

Feature

Games for Emotional Well-Being

Identifying Elements of Gameplay for Recommendation

Hyerim Cho, Joe Kohlburn, and Sam Chartrand

Abstract

Existing studies in psychology show that video games are an everyday entertainment medium that have successfully promoted people's emotional and mental well-being in an accessible setting. The current study investigates what elements of video games players select that coincide with their affective and mental health-related needs and why, from the lens of reference services. By identifying what kinds of video game experiences can support or impact game players' mental and emotional well-being, this paper aims to incorporate the findings to enhance future video game reference services in libraries that could promote communities' mental and emotional well-being. Using semi-structured interviews with 25 video game players, major categories of positive video game experiences were identified as emotion regulation, sense of achievement, and sense of control, which are aligned with the existing research. The authors discuss how the findings can be incorporated into reference services to support librarians who are interested in providing relevant services for their community members.

Introduction

It gave me something to keep my mind occupied with, and there was a sense of community and belonging. There were people I was playing with. I had a group of people that we would very consistently play all night with. So I think that it helped. If you tell most people, "hey, stayed up all night playing video games because I was depressed," they'd probably say that's a bad thing. But for me, I felt like it was a positive thing. (Participant 102)

Video games as a medium have come a long way over the past 50 years. Initially a niche hobby that gained a measure of cultural fixity in the 1980s to 1990s, the internet and online gaming helped propel the medium to new heights and offered new possibilities for social connection and community building. Throughout this history, players have made use of games to help regulate their states of emotion and mental health, but how widespread this is and its degree of impact are areas of current research.

During the COVID-19 pandemic, video games offered an opportunity to escape the stressors of the "real world" and still allow people to connect with communities with similar interests.¹ Researchers have begun to ask questions around how video games might be used to cope with specific challenges of contemporary life, with research focusing on escapism,² stress reduction,³ and emotional regulation,⁴ as well as the stressors neurodivergent players experience in their lives.⁵

Hyerim Cho is Assistant Professor, University of Missouri, School of Information Science and Learning Technologies, email: hyerimcho@missouri.edu. **Joe Kohlburn** is OER and Scholarly Communications Librarian, Assistant Professor, LIS, Southern Illinois University Edwardsville, email: jkohlbu@siue.edu. **Sam Chartrand** is an MLIS Student, University of Missouri, School of Information Science and Learning Technologies, email: kchartrand@umkc.edu.

Previous studies have shown that players use games to meet specific emotional, intellectual, and social needs. This study explores which game elements players choose that coincide with specific needs and why, especially from the reference services' lens, with the aim of improving video game reference services to support communities' mental and emotional well-being. The authors examine implications for future information services for video games first by identifying specific relevant game elements that are important to promoting emotional well-being in players and then by organizing participant feedback into manageable themes and trends. To this end, our research question is:

- **RQ:** What kinds of video game experiences do game players have that support or impact their emotional and mental well-being, and how can these experiences inform reference services?

Understanding why people choose specific games or elements of games to meet certain needs will enable information professionals, specifically librarians, to make better recommendations to users as they seek video games in databases and platforms. This article offers a series of insights into why players choose certain games and attempts to make sense of the sometimes-conflicting choices by specific groups of players (e.g., choosing either very difficult or very easy games, each in an effort to reach a desired emotional state). Understanding the nuances of player choice in this regard will enable information professionals to make recommendations to more closely and accurately tailor their suggestions to users, going above the simpler mechanisms of platform video game recommendation services.

Literature Review

Bibliotherapy and the Libraries' Efforts for Mental Health and Emotional Well-Being

Libraries have long implemented different forms of media to address mental health and emotional well-being in their collections for patron access. One of the main forms of this is bibliotherapy—self-therapy and emotional regulation from reading books. Bibliotherapy has been discussed as a means to support patrons through written, auditory, and e-learning materials to provide therapeutic support, and libraries have been central in facilitating access through programming, recommendations, and access. Bibliotherapy has been shown to positively affect emotional well-being and has been used as a form of intervention for therapy practices.⁶ Bibliotherapy programs have been implemented by public libraries globally⁷ and studied as a method of implementation into correctional facilities, hospitals, clinics, and rehabilitation centers alongside libraries.⁸

In Europe, libraries have partnered with outside organizations to create a “Library of Emotions” that seeks to provide bibliotherapy sessions through the emotional classification of books and media.⁹ Through this program, books are classified into categories based on emotional preference so that patrons can browse books based on the mood or emotion they'd like to read, creating a new way to browse books for emotional well-being and emotion regulation. Not only are these programs bringing together groups of people to discuss their emotional experiences in a group, but they are also creating new ways of classifying and recommending services to users based on their emotional needs and preference for relaxation from stressors in everyday life.

Similar to the concept of bibliotherapy in the library and information domain, there has been much research on exploring different types of media as a tool for self-regulation in media and psychology

studies. As an example, Dolf Zillmann has been studying the phenomenon of mood management theory since 1985;¹⁰ more recent studies also emphasize entertainment media's roles in supporting resiliency.¹¹ These resources refer to the tools people have at their disposal for mood regulation for well-being and stress relief that are often used for recovery, satisfaction with life, and work performance.¹² Other research has shown that when encountering poor emotional well-being from work or life, individuals can find relief from activities that are relaxing or create psychological distance from the source of stress.¹³ They assert that it is not the specific activity that determines recovery, but the components of the activity, such as reading a book and meditating, which are both valid activities that can create relief through recovery.

Video Games' Rise as Tools to Support Mental and Emotional Well-Being

While commercial video games have existed since the 1970s, research on the positive impact of video games as a pastime and for the emotional well-being of players increased significantly as a result of the COVID-19 pandemic in late 2020 into 2021, despite being a popular method of entertainment for Americans since the early 2000s.¹⁴

The COVID-19 pandemic led to an increased interest in playing video games due to lockdown, and research on the subject increased dramatically. Many people began to turn to video games as a method to socialize during isolation and improve emotional well-being.¹⁵ During COVID-19, people's game preferences changed, too, moving toward more multiplayer games due to a need to socialize and with a slight shift toward relaxing games with less violence.¹⁶ However, the most significant paradigm shift is that more researchers in interdisciplinary domains started to see video games as accessible everyday tools to promote mental health and emotional well-being.¹⁷

Reference Services for Video Games

In libraries, video games traditionally have been categorized as access to recreation and entertainment¹⁸ or methods to increase youth and patron involvement with the library.¹⁹ While video games have been recognized as an excellent tool for community outreach, they have also created various challenges for library services. The general consensus among librarians is that while librarians want to provide these services, they do not know how to without proper training and education.²⁰ Thus, to ultimately enhance the quality of the video game reference services, educational support for librarians should include an understanding of video games and access, their various components, and the reasons people are drawn to them. Although there has been research about the general appeals of video games,²¹ less has been done about the impact of video games on emotional regulation and well-being, especially about how libraries can play a supportive role by providing relevant information services. The current study addresses this problem by identifying what kinds of video game experiences people have that can support or influence their mental health and emotional well-being and how these experiences can inform the future of video game reference services.

