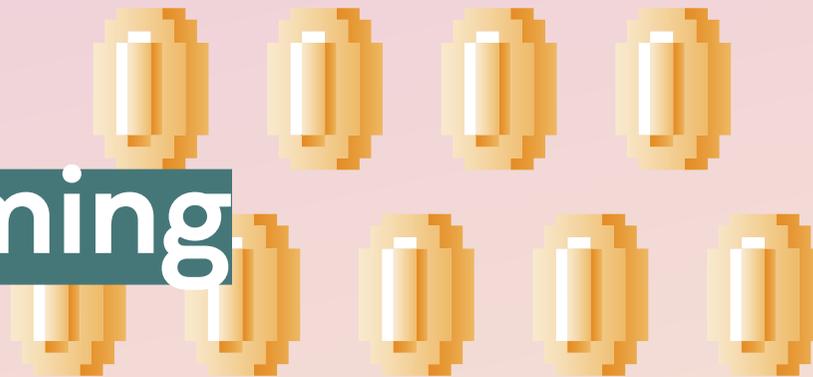
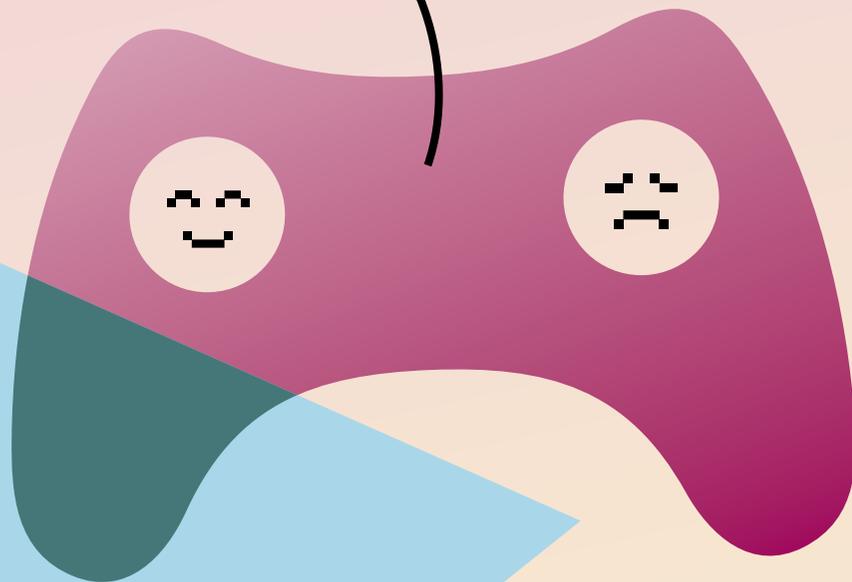


# Mind Gaming



**Exploring the  
lived experience  
of players' mental  
wellbeing**

**Independent research  
study by the Mental  
Health Foundation, with  
recommendations for the  
games industry**

**February 2022**



We would like to thank the members of our expert and lived experience advisory groups and the MHF Young Leaders for their integral role in shaping and supporting our work on this project.

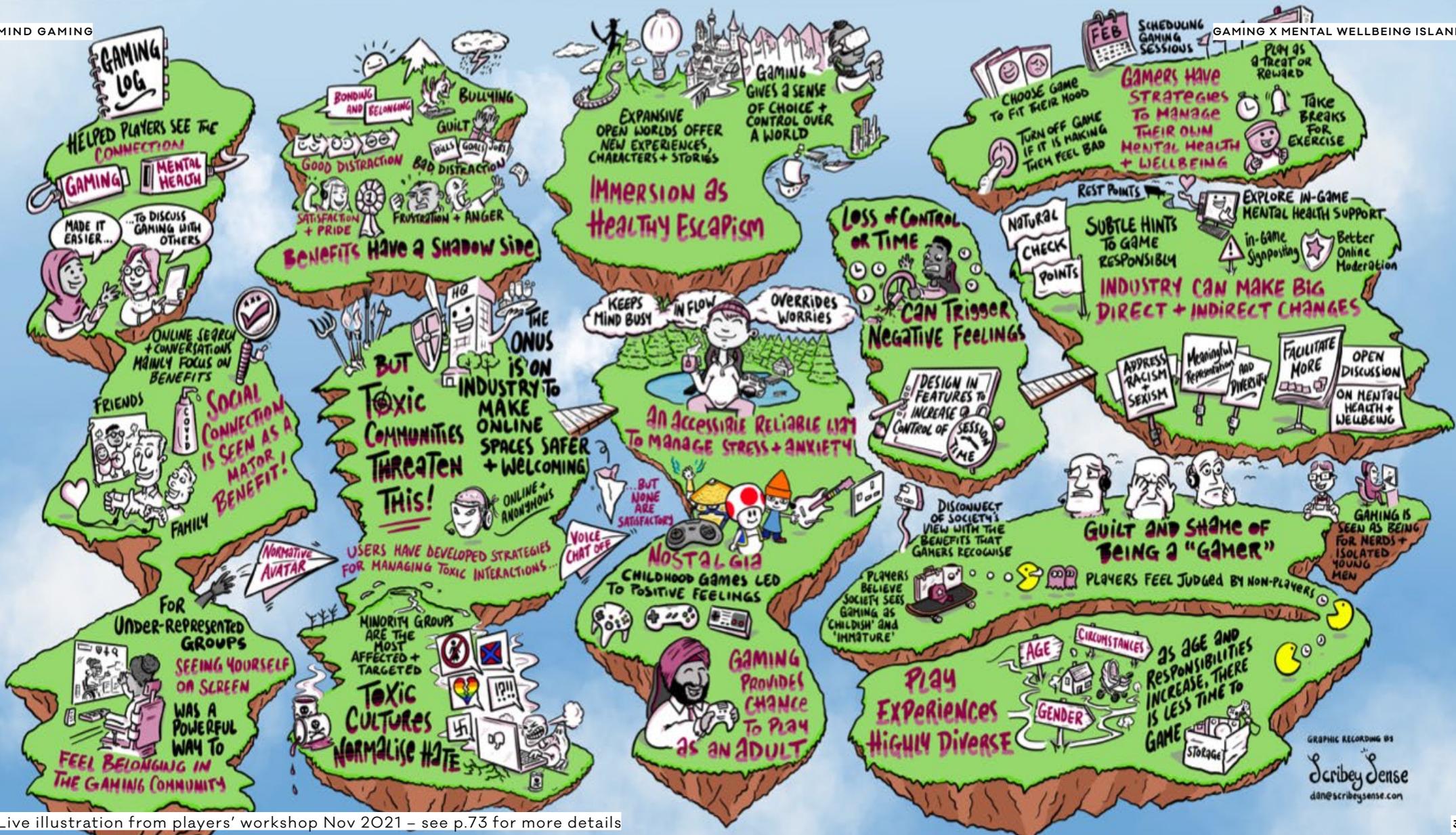


We also thank all those who took part in our gaming diary, interviews, and player workshop who generously shared their stories, experience and time with us.



This report was led and produced by the Mental Health Foundation, with data science contributions from **Synthesis**.





Live illustration from players' workshop Nov 2021 – see p.73 for more details

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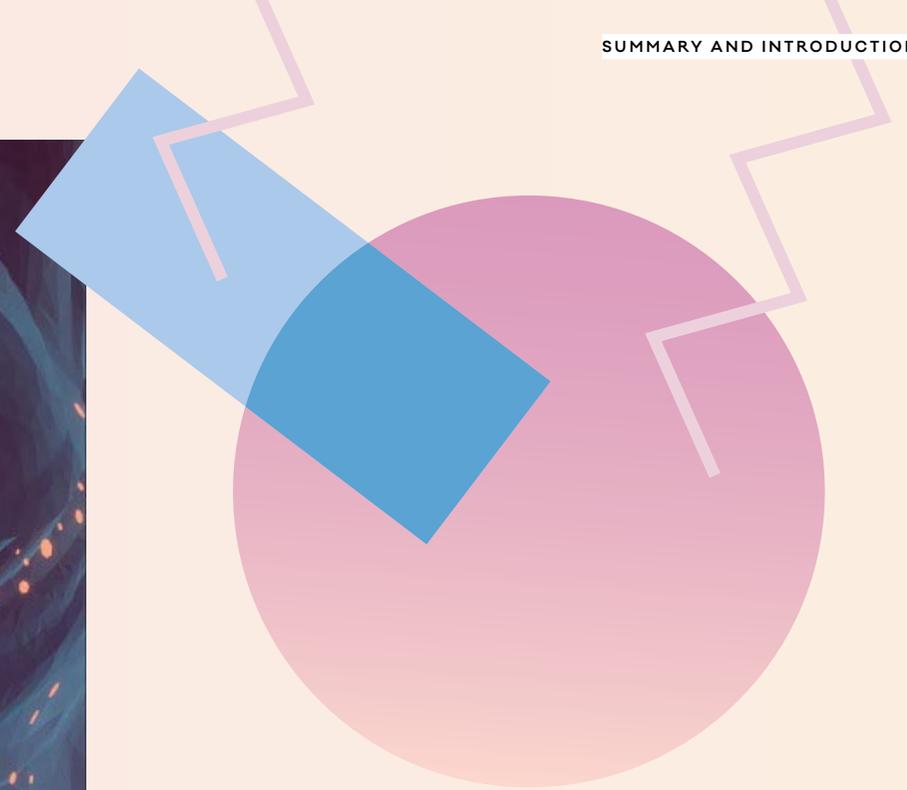


## Introduction

**The games industry has enormous potential to act as a source of good mental wellbeing.**

Mental health problems are a leading cause of ill-health in the UK.<sup>1</sup> One in six adults in England report experiencing a common mental health problem (like anxiety or depression) in any given week.<sup>2</sup> This unacceptably high level of mental ill-health is our biggest public health challenge.

By tackling risk factors to our mental health and maximising protective factors that enhance it, we can reduce the level and severity of mental health problems and improve our resilience to difficult life events.



We are increasingly recognising that this isn't just a task for the health sector. More and more, cultural institutions are considering the role they play in shaping social norms and behaviours – particularly brands that customers spend lots of time with.

The games industry has a huge role in reaching people who need to protect their mental health. The industry has enormous potential to act as a source for good in helping to promote mental wellbeing.

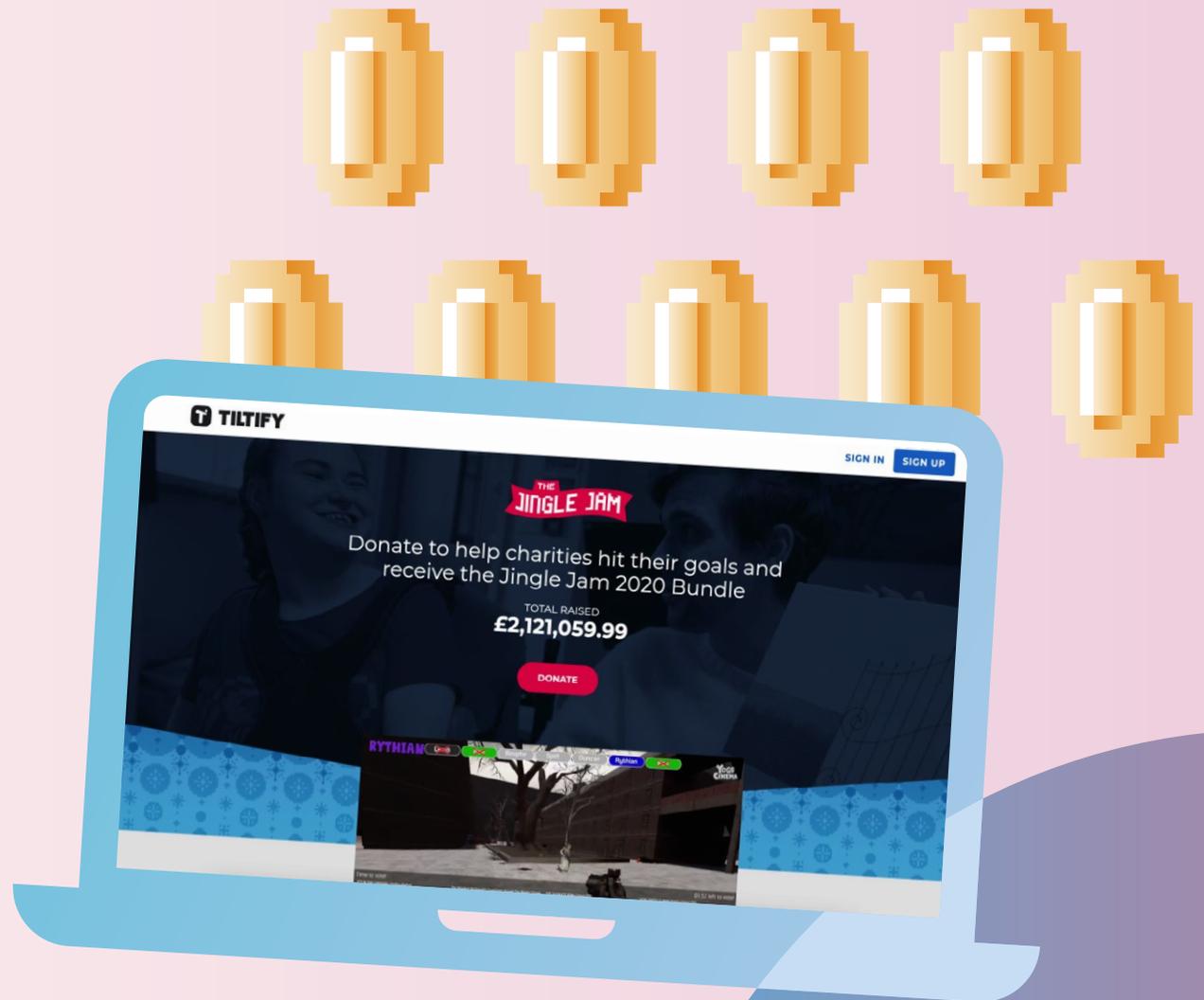
What's more, our study shows that players are expecting the games industry to take action on this. Players are asking you to do more: not because you have to, but because you have the opportunity and power to make a positive difference to their lives.

# Gamers crowd-fund a study on video games and mental wellbeing

Jingle Jam 2020 raised funds to support a range of charities. The Mental Health Foundation pledged to produce an exciting new piece of research that helps support the wellbeing of players.

We committed to taking a nuanced view that looks at the different ways that video games might influence wellbeing.

Most importantly, we made a commitment to co-design solutions with players themselves.



# Executive summary

There has been little research on the link between video games and mental wellbeing from the perspective and lived experience of players themselves. Our work followed 24 UK adults (console and PC gamers) aged 18-60 over three weeks, asking them to track their gameplay and mental wellbeing in their own words.

Players told us that games have a lot of benefits for their mental wellbeing, helping them manage worry or anxiety, de-stress and relax, and connect with other people (both in-person and online). Games also provide an outlet for creative expression and healthy escape. However, players also told us about some downsides: harmful behaviour from other players online, feelings of frustration or anger, and feeling like games can interfere with other priorities including self-care. When players described these downsides, one common feeling was a lack of

control. For example, they would play for longer than intended or 'on autopilot' without really knowing why.

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## Players didn't initially make the connection between video games and their mental wellbeing

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Players didn't initially make the connection between video games and their mental wellbeing. However, tracking how they felt when they played made them more aware of the link between their gameplay and their mood. This awareness helped players to articulate (both to themselves and to friends and family) why gaming was important to them and, in some cases, to be more deliberate in their choices around when, what and why they play.

Change can only come after awareness. Pausing to notice how gaming makes them feel is an important first step to empowering players to

better manage their wellbeing. We recommend players make a conscious effort to pause and be curious about their own gameplay habits. How do they feel before, during, and after playing games? What does gaming bring to their life and how does it affect their wellbeing? Regular reflection can help players understand the connection between gaming and their mental wellbeing, and identify where they may want to change their habits and where gaming is a positive resource for their wellbeing.

