her ex-boyfriend to play the game so that he could learn how to treat a woman respectfully. Interviewee 4 (Table 1) mentioned approvingly that as a male player he often heard other male players playing the game to "learn to be a good boyfriend."

For some players, playing *Mr. Love* improved their sense of self-worth and self-esteem by fulfilling their other ideals besides romantic love, such as social class and material needs. The four male characters in the game are neuroscientist, successful businessman, talented superstar, and police commissioner, all of whom are highly accomplished individuals in their own fields. Being in a relationship with these characters who have a high social class created a sense of validation and status for the players. Interviewee 7 (Table 1) stated that she has a small social circle. She confessed that "Li Zeyan is a president (of a company) and also my boss (in the game). He has power and a lot of money. Even if I don't consider anything else, his in-game identity alone gives me a sense of security."

Although *Mr. Love* provides esteem support to the players by providing them with experiences of respectful in-game parasocial relationships and allowing them to connect with each other in the Supertopic, the otome game is, however, eventually a consumer product that is largely driven by commercial interests. Some interviewees mentioned that they worked hard and developed new skills to make money to purchase in-game assets and game-related merchandise, which is a common practice among the players. This points to a darker side of esteem support in the game. By definition, self-esteem is a sense of self-worth independent of financial status or external validation. However, the game design company takes advantage of the player's need for esteem support and lures them into paying for something that cannot and should not be purchased.

The relationship between the game design company and the players as consumers of their product is, however, an extremely complex one. As Interviewee 9 (Table 1) stated,

Interview Excerpt 14. Women are often seen as possessions of men in our society, which is an idea that makes me feel very uncomfortable. But, otome games serve the needs of women. Therefore, there should never be any content in the games that discriminates or disrespects women. Otherwise the game design company will become a target of criticism.

Here, Interviewee 9 not only underlined the fact that otome games are essentially a type of female-oriented consumer products, but also highlighted that as a consumer she was aware of the commercial interests of the game design company. Moreover, the excerpt showed that female gamers were also using the game design company to help them design a game that cannot "discriminate or disrespect" them. In other words, consumerism in otome games is in fact welcomed and reinforced by the female players. Other interviewees also shared similar observations. For instance, Interviewee 12 (Table 1), a long-time otome game player, said that she started to play otome games because other games are "made from men's perspective," and as a female player she felt "a sense of discomfort" when playing these male-dominated games. Commenting on the status of otome games as female-oriented consumer products in China, Interviewee 2 (Table 1) succinctly summarized: "I am well aware that otome boyfriends are made by women for women, but men are not." A more in-depth discussion on the limitations of the otome game as a consumer product is in Section 5.2.

5 DISCUSSION

Although otome games have become a popular form of entertainment and a significant channel of social interactions in Asia and

worldwide, there has been relatively few studies in HCI examining the potential of otome games in supporting social interactions among players [34, 42]. In this empirical study, we discuss a new dataset based on the players of the otome game *Mr. Love* in China. We have reported the results of our empirical study in the previous section, focusing on four types of social support present in the gameplay. In the Discussion section, we extend our analysis of social support in *Mr. Love* through discussing the contradictory expectations of the players (Section 5.1.), the consumerist aspect of the otome game (Section 5.2.), the limitations of the gaming community in terms of gender stereotypes and heteronormativity (Section 5.3.), and finally, the design implications (Section 5.4.).

5.1 Contradictory Expectations

When examining different types of social support in online health communities (OHCs), previous studies found that while emotional support and informational support can complement each other, they “can also lead to contradictory priorities and expectations” [73]. Our study confirms this finding in showing how some players value emotional support as their priorities but find the Weibo Supertopic community only suitable for what they deem as a “lesser” form of mutual assistance which is informational support. For instance, in Vignette 2, Interviewee 7 commented on the overall lack of “mutual support” among *Mr. Love* players apart from “the occasions when the interests of the players are involved.” Following this comment, Interviewee 7 gave a long list of activities through which players offered informational support to one another in the Weibo Supertopic community. Other interviewees (mentioned in Vignette 2) stated similar observations of the practical nature of the social support among *Mr. Love* players online.

There are many layers to this interesting phenomenon of contradictory priorities and expectations among the players. Firstly, the players’ complaint of the lack of intimate forms of social support reveals a sense of hierarchy of the different types of social support, with instrumental and informational support being the more basic types of social support, which confirms the findings of previous literature [31]. The interviewees, to various degrees, showed preference towards the more intimate forms of social support such as emotional and esteem support. However, the contradictory expectations of the players led to the fact that while all of them have found the more intimate forms of support in the game either through their parasocial relationship with the male characters [13, 34, 39, 84] or through their identification with the female avatar [28, 57, 58] (see Vignette 1 and 4), only some of them felt that they have found intimate friendships and support with the other players in the gaming community.

Secondly, conflicting expectations from the players can also be the results of the unreasonably high expectations of the players towards the game. Previous literature has discussed the significance of more inclusive game design especially in considering the needs and representation of women and other marginalized populations [77, 82, 83]. Our study advances existing literature on inclusive game design by showing the complicated case of otome game players in China. Due to the dominant voices of male gamers in the video game industry in China and worldwide and the lack of video games designed for women [62], many young Chinese women

gather around the otome game genre in the hope to build their own unique gaming experiences and gaming communities. The rising feminist awareness in China in recent years [15, 67, 92, 101] and the dire reality of increased censorship on feminism in China [59–61, 106] created yet another desperate need among the female gamers: to create a feminist community. All these complex needs and desires simply cannot be met by one game. Despite its many limitations, the female gamers have built their own community on Weibo through offering social support to one another and mostly self-organization online.

5.2 A Consumer Product Under the Facade of Pure Love

Our findings are consistent with Kim’s (2014) earlier study which found that consumerism in game is not solely imposed by game developers but is also willingly reinforced and practiced by players [51]. Through our empirical study, we add to Kim’s study [51] by demonstrating that consumerism reinforced and practiced by players could potentially cause a backlash against the game design company. In this case, the virtual consumerism led to online collective actions among the *Mr. Love* players.