Methods

To understand participants' lived experiences of emotional and mental well-being supported by video games, the research team adopted a qualitative approach in the data collection and analysis. As its theoretical frame, the current study is informed by the media use and emotional resilience models,²² particularly in creating discussion prompts and interview questions. These models suggest that media users can regulate their emotions using strategies²³ and consider media users as active information agents who can search and select the appropriate media sources for

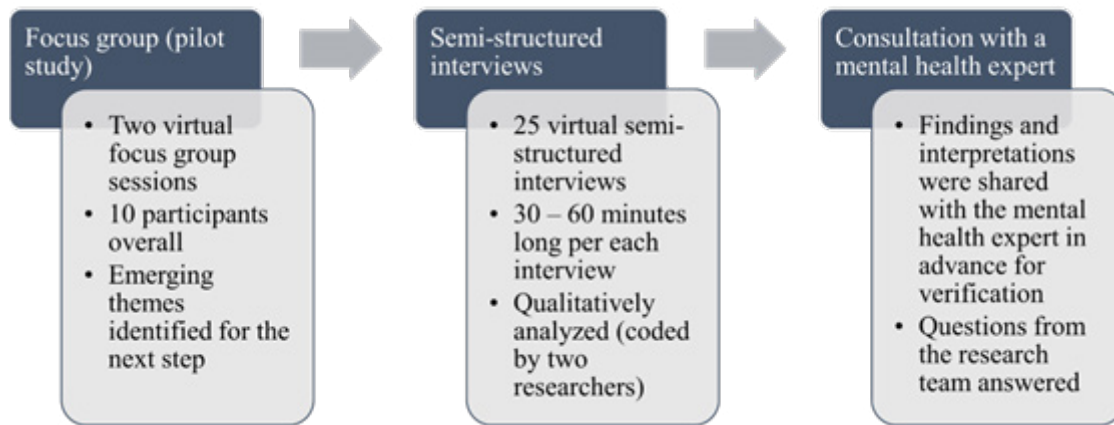


Figure 1. Study process.

themselves based on their needs. The use of media can contribute to psychological recovery and emotional resilience and can potentially provide emotional recovery experiences.²⁴

After the research team obtained the Institutional Review Board approval, the pilot study²⁵ was conducted in November 2022. Participants who were 18 years or older and enjoyed video games were recruited via the University of Missouri's email listserv in October 2022. After recruitment was completed, two focus group sessions were conducted virtually via Zoom. Each focus group session was composed of five participants and lasted about 90 minutes. The research team intentionally kept the size of focus groups small so that participants could share their experiences in a comfortable setting. Based on the audio recordings and the transcriptions, the research team identified the emerging themes for the next step, semi-structured interviews.

Based on the preliminary analysis from the pilot study, the research team designed semi-structured interviews (see Appendix A). The semi-structured interview method was selected due to its flexibility in structure, where the interviewer could ask follow-up questions on interesting topics or encourage participants to share their thoughts, feelings, and more contextualized responses. Recruitment was conducted in January 2023 using the email listserv of the University of Missouri. Recruitment criteria remained the same as those in the pilot study: Participants were 18 years or older and enjoy video games. Interviews were conducted between January and February 2023 virtually via Zoom. Twenty-five participants were interviewed, and each interview lasted between 30 minutes and an hour. As the identified themes were saturated at this point, the research team did not pursue additional recruitment.

To analyze the data, entire transcripts for the interviews were created in March 2023. Two research team members reviewed the transcripts and identified the primary themes that emerged from the interviews. After the iterative process of creating a codebook, two research team members divided the interviews and coded the data using NVivo, a qualitative data analytical software. To ensure the consistency and trustworthiness of the analysis, intercoder reliability was measured between the two research members. The pair-wise coding comparison average was calculated at 0.53 (Kappa coefficient value), indicating Fair to Good Agreement.²⁶ The agreement ratio was 96.23%.

As this research delves into psychological themes that are generally outside the library and information science domain, the research team aimed to receive second opinions on the findings and interpretation of the data from a mental health expert to ensure the findings are well aligned

with the knowledge in the psychology field. The research team had a consultation meeting with a mental health expert in May 2023 whose expertise is in counseling psychology. The analysis results and questions were shared with the expert in advance before the meeting so that the expert could have enough time to review the data. During the meeting, any clarification questions from the research team were answered, and the findings were verified. The meeting conversations were fully transcribed in November 2023 and summarized in a separate document.

Findings

Participants' Demographic Information

Demographics for this study were somewhat novel and point to potential counter-narratives to traditional normative framings of "gamer" identity, particularly with regard to gender (Table 1).

Table 1. Participants' Demographic Information

#	Game-Related Jobs or Hobbies	Gender Identity	Period of Game Playing	Neurodiversity	Mental and Emotional Health Concerns	Age
101	Yes	F	11–15 years	Yes, autism	Yes, anxiety and depression	21–30
102	Yes	M	≥21 years	Yes, autism	No	31–40
103	Yes	F	≥21 years	Yes, ADHD or ADD	No	31–40
104	Yes	M	≥21 years	No	Yes, depression	51–60
105	Yes	M	≥21 years	Yes, ADHD or ADD	No	31–40
107	Yes	F	16–20 years	No	Yes, anxiety	21–30
108	No	F	6–10 years	No	Yes, depression	21–30
109	No	F	6–10 years	Yes, ADHD or ADD	Yes, anxiety and depression	41–50
112	Yes	F	6–10 years	Yes, ADHD or ADD	Yes, anxiety and depression	21–30
113	Yes	M	16–20 years	No	Yes, depression	31–40
114	Yes	F	16–20 years	No	Yes, anxiety	21–30
116	Yes	M	16–20 years	No	No	31–40
117	No	F	6–10 years	No	Yes, depression	21–30
118	Yes	F	16–20 years	Yes, ADHD or ADD	Yes, anxiety	21–30
119	Yes	F	11–15 years	Yes, dyslexia	No	31–40
120	Yes	M	≥21 years	Yes, autism	Yes, anxiety and depression	21–30
122	No	F	11–15 years	Yes, ADHD or ADD	Yes, anxiety	21–30
123	Yes	F	≥21 years	No	Yes, anxiety	31–40
125	Yes	F	≥21 years	Yes, ADHD or ADD	Yes, anxiety	21–30
126	Yes	F	≥21 years	No	No	31–40
128	Yes	NB	16–20 years	No	No	21–30
129	No	NB	≥21 years	Yes, autism	Yes, anxiety	31–40
130	Yes	M	≥21 years	No	Yes, anxiety and depression	21–30
131	Yes	F	16–20 years	Yes, autism	Yes, personality disorder	21–30
132	Yes	M	16–20 years	No	Yes, personality disorder	18–20

Note. ADD, attention-deficit disorder; ADHD, attention-deficit/hyperactivity disorder; F, female; M, male; NB, nonbinary.