Given that gaming is different for everyone, there's unlikely to be a single universal solution for everyone. However, players told us they see a role for industry in supporting consumers to manage their own wellbeing in the context of gameplay. Players co-created solutions based around five ways the industry can make an impact on their mental wellbeing – see p.73



# How gaming impacts mental wellbeing is still an under-researched topic

**Around 86% of the UK adult population have played a video game in the past year.** Players are far more diverse than common stereotypes suggest. Half of frequent adult players are women, and more than half are over 30.<sup>3</sup> **Understanding how gaming interacts with mental wellbeing therefore isn't a niche topic: it's an important factor in the lives and leisure time of millions of people.**



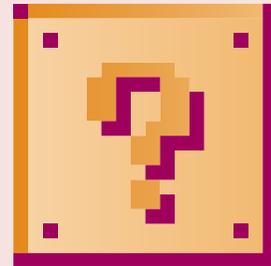
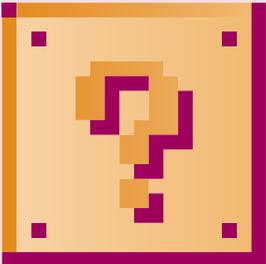
**We set out to better understand how UK players feel gaming relates to their mental wellbeing.** Much of the research about gaming is focused on measuring and quantifying people's gameplay. For example, it might compare how long people play for to how they rate their thoughts, feelings, and behaviour. While this is valuable, it can't tell us as much about how people feel about gameplay, and

how they understand and articulate their own relationship between gaming and mental wellbeing.

Answering these questions is an important way to understand the potential avenues for promoting good mental wellbeing while gaming.

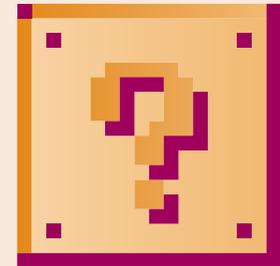
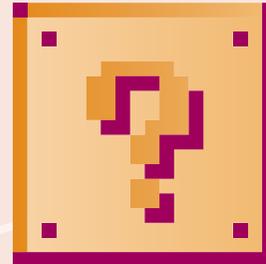
# Specifically, we wanted to know:

How do players understand mental wellbeing when it comes to gaming?



How do players currently manage their mental wellbeing when it comes to gaming?

What do players feel are the positive and negative impacts of gaming on their mental wellbeing?



How is the relationship between mental wellbeing and gaming affected by people's motivations to play and their individual characteristics?

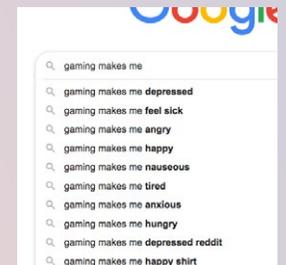
# We focused on players' own stories and experiences of mental wellbeing, gathering data within a more natural context

We asked a diverse group of 24 UK players (of console or PC games) aged 18-60 to keep an audio-visual 'gaming log'. Over the course of three weeks, players uploaded short clips telling us how they felt before, during, and after playing a game. They also answered additional questions about their thoughts, feelings, and behaviours around gaming. We followed this up with an in-depth interview to understand people's experiences in more detail. We then looked for trends and patterns in what people shared and pulled together some key themes.

While this can't tell us if playing games causes or is statistically linked to wellbeing, it can tell us a lot about how players understand their own mental health and wellbeing in relation to gaming, and the different roles that gaming plays in people's lives.

## We also took a closer look at trends in online searches for gaming and mental wellbeing.

We explored Google search trends and communities on Twitter and Reddit to see how, and how frequently, people were talking about gaming and mental wellbeing.





# Key findings

# Players didn't consciously make a link between gaming and mental wellbeing

A 2020 survey reported that 79% of video game players in the UK are highly aware of the importance of good mental health in general.<sup>4</sup> However, for most of our participants, this was the first time they had really considered the connection between their mental wellbeing and their personal gaming behaviours.

Their observations and insights about gaming and mental wellbeing only arose after exploring the topic in depth. Taking part in interviews and a 'gaming log' exercise encouraged players to pause and notice how their gaming affected their mood

**This suggests that while people might be aware of the importance of mental health in general, they are not necessarily aware of how their own gaming habits impact their mental wellbeing (and vice versa).**

**"It's probably something I'd never actually put two and two together, never put gaming and mental health...and put either... whether they have an adverse impact or whether they don't have an impact."**

# Change begins with awareness: active reflection via a 'gaming log' helped players better understand the links between their personal gaming behaviours and their mental wellbeing

Simply **noticing** that game play affects their mental wellbeing, and that mental wellbeing might drive their choice of game play, is an important first step in helping players make healthy gaming habits.

Structured reflection exercises (a 'gaming log' recorded via a voice or video clip on their smartphone) helped players better understand themselves and their gaming decisions

and behaviours. **Players told us they found this interesting and empowering.**

The gaming log encouraged some players to be more intentional in their gaming choices. It prompted some to have a constructive conversation with friends or family about why they game, fostering connections and a positive 'self-narrative'.



# How might we...?

Promote and support  
players to develop  
an increased self-  
awareness around the  
interplay of gaming and  
mental wellbeing as a  
route to empowering  
healthy choices?

Promote more  
intentional gaming?

*"It was interesting to be asked questions about this, because I'd never really... I subconsciously I knew what I was doing ...escapism and just to de-stress, but I'd never thought about it in those terms... that was the interesting thing - that little bit of self-analysis making me think about, in hindsight, what I'd done and how I'd changed."*



*"...a lot of time as humans, we just do things and it becomes automatic and then you forget what it is that I like [about] this, or what it is that I'm getting from this. So I think that was good, to understand some of my behaviours..."*

*"It was nice to be able to explain to my husband exactly how I feel. After doing the gaming diary I could talk to him about what they asked and what I said... and I could talk about being an introvert."*



# The UK public isn't commonly searching for information about gaming and mental wellbeing

The search volume for keywords related to mental health and gaming is very low, especially when compared to search volumes for general mental health keywords over the same time or searches for the mental health effects of other technologies.

This suggests the wider public also isn't making a connection between mental wellbeing and gaming. It may be because this isn't a concern for them, or because they aren't seeking information or support via these channels.

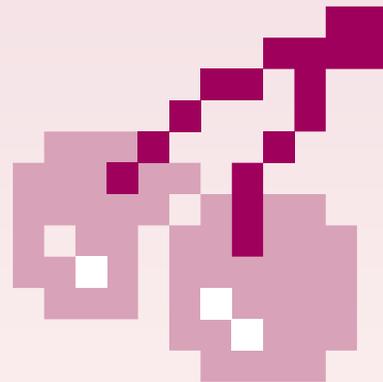


Table 1

Compared to general searches for Mental Health keywords, Mental Health x Gaming volumes are low

Keyword	Average P1Y Monthly Search Volume
Anxiety	135,000
Depression	110,000
Mental Health	90,500
Stress	40,500
Relaxing Gaming	1,300
Help with gaming/game addiction	320
Stress relief game	260
Games to help with anxiety	170
Mental Health and Gaming	20

Searches for Gaming x Mental Health also have comparatively lower Google Search volumes to other areas of mental health concerns

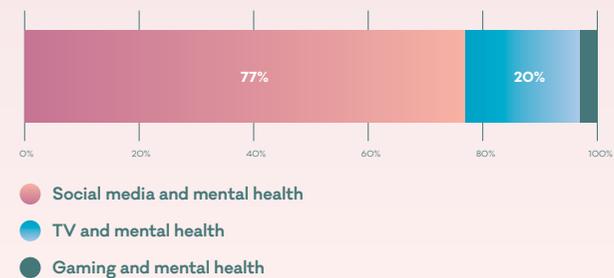


Table 1

'Benefits' and 'shadows' are loosely categorised into themes (or 'needs') from 'Self Determination Theory' - Social Connection, Autonomy, Competence and Flow.<sup>6,7</sup> This framework has previously been used to help understand links between gaming and wellbeing, and there is evidence to suggest that they act as key motivations for play.<sup>8</sup> More generally, research suggests that satisfying these needs is associated with improved wellbeing.<sup>6,7</sup>

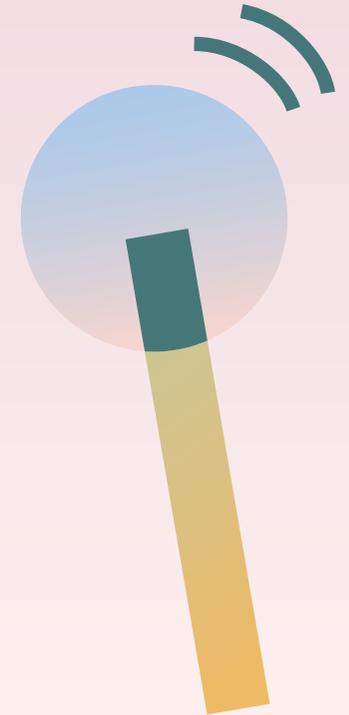
	Benefits	Shadows
Social connection	Bonding time with friends and family	Online bullying, abuse, or harassment
	Sense of belonging to a community	Feeling unable to be oneself online due to discrimination or harassment
	A shared interest and cultural experience	Feeling ashamed, guilty or embarrassed of hobby or gameplay habits
	Way to socialise on one's own terms	Avoiding in-person socialising
Control and Autonomy	Feeling a sense of control over the in-game environment	Feeling out-of-control of own gaming habits, sometimes playing excessively to the detriment of other responsibilities (eg. work, sleep)
Achievement and Mastery	Having freedom and variety of choice over what and how to play	
	Expressing creativity in-game	
	Satisfaction from in-game achievements	Feeling frustrated or angry with in-game challenges
	Pride from mastering a particularly challenging part of the game	
Flow	Active nature of gaming helping to keep brain occupied from feelings of anxiety, worry or stress	Gaming distracting from other goals or responsibilities
	Feeling immersed in different worlds or stories as a form of escapism	
Play	Positive nostalgia and sense of play from beloved childhood games	Stigma / shame about gaming as a hobby

## Players describe many positive aspects of gaming for their mental wellbeing. However, these positive aspects sometimes have a 'shadow side'

Players felt gaming mostly had a positive impact on their mental wellbeing. This is supported by survey data: three in five gamers (60%) say that gaming improves their mental health (a further 15% say 'significantly improves') and just 2% say it worsens it.<sup>5</sup>

Gaming was described as a way to manage feelings of worry or anxiety, an accessible method of relaxing and socialising with others, and an immersive way to explore creativity and in-game experiences.

However, players also described some downsides to gaming. These included abuse or harassment online, feeling frustrated or angry, and occasionally feeling out of control with their play habits. This could make them feel worse about themselves.



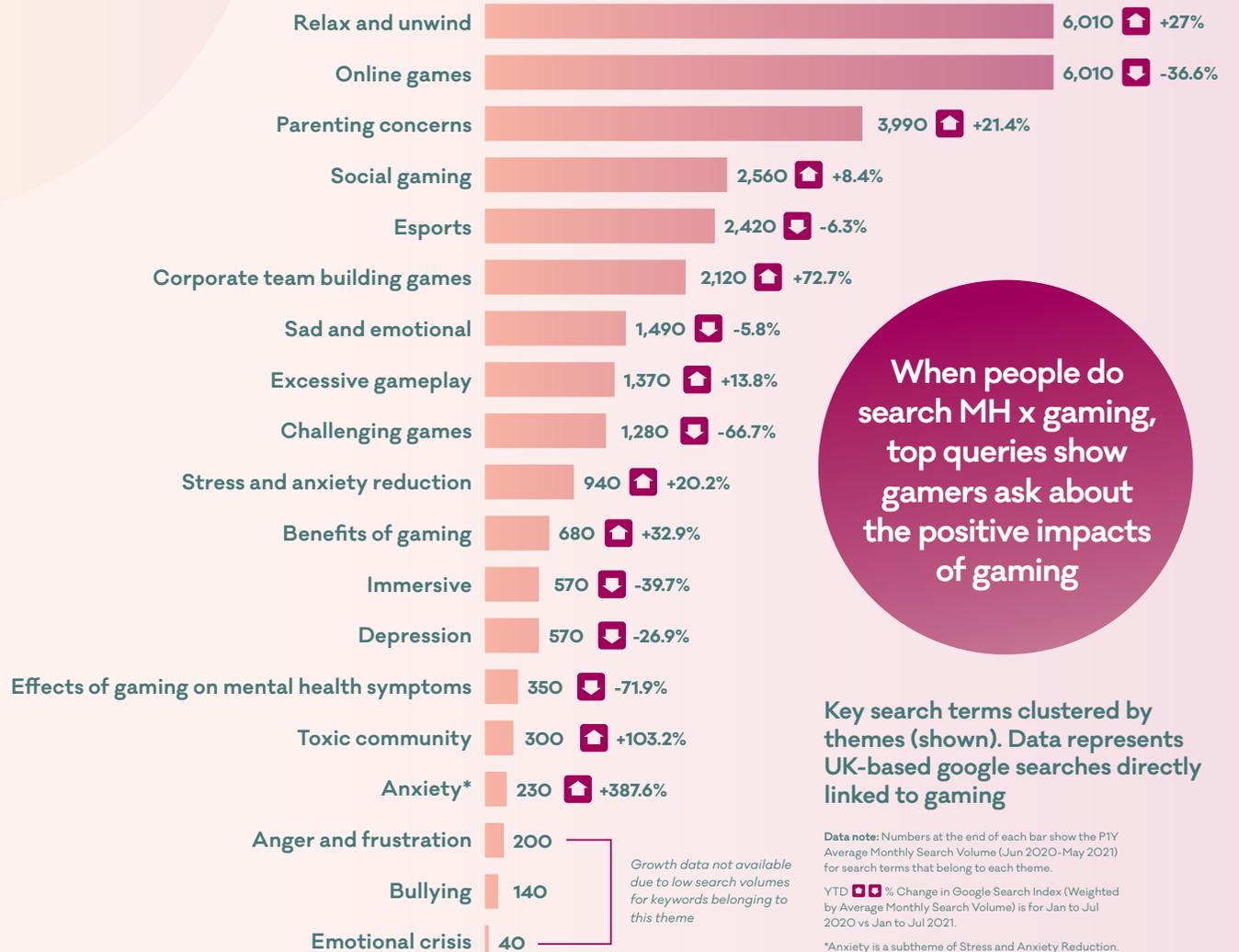
# Overview: key findings

Online search trends suggest people more commonly search for the positive benefits of gaming than the 'shadow sides', suggesting they may be actively seeking out games that might provide these benefits.

The most common gaming and mental health-related search was for games to 'relax and unwind'.

## How might we...?

Help players more easily find types of games that benefit their mood and mental wellbeing in a healthy way?

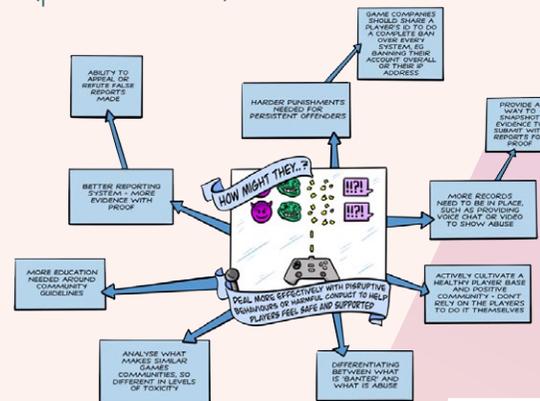


# Players felt the games industry could and should play a role in supporting their customers' wellbeing

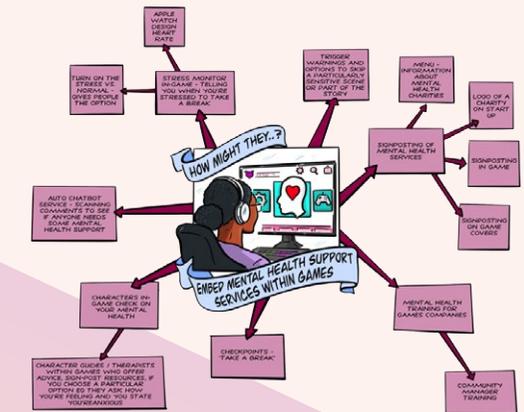
The relationship between gaming and wellbeing is highly individual and complex with many contextual and environmental factors. This means that developing a one-size-fits-all 'solution' for improving mental wellbeing is a challenge.

Players in our study suggested direct and indirect ways the games industry could better support players' mental wellbeing. These ranged from design tweaks to help players control how long they played to doing more to tackle toxic online communities.