The players of *Mr. Love* see the game both as a source for “pure love” (see Vignette 1), and contradictorily, a consumer product (see Vignette 4). As discussed in Vignette 1 “Emotional Support” and Vignette 4 “Esteem Support,” the female players feel a strong emotional bond with and a genuine affection for the male characters. However, at the same time, the players also understand that the game is eventually a consumer product that is carefully tailored by the game designers for the specific needs of the female players. To ensure a more engaging gaming experience, the players often invest in the game financially to progress the story or unlock additional chapters. They also actively share their collection of in-game assets or game-related merchandise in the Supertopic as a way to build connections with other players. Obtaining social support is a significant aspect of their gaming experience, but is often facilitated through their consumption behaviors.

In our observation, we documented a protest against one of the recent updates of the game in the Weibo Supertopic community. The protest involved a significant number of *Mr. Love* players. The players called on each other to refrain from spending money in the game and demanded an official apology from the game design company for its heartless profit-driven tendencies. The existing network of social support among the players quickly transformed into a network of online activism [85]. The incident demonstrates the potential for gaming communities to engage in collective actions to defend their consumer rights. The topic of how gaming communities provide potential networks of online activism is an area for future inquiry.

5.3 A Game for Heterosexual Women Only

Previous literature has argued that otome games “may indirectly influence players’ idealized romantic beliefs” [91]. Through our empirical study on *Mr. Love*’s players, we reject such an argument by clarifying the complicated relationship between otome games and romantic ideals, which may have been simplified by the statement. The statement implies a causal relationship between the two which

is not supported by the data we collected. Specifically, Vignette 4 shows that sustaining romantic ideals is a form of esteem support the game provides to the players and the players provide to one another to help them persevere in their search for romantic relationships based on gender equality and mutual respect. In other words, the otome game does not cause the players' "idealized romantic beliefs," but rather, provides an experience and a community through which the players support each other to continue their fight for the ideal of gender equality in romance and beyond. Moreover, the statement that otome games "may indirectly influence players' idealized romantic beliefs" [91] implies that women play otome games only to fulfill their needs of romance and marriage. Our study, however, shows that female gamers have complex needs and expectations they want to fulfill through the gameplay (also see Section 5.1 "Contradictory Expectations").

There are few previous comparative studies on Chinese otome games. The few existing studies compared Chinese women players' gaming experience in an otome game versus a multiplayer online battle arena (MOBA) game [62], or compared female avatars' images in different otome games [16, 43]. Considering the particularities of Chinese women players' gaming experience in otome games, we believe that a comparative study focusing on the social support provided by *Mr. Love* versus other otome games would be an important topic of future research.

Although *Mr. Love* provides the player with various types of social support they need in the search of gender equality in romantic relationships, the daily interactions of giving and receiving support are largely based on binary gender roles and a shared heterosexual identity. This is consistent with previous research that finds games reinforce a heterosexual view on love and marriage [29, 51, 81]. In the gaming community of *Mr. Love*, only women are perceived to be legitimate partners of the male characters, whereas men are excluded.

During the process of data collection, we attempted to recruit male players for an interview and posted a call specifically for male players in the Weibo Supertopic community. It resulted in mostly unfriendly comments from female players arguing that men should not be playing the game. One said, "If you want to be a 'tongqi' ('tongqi' in Chinese means heterosexual women tricked into a marriage with gay men), otome games are not for you." Our interviewees generally expressed similar sentiment (see Vignette 1).

The female players' genuine affection for the male characters leads them to assume that male players of the game are all homosexual men, but there are actually male players who play the game purely for fun or to "learn to be a good boyfriend" (see Vignette 4). The exclusion of men from their community is based on the belief that a heterosexual relationship between the male characters and female players is the default. Female players are acutely aware of the possibility of male players also having a relationship with their beloved virtual partners, but prefer not to be reminded of it. As a result, the possibility of non-heteronormative parasocial relationships in the game remains an underdiscussed topic or even a taboo in the gaming community.

Overall, we agree with existing literature that otome games reinforce heteronormativity and gender stereotypes, which is a key limitation of the game and its online gaming community. However,

in our study we also offer more detailed contextualization of the female gamers and their struggles against gender inequality in China (see Vignette 3 and 4). We stress that the reinforcement of gender norms and heteronormativity needs to be interpreted in the bigger picture of shrinking online safe spaces for women in China and their desperate desire to create one through the game (also see Section 5.1), even if it means to pay for a profit-driven game design company to create a consumer product for them (also see Section 5.2).

5.4 Design Implications and Recommendations

As an online gaming community, *Mr. Love*'s community on Weibo still has many aspects that can be improved. A few interviewees discussed the frequent quarrels among players in the Weibo Supertopic community (see Vignette 2). Previous studies have shown that managing an online gaming community requires a great amount of moderation efforts and tactics [32, 47, 52]. In the case of the Weibo Supertopic of *Mr. Love*, the game design company of *Mr. Love*, Papergames, is the official moderator and manager of the Weibo Supertopic community. However, Papergames has shown little interest over the years in constructing a friendly, functional, and supportive online gaming community for the players. Our quantitative data shows that most of the content posted by the official account of *Mr. Love* is advertisement. Our observation also shows that the three moderators of the Weibo Supertopic community are customer service representatives likely employed by Papergames. Since the Weibo Supertopic community is officially owned and managed by Papergames, the players lack necessary tools and access to rebuild the Weibo Supertopic community to fit their own needs, even if they desperately want to. Despite its many drawbacks, the Weibo Supertopic community is still the main place where players seek and offer social support to one another.