Of the 25 participants, 15 were female-identifying, 2 participants identified as nonbinary, and the remaining 8 identified as male. The majority of our participants identified as being neurodivergent in some way (18/25) (e.g., autistic, having ADD/ADHD, or having some combination of both). This is not particularly surprising given conversations in the literature elsewhere that acknowledge relationships and interplay between specific forms of neurodiversity and seeking out gaming as a hobby.²⁷ Participants self-reported both formal diagnoses and identification with specific mental illnesses, particularly anxiety and depression (18/25). Nearly all participants were from the United States (23/25), and more than half were younger than the age of 30 (14/25), nine were between 31 and 40 years, one was between 41 and 50 years, and the remaining participant was between 51 and 60 years. Participant numbers range from 101–132, with numbers missing from the range (e.g., 106, 110, 111), for a total of 25 participants. Participants were assigned numbers based on the order they joined the study. When a participant withdrew from the study due to scheduling conflicts or other reasons, their number was removed from the list.

The current study had a sample of 25 participants ($n = 25$) and is of a qualitative nature, which means that no generalizations should be drawn from this set. That said, the authors could see emerging trends in the numbers of participants coded for specific elements of games relative to the total number of individuals in each group, which may provide foundational knowledge for further studies to investigate with larger sample sizes. For example (Table 2), certain patterns emerged when comparing gender identities to four codes generated by the study: game's positive influence on emotion, mood of game, plot or narrative, and visual or artistic style. Nearly all participants noted some awareness of the positive influence of games on emotion (8/8 M; 14/15 F; 2/2 NB). Nonbinary participants did not reflect interest in the mood, plot, or narrative of the game in their responses, keeping in mind that there were only two in the study. Female-identified participants were interested in the game's mood (9/16), which was proportionally similar to male-identified participants (5/8). Both male- and female-identified participants had relatively more interest in the plot or narrative of the game ($F = 13/16$, $M = 7/8$). Female-identified participants trended toward relatively more interest in the visual or artistic style of the game than did male participants ($F = 12/16$, $M = 5/8$).

No major trends were observable when comparing neurodiversity to participants' discussions of the positive influence of games on emotions, the mood of the game, plot or narrative, or visual or aesthetic style, although those with ADD/ADHD were slightly more interested in the aforementioned elements than those with autism only or other forms of neurodiversity. Similarly, the game's positive influence on emotion, the mood of the game, the plot or narrative of the game, and the visual or artistic style were not particularly relevant when coded against mental and emotional health concerns like depression, anxiety, or personality disorders. When cross-tabulated against other identified codes, neurodiversity and mental health concerns did not seem to produce observable patterns in participant responses, other than slightly higher levels of reference within ADD/ADHD-identified participant responses.

Table 2. Gender Identities and Emerging Themes

Emerging Themes	Male (M)	Female (F)	Nonbinary (NB)
Game's positive influence on emotion	8 (100%)	14 (93.3%)	2 (100%)
Mood of game	5 (62.5%)	9 (60%)	0 (0%)
Plot or narrative	7 (87.5%)	13 (86.7%)	0 (0%)
Visual or artistic style	5 (62.5%)	12 (80%)	1 (50%)

Positive Video Game Experiences

Based on the analysis, video game players' positive emotional and mental health experiences were categorized into emotion regulation, sense of achievement, and sense of control. The following sections highlight the positive emotional experiences described by the participants and identify how games were able to support these experiences.

Emotion Regulations

Among the participants in this study, the most predominant motivation for playing video games (25/25 participants) was to regulate one's emotions to alleviate their negative feelings and become more resilient. For example, participants often talked about the internal and external challenges they faced, such as anxiety and panic attacks, depression, burnout, stress, and sadness, as they discussed how they used video games in these situations as a "coping mechanism."

I'll get panic attacks sometimes, and playing even just a simple game, not when I'm in the throes of it, but afterwards to calm down. And it just, something to get out of your mind and into another world does wonders for. It's just a good coping mechanism when otherwise I would reach for something maybe more destructive. (Participant 101)

[...] if I'm in a bad mood, sometimes I just play something like a mobile game, where it's a lot of puzzles. I'm just not really thinking about it. Or if I really need to get my mind off something, then I want to play something with a really good story. (Participant 109)

Video game players' seeing games as a coping strategy is noteworthy, as it indicates that players are active agents who can determine if and what types of games can help them feel better. This also influences how reference or recommendation services should be provided; as avid game players tend to understand their information needs in-depth and clearly, it may be important to recognize them as expert information users who can clearly and specifically verbalize their needs.

The research team observed that when participants played games to regulate their emotions, how they played (e.g., frequency, length) and the types of games they played were often discussed together. For example, participants who want to manage their anxious mood or panic attacks tend to play games in that moment or right after the panic attack episodes to soothe themselves. These participants often mentioned playing games with simple, easy, or repetitive gameplay mechanics with a cozy atmosphere or dialogue.

So if I'm feeling particularly overstimulated from work or talking to people, in general, a lot of times I will go to the bathroom or whatever, make up a reason to get away, and then I will do some mindless things on my phone, one of which is checking Evony, another of which might be playing something like Pull the Pin, one of those puzzle games that's not very hard, but also just kind of lets you engage in a different way where you don't have to respond quite so much because for me, the overstimulation comes from having to respond. (Participant 103)

I have anxiety, so playing a nice cozy mystery where I focus on puzzles or something else gets me out of an anxious mood. (Participant 107)

Participants who wanted to elevate their moods from feeling depressed, stressed, or sad tended to mention the importance of disconnecting themselves from the negative chain of thoughts by being immersed in a strong narrative. In those challenging moments, games provided participants "something to do." To elevate their moods, participants often had their own gameplay schedules or habits as conscientious efforts to have bits of time to feel better and find joy. Participant 102 also added that having a positive and supportive gaming community could help them feel resilient.