Additionally, a workshop with a new sample of players co-created solutions for gaming and mental wellbeing. **Five themes** were identified as important to them (p.73 for details):



1. Meaningful representation and inclusive gaming
2. Dealing effectively with harmful or abusive players (toxic communities)
3. Increasing players' awareness of the relationship between mental health and videogames
4. Embedding mental health support and resources within games
5. Helping players recognise and avoid using games in unhealthy ways



see p.73 for more players recommendations



# Exploring the benefits and shadow sides of gaming

# Exploring the benefits and shadow sides of gaming and mental wellbeing

1. Vital social connection vs. harmful community behaviour



2. Meaningful representation matters enormously for mental wellbeing



3. Games as a reliable source of stress relief and managing anxiety



4. Immersion + escapism vs. loss of control



5. Redefining excessive play



6. The value of prompted reflection for playing with intention



7. The guilt and stigma attached to adult forms of play





# 1. Vital social connection vs. harmful behaviour

Gaming provides players with a unique way to connect with others, greatly benefiting their mental health - but harmful behaviour online can threaten this.

# In contrast to the stereotype of the 'lone isolated gamer', players primarily found gaming a vital source of social connection



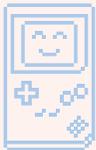
Players told us that games were a valued way of connecting with others, especially during COVID-19 restrictions. Games were an easy, enjoyable way to bond with others.

However, the positives of social gaming mostly came from strengthening existing relationships - playing with friends and family.

Players described routines of playing games with younger relatives or their children and spoke about gaming online as a way to keep in touch with friends who lived far away. Playing together was a way to have healthy competition with others and softened the blow of particularly challenging or frustrating game experiences.

This is supported by existing research and polling. Over a third of players in a recent poll said 'spending time with family and friends' was a reason for playing games,<sup>5</sup> and the concept of 'intergenerational play' (gameplay in physical proximity to parents or grandparents) has been suggested to help facilitate conversation between family members.<sup>9</sup>

*"We all still get online quite a bit, we kind of make a conscious effort to get on, all of us, at least once of week... bizarrely, I think it's made our friendship stronger in a way. 'Cause we make a commitment to actually meet up online. I think it's made us a lot more solid, kind of, as a unit. Which... to people who don't game probably sounds really weird, but to us, you know, it's worked"*



*"I suppose with my younger brother... it's fun... it's like our bonding time kind of thing. So it's nice in that way, and it's definitely because of COVID and that game kind of brought us together..."*



*"[Playing games] is that together time, when you can have conversations and you can have talks about how school's going... you make use of that time to speak about anything and everything because that might be your one go, and once that window has gone you don't know when the next window of opportunity arises"*



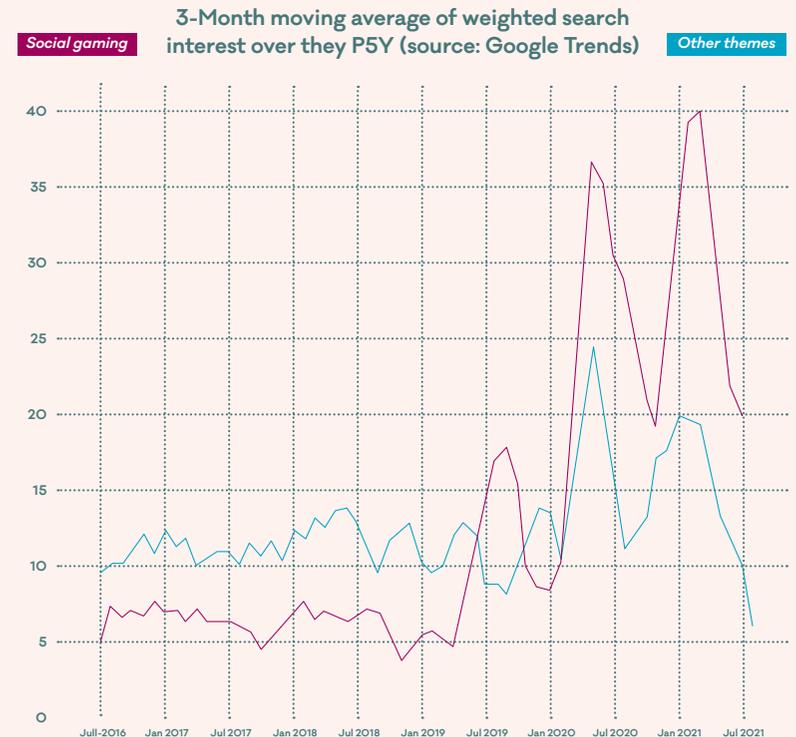
**As expected, during 2020-2021 COVID-19 lockdowns, people searched for new ways to connect with others via gaming. For some, it was a lifeline for their mental wellbeing**

*"I live alone, so basically at one point [during COVID lockdowns] it was my only sort of socialisation outside of going to work, doing my job, and coming home... living by yourself, it did get really lonely for a while and so gaming online was the only socialisation I could have for quite a bit of the time"*



Players in our study described using games as a valuable way to connect online when in-person connection was limited.

Polling has estimated that the overall gaming population in the UK increased by 63% over lockdown.<sup>5</sup>



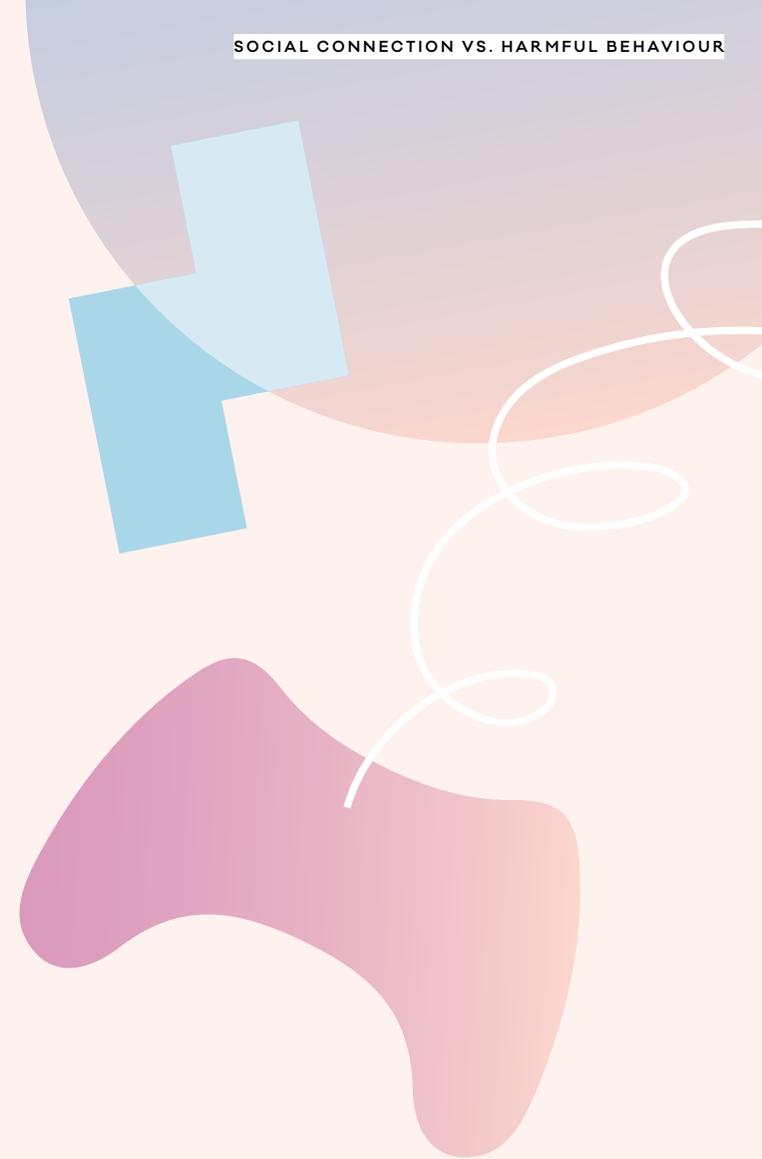
# Social gaming created a unique space to talk about mental wellbeing through the safety of a screen

The more distanced nature of online play meant some people found it easier to discuss sensitive topics (such as mental wellbeing) more openly than in person.

Players said talking in this way increased their mental wellbeing and their bonds with friends, and helped them talk about more serious or stigmatised topics such as mental health.

Social support networks are crucial to supporting positive mental wellbeing. Existing research suggests that games with social components give players a sense of belonging and improved wellbeing partly because of how they foster connection, community and social support.<sup>10,11</sup>

In our workshops, players asked for more opportunities and spaces for mental wellbeing discussion in gaming – informally with friends, and more formally with professionals.



## How might the industry...?

Understand more about which types of game, and game function, this might be suited to?

Promote opportunities such as this in gaming spaces?

Explore collaborating with mental health partners to provide spaces for talking about mental health?

"...it was quite nice he felt safe in opening up to us, but he did say it's because, you know, he couldn't see us, he felt he could just say it. Which he probably wouldn't have if we were all still socialising in normal ways at the time... I think it's 'cause you can't see each other. You can hear, but you can't see each other. So I think there is that, sort of, weird anonymity to it"



## While gaming creates connection, it also exposed some players to harmful online behaviour – especially players from marginalised groups



Players spoke of negative experiences predominantly related to harmful behaviour from other players online.

Players, particularly female or non-binary ones, described online harassment that negatively impacted their mental wellbeing and their experience of play. This commonly happened when gaming with anonymous players rather than with friends or family.

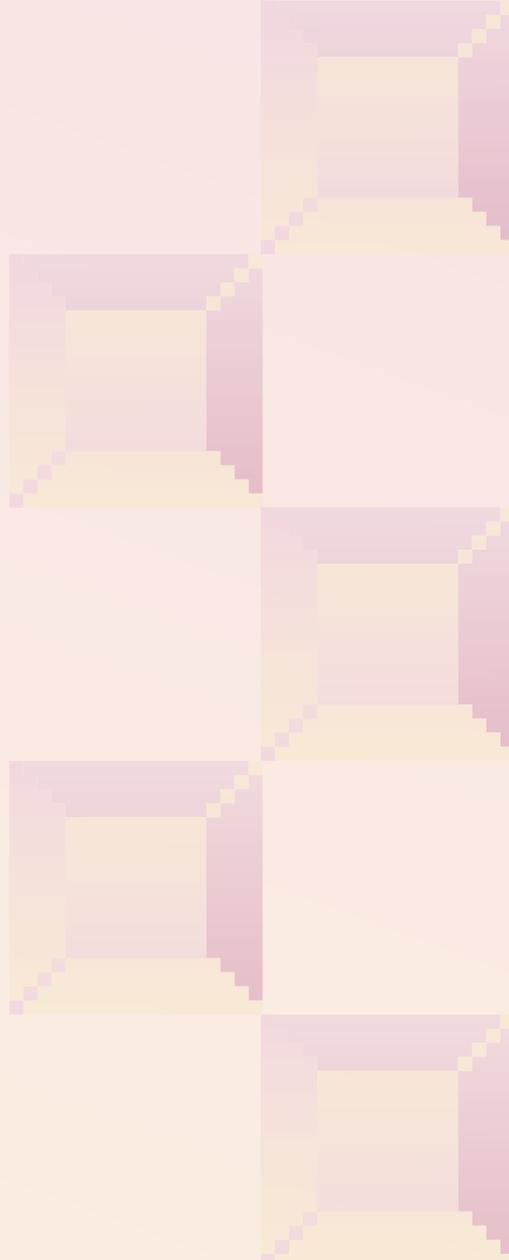
*“the community has a lot of problems with toxicity. I mean, like any online game does. Basically you’re never gonna find an online game where you don’t get people throwing slurs around in voice chat... even the nicest people in it will completely lose their minds going on rants, swearing at people and stuff like that, and, I personally just can’t tolerate that sort of thing”*



Unfortunately, existing research suggests these experiences are not isolated to players in our study. Surveys have found that one in five players believe racism and homophobia are problems in the gaming community, and one in ten believe that sexism is a problem.<sup>3</sup>

# This toxicity has profound implications for mental wellbeing

Research suggests that exposure to harmful conduct in gaming spaces, however brief, can cause psychological harm.<sup>12</sup> In a survey of players who reported being harassed online, one in five felt uncomfortable or upset after playing, one in seven felt isolated or alone and one in ten had depressive or suicidal thoughts.<sup>13</sup> For players from minority groups, being exposed to harassment and hate online could amplify the detrimental effects of minority stress they experienced in the offline world.<sup>14</sup>



*"...gaming can gloss this up as much as it wants, but it's bullying... it's horrible, 'cause you watch it, you just watch them pick on somebody... and I just think, if I was that person and if my mental health wasn't good and somebody is picking on me all the time... it's going to affect you"*



# The burden of dealing with harmful online behaviour is often left to individual players – further affecting their mental wellbeing

Players had ways to manage harmful online behaviour, but these didn't always help.

Players described strategies for managing harassment and other harmful interactions (e.g. playing as a male character, avoiding voice chat, ignoring or confronting the behaviour). However, none of these fully mitigated their distress or challenging emotions. Some players felt the best strategy was to avoid certain games entirely.

This is not uncommon. Research from the Fair Play Alliance found that among players who were harassed online, over one in three changed how they played, more than one in four avoided certain games and more than one in five quit playing certain games entirely.<sup>13</sup>

*...I've created a male version of me rather than a female version because it's just easier... I come home from work; I can't be bothered with more hassle... this is something I've never really properly talked about until I did this study. I generally feel like quite a coward...*

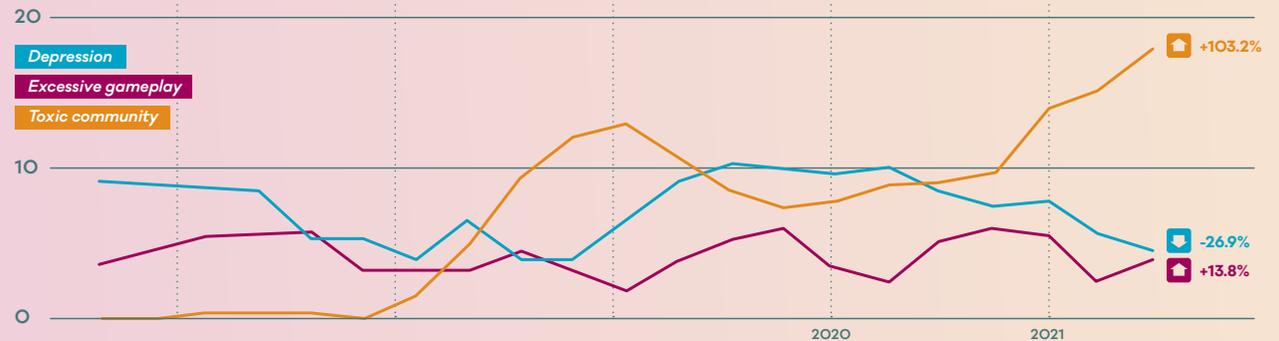


# Players are turning to forums and Google to find information, support and solutions

Online search trends suggest that concern around 'toxic communities' is growing and may be linked to the rising popularity of massive multiplayer online (MMO) games.

## Of the nine prioritised themes, toxic community is the fastest rising concern

Data note: 1) Date range for Google Search Index Line Chart is from Jul 2016 to Jul 2021, specifying searches originating from the UK only. Y-axis shows the 3-quarter moving average of Google Search Index (weighted by average monthly search volumes). 2) YTD % Change in Google Search Index (Weighted by Average Monthly Search Volume) for Jan to Jul 2020 vs Jan to Jul 2021



Amongst searches for concerns, toxic community has the fastest growth. This concern is linked to the rise in popularity of multiplayer & battle royale games like *Fortnite* and *League of Legends*.

Top URLs for this search space reveal people are seeking community support for this social concern, and are referred to forums (such as Reddit, Quora) rather than a game's official support page, or mental health resources and professionals.

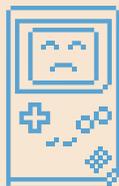
However, searches for 'social gaming' still vastly outnumber those for 'toxic communities'.

We recognise that 'toxicity' has a wide range of colloquial uses that can sometimes unhelpfully conflate varied types of online behaviour. However,

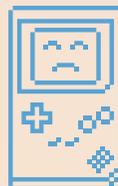
we chose to use keywords related to 'toxic' in this context to help us capture the ways that harmful and disruptive behaviours are often organically discussed online.