As of now, the players remain drawn between two imperfect but tolerable options: to be a member of the Weibo Supertopic community for a sense of belonging to a bigger family, or to join much smaller private groups on WeChat, Weibo, Xiaohongshu, or other social media platforms for less consumerist content and safer communications online. This finding confirms prior literature on online communities which shows that online communities need to meet the needs of individual members to thrive in the long run [3]. In order to ensure that only communities provide the experiences and social support members seek, moderation is required [10, 36, 47]. The lack of moderation can lead to low-quality content and unfriendly disputes among members which will ultimately lead to the "degradation of the community" as observed by some interviewees in our study (Vignette 2). This is the conundrum faced by the *Mr. Love* players. They want a safe online space in which they can exchange social support and their online gaming community can thrive, but they have no access to the moderation practices and tools which are monopolized by the game design company. The little moderation they achieved in the Weibo Supertopic was accomplished through establishing implicit norms and rules among themselves (Vignette 1). If they leave the Weibo Supertopic community to build smaller communities with stronger moderation on their own, they are faced with the issue of having to forgo the main community on Weibo and many of the online contacts they

have there. This raises interesting questions about the relationship between gamers and game design companies, and their respective roles in online gaming communities.

One of the main issues we found in *Mr. Love* is that the game design company only views the players as its customers. Since the game design company views the online gaming community as a profitable channel through which it can sell more merchandise, it views the social support in the community only as a byproduct of its commercial activities. There has been a significant body of work in HCI demonstrating the positive social influences of games and how these positive social influences can potentially affect not only individual designers and game design companies, but also the entire game industry [31, 95].

Ignoring the social influences of its game, the game design company prioritizes the players' parasocial relationships with the male characters rather than the interactions and friendships among the players. Due to this priority, the game design company designs the game in a way that the players are unable to interact with one another inside the game in meaningful ways. As a result, the players have to depend on the Weibo Supertopic community to connect with other players. We recommend that game designers consider more gamer interaction features to enrich the gaming experience.

Moreover, from the perspective of emotional support in game design, *Mr. Love* has demonstrated the value of designing games with emotional impact in mind. This applies to games beyond the case of otome games. In order to properly consider the emotional support and impact of a game, it is therefore important for game designers to involve potential players in the game design process to be able to evaluate their emotional experiences [11, 23, 69]. In other words, emotionally impactful games such as *Mr. Love* have shown that players are not only customers, but also collaborators in creating a gaming experience.

Hence, building on this discussion, we have the following recommendations:

- (1) Game design companies should involve players in the building and management of gaming communities by giving them access to moderation roles and tools
- (2) Game design companies should not treat online gaming communities only as channels to sustain loyalty and increase profits, but pay more attention to the social functions of these communities
- (3) Game designers and game design companies should take into account their social responsibility by designing more inclusive games for women and other marginalized groups.

Another issue of the game is that it reinforces gender stereotypes and heteronormativity in Chinese society. Gender stereotypes are not challenged in the gameplay, but rather further strengthened by the choices of romantic partners. The issue of reinforcing gender stereotypes and heteronormativity is also related to the fact that the design company only views the players as its customers, and hence, it is only interested in designing male characters who will appeal to the most players without considering the cultural and social implications. This is further complicated by the fact that female gamers see the game as a shared experience that

provides the perfect contexts for a women-only gaming community, as discussed in Section 5.3. Therefore, we have the following suggestions:

- (1) When designing otome games, designers should consider designing more diverse male characters outside of existing gender stereotypes in the society.
- (2) Designers should also consider providing players with options of non-heteronormative storylines so that LGBTQ players are not excluded in the gameplay.
- (3) Designers should design the storyline in a way that encourages the players to become aware and reflective of the gender stereotypes in the society and their own gendered experiences in their daily life.

6 CONCLUSION

In this paper, we have examined the social support present in the Chinese otome game *Mr. Love* and its gaming community. Through our empirical study, we have discovered that even though the game was initially designed to be a consumer product, it becomes the basis of an online gaming community in which the players exchange emotional support, informational support, instrumental support, and esteem support. The context of female gamers' struggles against gender inequality in China adds another layer of complexity to the social meanings of the game. This aspect of feminist struggles in the gameplay is further complicated by the fact that the game reinforces heteronormativity and gender stereotypes, which is also a significant limitation of the game and the gaming community.

Previous HCI studies have shown the significance of inclusive game design and the positive social influences of games. Our study advances previous literature by discussing the complicated case of otome games in China. As a previously lesser-known genre of games, otome games post interesting questions to designers and the game industry about the relationship between gamers and game design companies, and their respective roles in gaming communities. The game design company sees *Mr. Love* and its gaming community, which the company also owns and manages, primarily as channels through which the company makes money. The surprising outcome of the abundance of social support among the players signifies the importance of understanding the complex needs and desires of the players. Based on the results of our study, we call for more inclusive design practices that take gender, social identities, and everyday experience of the players into consideration, as well as more conversations on the social functions of games and gaming communities in the larger CHI community.

ACKNOWLEDGMENTS

Special thanks to Pengcheng An and Seungwoo Je for reading versions of this paper.

REFERENCES

- [1] Nazanin Andalibi, Pinar Ozturk, and Andrea Forte. 2017. Sensitive self-disclosures, responses, and social support on Instagram: The case of #depression. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1485–1500. <https://doi.org/10.1145/2998181.2998243>
- [2] Leticia Andlauer. 2018. Pursuing one's own prince: Love's fantasy in otome game contents and fan practice. *Mechademia: Second Arc* 11, 1 (2018). <https://doi.org/10.5749/MECH.11.1.0166>