The characters are so well written that everyone is able to find some connection to one of the characters in the game. And the community is very active in supporting one another and talking about it and sort of a shared processing of grief and loss, which I think, especially during the last few years, have been well received.[...] And I think that it did promote a lot of resiliency in people and help them to navigate through some of those feelings. (Participant 102)

I always say life's like a rollercoaster because I'll have ups, I'll have downs. And games and story allow me to take breaks from my own thinking of always thinking, always overthinking things and anxiety of that. It allows me to de-stress and I don't watch movies or TV, so story-based games or watching games is the outlet for that. (Participant 120)

Sense of Achievement

A sense of achievement was a common motivation for our participants. Participants noted the importance of gratification received from achievement, such as solving a puzzle or completing a level:

I think what sets games apart from other things you could be doing to cope or whatever is that there's active input in a game. So, there's the motivation to do something and the sense of achievement when you figure out a puzzle or do something else. It's not just passive like reading a book would be; it's a more active narrative experience. (Participant 101)

Participants contrasted the sense of achievement in the game context to the sometimes apparent aimlessness or lack of clarity of purpose in their real lives. This could be related to games having more defined parameters, simplified systems of causality and interaction, or even clearer social cues that are easier to pick up on.

Sure. Yeah. I think that more often than not, I think I feel better. I think that I get, like I said, a sense of accomplishment that just the drudgery of life doesn't always provide. So I feel like playing a good game and having, especially something that's kind of hard, and then working my way through how to solve it, I think feels like, "Ah, yeah." I walk away feeling like, "Yeah, I did that." (Participant 104)

Sense of accomplishment. I think a lot of games provide very concrete goals and even just having something to work toward in a game I feel like could be very helpful because I feel like life can feel very chaotic at times and it's nice to have something that's, "Do this and you get this" or whatever and you don't even have to think to myself, "Oh, this is so fulfilling." You can understand that it's like, "Okay, it's just in the video game" and that's fine. The feeling is sort of similar. It's just a sense of accomplishment and that's nice. (Participant 113)

Participants had mixed feelings about the difficulty as well as the extent of available tasks to complete. For example, especially when players become obsessed with completing as much of the game as possible, the sheer number of tasks available in open-world games can be overwhelming to complete, and massively multiplayer online role-playing games (MMORPGs) can also be addictive and overly challenging.

Our participants' responses pointed to some need for clearly delineated goals and purposes within the games so that they might gain a sense of achievement by meeting those goals. Still, these clear objectives should have significant degrees of freedom in terms of how to achieve them in order to support a sense of agency that is critical to feeling as though the player has achieved something through their own efforts. Difficulty may be deployed toward a sense of achievement in different contexts. An ideal middle-of-the-road or "sweet spot" for difficulty means that players in general prefer something that is difficult enough to challenge them, but not so difficult as to be frustrating.

However, a subset of players do find a sense of achievement from overcoming intensely difficult games like so-called “souls-like” games that may be related to seeking to regulate mood through catharsis. Conversely, players seeking games to relax pointed to mechanics that were relatively unchallenging within nostalgic or “cozy” atmospheres, and were repetitive and soothing, such as farming or crafting. Therefore, when determining what sort of games to recommend to players, it is first important to determine their predilections and habits, whether they prefer difficult or cozy games, and their tendencies to become overwhelmed by too many potential objectives or too great a degree of freedom within a game.

Sense of Control

When playing a video game, players can decide what kinds of actions they want to take. In many games, players can also choose what their characters are capable of or look like, in addition to other customization options like difficulty levels, keyboard and joystick configurations, and sound/music effects. It is not just the gameplay itself; players decide when they want to play and for how long. While the number of participants who specifically mentioned this topic (9/25) was not as high as other themes addressed in this paper, the research team finds this theme important to note, as having a sense of control often seemed to be relevant to other positive emotional experiences (e.g., comfort, safety, relaxation) that participants discussed.

In the current study, several participants compared video games with other types of entertainment media with strong narratives, such as books and TV shows, to emphasize what differentiates games from them: the sense of control that is driven by active interaction with the media. Participants appreciated that when there is a storyline to follow, they are the ones who have power over following the plot, instead of simply absorbing what is provided to them.

Well, I would say the interactivity of them, unlike pretty much any other form of media, you literally have control. And for people who feel like they don't have a lot of control in their life it's nice to have something where you're literally controlling a character and what they do and that's very comforting. (Participant 130)

Participants often talked about real-life situations and struggles they cannot control. However, playing games is different. Gaming experience provides them with a sense of control in the alternative world (e.g., Participant 116) and even in a cathartic but nonconsequential way (e.g., Participant 119).

Well, in RTS game, I feel like I can control a lot of things. I can control the resources, the construction, and then the army and the strategy or tactics. So I feel like I like this kind of control because I cannot do that in reality, but in the game, so it gave me the chance to experience this. (Participant 116)

Sims is one that I play on and off just when I'm like, “I want to control something, I'm going to make these people do what I tell them to do,” kind of thing. So I think sometimes games, it is a little bit of a control factor that we can have over a character in a game, even if we end up dying from it. (Participant 119)

Here, the pace of a game was a noteworthy element as it contributes to achieving a sense of control. Video games that strictly require players to finish certain tasks at specific deadlines may not provide the self-paced gameplay experience and the freedom that comes with it. Thus, if a game player looks for recommendations for games that can potentially help them feel more in control regarding pace, librarians may provide suggestions of sandbox or strategic games that give players freedom of creativity without predetermined goals (e.g., Minecraft, Stardew Valley, Animal Crossing), or adventure and role-playing games (RPGs) that allow players to explore the world without having rigid deadlines for the quests (e.g., Hogwarts Legacy).

Negative Experiences—Elements to Be Careful With

While extolling the prevalent virtues of video games as a means to regulate mood, seek comfort, and cultivate a community of friends and peers, participants in our study were well aware of the drawbacks of using games in this manner or playing games at all. Multiple participants noted the potential to use video games, much as one would use a drug or other addictive substance, as an escape to avoid problems for prolonged periods of time. Several participants were able to describe instances in their own lives or those of family members or friends who became “addicted” to video games:²⁸

The only, I would say, giant effect that it has on my overall mental health is when I’m more or less addicted to a game. I think that’s more of a problem with having something consume my life, rather video games specifically. (Participant 132)

Participants had nuanced understandings of addiction as it related to video game playing. They understood that moderation was key and expressed the nuanced understanding that games can be used to a positive effect to an extent but are no replacement for more meaningful interventions like therapy, exercise, or community building more broadly. Games should not be used, in other words, to escape problems permanently, because they don’t ultimately solve the real underlying problems of our daily lives.