# Players believe the games industry should make online spaces safer and more welcoming for a diverse range of people

*...I just think, it shouldn't be down to me, you know. That's why I get angry – that's why I get annoyed with like, the gaming developers and the companies because it should come from them. You know, gaming should be a safe place.*



*...I don't think the way you can report someone for their bullying or their behaviour, I don't think it's robust enough. And I think that is their responsibility... It's their game. It's their platform. And if they're not responsible for that then who is?*



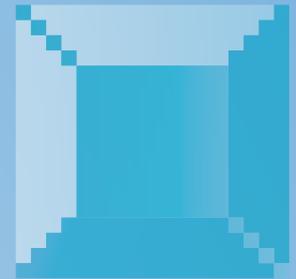
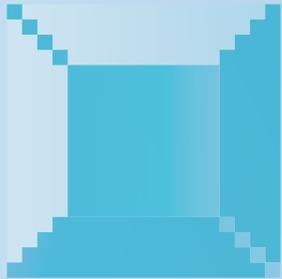
## How might we...?

**Tackle harmful behaviours, especially those impacting marginalised communities?**

Game developers have argued that moderating toxicity is unfeasible and unrealistic. However, businesses have an ethical responsibility to consider the safety and wellbeing of their customers. The Fair Play Alliance has provided an in-depth and practical framework for addressing harmful behaviour.<sup>13</sup>

Additionally, players attending our co-design workshop suggested solutions they would like to see the industry take up (see p.73).

## 2. Meaningful representation in games matters enormously to mental wellbeing





For players from underrepresented groups, seeing themselves represented on screen was a powerful way to feel a sense of belonging to the wider gaming community.

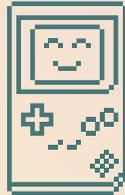
Meaningful representation of various ethnicities, nationalities, genders and sexualities in games had surprisingly powerful links to mental wellbeing

This is mirrored in existing polling, where 46% of players say they feel 'accepted in the gaming world'.<sup>5</sup>

*"...it makes me feel like I exist in the world... to see people like myself, non-binary, or people who struggle with the same problems that I've had in my life, or like with my mental health..."*



*"I'll play as myself, but it's kind of nice to just take the good aspects of me... so I don't put that I'm anxious, I'll put that I'm a bookworm or something and it highlights the good things that I like about myself..."*



## Highly customisable in-game avatars improve mental wellbeing by allowing control over self-image, boosting self-esteem

Some research suggests that letting players customise their character to match particular aspects of themselves may help to counteract any negative self-image and improve mental wellbeing.<sup>15,16</sup>

We saw this experience in our study, where players valued the ability to customise their characters. Some chose to 'put their own personality' into their characters and have them embody things they saw as their positive qualities such as their hobbies and their positive attitude.

## However, when games get representation wrong, players can feel excluded and isolated from the gaming community

Players were clear that meaningful representation matters. Without it, it can feel like they're not welcome in a particular game or in the wider community.

This extended to the culture of companies themselves. Attempts at in-game representation from companies with exclusionary working cultures were seen as tokenistic and insincere.

Players suggested that true representation comes from developers hiring more diverse staff to work on game design and creative decisions.

*"If you constantly don't see people who are like you, eventually it starts to go into your head that there might be something wrong about you, and you almost always feel like you're on the edge of something, at the edge of an acceptable community"*



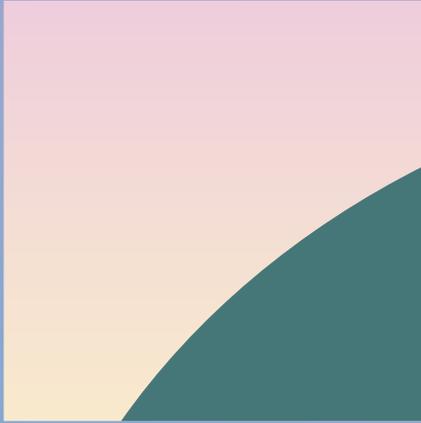
*"... it turns out five minutes later that every single woman that's ever worked for them [game developer] has been harassed or abused in some way. Like, I'm not gonna feel good because you've put a token lesbian character in your video game, if you're gonna tell me that these horrible things are happening behind closed doors."*



## How might we...

**Support the mental wellbeing of all players by working with minority group players to better understand what meaningful representation looks like?**

**Help to get representation right by bringing in the right voices early in the creative process?**



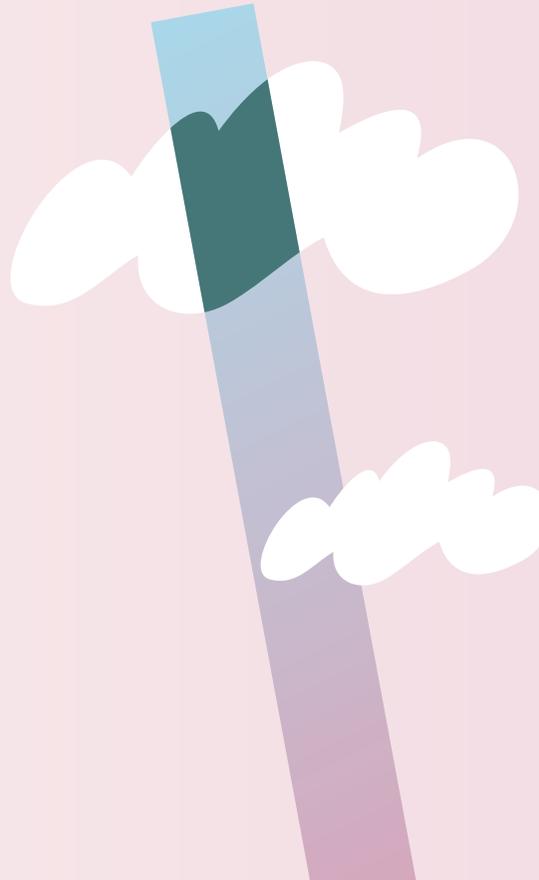
### 3. Gaming for reliable stress relief and managing worry



## All players, no matter what their mental health needs, used games to distract from worries

Players in our study told us that de-stressing and relaxing was one of the main benefits of gameplay. Different players found different genres gave them this benefit. They were able to identify, and consciously select, titles they turn to for this de-stressing effect.

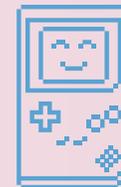
Existing polling suggests this is a widespread reason players enjoy gaming, with 48% of players agreeing that gaming helps them reduce stress.<sup>5</sup> Stress, particularly chronic stress, is linked to poorer mental health and wellbeing. Strategies to mitigate and 'recover' from stress are important in promoting and protecting good mental wellbeing.<sup>17</sup>



## How might we...?

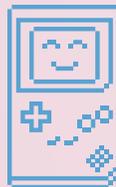
Explore further the specific mechanisms, across genres and titles that may provide stress relief?

*"If I've had a stressful day, in terms of things not going well, or maybe I've had to tell people their work isn't up to standard... then I would [select] a more kind of first-person shooter type game, to just sort of de-stress, really"*



## All players, no matter what their mental health needs, used games to distract from worries

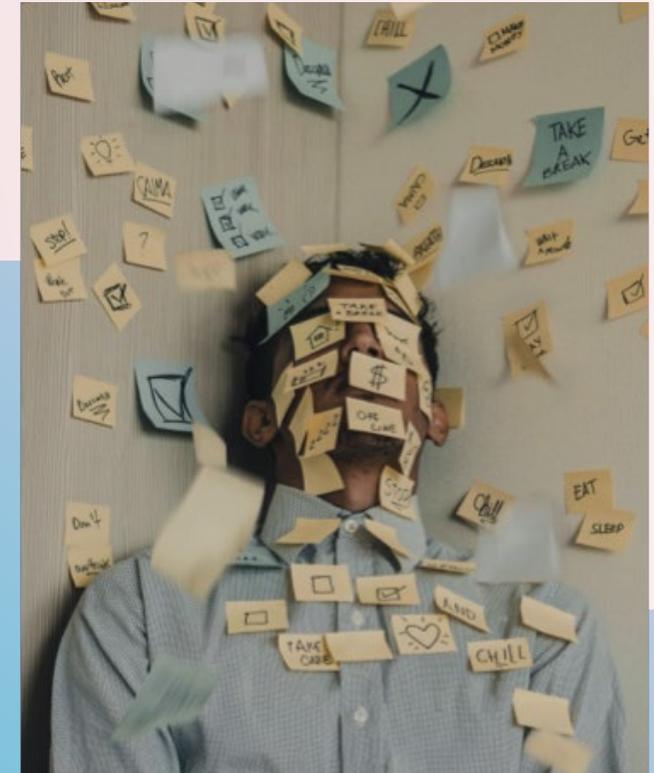
*"...it's a puzzle to work out, it just uses more parts of your brain, so that it's more time distracted from other things that were occupying your mind... because sometimes you need to take that break in order to feel like you're not overwhelmed... the game can interrupt that, and bring you back down to earth..."*



While other leisure activities also provided stress relief and relaxation, players said the specifically active nature of gaming was uniquely suited to distract them from nagging worries. It was often described as a way to 'keep the mind occupied'.

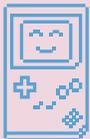
This is supported by academic research which suggests that gaming may act as a coping strategy by providing an activity to focus on that isn't related to current life difficulties, helping to disrupt negative thought processes.<sup>18</sup> It may

do this by alternating feelings of relaxation with more challenging tasks that push players to feel 'in the zone'. This deeply immersed state is often referred to as 'flow' and can prompt feelings of relaxation and wellbeing.<sup>19</sup>



## For players who struggled with anxiety, gaming was seen as a way to cope with rumination and overwhelming anxious thoughts

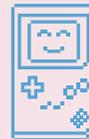
"I suppose gaming is one of those things that I can lean on at times.... I have an overactive mind, and it [gaming], sort of, flatlines, neutralises my mind. It's a distraction point for me where I can just... tide things over. So I'll use it to just let the wave return to neutral"



"...I do get quite stressed about stuff, and I'll worry about things. I get into a dark mood, and I think it [gaming] just helps that. It just kind of creates a firebreak between whatever I've been thinking about, and I do that for a half an hour or whatever, and then at the end of that, [it's] not that my brain's moved on, but it's had that time to kind of sort things out in the background maybe..."



"...the positive thing from gaming is, whenever you have anxiety you kind of need to really switch off your brain, because your brain will not allow you to switch it off, it just keeps going and going and going. So whenever a game that's good, that's creative and forces you to think, it pulls away from the resources the anxiety has... you can start to breathe normally and your thoughts can slow down a wee bit because your thoughts are kind of within the game"



"For me, I don't think it necessarily solves whatever issue I might have had, but it puts it aside for a time period that I'm playing and that can help because it gives you a bit of space, a bit of perspective, so you can come back to it later and deal with it a bit later."

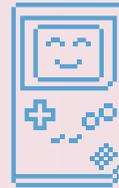


## Some players were drawn to worlds where they could control their environment. This felt good for their mental wellbeing

Players valued the control afforded by open-world games. They could influence the in-game environment in a satisfying way that they may not experience in their daily lives.

This sense of control was often articulated as a way of coping with stress or anxiety. Existing research supports this: a sense of autonomy is linked to increased wellbeing<sup>6,7</sup>

*"...you can sit down and spend time with yourself and do exactly what you want to do, not what others are expecting you to do, or what society wants you to do, and that certain area, you're just by yourself, doing exactly what you want and you have complete control"*



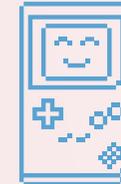
*"...in an RPG\* you're controlling absolutely everything, and it satisfies that need to control, and it eases my anxiety. It's similar to how it functions in my general life, if I don't have control over something it'll freak me out a lot and the control in gaming just helps that a lot."*



## Completing smaller tasks in-game felt particularly mentally satisfying and, for some, briefly eased their anxiety



*"...it's just a small thing, but all the small things add up to big things... whether it's a computer or a person - someone or something tells you that you've done something which gets a little reward, it makes you feel that literally you've done something, that you've achieved something, you've hit a milestone."*



Small in-game accomplishments provided a sense of productivity that could be difficult to gain in real life. Players described the satisfaction and mental lift associated with completing simple tasks within games, particularly more routine and calming activities such as gardening, fishing and doing chores.

This supports existing evidence that gaming can make people feel competent, which enhances their psychological wellbeing and post-play mood.<sup>14,20</sup>

However, it is important to acknowledge the difficulty in distinguishing between a healthy

satisfaction at feeling in control and competent in the game and times when this may slip into dependency or behaviour that is more difficult to control.

**4. Players enjoy the immersion and escapism that comes with gaming...**



**... but this escapism can also contribute to a loss of control over play that can make players feel worse about themselves**



# Gaming affords many types of 'escape', which players described as positive for their mental wellbeing



Surveys suggest that escapism may be a common reason why people enjoy games.<sup>21</sup> Players in our study described games as a form of escapism that lets them explore new experiences, stories and characters.

Players felt this immersion was beneficial to their wellbeing. With some players and games

it appeared similar to a flow state, where there is a satisfying balance between skill and challenge.

Players found enjoyment not just in storylines but also in the freedom to interact with the game in their own way. For example, they enjoyed choosing to ride a horse, go fishing or simply explore rather than following the

main story. Some research suggests that when escapism is sought out for positive reasons (i.e. for the benefits it can bring), it can be good for someone's mood and overall wellbeing.<sup>22,23</sup>

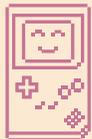


"...you can sort of sit on top of a mountain and watch the sunrise and think 'wow, this is actually quite beautiful'. It's that kind of level of immersion. It doesn't necessarily have to be a real place, an Earth place, but it is really... the ability to suspend disbelief, it's that reality"

"... role playing games probably enhance my mood the most, because you just put yourself in the shoes of a completely created person, you don't have to be yourself, and you can go around in some virtual world and do all sorts of things... that's why I play video games like that, because it's an escape..."

"...it's not something you have to organise with someone else, you can just do it on your own. For me, it was always the case where I could play a game and then I would be in this whole new world, and that was really enjoyable"

"That's where gaming helps me, because [of] the escapism. That's why escapism is really quite a key thing for me, because it really helps me to ... just to distract me and take my mind off things... I like to escape, I like to imagine. So, I guess it stems from that, even from being a child, I've always been really imaginative"

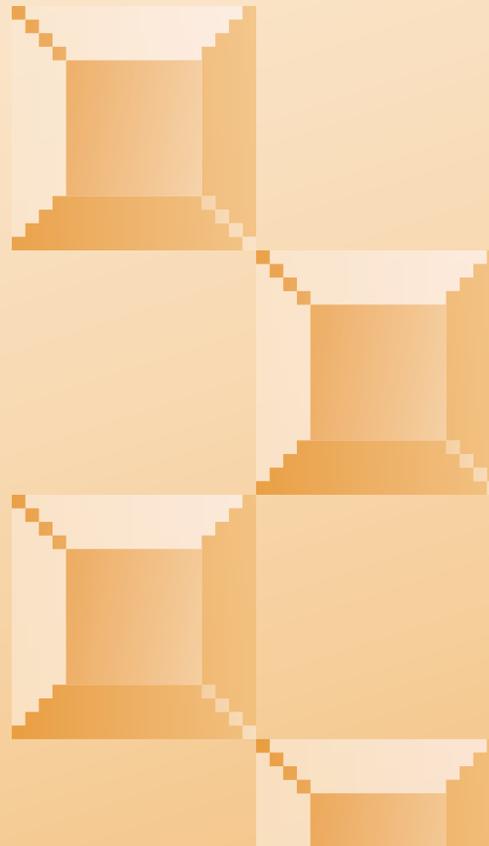


## However, for some, escapism may lead to avoidant or maladaptive coping methods

The relationship between escapism and wellbeing is complex. While it can be positive, there is also research to suggest that seeking escapism to suppress challenging emotions or avoid thinking about oneself is linked to problematic gaming and lower wellbeing.<sup>22,24</sup>

While some players in our study often spoke positively about how games, and the escapism they provided, could affect their mood and wellbeing, other players reported times where this balance was off. This resulted in games interfering with other goals or responsibilities in a way that left them feeling guilty or lacking control.