- [3] Jaime Arguello, Brian S Butler, Elisabeth Joyce, Robert Kraut, Kimberly S Ling, Carolyn Rosé, and Xiaoqing Wang. 2006. Talk to me: Foundations for successful individual-group interactions in online communities. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. 959–968. <https://doi.org/10.1145/1124772.1124916>
- [4] Mariam Asad and Christopher A Le Dantec. 2015. Illegitimate civic participation: Supporting community activists on the ground. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1694–1703. <https://doi.org/10.1145/2675133.2675156>
- [5] Peng Bao, Hua-Wei Shen, Junming Huang, and Xue-Qi Cheng. 2013. Popularity prediction in microblogging network: A case study on Sina Weibo. In *Proceedings of the 22nd International Conference on World Wide Web*. 177–178. <https://doi.org/10.1145/2487788.2487877>
- [6] Weilong Bao. 2022. Current situation and development of trend of Chinese mobile game development. In *2022 2nd International Conference on Enterprise Management and Economic Development (ICEMED 2022)*. Atlantis Press, 460–466. <https://doi.org/10.2991/aebmr.k.220603.075>
- [7] Manuel Barrera Jr. 1986. Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology* 14, 4 (1986). <https://doi.org/10.1007/BF00922627>
- [8] Francesco Bellotti, Bill Kapralos, Kiju Lee, Pablo Moreno-Ger, and Riccardo Berta. 2013. Assessment in and of serious games: An overview. *Advances in Human-Computer Interaction* 2013 (2013). <https://doi.org/10.1155/2013/136864>
- [9] Prakhkar Biyani, Cornelia Caragea, Prasenjit Mitra, and John Yen. 2014. Identifying emotional and informational support in online health communities. In *Proceedings of COLING 2014, the 25th International Conference on Computational Linguistics: Technical Papers*. 827–836.
- [10] Lindsay Blackwell, Nicole Ellison, Natasha Elliott-Deflo, and Raz Schwartz. 2019. Harassment in social virtual reality: Challenges for platform governance. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019). <https://doi.org/10.1145/3359202>
- [11] Julia Ayumi Bopp, Elisa D Mekler, and Klaus Opwis. 2016. Negative emotion, positive experience? Emotionally moving moments in digital games. In *Proceedings of the 2016 CHI conference on human factors in computing systems*. 2996–3006. <https://doi.org/10.1145/2858036.2858227>
- [12] Barry Brown and Marek Bell. 2004. CSCW at play: 'There' as a collaborative virtual environment. In *Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work*. 350–359. <https://doi.org/10.1145/1031607.1031666>
- [13] Jacqueline Burgess and Christian Jones. 2020. "I harbour strong feelings for Tali despite her being a fictional character": Investigating videogame players' emotional attachments to non-player characters. *Game Studies* 20, 1 (2020).
- [14] Stevie Chancellor, Andrea Hu, and Munmun De Choudhury. 2018. Norms matter: contrasting social support around behavior change in online weight loss communities. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. 1–14. <https://doi.org/10.1145/3173574.3174240>
- [15] Jiang Chang and Hao Tian. 2021. Girl power in boy love: Yaoi, online female counter culture, and digital feminism in China. *Feminist Media Studies* 21, 4 (2021). <https://doi.org/10.1080/14680777.2020.1803942>
- [16] Dongna Chen. 2023. Female Characters' Images in Chinese Otome Game and Woman Stereotype.
- [17] Yixin Chen, Ke-Rou Wang, Weikai Xu, and Yun Huang. 2021. Exploring commenting behavior in the COVID-19 super-topic on Weibo. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems*. 1–7. <https://doi.org/10.1145/3411763.3451717>
- [18] ACM Code. 2019. Task Force (2018) ACM code of ethics and professional conduct.
- [19] Amanda C Cote. 2017. "I can defend myself": Women's strategies for coping with harassment while gaming online. *Games and Culture* 12, 2 (2017). <https://doi.org/10.1177/1555412015587603>
- [20] MoonFox Data. 2022. *Shuju baogao: 2022 nian Q3 yidong huanliang wang hangye shuju yanjiu baogao* [Data report: Q3 2022 Mobile Internet Industry Data Research Report]. Retrieved Aug 20, 2023 from https://mp.weixin.qq.com/s/ePDtRr_sNRX49cRe1LQTTw
- [21] Munmun De Choudhury and Sushovan De. 2014. Mental health discourse on reddit: Self-disclosure, social support, and anonymity. *Proceedings of the international AAAI conference on web and social media* 8, 1 (2014). <https://doi.org/10.1609/icwsm.v8i1.14526>
- [22] Zhaoxia Deng and Zhijie Chen. 2023. Balancing creative expression and societal well-being: A comprehensive regulatory framework for the Chinese video game industry. In *Journal of the Knowledge Economy*. 1–28. <https://doi.org/10.1007/s13132-023-01491-7>
- [23] Alena Denisova, Julia Ayumi Bopp, Thuy Duong Nguyen, and Elisa D Mekler. 2021. "Whatever the emotional experience, it's up to them": Insights from designers of emotionally impactful games. In *Proceedings of the 2021 CHI conference on human factors in computing systems*. 1–9. <https://doi.org/10.1145/3411764.3445286>
- [24] Michael A DeVito, Ashley Marie Walker, and Jeremy Birnholtz. 2018. "Too gay for Facebook": Presenting LGBTQ+ identity throughout the personal social media ecosystem. *Proceedings of the ACM on Human-Computer Interaction* 2, CSCW (2018). <https://doi.org/10.1145/3274313>