In addition, participants pointed out some endemic problems with video games, particularly online communities that alienated them, in many cases, encouraging participants to play only single-player games or games offline:

I want to say that my negative experience doesn’t have much to do with the game itself, but with the online players that I play with. So, of course, it’s male-oriented, and so when I’m online, I do approach people who are misogynistic, and they hear that I’m a girl, and so they go crazy and get really mean. So that’s the only negative I have of that. (Participant 118)

Again, we see a consciousness of the multifaceted and nuanced potentials of games-as-media, and games as a platform for community. In this case, it’s clear that participants, particularly female-identified players, are able to build community online, but must do so carefully and under the added stress of misogynistic structural problems within gaming communities.

The literature already has substantial discussion of the variable of difficulty within games and how that impacts player satisfaction and positive outcomes, as well as elements of frustration and how that impacts user experience.²⁹ Frustration can be caused by a number of factors, from extensive difficulty in games, to games that are in a state of “early access” or are “broken” or otherwise unfinished.³⁰ Players note both frustration and general difficulty as potentially negative characteristics of the experience of playing games:

I guess there are times that I’ve played super frustrating games that I’ve walked away probably more angry than I started out. There’s definitely been some, particularly fighting games, there’s certain ones where there’s a certain level where you plateau, and it’s really frustrating, because it seems like there’s nothing you can do. (Participant 104)

In cases where players are too frustrated with either the state of the game or its intentional difficulty, a common response is to walk away from the game, probably to return later: players describe growing bored or frustrated when they hit insurmountable obstacles or “broken” elements of gameplay and choosing to move on to something else. Participants cite the principle that games should be, first and foremost, a fun experience.

In extreme circumstances, players describe having negative emotional states as being “triggered” by elements of games. Although these anecdotes are much less common than general expressions of frustration, they do happen:

Where games made me feel worse, I guess that was before I realized that I suffer from a lot of anxiety, and I hadn’t gone to a doctor yet to get medication for it. And so there were certain games where what was happening in the story... For example, in *Horizon Zero Dawn*, it’s about how the Earth is destroyed by a mechanical plague. And then people are brought back, and they realize all this destruction and that they’ve lost all this advancement. And I just realized as much as I loved the storytelling, I was like, “God, it was a very depressing situation.” And when I was feeling anxious and depressed, before I got some medication, I was like, “I don’t want to play. It’s triggering me and making me feel hopeless.” So I was like, “Nope, I got to back away from this story.” When I finally went to my doctor and said, “I think I need help,” and I was able to get something that was helping with my anxiety and depression, I was able to actually just play the game and not feel that effect. (Participant 109)

Finally, players are acutely aware of the material conditions under which games are produced. Multiple participants expressed concern about the so-called “crunch” as part of video game development and the industry:

If I have heard that a game company did something awful, or if they’re known for bad practices, I will avoid it to a point. To be a hypocrite, I’m still probably going to play *Dragon Age* when it comes out, even though EA is not a good company. Because I love that franchise so much. But, I’ve definitely moved more in the direction of smaller studios and more indie games recently, partly because of that. (Participant 114)

This gives us a few potential threads to tug at to unravel how players see games in their lives. Because games may be a facet of individual identity, players do not want to be complicit in exploitative or other problematic social and political consequences caused by the games industry. They may, therefore, boycott certain games or choose one similar game over another if the former is free of some problematic element, such as being produced under exploitative labor practices or being associated with homophobic or sexist public figures. When providing recommendations, librarians might want to consider potential negative elements of gaming, in contrast to the returns the games provide emotionally, psychologically, socially, and even politically. Players are aware of their engagement with games as an act of identification in addition to a simple choice about how to spend their time.

Discussion

Based on the findings in this study, the following discussion section examines how libraries and librarians can incorporate an understanding of game players’ affective needs to enhance reference and other relevant information services. During the interview, participants discussed what kinds of recommendations they hope to receive that satisfy their affective video game needs. They talked about hypothetical services or features that are tailored to their personalized needs, including finding games based on their current mood or the mood that they want to achieve, and games that are similar to the ones they liked previously or even to the other types of media they enjoyed. Additionally, one participant (Participant 114) noted that being able to avoid specific components of games is also important for them in game recommendations.

One aspect that stood out to the research team was that participants in the current study understood themselves as players very well. They were able to articulate in detail what types of games could support their emotion regulation in what ways; similarly, they were also able to identify what could hinder their emotion regulation. Due to this, participants hoped to get that level of

granular and personalized recommendations through the information services. In that perspective, their needs were not necessarily about trying out new games and expanding their preferences,³¹ but rather about finding the games that are an exact right fit for them in specific contexts and situations, checking all the boxes they have as an information user.

For reference librarians who are knowledgeable about games already, this type of granular information need may be a straightforward reference interview opportunity. However, for librarians who are not familiar with expansive game collections, this type of reference request may be intimidating and overwhelming. In their book, *Librarians' Guide to Games and Gamers: From Collection Development to Advisory Services*,³² Goodridge and Rohweder suggest that while it is a librarian's job to ensure the patrons are set up suitably to enjoy the games recommended to them, it cannot always be guaranteed that the patrons will like the game recommendations from the librarians:

Books and games are very personal experiences, and while we can do our best to make recommendations, sometimes we don't hit the mark. By providing a positive experience and an eagerness to help, you can encourage your patrons to continue to try new games and come back to the library. (p. 52)

While the research team agrees with the authors that sometimes it may be natural and even expected for library users not to like the materials that librarians recommend because reading is such a personal experience, recommending materials for affective needs or to support mental well-being may need to be considered with more caution. Existing research in clinical psychology and media studies³³ shows that incorporating bibliotherapy (or the use of other types of entertainment media) can support promoting readers, players, and audiences' mental health and resiliency. The findings from the current study are aligned consistently with the existing studies. However, some of the participants in this study shared their caution toward using games to promote their mental health due to potential negative experiences, such as addiction and online harassment. More severely, poor recommendations may inadvertently include psychological triggers, leading to outcomes that oppose the patrons' original intentions and potentially causing emotional distress.

Considering this, the research team suggests the following reference interview questions for librarians when a patron is looking for games to promote emotional and mental well-being, which are created based on the findings of this study. While these questions are tailored for video games, many can apply to other formats and genres of media materials with similar emotion regulation purposes.