Some players in our study described the positive benefits of using escapism in games to avoid or distract from anxious thoughts. However, it's not clear what the consequences of this avoidance may be if the underlying causes of their anxiety are suppressed but not addressed.



## How might we...?

**Support players who might be relying on games to avoid reality?**

**Encourage players to check in and be curious about why they are gaming today? Doing so might help people spot patterns in their moods and emotions.**



# 5. Redefining excessive play



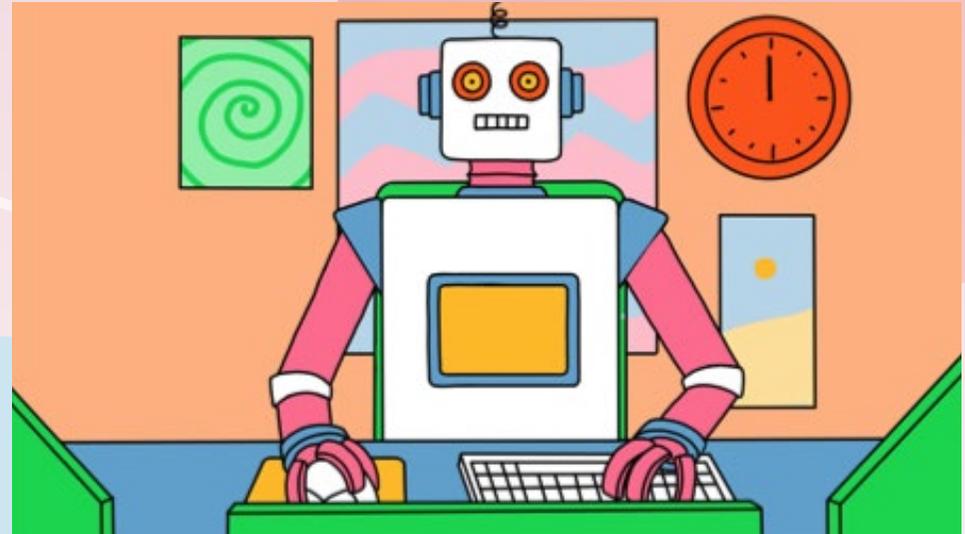
## Players commonly said the experience of playing longer than intended had a negative impact on their mental wellbeing

These responses were characterised by a sense of being immersed and losing track of time, often described as closer to an undesirable state sometimes called 'junk flow'.<sup>25</sup>

This type of play made players feel uneasy and could lead to them neglecting important tasks or responsibilities and not feeling in control of their choices.

Players who were unhappy with their gaming in this way commonly spoke about playing unintentionally and losing control – without being aware of how gaming impacted their mood.

Gamers who believed that playing games worsened their mental health said this was because they felt unproductive or 'lazy' and found themselves gaming instead of being physically active or spending time with loved ones.<sup>5</sup>



## For players who struggled with anxiety, gaming was seen as a way to cope with rumination and overwhelming anxious thoughts



*"...You can sort of immerse yourself and forget what you're doing. A bit obsessive or something... I was playing that like hours at night and like until two or three in the morning because there was no reason to get up early the next day or anything"*



*"I definitely have the case where sometimes I'll get so hyper-focused on playing a game, especially when a new game comes out, and that can mess up my whole schedule for doing everything else"*



*"...it almost feels like playing more to appease someone else inside my brain, you know, something in the back of my head wants to play... so I guess that's what I'm doing"*



*"I'd just graduated so I didn't have anything going on in my life, and obviously had no direction, so I would play like seven hours a day instead of like looking for a job..."*

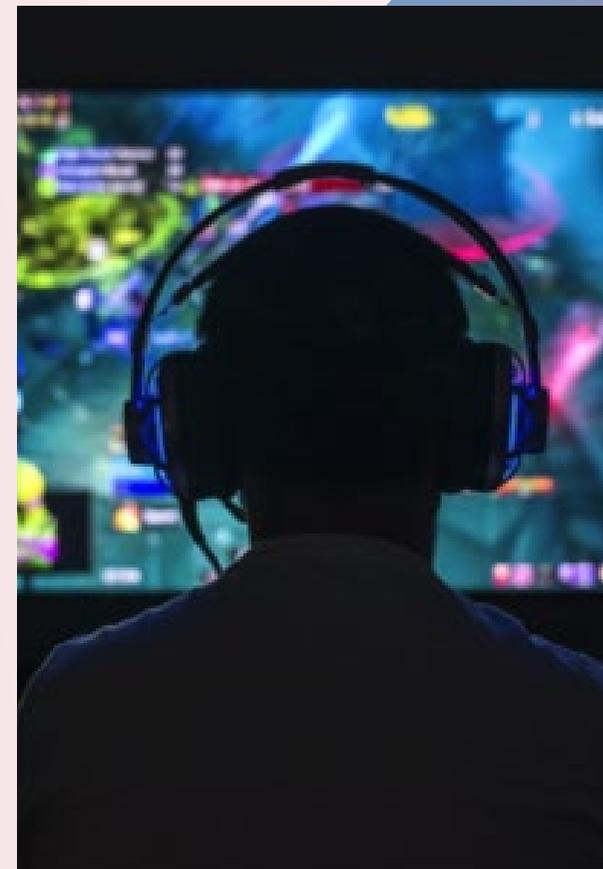


## What counts as 'excessive' play is highly individual. It isn't defined by a set number of hours, but rather by whether players felt in control of how long they played

There was no consistent amount of time players in our survey described as 'too long'. Instead, the issue was playing for longer than intended. This was connected to losing a sense of autonomy and control over their choices and behaviours followed by feelings of guilt or lethargy.

Losing track of play is a relative common experience for players. One study found that 26% of male players and 30% of female players reported playing a game for longer than intended<sup>3</sup>, and more than one in ten players had been told they 'play too much'.<sup>3</sup>

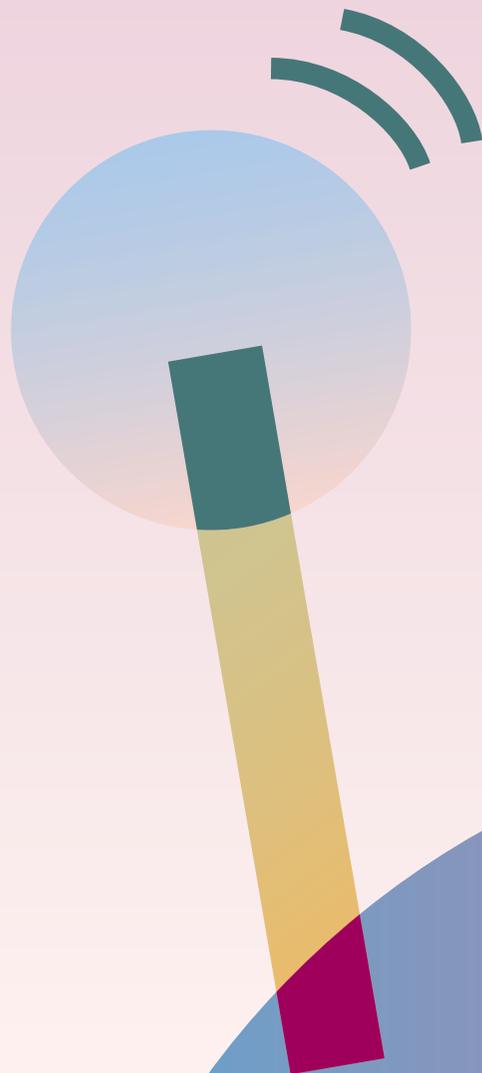
*"You notice that it's now half-one in the morning or 2am and you've lacked the discipline of what you allocated initially... I like to have discipline over things like that, and when I feel I don't have that control, it makes me feel worse about myself."*



## Players wanted the industry to help with self-control, particularly through design features

Players have ways to stay in control of their own play habits but saw ways the industry could support them to manage their play.

Players took responsibility for how long they played – but wanted the industry’s help in doing this with design features that gave them greater awareness of and autonomy over their session length.



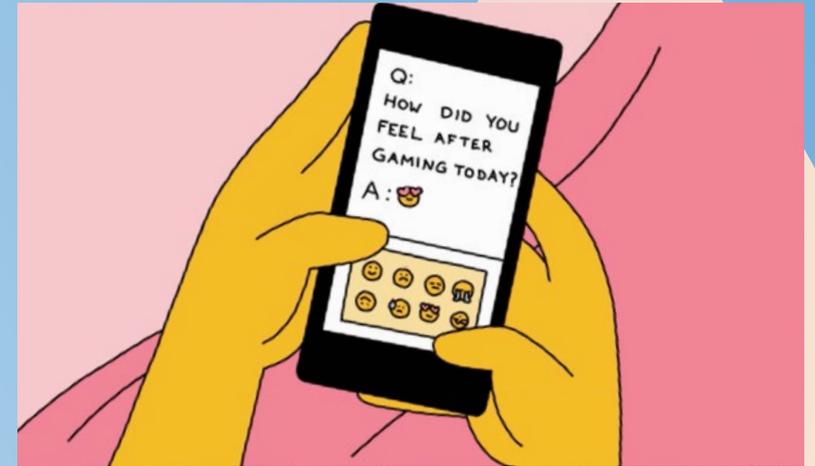
## How might we...?

Help players, via design for wellbeing, play more intentionally and regain a sense of control?

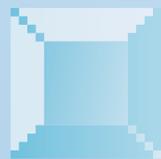
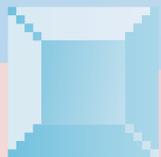
Promote better digital wellbeing overall, helping players look after their physical wellbeing as much as mental wellbeing?



# 6. The value of prompted reflection for playing with intention



# The power of prompted reflection and gaming with intention



A key finding of our study was that prompted self-reflection about game play and mental wellbeing improved players' relationship with gaming by:

- empowering players by giving them an opportunity to understand their motivations, experiences, emotions and triggers (both positive and negative)
- connecting them meaningfully to others - and let them explain why they game – which was important for their self-esteem and identity
- helping them reflect on why they game and allowing them to 'self-construe' (tell their story about themselves) in positive and empowering ways.

However, players didn't intuitively or spontaneously link their game play behaviours with their mental wellbeing until the study invited them to. This suggests an **opportunity to promote greater awareness of this link and encourage players to 'pause and check in' on their game play.** The industry could support this via in-game design (features or content) and/or communications via other channels.

A key feature of 'excessive' gaming was the feeling of gaming 'on autopilot'. The opposite of this is gaming more mindfully with greater awareness and intention.

Reflecting on game play and mental wellbeing isn't a silver bullet solution to mental wellbeing issues. But it may be an accessible first step that anyone can take to help to manage their habits positively.

## The power of prompted reflections

*"I became more aware of when I was playing and how I was playing, it was easier to be, like, well, 'do I want to switch that out for maybe a better hobby or something...?' It's quite weird 'cause I don't think I'd ever paid attention to how much I was playing a game or what games I was playing most and most importantly, I'd never really thought, how am I feeling before, during and after, it's just something...I just played the game."*



*"I feel really struck by realising that I need to feel, like, positive and I need to feel good and healthy to do my gaming. That thought didn't really crystallise prior to this session and the way I now associate with the treat element, or the reward, has been really really interesting to me. And it helps me to slightly adjust and slightly amend my thinking and my behaviours. That comes with being armed with the information in the first place, like, realising it"*



*"I just thought, do I play too much? And I know the first lockdown, I was playing far too much. But I didn't have anything else, you know, that was literally my socialisation and everything else. So I justified...I think I've got a better balance now and I think it made me look at that and go, no actually you're alright 'cause you're only...I generally only go online for, like, an hour or so at a time. So generally I'm not like one of these people that sits there for, like, five hours. Even when I'm online with my mates, it's only, like... it's only, like, a couple of hours. So it made me think. Which is never a bad thing."*



*"It was interesting to be asked questions about this, because I'd never really... I suppose subconsciously I knew what I was doing in terms of it being escapism and just to de-stress and all that. But I'd never thought about it in those terms... I think that was the interesting thing really, just that little bit of self-analysis making me think about, in hindsight, what I'd done and how I'd changed"*





7. Games are an important source of playfulness for adults, but this can be hampered by guilt and societal stigma

# Describing playing games they loved as children prompted warm feelings and memories that improved players' wellbeing

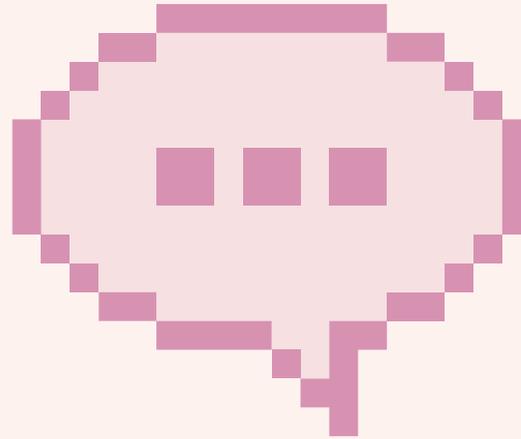
For players in our study who had been gaming since childhood, revisiting these games (and sometimes introducing them to younger relatives) was a joyful experience. Games were linked to fond memories of play in adolescence, and people reported benefits from revisiting these familiar games in adulthood.

Though play is often associated with childhood, research suggests that play and playfulness are linked to happiness and mental wellbeing across our lives.<sup>26,27</sup> Games may offer some people an avenue for playfulness in adult life.

*"...you can get that feeling, that warm nostalgic feeling about things you've done when you were younger, or in your past, or you were playing the game for the first time, and it was at a certain time in your life"*



# However, players were often reluctant to identify themselves as 'gamers' or talk about their hobby with non-players



Players' thoughts about gaming revealed a common theme: a sense of guilt or shame based on a perception that society doesn't see their hobby as worthwhile. Players believed others saw gaming as unproductive, a waste of time, for isolated young men or nerds, bad for your health or ultimately something you should grow out of.

It's not just the players in our study who are uncomfortable with the label of 'gamer' and gaming as a hobby. Surveys suggest that though many UK adults report playing video games, far fewer identify gaming as a hobby.<sup>3</sup> Among those who do, between one in five and one in four say they feel judged for it.<sup>5</sup>

*"I think my perception of a gaming is quite similar to a lot of other peoples', like, when I think of a "gamer" I think of like a boy or a man in a room playing games like 10 hours straight, shouting at someone down the microphone and like blowing things up."*



**Players' negative feelings around gaming didn't come from gaming itself but the perception of being judged by non-gamers or society in general**

There was a disconnect between how players felt about gaming, and what they felt others thought of it. Players spoke of their reluctance to talk to friends, family or community about gaming for fear of being judged negatively.



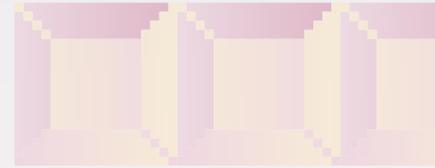
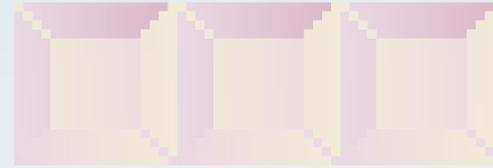
**What might this stigma mean for the wellbeing of players as a broader community?**

**Does guilt around time spent gaming tap into our societal preoccupation with leisure time needing to be 'productive'?**



# Promoting mental wellbeing in the context of gaming

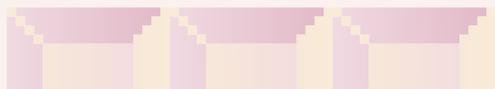
# Players had a range of 'hacks' to manage their wellbeing while gaming



**Players were partly aware of their mental wellbeing needs and mitigated them to some extent.**

**Strategies ranged from consciously choosing a game to fit their current mood to structuring play to ensure they remained in control of their gaming habits. Other strategies included:**

- Only playing at specific times of the day or week to avoid distracting themselves from other responsibilities
- Taking regular breaks to do activities they saw as more productive
- Keeping track of how long they'd been playing and setting a time limit or game progress-related limit (e.g. one match in FIFA) for when they would stop
- Using play as a 'treat' for completing other chores or responsibilities
- Avoiding any frustrating games if they'd already had a challenging day
- Selecting specific game genres to make them feel relaxed or de-stressed (e.g., picking a puzzle game over a first-person shooter)
- Playing as a male avatar or turning off voice chat to reduce the likelihood of online harassment
- Turning off a game entirely if they found it made them feel negatively about themselves.