- [25] Mary Flanagan, Daniel C Howe, and Helen Nissenbaum. 2005. Values at play: Design tradeoffs in socially-oriented game design. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. 751–760. <https://doi.org/10.1145/1054972.1055076>
- [26] Mary Flanagan and Helen Nissenbaum. 2007. A game design methodology to incorporate social activist themes. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. 181–190. <https://doi.org/10.1145/1240624.1240654>
- [27] Game Responsibility Forum. 2020. Yitu xiangjie "shiling tishi" ["Age-appropriate warning" in one chart]. <http://jinbao.people.cn/n1/2020/1228/c421674-31981560.html>
- [28] Guo Freeman and Dane Acena. 2022. "Acting out" queer identity: The embodied visibility in social virtual reality. *Proceedings of the ACM on Human-Computer Interaction* 6, CSCW2 (2022). <https://doi.org/10.1145/3555153>
- [29] Guo Freeman, Jeffrey Bardzell, and Shaowen Bardzell. 2016. Revisiting computer-mediated intimacy: In-game marriage and dyadic gameplay in Audition. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. 4325–4336. <https://doi.org/10.1145/2858036.2858484>
- [30] Guo Freeman, Jeffrey Bardzell, Shaowen Bardzell, and Susan C Herring. 2015. Simulating marriage: Gender roles and emerging intimacy in an online game. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1191–1200. <https://doi.org/10.1145/2675133.2675192>
- [31] Guo Freeman and Donghee Yvette Wohn. 2017. Social support in eSports: Building emotional and esteem support from instrumental support interactions in a highly competitive environment. In *Proceedings of the Annual Symposium on Computer-Human Interaction in Play*. 435–447. <https://doi.org/10.1145/3116595.3116635>
- [32] Guo Freeman and Donghee Yvette Wohn. 2019. Understanding eSports team formation and coordination. *Computer Supported Cooperative Work (CSCW)* 28 (2019). <https://doi.org/10.1007/s10606-017-9299-4>
- [33] Sarah Christina Ganzon. 2019. Investing time for your in-game boyfriends and BFFs: Time as commodity and the simulation of emotional labor in Mystic Messenger. *Games and Culture* 14, 2 (2019). <https://doi.org/10.1177/1555412018793068>
- [34] An-Di Gong and Yi-Ting Huang. 2023. Finding love in online games: Social interaction, parasocial phenomenon, and in-game purchase intention of female game players. *Computers in Human Behavior* 143 (2023). <https://doi.org/10.1016/j.chb.2023.107681>
- [35] Xinning Gui, Yu Chen, Yubo Kou, Katie Pine, and Yunan Chen. 2017. Investigating support seeking from peers for pregnancy in online health communities. *Proceedings of the ACM on Human-Computer Interaction* 1, CSCW (2017). <https://doi.org/10.1145/3134685>
- [36] Hussam Habib, Maaz Bin Musa, Fareed Zaffar, and Rishab Nithyanand. 2019. To act or react: Investigating proactive strategies for online community moderation. <https://doi.org/10.48550/arXiv.1906.11932>
- [37] Ling Han and Chengpang Lee. 2019. Nudity, feminists, and Chinese online censorship: A case study on the anti-domestic violence campaign on SinaWeibo. *China Information* 33, 3 (2019). <https://doi.org/10.1177/0920203X18807083>
- [38] Heidi Hartikainen, Afsaneh Razi, and Pamela Wisniewski. 2021. Safe sexting: The advice and support adolescents receive from peers regarding online sexual risks. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW1 (2021). <https://doi.org/10.1145/3449116>
- [39] Jeffrey CF Ho and Ryan Ng. 2022. Perspective-taking of non-player characters in prosocial virtual reality games: Effects on closeness, empathy, and game immersion. *Behaviour & Information Technology* 41, 6 (2022). <https://doi.org/10.1080/0144929X.2020.1864018>
- [40] James S. House. 1981. *Work stress, and social support*.
- [41] Yang Hu and Jacqueline Scott. 2016. Family and gender values in China: Generational, geographic, and gender differences. *Journal of Family Issues* 37, 9 (2016). <https://doi.org/10.1177/0192513X14528710>
- [42] Shaoqi Hua and Chengli Xiao. 2023. What shapes a parasocial relationship in RVGs? The effects of avatar images, avatar identification, and romantic jealousy among potential, casual, and core players. *Computers in Human Behavior* 139 (2023). <https://doi.org/10.1016/j.chb.2022.107504>
- [43] Yining Huan. 2022. Female representation in Chinese Otome games: Comparative research on three famous games from 2017 to 2021. In *2021 International Conference on Education, Language and Art (ICELA 2021)*. Atlantis Press, 964–970. <https://doi.org/10.2991/assehr.k.220131.175>
- [44] Kim-Phong Huynh, Si-Wei Lim, and Marko M Skoric. 2013. Stepping out of the magic circle: Regulation of play/life boundary in MMO-mediated romantic relationship. *Journal of Computer-Mediated Communication* 18, 3 (2013). <https://doi.org/10.1111/jcc4.12011>
- [45] Adrienne Holz Ivory, Jesse Fox, T Franklin Waddell, and James D Ivory. 2014. Sex role stereotyping is hard to kill: A field experiment measuring social responses to user characteristics and behavior in an online multiplayer first-person shooter game. *Computers in Human Behavior* 35 (2014). <https://doi.org/10.1016/j.chb.2014.05.011>