- Please think about the games you played before that helped you feel better. Let's talk about those games and think about the general atmosphere or elements in those games, such as music or art, a strong narrative, and gameplay style.
 - *[Related question]* If it is difficult for you to describe the games you are looking for, can you talk about other types of media that have helped you feel better, such as books and movies? What were the elements of those media that you liked?
- Are you looking for relaxation or excitement?
- Do you like competitive elements in games?
- Do you prefer to play with family and friends or by yourself?
- Do you want to find games with a slower or faster pace? Do you prefer games that allow you to decide your own pace in progress, or more structured pacing with a set timeline?
- Are you looking for games that are simple or require more cognitive engagement?
 - *[Related question]* How much of a challenge in gameplay mechanics are you looking for? What are the game examples that gave you the right level of challenge?

- How long do you prefer your gaming sessions to be, and how important is it for you to be able to pause games easily?
- What do you want to avoid?

In online gaming communities, the terms that are often used to describe games to help people feel better include "cozy games," "therapeutic games," "relaxing games," "calming games," and "stress management games." Sometimes, "cognitive games," "creative games," "sandbox games," and "puzzle games" can also be relevant for specific purposes and situations. For librarians who are unfamiliar with games but want to learn more about the availability of games that are well known for their soothing effects, they may begin their research with these search keywords to familiarize themselves with the different types of video games that can be helpful in reference services. As the natural language query has become much easier with the available large language models (LLMs) such as ChatGPT, librarians who are unfamiliar with video games can also get the initial help by using them in learning about the list of video games that are often recommended in online gaming communities for affective reasons. However, this suggestion is merely a starting point to learn about games and not to create an exhaustive list of games that can be recommended to promote one's emotional and mental well-being. What a library user needs will be personal, diverse, and situational.

Conclusion

The current study interviewed 25 video game players and qualitatively analyzed their video game play experiences to understand how everyday entertainment media, such as video games, can help promote one's emotional and mental well-being. The experiences and insights that participants shared in this study were invaluable; their honest and personal anecdotes highlighted the potential strength of video games as a means to regulate emotions, which also aligned with existing literature in media and psychology studies. Based on the findings, the research team believes that providing video game reference services and other relevant information services can be vital for community members.

Several participants in this study identified themselves as neurodivergent or with mental health issues, and the research team believes that their video game playing experiences and affective information needs are worth investigating further in future studies. For example, in this study, findings suggested that neurodivergent participants typically found a measure of escape in video games, which may be related to emotional regulation. While this is not generalizable, a larger sample in future research can provide a more in-depth understanding of how to support neurodivergent information users or information users with different mental health concerns by providing pertinent video game reference and recommendation services. Particularly, knowing more about which elements of games, such as aesthetics, sounds, pace, gameplay mechanics, and more, might influence their affective needs positively or negatively in various situations or contexts would be a significant help in enhancing future reference services in not just video games but other leisure materials.

Acknowledgments

This research was supported by the RUSA Gail Schlachter Memorial Research Grant. The research team is sincerely grateful for the opportunity to better understand how video games can support library users' emotional and mental well-being. In addition, the research team thanks Dr. Christy Hutton for sharing her expertise in mental health for this study.

References

1. Matthew Barr and Alicia Copeland-Stewart, "Playing Video Games During the COVID-19 Pandemic and Effects on Players' Well-Being," *Games & Culture* 17, no. 1 (2022): 122–39. <https://doi.org/10.1177/15554120211017036>.
2. Andrew Kuo, Richard J. Lutz, and Jacob L. Hiler, "Brave New World of Warcraft: A Conceptual Framework for Active Escapism," *Journal of Consumer Marketing* 33, no. 7 (2016): 498–506. <https://doi.org/10.1108/JCM-04-2016-1775>.
3. Lisa Brelet and Yoren Gaffary, "Stress Reduction Interventions: A Scoping Review to Explore Progress Toward Use of Haptic Feedback in Virtual Reality," *Frontiers in Virtual Reality* 3 (2022): 900–70, <https://doi.org/10.3389/frvir.2022.900970>.
4. Scott H. Hemenover and Nicholas D. Bowman, "Video Games, Emotion, and Emotion Regulation: Expanding the Scope," *Annals of the International Communication Association* 42, no. 2 (2018), 125–43, <https://doi.org/10.1080/23808985.2018.1442239>; Zhanna Sarsenbayeva, et al, "Using Video Games to Regulate Emotions," *Proceedings of the 32nd Australian Conference on Human-Computer Interaction*, published February 15, 2021, <https://dl.acm.org/doi/10.1145/3441000.3441035>.
5. Georgia Pavlopoulou, Claire Usher, and Amy Pearson, "'I Can Actually Do It Without Any Help or Someone Watching Over Me All the Time and Giving Me Constant Instruction': Autistic Adolescent Boys' Perspectives on Engagement in Online Video Gaming," *British Journal of Developmental Psychology* 40, no. 4 (2022): 557–71, <https://doi.org/10.1111/bjdp.12424>.
6. Sara Ahmadi, Keyvan Salehi, Soheila Khoeini, Hasan Siamian, and Alireza Noruzi, "Building Self-Esteem in Elementary School Students: The Promising Benefits of Bibliotherapy," *Informology* 3, no 1 (2024): 127–42; Çigdem Kaymaz and Pinar Bayhan, "Implementing Developmental Bibliotherapy to Manage Anger in Students with Learning Disabilities," *Intervention in School and Clinic* 60, no. 5 (2025): 276–84, <https://doi.org/10.1177/10534512241305328>; Rebecca A. Morin and Amy E LaVertu, "Bibliotherapy for Stress Management: A Wellness Intervention for First-Year Medical Students," *Journal of the Medical Library Association* 113, no. 2 (2025): 158–67, <https://doi.org/10.5195/jmla.2025.1830>; Amy Serafini, "Bibliotherapy in Education: A Systematic Review," *Alabama Journal of Educational Leadership* 11 (2024):109–28; Madison Woodall and Lyndsay N. Jenkins, "Using Bibliotherapy to Address Bullying in Schools," *Child & Youth Services* 45, no. 4 (2024): 651–63, <https://doi.org/10.1080/0145935X.2023.2218080>.
7. Deborah Fanner and Christine Urquhart, "Bibliotherapy for Mental Health Service Users Part 1: A Systematic Review," *Health Information & Libraries Journal* 25, no. 4 (2008): 237–52, <https://doi.org/10.1111/j.1471-1842.2008.00821.x>; Jurgita GirČienė and Miglė Damijonaitytė, "Bibliotherapy Services in Public Libraries: The Case of Lithuania," *Knygotyra* 81 (2023), <https://doi.org/10.15388/Knygotyra.2023.81.5>; Soheyla Khoeyni, Alireza Nurozi, and Fatemeh Fahimnia, "Components of the Implementation of Bibliotherapy in Public Libraries," *Viewpoints of LIS and Psychology professionals* 1, no. 23 (2017): 89–110.
8. Loretta Odori Daniel. "Bibliotherapy: An Expanded Role for Libraries and Librarians." *Library Philosophy and Practice (E-Journal)* no. 7957 (2023). <https://scholarworks.sjsu.edu/libphilprac/7957/>
9. Elena Popova, "'Libraries of Emotions'- A New Way of Reading Books and a Psychological Method of Classification," *Издатель* 24, no. 1 (2022): 61–70, <https://doi.org/10.70300/LhKSM2yNZ6NpyrKBh>.
10. Dolf Zillman, *Selective Exposure to Communication* (Routledge, 1985).
11. Leonard Reinecke, "Games and Recovery." *Journal of Media Psychology* 21, no. 3 (2009): 126–42, <https://doi.org/10.1027/1864-1105.21.3.126>; Leonard Reinecke and Allison Eden, "Media Use and Recreation: Media-Induced Recovery as a Link Between Media Exposure and Well-Being," In *The Routledge Handbook of Media Use and Well-Being: International Perspectives on Theory and Research on Positive Media Effects*. Routledge/Taylor & Francis Group, 2017; Leonard Reinecke and Diana Rieger, "Media Entertainment as a Self-Regulatory Resource: The Recovery and Resilience in Entertaining Media Use (R²EM) Model," In *The Oxford Handbook of Entertainment Theory*. Oxford UP, 2021; Diana Rieger, Leonard Reinecke, Lena Frischlich, and Gary Bente, "Media Entertainment and Well-Being—Linking Hedonic and Eudaimonic Entertainment Experience to Media-Induced Recovery and Vitality," *Journal of Communication* 64, no. 3 (2014): 456–78, <https://doi.org/10.1111/jcom.12097>.
12. Reinecke and Rieger, "Media Entertainment as a Self-Regulatory Resource: The Recovery and Resilience in Entertaining Media Use (R²EM) Model."