# However, these wellbeing strategies relied on players having awareness of a problem and the motivation, self-control or social support to solve it

Players who were aware of their wellbeing needs didn't just use gaming to manage how they were feeling: they also played with pets, went outside or saw friends, for example.

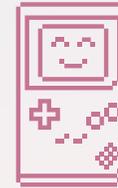
Many were aware they needed a range of tools to manage their mental wellbeing, but commented that things such as meeting friends in person or exercising had higher barriers to completion than gaming.

# Games can also play a useful role in educating players about mental health

One game that used experiential learning was described as particularly effective. The main character in the game experiences a panic attack and the player must complete a task which mirrors a breathing exercise to help them through it. This was described as a particularly useful way to learn a new coping technique they could use outside of the game.

Players don't see mental wellbeing support in the context of gaming as a substitute for accessible, well-funded mental health support in general. Those with lived experience of mental health problems want support from established mental health channels, not from gaming. However, the active nature of gaming presents a unique opportunity for experiential and embodied learning.

*"I've tried it since, and it is extremely helpful for coping with panic attacks, and I've never ever in my life had a game help in that direct way, in a way that nothing else possibly could."*



# Many of the strategies for healthy gaming are similar to general digital wellbeing strategies

## Physical wellbeing in gaming

Participants often discussed ways that gaming could affect their physical wellbeing: eye strain from looking at a screen for a long time, aches from poor or awkward posture, and an awareness of needing to spend more time outside.

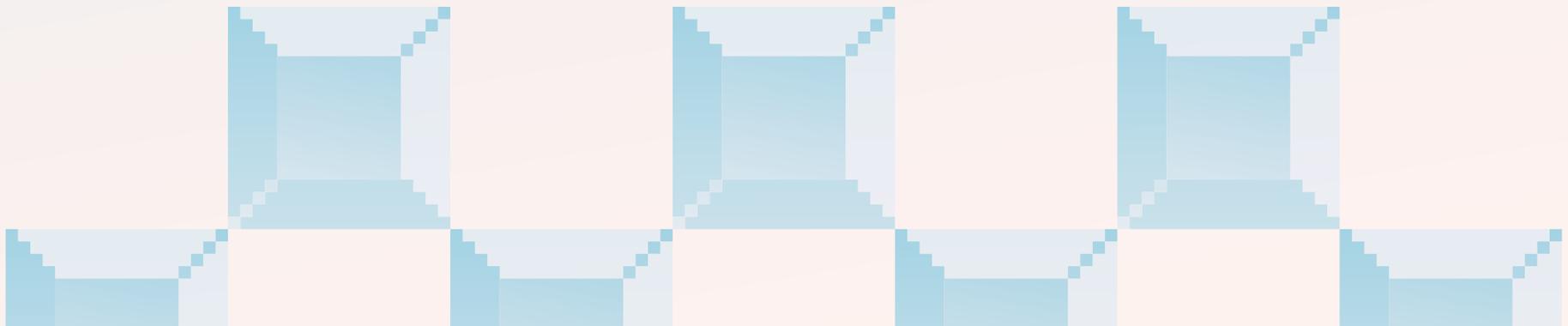
Some commented on how this could impact their mood, but they didn't automatically make the link between physical wellbeing and mental wellbeing.



## How might we...?

Invest in digital wellbeing across different types of media?

People who use other forms of digital media also encounter issues with physical wellbeing, toxic communities and lack of diversity and representation. Promoting increased understanding of how digital behaviours impact mental wellbeing across all technologies is therefore an important goal for tech and public sector organisations beyond the games industry.



# Conclusion and Solutions



# Summary: a complex, individualised picture – but with clear recommendations from players on what they need from the industry

Players felt gaming mostly had a positive impact on their mental wellbeing. This is supported by survey data: three in five gamers (60%) say that gaming improves their mental health (a further 15% say ‘significantly improves’) and just 2% say it worsens it.<sup>5</sup>

But deeper exploration revealed ‘shadow sides’ to gaming, such as feeling out of control over the length of playtime and harmful interactions with toxic communities. Some of the downsides of gaming seem to be more commonly experienced in more vulnerable players such as those with mental health difficulties or fewer support structures, or from marginalised groups.

It’s important to note that some negative aspects of gaming, such as losing control over length of use, are also key features of research and discussions about social media. Gaming healthily may be part of a broader conversation about overall ‘digital wellbeing’ design across platforms.

Players who had active strategies to manage the type and length of game play seemed to report a

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## Ultimately, the relationship between gaming and wellbeing is highly individual and complex.

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better relationship with gaming. Being intentional about how and when they played helped to balance gaming with other responsibilities such as work, relationships and self-care. Players felt game design sometimes worked against their better judgement to keep them playing longer than they would intended. In these instances, playing ‘on autopilot’ often led to feelings of loss of control and dissatisfaction.

Ultimately, the relationship between gaming and wellbeing is highly individual and complex with many contextual and environmental factors.

Developing one-size-fits-all ‘solutions’ for improving mental wellbeing are challenging. However, there are many ways the games industry can act to improve the wellbeing of its customers.

# Three channels for supporting players' mental wellbeing

## 1. Player-led solutions (Individual, bottom up)

Increased understanding of personal relationship between gaming and mental wellbeing.

Awareness as the first step towards building healthy habits and gaming with intention.

Campaign for game design to better promote and support mental wellbeing

See our resources for players – a film and reflection template here

## 2. Games Industry-led solutions (top down) (Structural / infrastructural / cultural)

Integrating design for wellbeing:

- Design for greater autonomy over play time
- Design for rest breaks and prompted reflection
- Tackling toxic communities

Content:

- More meaningful co-created representation (of identities and mental health issues within game narratives)

Culture:

- Commit to increased representation, diversity and inclusion within industry

Comms

- Encouraging awareness of mental wellbeing in video games
- More inclusive communications with better diversity and representation

## 3. Mental Health Sector-led solutions (Social / Environmental)

Increased understanding amongst mental health professionals of the nuances of gaming and mental wellbeing both positives and negatives

Efforts to work with not against existing behaviours eg. collaborations to embed support features within games

Increased support for digital wellbeing across social media, gaming and other technology

Increased availability of mental health services for those who need it

Tackling structural inequalities that may help prevent poor mental health

# 1. Player-led solutions

## The power of prompted reflection

The study found some evidence that prompted reflection about game play and mental wellbeing improved players relationship with gaming by:

- empowering players by giving them the opportunity to understand their own motivations, experiences, emotions and triggers (both positive and negative)
- connecting them meaningfully to others - and letting them explain why they game – which was important for their self-esteem and identity
- helping them reflect on why they game and allowing them to 'self-construe' (tell their story about themselves) in positive and empowering ways.

However, players didn't intuitively or spontaneously link their game play behaviours with their mental wellbeing.

This suggests an opportunity to promote greater awareness of this link and encourage players to 'pause and check in' to reflect on their game play. The industry could support this via in-game design (features or content) and/or communications via other channels,

Reflecting on game play and mental wellbeing is not a solution to mental wellbeing issues. But it may be an accessible first step towards helping people manage their habits positively.



# The mental health sector and the games industry can help players pause and check in with their mental wellbeing

The Mental Health Foundation created **resources to share directly with players - a film and a reflection template** - that helps them better understand how their gaming uniquely impacts their mood and wellbeing.

The industry might also consider ways to prompt players to pause and check in on how they are feeling pre- and post-play, such as:

- in-build design features to label and record their mood at various stage (for example, Calm App)
- community discussion reflection prompts
- messaging to raise awareness of the power of pressing pause to reflect.



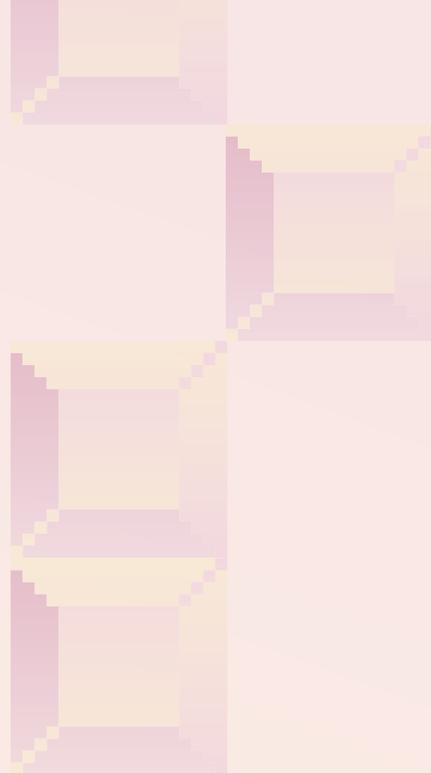
## 2. Games industry-led solutions

### The potential for the games industry to make an impact is huge

Games reach people directly in their homes and build engagement and trust over hours of play time.

The games industry reaches more adults than mental health services can. Games reach adults who may not engage with traditional public mental health services or information.

Consumers, including those in our study, are increasingly looking to purchase from ethical brands with a strong sense of social purpose. This could act as motive for the games industry to consider the long-term mental wellbeing of customers.



*"... one of my favourite indie developers, they make games because they care about the stories that they're telling with them, and they care about interesting ways that you can tell those stories. Playing a 6-hour game that they have made is gonna sit in the back of my head for years and years and years longer than like, spending 200 hours on something that [has] been put out for the sake of making money that day"*



# Players felt that games companies could play a significant role in supporting mental wellbeing

## Players wanted the industry to support mental wellbeing in various direct and indirect ways, including:

- Embedding more time management features and organic rest points into games to help them play more intentionally – not on autopilot
- Better moderation of harmful and abusive online behaviour
- Including in-game content warnings about potentially upsetting topics and signposting to resources where appropriate
- Exploring mental health support within games
- Improving meaningful diversity and representation in games
- Addressing industry-wide issues around sexism and racism
- Facilitating a more open discussion of gaming's positives and negatives
- Working with the third sector to provide mental health guidance and resources to consumers.

# Gamers are particularly concerned about the impact of internal culture on the end creative product...

*"the ideas of representing marginalised communities, people of colour, lgbt people, disabled people, and like, stigmatised mental health, you know bringing those things to the fore is good. But, ideally, I would want those to be completely removed from the profit mechanism." // "If you don't have those people leading the creative directions, what you make is worthless and it always will be worthless, because you need people with those experiences to draw upon."*



*"I read that within their [games company] office environment, the female staff were just treated abysmally. And this is known. And I think it just... well if they can do that and they create the game, then I'm going to tell a woman gamer that she needs to go back to the kitchen because they do that so that's okay." "Because they...it was news as to how they treated their staff, their female staff. And, you know, gamers read gaming stuff so they're going to read about that. And then think that's okay."*



### 3. Mental health sector-led solutions

Our study shows the relationship between gaming and mental wellbeing is complex. On the negative side, some evidence suggests that for some players, games can be associated with behaviour that damages their wellbeing.<sup>28</sup> However, the link isn't so clear cut: it may also be the case that those with poorer mental wellbeing are at a higher risk of developing 'problematic' play habits.<sup>29</sup> And on the positive side, there is evidence that casual gaming may be linked to improvements in symptoms of anxiety and low mood.<sup>30</sup>

Players told us they sometimes felt stigmatised or judged for their interest in video games, which could impact their wellbeing. To improve their relationship with gamers who have mental health needs, we recommend mental health professionals explore the nuances of how gaming (like other forms of social media and

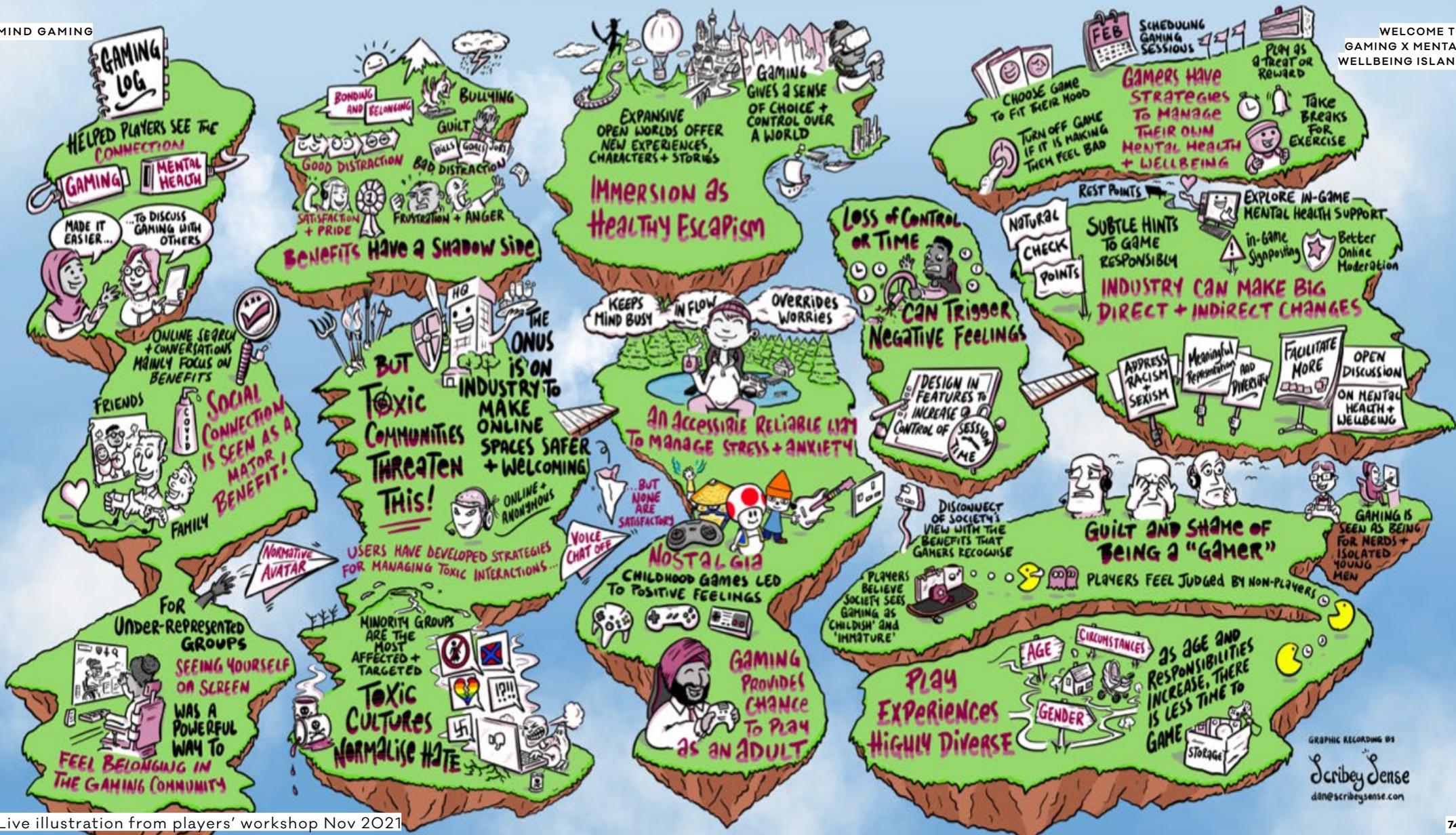
digital entertainment) can provide benefits as well as risks, depending on individual factors.

Players often turned to gaming to relieve stress and anxiety and to escape from the increasing uncertainties of the offline world. We can help more vulnerable players avoid over-relying on gaming as a distraction technique by helping to tackle the structural inequalities that contribute to these pressures for those without good support systems.

While players described the benefits of gaming to their mental wellbeing, **supporting mental wellbeing in the context of gaming is not a substitute for accessible, well-funded mental health support.** Players with experience of mental health problems wanted to see more support from established mental health and public health channels.