- 2014.02.026
- [46] Maia Jacobs, Galina Gheihman, Krzysztof Z Gajos, and Anoop S Gupta. 2019. "I think we know more than our doctors": How primary caregivers manage care teams with limited disease-related expertise. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019). <https://doi.org/10.1145/3359261>
 - [47] Jialun Aaron Jiang, Charles Kiene, Skyler Middler, Jed R Brubaker, and Casey Fiesler. 2019. Moderation challenges in voice-based online communities on discord. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019). <https://doi.org/10.1145/3359157>
 - [48] Grace J Johnson and Paul J Ambrose. 2006. Neo-tribes: The power and potential of online communities in health care. *Commun. ACM* 49, 1 (2006). <https://doi.org/10.1145/1107458.1107463>
 - [49] Naveena Karusala, David Odhiambo Seeh, Cyrus Mugo, Brandon Guthrie, Megan A Moreno, Grace John-Stewart, Irene Inwani, Richard Anderson, and Keshet Ronen. 2021. "That courage to encourage": Participation and aspirations in chat-based peer support for youth living with HIV. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 1–17. <https://doi.org/10.1145/3411764.3445313>
 - [50] Lucas Kempe-Cook, Stephen Tsung-Han Sher, and Norman Makoto Su. 2019. Behind the voices: The practice and challenges of esports casters. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. 1–12. <https://doi.org/10.1145/3290605.3300795>
 - [51] Hyesun Kim. 2009. Women's games in Japan: Gendered identity and narrative construction. *Theory, Culture & Society* 26, 2–3 (2009). <https://doi.org/10.1177/0263276409103132>
 - [52] Yubo Kou and Xinning Gui. 2018. Entangled with numbers: Quantified self and others in a team-based online game. *Proceedings of the ACM on Human-Computer Interaction* 2, CSCW (2018). <https://doi.org/10.1145/3274362>
 - [53] Nir Kshetri. 2009. The evolution of the Chinese online gaming industry. *Journal of Technology Management in China* 4, 2 (2009). <https://doi.org/10.1108/17468770910965019>
 - [54] Daria J Kuss, Anne Marie Kristensen, A Jess Williams, and Olatz Lopez-Fernandez. 2022. To be or not to be a female gamer: A qualitative exploration of female gamer identity. *International Journal of Environmental Research and Public Health* 19, 3 (2022). <https://doi.org/10.3390/ijerph19031169>
 - [55] Zishan Lai and Tingting Liu. 2023. "Protecting our female gaze rights": Chinese female gamers' and game producers' negotiations with government restrictions on erotic material. *Games and Culture* 19 (2023). Issue 1. <https://doi.org/10.1177/15554120231151300>
 - [56] Ida Larsen-Ledet and Chiara Rossitto. 2023. Participatory writing as activism: The work of organizing a Swedish MeToo initiative through social media. *Proceedings of the ACM on Human-Computer Interaction* 7, CSCW1 (2023). <https://doi.org/10.1145/3579513>
 - [57] Dong Dong Li, Albert Kien Liao, and Angeline Khoo. 2013. Player-Avatar identification in video gaming: Concept and measurement. *Computers in Human Behavior* 29, 1 (2013). <https://doi.org/10.1016/j.chb.2012.09.002>
 - [58] Lingyuan Li, Guo Freeman, Kelsea Schulenberg, and Dane Acena. 2023. "We cried on each other's shoulders": How LGBTQ+ individuals experience social support in social virtual reality. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. 1–16. <https://doi.org/10.1145/3544548.3581530>
 - [59] Pengxiang Li, Hichang Cho, Yuren Qin, and Anfan Chen. 2021. #MeToo as a connective movement: Examining the frames adopted in the anti-sexual harassment movement in China. *Social Science Computer Review* 39, 5 (2021). <https://doi.org/10.1177/0894439320956790>
 - [60] Zhongxuan Lin and Liu Yang. 2019. Individual and collective empowerment: Women's voices in the #MeToo movement in China. *Asian Journal of Women's Studies* 25, 1 (2019). <https://doi.org/10.1080/12259276.2019.1573002>
 - [61] Qi Ling and Sara Liao. 2020. Intellectuals debate #MeToo in China: Legitimizing feminist activism, challenging gendered myths, and reclaiming feminism. *Journal of Communication* 70, 6 (2020). <https://doi.org/10.1093/joc/jqaa033>
 - [62] Tingting Liu and Zishan Lai. 2022. From non-player characters to othered participants: Chinese women's gaming experience in the 'free' digital market. *Information, Communication & Society* 25, 3 (2022). <https://doi.org/10.1080/1369118X.2020.1791217>
 - [63] S. Lu. 2018. Tanfang "lian yu zhi zuo ren" gongsi: Qi cheng nuxing yuangong, men bei yingshi gongsi tapo [Interview with the company of Mr. Love: 70 percent of female employees; many movie and TV companies came to us for collaboration]. <http://www.yzbl.com/article/1992>
 - [64] Kai Lukoff, Taoxi Li, Yuan Zhuang, and Brian Y Lim. 2018. TableChat: Mobile food journaling to facilitate family support for healthy eating. *Proceedings of the ACM on Human-Computer Interaction* 2, CSCW (2018). <https://doi.org/10.1145/3274383>
 - [65] Daniel Madden, Yuxuan Liu, Haowei Yu, Mustafa Feyyaz Sonbudak, Giovanni M Troiano, and Casper Hartevelde. 2021. "Why are you playing games? You are a girl!": Exploring gender biases in Esports. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 1–15. <https://doi.org/10.1145/3411764.3445248>