13. Sabine Sonnentag, Carmen Binnewies, and Eva J. Mojza, "'Did You Have a Nice Evening?' A Day-Level Study on Recovery Experiences, Sleep, and Affect," *Journal of Applied Psychology* 93, no. 3 (2008): 674–84, <https://doi.org/10.1037/0021-9010.93.3.674>.
14. "Video Game History - Timeline & Facts," *History*. September 1, 2017. <https://www.history.com/articles/history-of-video-games>.
15. Chris Comerford, "Coconuts, Custom-Play and COVID-19: Social Isolation, Serious Leisure and Personas in Animal Crossing: New Horizons," *Persona Studies* 6, no. 2 (2021), <https://doi.org/10.21153/psj2020vol6no2art970>; Katy E. Pearce, et al, "Families Playing Animal Crossing Together: Coping With Video Games During the COVID-19 Pandemic," *Games & Culture* 17, no. 5 (2022): 773–94, <https://doi.org/10.1177/15554120211056125>; Arianna Boldi, Amon Rapp, and Maurizio Tirassa, "Playing During a Crisis: The Impact of Commercial Video Games on the Reconfiguration of People's Life During the COVID-19 Pandemic," *Human-Computer Interaction* 39, nos. 5-6 (2024): 338–79, <https://doi.org/10.1080/07370024.2022.2050725>; Joanna E. Lewis, Mia Trojovsky, and Molly M. Jameson, "New Social Horizons: Anxiety, Isolation, and Animal Crossing During the COVID-19 Pandemic," *Frontiers in Virtual Reality* 2 (2021), <https://doi.org/10.3389/frvir.2021.627350>.
16. Barr and Copeland-Stewart, "Playing Video Games During the COVID-19 Pandemic and Effects on Players' Well-Being."
17. Hyerim Cho, Jin Ha Lee, and Alex Urban, "Recovery and Support: Motivations for Playing a Social Video Game in the Midst of a Pandemic," In *Conference Proceedings of DiGRA 2023 Conference: Limits and Margins of Games Settings* (2023). <https://doi.org/10.26503/dl.v2023i1.1953>; Barr and Copeland-Stewart, "Playing Video Games During the COVID-19 Pandemic and Effects on Players' Well-Being."
18. Gustavo Marfia, Alessandro Amoroso, Marco Rocchetti, Giulio Basile, and Claudio E. Palazzi, "Video Games at the Library: A Historical Perspective," *2011 Proceedings of 20th International Conference on Computer Communications and Networks (ICCCN), Computer Communications and Networks (ICCCN)* (2011), <https://doi.org/10.1109/ICCCN.2011.6005757>.
19. Beth Saxton, "All Thumbs Isn't a Bad Thing: Video Game Programs @ Your Library," *Young Adult Library Services* 5, no. 2 (2007): 31–3.
20. Aaron J. Elkins and Jonathan M. Hollister, "Power Up: Games and Gaming in Library and Information Science Curricula in the United States," *Journal of Education for Library and Information Science* 61, no. 2 (2020): 299–52; Lisette Templeton and Ann Goulding, "Staff Engagement and Perceptions of Video Games in Public Libraries in Aotearoa New Zealand," *Global Knowledge, Memory and Communication* 74, no. 3/4 (2025): 977–1006.
21. Jin Ha Lee, Rachel Ivy Clarke, Hyerim Cho, and Travis Windleharth, "Understanding Appeals of Video Games for Readers' Advisory and Recommendation," *Reference & User Services Quarterly* 57, no. 2 (2017): 127–39, <https://doi.org/10.5860/rusq.57.2.6529>.
22. Reinecke and Riege 2021; Sabine Sonnentag and Charlotte Fritz, "The Recovery Experience Questionnaire: Development and Validation of a Measure for Assessing Recuperation and Unwinding From Work," *Journal of Occupational Health Psychology* 12, no. 3 (2007): 204–21, <https://doi.org/10.1037/1076-8998.12.3.204>.
23. Gross, James J. "Emotion Regulation: Conceptual and Empirical Foundations." In *Handbook of Emotion Regulation*, 2nd ed., edited by James J. Gross, 3–20. Guilford Press, 2014.
24. Reinecke and Riege 2021; Sabine Sonnentag and Charlotte Fritz, "The Recovery Experience Questionnaire: Development and Validation of a Measure for Assessing Recuperation and Unwinding From Work."
25. Hyerim Cho and Joe Kohlburn, "Identifying Affective Gameplay Behaviors: How Video Games Help People Feel Better," In *Proceedings of the Association for Information Science and Technology* (2023), <https://doi.org/10.5281/zenodo.7768440>.
26. "Run a Coding Comparison Query." NVivo 11 for Windows Help. Accessed June 3, 2025. <https://help-nv11.qsrinternational.com/desktop/welcome/welcome.htm>
27. Richard Chen Li, Meike Belter, Zo® Platt-Young, and Heide Karen Lukosch, "Immersive Games for Neurodiversity and Mental Health in Children and Young Adults," *Handbook of Research on Promoting Economic and Social Development Through Serious Games* (2022): 238–58; Katta Spiel and Kathrin Gerling, "The Purpose of Play: How