# Mental wellbeing recommendations from player workshop





Live illustration from players' workshop Nov 2021

# Players' recommendations to you, the games industry

In November 2021, 16 players aged 24-40 spent a day workshopping solutions for mental wellbeing in gaming. They identified five topics as most important to their mental wellbeing:

1. Meaningful representation and inclusive gaming



2. Dealing effectively with harmful or abusive players (toxic communities)



3. Increasing players' awareness of the relationship between mental health and video games



4. Embedding mental health support and resources within games



5. Helping players recognise and avoid using games in unhealthy ways



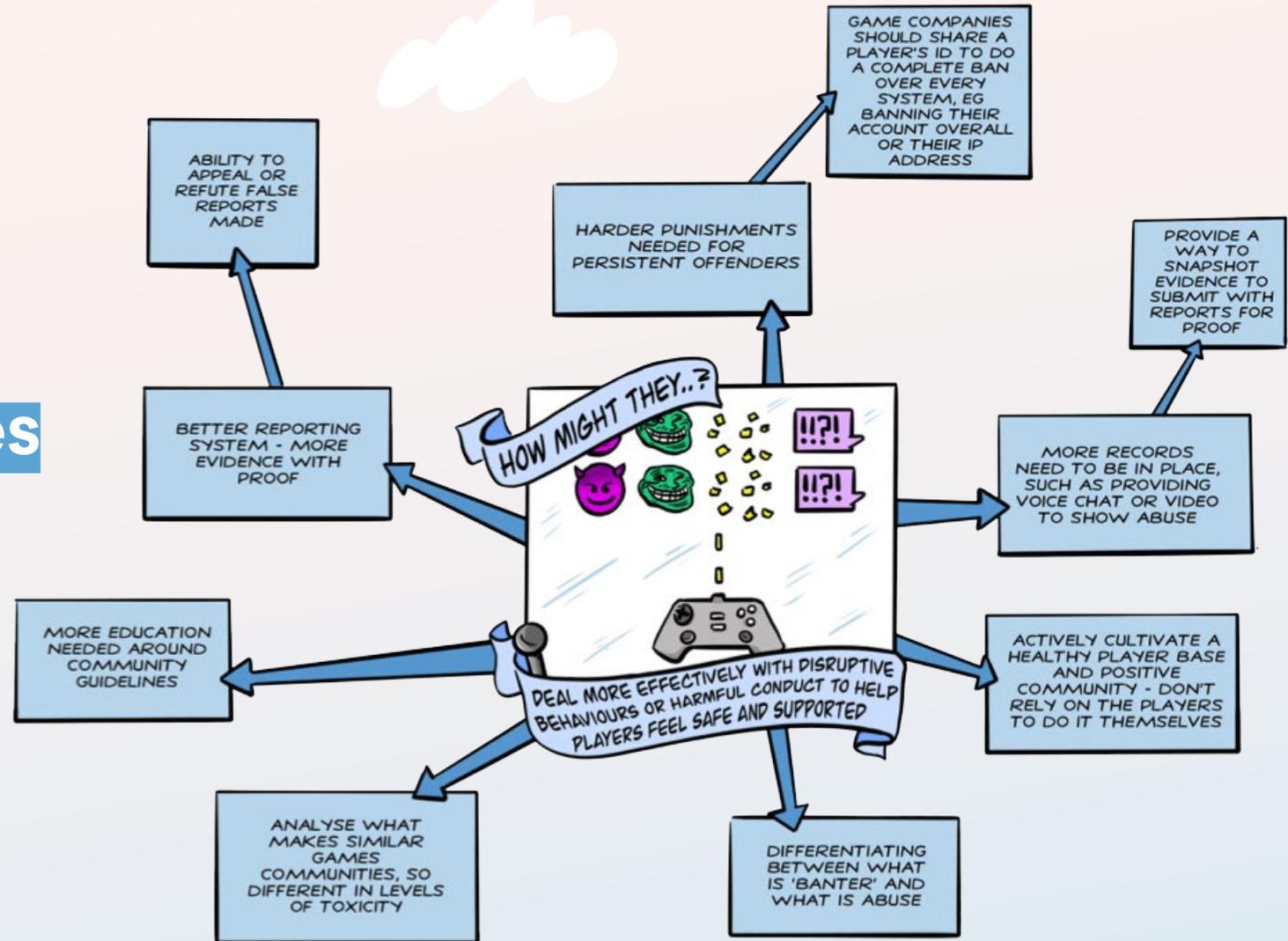
Write three words to describe how you feel about gaming

Control, Games for enhanced positive health, Social, Toxic / Negative, Tackling Issues, Miscellaneous

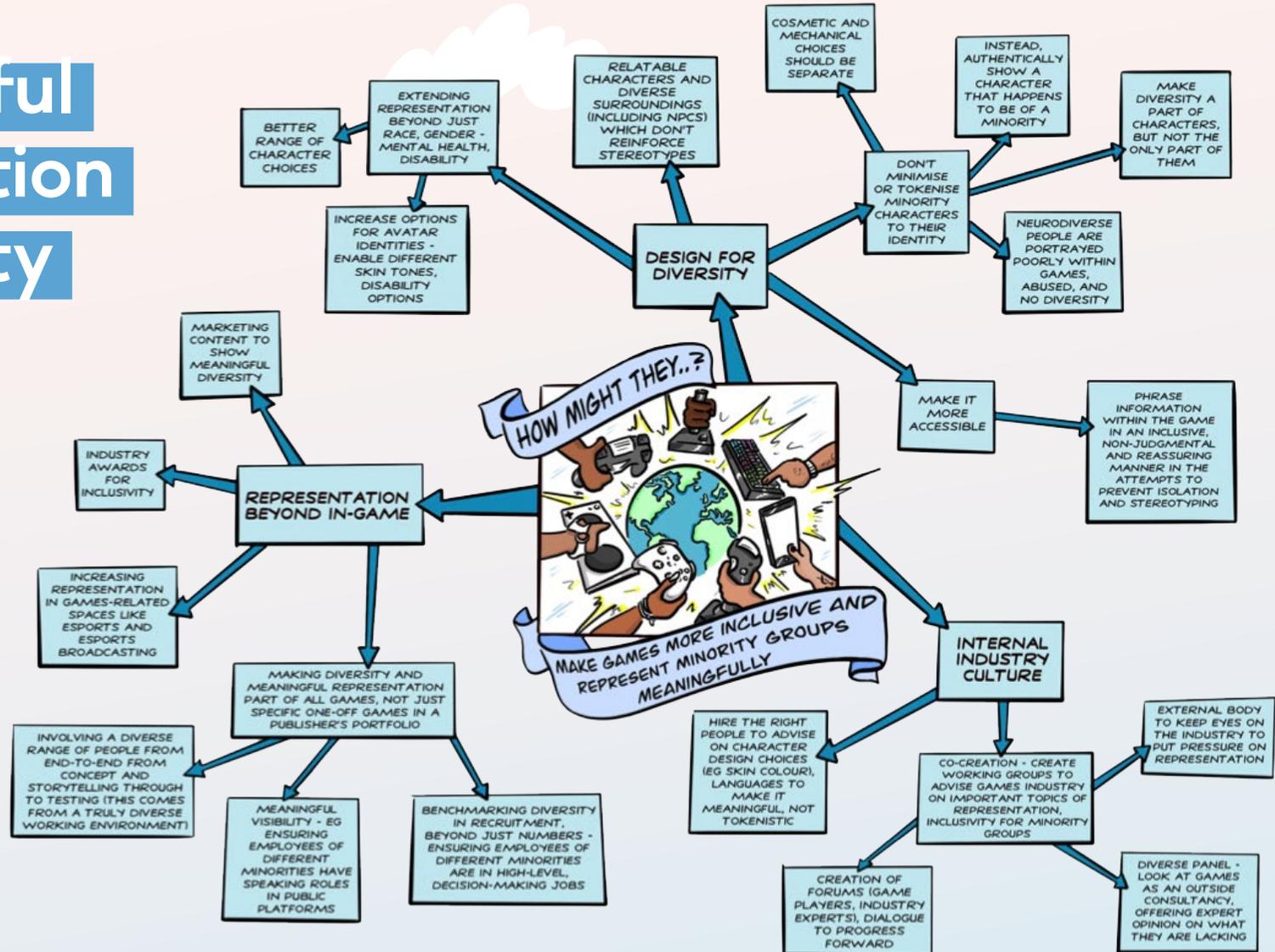
Combined 'How Might They' Questions

Word cloud: fun, escapism, happy, community, relaxing, escape, therapy, meaningful, representation, inclusive, awareness, mental health, video games, relationship, harmful, abusive, toxic, communities, support, resources, within, games, recognise, avoid, using, games, in, unhealthy, ways.

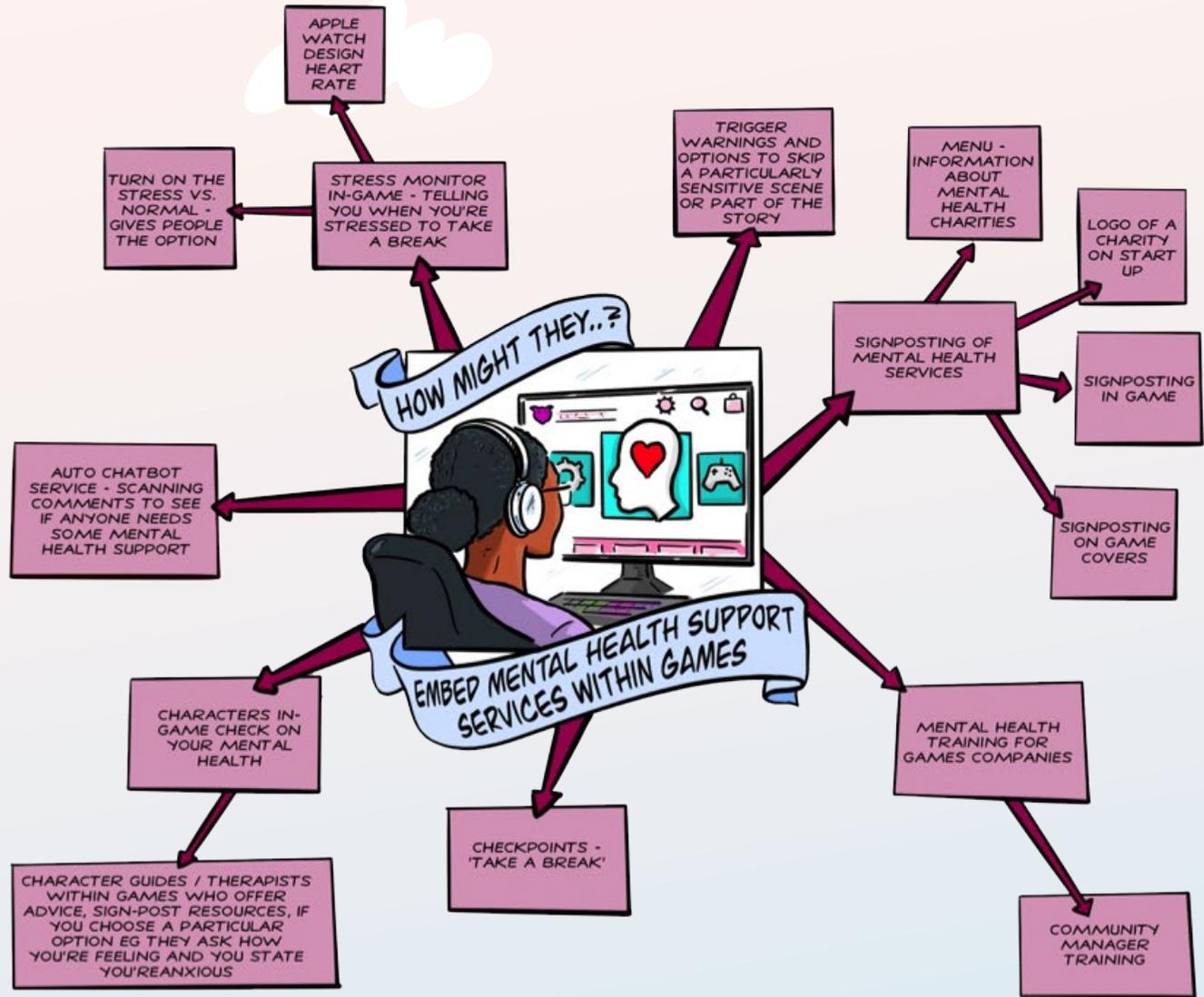
# 1. Tackling harmful behaviours and toxic communities



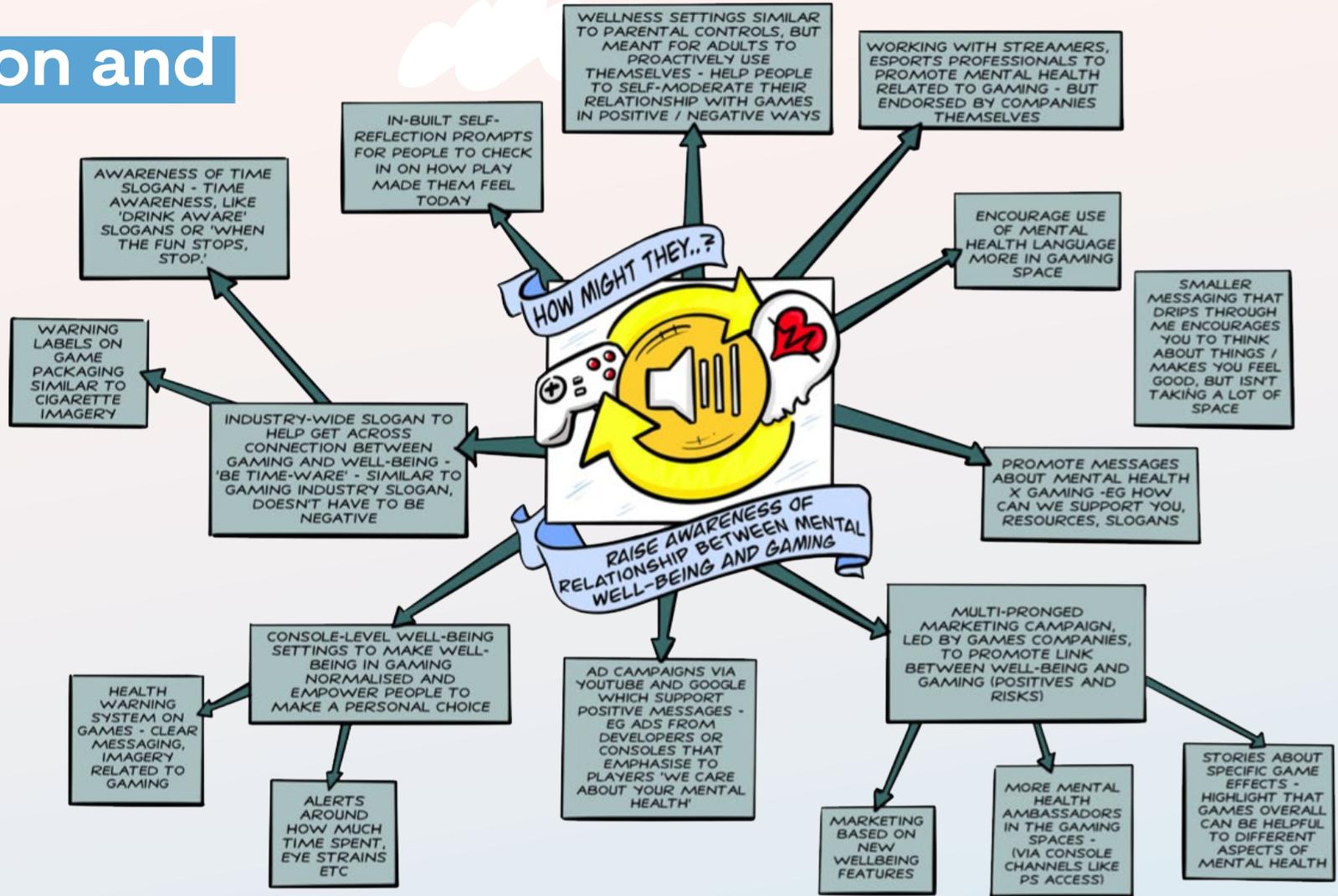
# 2. Meaningful representation and diversity (in games and within industry)