 - [66] Rose C Maly, Barbara Leake, and Rebecca A Silliman. 2003. Health care disparities in older patients with breast carcinoma: Informational support from physicians. *Cancer: Interdisciplinary International Journal of the American Cancer Society* 97, 6 (2003). <https://doi.org/10.1002/cncr.11211>
 - [67] Chengting Mao. 2020. Feminist activism via social media in China. *Asian Journal of Women's Studies* 26, 2 (2020). <https://doi.org/10.1080/12259276.2020.1767844>
 - [68] Lavinia McLean and Mark D Griffiths. 2019. Female gamers' experience of online harassment and social support in online gaming: A qualitative study. *International Journal of Mental Health and Addiction* 17 (2019). <https://doi.org/10.1007/s11469-018-9962-0>
 - [69] Elisa D Mekler, Stefan Rank, Sharon T Steinemann, Max V Birk, and Ioanna Iacovides. 2016. Designing for emotional complexity in games: The interplay of positive and negative affect. In *Proceedings of the 2016 annual symposium on computer-human interaction in play companion extended abstracts*. 367–371. <https://doi.org/10.1145/2968120.2968126>
 - [70] MobData. 2020. "ta youxi" baogao [2020 report of female-oriented games]. <https://www.mob.com/mobdata/report/93>
 - [71] Aaron Mueller, Zach Wood-Doughty, Silvio Amir, Mark Dredze, and Alicia Lynn Nobles. 2021. Demographic representation and collective storytelling in the me too Twitter hashtag activism movement. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW1 (2021). <https://doi.org/10.1145/3449181>
 - [72] Geoff Musick, Guo Freeman, and Nathan J McNeese. 2021. Gaming as family time: Digital game co-play in modern parent-child relationships. *Proceedings of the ACM on Human-Computer Interaction* 5, CHI PLAY (2021). <https://doi.org/10.1145/3474678>
 - [73] Drashko Nakikj and Lena Mamykina. 2017. A park or a highway: Overcoming tensions in designing for socio-emotional and informational needs in online health communities. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1304–1319. <https://doi.org/10.1145/2998181.2998339>
 - [74] Bonnie Nardi and Justin Harris. 2006. Strangers and friends: Collaborative play in World of Warcraft. In *Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work*. 149–158. <https://doi.org/10.1145/1180875.1180898>
 - [75] Sarah Nikkiah, Swaroop John, Krishna Supradeep Yalamarti, Emily L. Mueller, and Andrew D. Miller. 2021. Helping their child, helping each other: Parents' mediated social support in the children's hospital. In *Companion Publication of the 2021 Conference on Computer Supported Cooperative Work & Social Computing*. 140–143. <https://doi.org/10.3389/fdps.2023.1278034>
 - [76] Tyler Pace, Shaowen Bardzell, and Jeffrey Bardzell. 2010. The rogue in the lovely black dress: Intimacy in world of warcraft. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. 233–242. <https://doi.org/10.1145/1753326.1753361>
 - [77] Cale J Passmore and Regan Mandryk. 2018. An about face: Diverse representation in games. In *Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play*. 365–380. <https://doi.org/10.1145/3242671.3242711>
 - [78] Dilisha Patel, Ann Blandford, Mark Warner, Jill Shawe, and Judith Stephenson. 2019. "I feel like only half a man" online forums as a resource for finding a "new normal" for men experiencing fertility issues. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019). <https://doi.org/10.1145/3359184>
 - [79] Zhenhui Peng, Qingyu Guo, Ka Wing Tsang, and Xiaojuan Ma. 2020. Exploring the effects of technological writing assistance for support providers in online mental health community. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. 1–15. <https://doi.org/10.1145/3313831.3376695>
 - [80] Jennifer Pierre. 2019. Chats over spats: Exploring social media use for mentorship in youth development programs. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019). <https://doi.org/10.1145/3359329>
 - [81] Alexis Pulos. 2013. Confronting heteronormativity in online games: A critical discourse analysis of LGBTQ sexuality in World of Warcraft. *Games and Culture* 8, 2 (2013). <https://doi.org/10.1177/1555412013478688>
 - [82] Yolanda A Rankin and India Irish. 2020. A seat at the table: Black feminist thought as a critical framework for inclusive game design. *Proceedings of the ACM on Human-Computer Interaction* 4, CSCW2 (2020). <https://doi.org/10.1145/3415188>
 - [83] Sheri Graner Ray. 2003. *Gender inclusive game design: Expanding the market (Advances in Computer Graphics and Game Development Series)*.
 - [84] Katja Rogers, Maria Aufheimer, Michael Weber, and Lennart E Nacke. 2018. Exploring the role of non-player characters and gender in player identification. In *Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts*. 271–283. <https://doi.org/10.1145/3270316.3273041>
 - [85] Dana Rotman, Sarah Vieweg, Sarita Yardi, Ed Chi, Jenny Preece, Ben Shneiderman, Peter Piroli, and Tom Glaisyer. 2011. From slacktivism to activism: Participatory culture in the age of social media. In *CHI'11 Extended Abstracts on Human Factors in Computing Systems*. 819–822. <https://doi.org/10.1145/1979742.1979543>
 - [86] Sam Schelfhout, Matthew T Bowers, and Y Andrew Hao. 2021. Balancing gender identity and gamer identity: Gender issues faced by Wang 'BaiZe' Xinyu at the 2017 hearthstone summer championship. *Games and Culture* 16, 1 (2021). <https://doi.org/10.1177/1555412019866348>