- HCI Games Research Fails Neurodivergent Populations," *ACM Transactions on Computer-Human Interaction (TOCHI)* 28, no. 2 (2021): 1–40; Kevin Rebecchi, "What Can Video Games Tell Us About Neurodiversity and Autism?" *Proceedings of DiGRA 2025: Games at the Crossroads*, published July 9, 2025, <https://doi.org/10.26503/dl.v2025i3.2671>.
28. Henrik Schoenau-Fog, "The Player Engagement Process-An Exploration of Continuation Desire in Digital Games," In *DiGRA Conference* (2011), <https://dl.digra.org/index.php/dl/article/view/540/540>.
 29. Ryan S. J. d. Baker, Sidney K. D'Mello, Ma Mercedes T. Rodrigo, and Authur C. Graesser, "Better to Be Frustrated Than Bored: The Incidence, Persistence, and Impact of Learners' Cognitive–Affective States During Interactions With Three Different Computer-Based Learning Environments." *International Journal of Human-Computer Studies*, 68, no. 4 (2010): 223–41; Hisham Kunju Mohamed and Jesper Vångman, "When Do Players Quit Playing Unaltered Valheim (2021) Due to Frustration of Gathering Resources?" Uppsala University, 2023, <https://uu.diva-portal.org/smash/record.jsf?pid=diva2%3A1765404&dswid=3327>.
 30. Kunju Mohamed and Vångman, "When Do Players Quit Playing Unaltered Valheim (2021) Due to Frustration of Gathering Resources?"
 31. American Library Association, "Booklist Launches Booklist Reader for Library Patrons and the Public," *American Library Association*, September 7, 2021, <https://www.ala.org/news/press-releases/2021/09/booklist-launches-booklist-reader-library-patrons-and-public>.
 32. Michelle Goodridge and Matthew J. Rohweder, *Librarian's Guide to Games and Gamers: From Collection Development to Advisory Services* (Bloomsbury Publishing, 2021).
 33. Steven Barnes and Julie Prescott, "Empirical Evidence for the Outcomes of Therapeutic Video Games for Adolescents With Anxiety Disorders: Systematic Review," *JMIR Serious Games* 6, no. 1 (2018): <https://doi.org.e9530.10.2196/games.9530>; Maria Rosaria Gualano, et al, "The Long-Term Effects of Bibliotherapy in Depression Treatment: Systematic Review of Randomized Clinical Trials," *Clinical Psychology Review* 58 (2017): 49–58; Magdalena Kowal, et al, "Gaming Your Mental Health: A Narrative Review on Mitigating Symptoms of Depression and Anxiety Using Commercial Video Games," *JMIR Serious Games* 9, no. 2 (2021): e26575; Leonard Reinecke and Rebekka Johanna Kreling, "The Longitudinal Influence of Hedonic and Eudaimonic Entertainment Preferences on Psychological Resilience And Wellbeing," *Frontiers in Communication* 7 (2022): 991458.

Appendix A: Semi-structured Interview Questions

[Part 1] Ice breakers

- Do you have any pronouns that you would like us to use?
- Do you have any jobs or hobbies that are relevant to video games?
- What kinds of video games are you playing lately? Could you tell me about them?
- Let's think about your all-time favorite video game. Can you choose one (or two) and tell us how that video game made you feel?

[Part 2] Motivations for playing video games

- Could you tell us what playing video games is generally like for you?
- Why do you play video games? Could you tell us about your motivations for playing video games?
- Do you play video games to change your mood?
- If so, can you remember how long you have been playing video games to feel better?
- Do you intentionally seek out certain games to feel certain emotions like horror, comedy, sadness, and more?
- (follow-up if needed)- What kinds of video games help you feel certain emotions?
- Do you have a preferred genre, platform, or type of video game that you play to produce specific emotions or moods?
- Prompts (gameplay, art style, sound or music, noncompetitive nature, setting, narrative, etc.)
- How does playing video games affect your feelings and mental health, if at all?
- Did you have any experience of feeling better or positive after playing video games? If so, could you share that experience with us?
- Can you tell us about a time playing video games made you feel bad or made your mood worse?
- Let's suppose that you're feeling anxious or stressed out or feeling "bad." What kinds of video games would help you feel better/resilient?
- If someone you care about feels depressed, which video game would you recommend, and why?

[Part 3] Video game information needs

- Where do you search for video games to play?
- Describe what you do when you are bored with the games you usually play, how do you find a new game?
- Please think about the last time you tried to find a video game to elevate your mood. How did you try to find the game? (e.g., search keywords, video game sources, elements that mattered to you like visual style, music, story)
- Please think about the last time when playing a video game actually helped you feel better. Could you tell us about that game and your experience?
- In your opinion, what are the video games' unique characteristics that help you feel better?
- Do video game cultures influence your mood in any way, like the political atmosphere, how games are made, how fans interact with each other online, and more?
- For example: who created the game, was "crunch" part of development, is there a controversy associated with the game that impacts your feelings

[Part 4] Suggestions to enhance video game recommendation services

- What are some blind spots you notice in current game recommendation services? Do you feel that you are missing out on certain kinds of games or certain topics, for example?
- Let's suppose that there is your dream video game recommendation and search engine that can find any video games. What kinds of search features would those systems have to help you find the games that support your emotional well-being?

[Part 5] Wrap-up

*Please remember that you do not have to answer questions when you don't want to.

- How old are you?
- What is your nationality?

Because our study is about how video games can support one's emotional well-being, we would like to know if you have any challenges that you are dealing with personally. If so, and only if you are feeling comfortable with sharing your story with us, can you give us a general idea of what they are (for example, depression, anxiety)? You don't have to go too in-depth.

- Is there anything else that you'd like to share with us before we end this conversation?