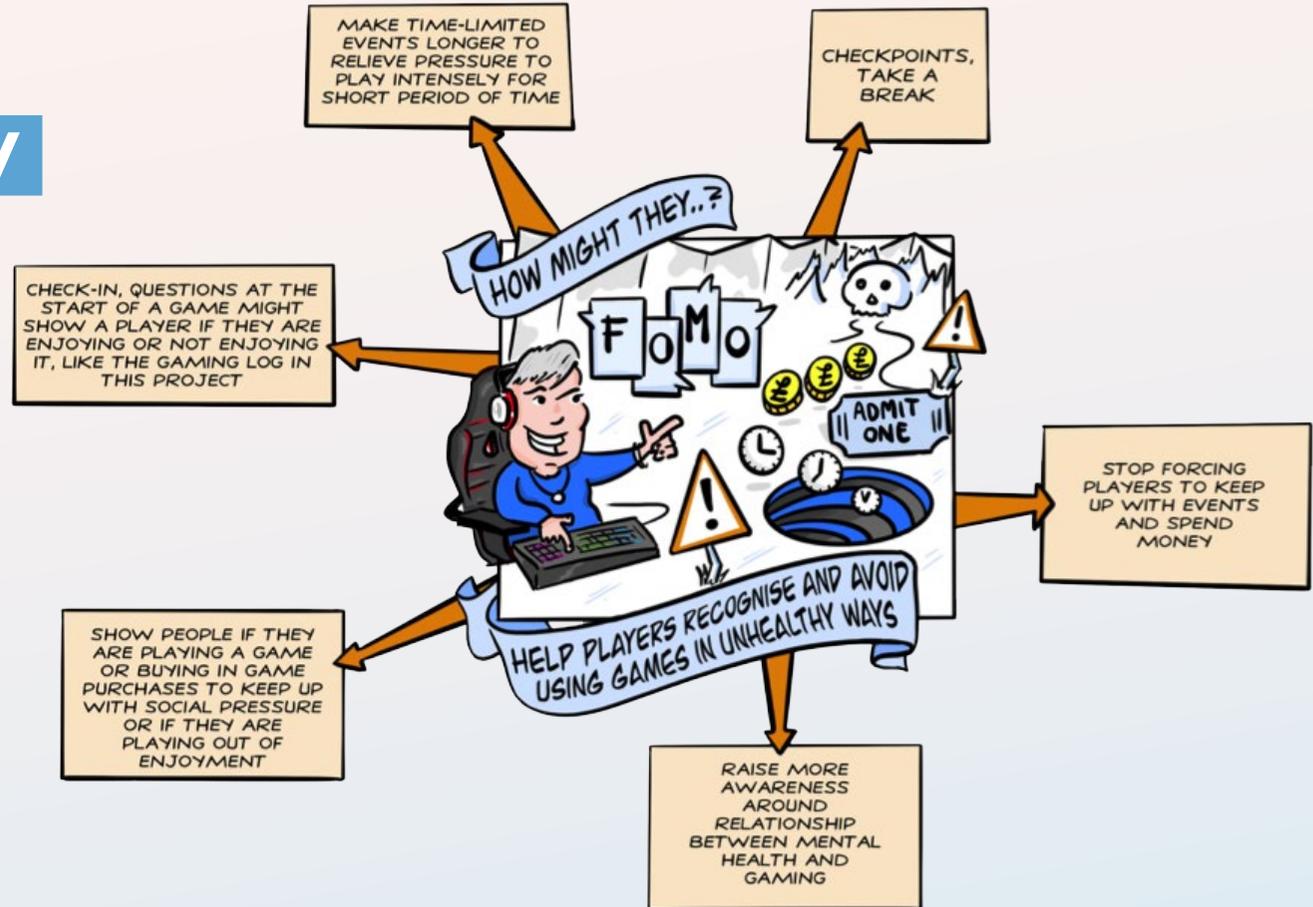
# 3. Embedding mental wellbeing content and services within games



# 4. Education and awareness of mental wellbeing



# 5. Help players game healthily and intentionally via design for wellbeing



# Appendix



# References

1. IHME. Global Burden of Disease [Internet]. 2019. Available from: <https://vizhub.healthdata.org/gbd-compare>
2. McManus S, Bebbington P, Jenkins R, Brugha T. (eds.) (2016). Mental health and wellbeing in England: Adult psychiatric morbidity survey 2014.
3. Savanta: Game on: A study of UK gaming attitudes and behaviours. 2019.
4. MY.GAMES, Fair Play Alliance, IGDA. MY.GAMES, Fair Play Alliance and IGDA Release 2020 Mental Health Gamers Study Findings [Internet]. 2021 [cited 2022 Jan 27]. Available from: <https://my.games/en/news/100>
5. Opinium. Mental Health and Gaming - UK: Key Findings. London, UK; 2021.
6. Ryan PR. Self-determination Theory and Wellbeing. Vol. 1, WeD Research Review. 2009.
7. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol*. 2000;55(1):68–78.
8. Johnson D, Gardner J, Sweetser P. Motivations for videogame play: Predictors of time spent playing. *Comput Human Behav*. 2016;63:805–12.
9. Osmanovic S, Pecchioni L. Beyond Entertainment. *Games Cult*. 2016;11(1–2):130–49.
10. Vella K, Johnson D, Cheng VWS, Davenport T, Mitchell J, Klarkowski M, et al. A Sense of Belonging: Pokémon GO and Social Connectedness. *Games Cult*. 2019;14(6):583–603.
11. Vella K, Johnson D, Hides L. Positively playful: When videogames lead to player wellbeing. In: ACM International Conference Proceeding Series. Association for Computing Machinery; 2013. p. 99–102.
12. de Mesquita Neto JA, Becker K. Relating conversational topics and toxic behavior effects in a MOBA game. *Entertain Comput*. 2018;26:10–29.
13. Fair Play Alliance, ADL. Disruption and Harms in Online Gaming Framework. 2020.
14. Passmore CJ, Mandryk RL. A Taxonomy of Coping Strategies and Discriminatory Stressors in Digital Gaming. *Front Comput Sci*. 2020;2:40.
15. Kim Y, Sundar SS. Visualizing ideal self vs. actual self through avatars: Impact on preventive health outcomes. *Comput Human Behav*. 2012;28(4):1356–64.
16. Pimentel D, Kalyanaraman S. Customizing Your Demons: Anxiety Reduction via Anthropomorphizing and Destroying an “Anxiety Avatar.” *Front Psychol*. 2020;11:3257.
17. Mental Health Foundation. Stress: Are we coping? Research Report. London, UK; 2018.
18. Iacovides I, Mekler ED. The role of gaming during difficult life experiences. In: Conference on Human Factors in Computing Systems - Proceedings. ACM; 2019. p. 4–09.
19. Jones CM, Scholes L, Johnson D, Katsikitis M, Carras MC. Gaming well: Links between videogames and flourishing mental health. *Front Psychol*. 2014;5:260.
20. Johannes N, Vuorre M, Przybylski AK. Video game play is positively correlated with well-being. *R Soc Open Sci*. 2021;8(2).
21. Warmelink H, Hartevelde C, Mayer I. Press enter or escape to play. Deconstructing escapism in multiplayer gaming. In: Breaking New Ground: Innovation in Games, Play, Practice and Theory. 2009.
22. Stenseng F, Falch-Madsen J., Hygen B. Are there two types of escapism? Exploring a dualistic model of escapism in digital gaming and online streaming. *Psychol Pop Media*. 2021;10(3):319–29.

23. Giardina A, Starcevic V, King DL, Schimmenti A, Di Blasi M, Billieux J. Research directions in the study of gaming-related escapism: A commentary to Melodia, Canale and Griffiths (2020). *Int J Ment Health Addict*. 2021

24. Melodia F, Canale N, Griffiths M. The role of avoidance coping and escape motives in problematic online gaming: A systematic literature review. *Int J Ment Health Addict*. 2020

25. C Peterson. *A Primer in Positive Psychology*. A primer in positive psychology. 2006

26. Proyer RT. Playfulness over the lifespan and its relation to happiness: Results from an online survey. *Z Gerontol Geriatr*. 2014;47(6):508–12.

27. Proyer RT, Ruch W. The virtuousness of adult playfulness: the relation of playfulness with strength of character. *Psychol Well-being Theory, Res Pract*. 2011;4.

28. Mandryk RL, Frommel J, Armstrong A, Johnson D. How Passion for Playing World of Warcraft Predicts In-Game Social Capital, Loneliness, and Wellbeing. *Front Psychol*. 2020;11:2165.

29. Lemmens JS, Valkenburg PM, Peter J. Psychosocial causes and consequences of pathological gaming. *Comput Human Behav*. 2011;27(1):144–52.

30. Pine R, Fleming T, McCallum S, Sutcliffe K. The effects of casual videogames on anxiety, depression, stress, and low mood: A systematic review. *Games Health J*. 2020;9(4):255–64.



# Methodology

## details

The present study was granted ethical approval from Queen's University Belfast School of Social Sciences, Education and Social Work (REF: 149\_2021). It used qualitative methods, focused on rich experiential information gathered as players game, which were then explored in greater depth through semi-structured interviews.

A total of 24 participants were recruited using purposive sampling through an AQR/MRS accredited research recruitment agency. Eligible participants were limited to UK residents aged 18-60, from a diverse range of ethnicity and gender identity, who reported playing games "weekly" or more frequently, and who did not self-report frequent in-game spending or concerns with their in-game spending behaviour. There was an even mix of those with lived experience of mental health problems and those without.

Over three weeks in July 2021, participants recorded regular video/audio diaries reflecting on their mood and wellbeing upon finishing a session of gameplay (using a secure app designed for qualitative research called "FieldNotes"). Based on themes emerging from this initial data, a subsample of 15 players were approached in August 2021 for semi-structured interviews further exploring views of gaming and mental wellbeing. Interviews were conducted remotely via Zoom by a trained researcher.

Data were analysed using a mixed inductive and deductive approach, using thematic analysis building on a set of themes from existing theoretical frameworks, with additional themes emerging from the data. Data were coded by a team of three peer researchers (supervised and supported by a research officer). After initial coding, the team met to discuss and refine codes which were then synthesized into overarching themes.

A follow-up workshop was held with a group of players to generate player-led ideas for the

promotion of mental wellbeing in the gaming community. This workshop built on the findings from the audio/visual diaries and interviews.

Our work throughout was informed by three advisory panels, each bringing a unique perspective to the project. Panels met at key stages to a) help shape and inform the initial direction of the work, and b) to help interpret and place our emerging findings into context.

### **Our three advisory panels were:**

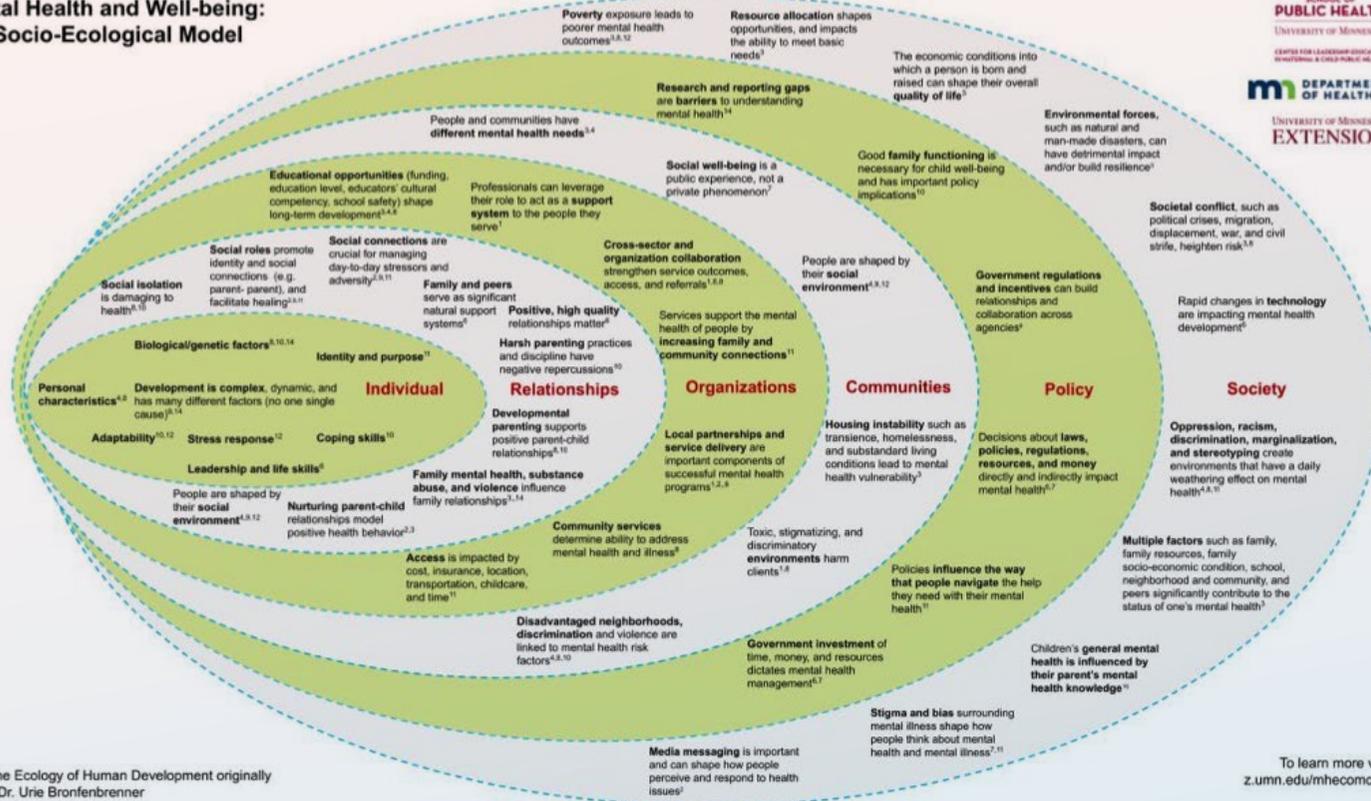
An 'expert' panel composed of professionals in the fields of academia, third sector, healthcare and/or the gaming industry working on the topic of gaming and mental health

A lived experience panel composed of players who were passionate about gaming and were experts-by-experience in mental health

A subgroup of the Mental Health Foundation's Young Leaders panel who were aged 16+ and were passionate about gaming and mental health.

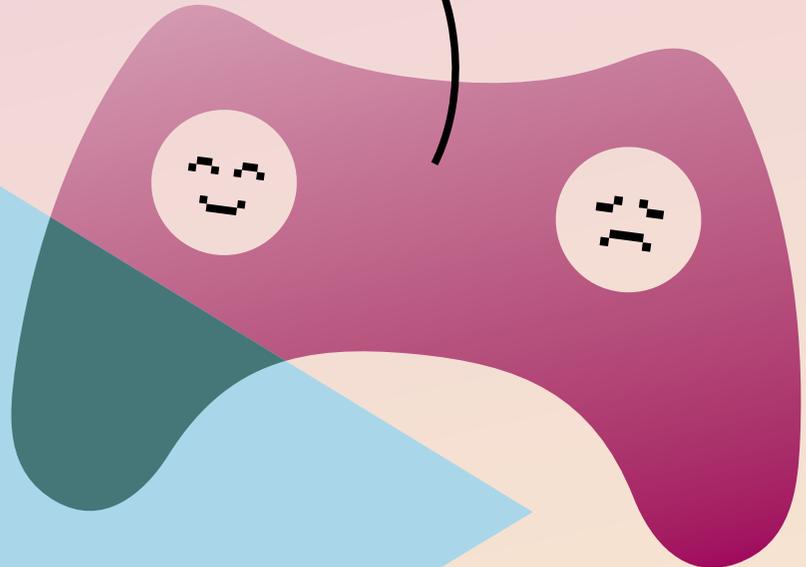
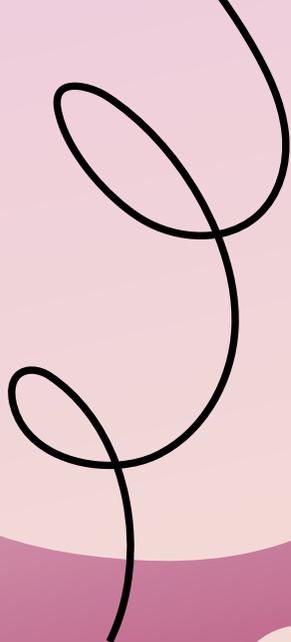
# Appendix: supporting gamers' mental wellbeing at the individual, organisational and social level

**Mental Health and Well-being:  
A Socio-Ecological Model**



Based on the Ecology of Human Development originally created by Dr. Urie Bronfenbrenner

To learn more visit [z.umn.edu/mhecomodel](http://z.umn.edu/mhecomodel)



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