- [87] Morgan Klaus Scheuerman, Stacy M Branham, and Foad Hamidi. 2018. Safe spaces and safe places: Unpacking technology-mediated experiences of safety and harm with transgender people. *Proceedings of the ACM on Human-Computer Interaction* 2, CSCW (2018). <https://doi.org/10.1145/3274424>
- [88] Cuihua Shen, Rabindra Ratan, Y Dora Cai, and Alex Leavitt. 2016. Do men advance faster than women? Debunking the gender performance gap in two massively multiplayer online games. *Journal of Computer-Mediated Communication* 21, 4 (2016). <https://doi.org/10.1111/jcc4.12159>
- [89] Donghoo Shin, Subeen Park, Esther Hehsun Kim, Soomin Kim, Jinwook Seo, and Hwajung Hong. 2022. Exploring the effects of AI-assisted emotional support processes in online mental health community. In *CHI Conference on Human Factors in Computing Systems Extended Abstracts*. 1–7. <https://doi.org/10.1145/3491101.3519854>
- [90] Marita Skjuve, Asbjørn Følstad, Knut Inge Fostervold, and Petter Bae Brandtzaeg. 2021. My chatbot companion—a study of human-chatbot relationships. *International Journal of Human-Computer Studies* 149 (2021). <https://doi.org/10.1016/j.ijhcs.2021.102601>
- [91] Wen Song and Jesse Fox. 2016. Playing for love in a romantic video game: Avatar identification, parasocial relationships, and Chinese women's romantic beliefs. *Mass Communication and Society* 19, 2 (2016). <https://doi.org/10.1080/15205436.2015.1077972>
- [92] Jia Tan. 2017. Digital masquerading: Feminist media activism in China. *Crime, Media, Culture* 13, 2 (2017). <https://doi.org/10.1177/1741659017710063>
- [93] Emily Taylor. 2007. Dating-simulation games: Leisure and gaming of Japanese youth culture. *Southeast Review of Asian Studies* 29 (2007).
- [94] Yuan Tian. 2022. Falling in Love With Virtual Boyfriends: Otome Games in Japan and Mainland China.
- [95] Sabine Trepte, Leonard Reinecke, and Keno Juechems. 2012. The social side of gaming: How playing online computer games creates online and offline social support. *Computers in Human Behavior* 28, 3 (2012). <https://doi.org/10.1016/j.chb.2011.12.003>
- [96] Jirassaya Uttaraopong, Jie Cai, and Donghee Yvette Wohn. 2021. Harassment experiences of women and LGBTQ live streamers and how they handled negativity. In *ACM International Conference on Interactive Media Experiences*. 7–19. <https://doi.org/10.1145/3452918.3458794>
- [97] Lotte Vermeulen, Sofie Van Bauwel, and Jan Van Looy. 2017. Tracing female gamer identity. An empirical study into gender and stereotype threat perceptions. *Computers in Human Behavior* 71 (2017). <https://doi.org/10.1016/j.chb.2017.01.054>
- [98] Tatiana A Vlahovic, Yi-Chia Wang, Robert E Kraut, and John M Levine. 2014. Support matching and satisfaction in an online breast cancer support community. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. 1625–1634. <https://doi.org/10.1145/2556288.2557108>
- [99] Keith B Wagner and Meng Liang. 2021. Love and Producer as East Asian Transmedia: Otome Games, Sexless Polyamory, and Neoliberal Choice for Chinese and South Korean Young Career-Oriented Women. In *Transmedia in Asia and the Pacific: Industry, Practice and Transcultural Dialogues*. 129–156. https://doi.org/10.1007/978-981-15-7857-1_7
- [100] Yi-Chia Wang, Robert Kraut, and John M Levine. 2012. To stay or leave? The relationship of emotional and informational support to commitment in online health support groups. In *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work*. 833–842. <https://doi.org/10.1145/2145204.2145329>
- [101] Angela Xiao Wu and Yige Dong. 2019. What is made-in-China feminism(s)? Gender discontent and class friction in post-socialist China. *Critical Asian Studies* 51, 4 (2019). <https://doi.org/10.1080/14672715.2019.1656538>
- [102] Tianling Xie and Iryna Pentina. 2022. Attachment theory as a framework to understand relationships with social chatbots: A case study of Replika. In *Hawaii International Conference on System Sciences 2022*. 2046–2055. <https://doi.org/10.24251/HICSS.2022.258>
- [103] Anna Xygykou, Panote Siriraya, Alexandra Covaci, Holly Gwen Prigerson, Robert Neimeyer, Chee Siang Ang, and Wan-Jou She. 2023. The "conversation" about loss: Understanding how chatbot technology was used in supporting people in grief. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. 1–15. <https://doi.org/10.1145/3544548.3581154>
- [104] Naomi Yamashita, Hideaki Kuzuoka, Keiji Hirata, Takashi Kudo, Eiji Aramaki, and Kazuki Hattori. 2017. Changing moods: How manual tracking by family caregivers improves caring and family communication. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*. 158–169. <https://doi.org/10.1145/3025453.3025843>
- [105] Qiongyao Yang, Han Wang, Hongye Wu, Wei Li, Yueyue Zhang, Yitan Yao, Xiaoping Yuan, Chuanchuan Chen, Yue Wang, Yongjie Zhong, et al. 2023. Effect of online game policy on smartphone game play time, addiction, and emotion in rural adolescents of China. *BMC psychiatry* 23, 1 (2023). <https://doi.org/10.1186/s12888-023-05325-3>
- [106] Siyuan Yin and Yu Sun. 2021. Intersectional digital feminism: Assessing the participation politics and impact of the MeToo movement in China. *Feminist Media Studies* 21, 7 (2021). <https://doi.org/10.1080/14680777.2020.1837908>
- [107] Guo Zhang. 2014. Can you marry me?: Conceptualizing in-game marriage as intimacy-mediated collaboration. In *Proceedings of the Companion Publication of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 273–276. <https://doi.org/10.1145/2556420.2556473>
- [108] Yun Zhang. 2022. Analysis of Otome Mobile Game from the Perspective of Feminism in China. *Journal of Social Science and Humanities ISSN 1811* (2022). [https://doi.org/10.53469/jssh.2022.4\(10\).11](https://doi.org/10.53469/jssh.2022.4(10).11)
- [109] Qingxiao Zheng, Daniela M Markazi, Yiliu Tang, and Yun Huang. 2021. "Pocket-Bot is like a knock-on-the-door!": Designing a chatbot to support long-distance relationships. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW2 (2021). <https://doi.org/10.1145/3479589>
- [110] Zhi-Jin Zhong. 2011. The effects of collective MMORPG (Massively Multiplayer Online Role-Playing Games) play on gamers' online and offline social capital. *Computers in Human Behavior* 27, 6 (2011). <https://doi.org/10.1016/j.chb.2011.07.014>
- [111] Doug Zytok, Guo Freeman, Sukeshini A Grandhi, Susan C Herring, and Quentin Jones. 2015. Enhancing evaluation of potential dates online through paired collaborative activities. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1849–1859. <https://doi.org/10.1145/2675133.2675184>

A RESEARCH METHODS

A.1 Interview Questions

Researchers conducted semi-structured interviews based on the following outline:

- (1) How long have you been playing *Mr. Love*? Can you share the story of how you discovered the game? How often do you read posts in the Weibo Supertopic? Do you post in the Supertopic yourself? What kind of content or in-game experiences do you share with other players in the community? Do you have any memorable conversations or exchanges?
- (2) How do you view your relationship with other players in the Weibo Supertopic community? Do you provide support to other players? Have other players ever provided you with any kind of support? Can you give examples? To your knowledge, are there any rules for posting in the Supertopic? Do you have any suggestions for creating an online space where players can communicate safely with each other?
- (3) Do you consider playing *Mr. Love* a romantic experience? If yes, do you share stories and aspects of your experience with other players in the Weibo Supertopic community? Which aspects of this experience would you consider sharing? Can you give me some examples? How do your parents and friends think about you playing this game? What kind of community is the Weibo Supertopic community to you?