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"It's a good distraction from the mayhem of reality": An exploratory qualitative study on video gaming during the COVID-19 lockdown.

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Abstract

Social distancing measures implemented during the COVID-19 pandemic created periods of social isolation and stress for many individuals. In the current study, we offer a glimpse into the lives of video gamers during the pandemic and the role of video games in navigating COVID-19 stressors. Thematic analysis of 13 interviews uncovered three themes that focus on video games, coping, and well-being. For many participants, video games provided what the lockdown took away: permitting the restoration of agency, community, and a sense of purpose. Immersing oneself in video games was a proactive coping mechanism for some but protective for others, suggesting a range of strategies that likely differed in effectiveness. Finally, gamers discussed the tension between viewing gaming as a beneficial and valuable activity versus unproductive time-wasting. Findings are evaluated through the lens of self-determination theory and speak to

video gaming as a compensatory activity during times of crisis, which applies to future global health events beyond COVID-19.

Keywords: Video Gaming; Covid-19; Psychological Well-being; Stress; Qualitative Methods

Introduction

The psychological ramifications of the COVID-19 pandemic continue to be felt many years after social distancing measures were lifted. Several phases of social lockdowns were implemented within the UK, starting in March 2020, before being fully rescinded in July 2021 (Timeline of UK Government Coronavirus Lockdowns and Restrictions, 2022). Early commentators raised concerns over the potential long-term negative physical and psychological impacts that social lockdowns might have (Niedzwiedz et al., 2021; Owens et al., 2022; Tromans et al., 2020; Wiederhold, 2020). Indeed, these concerns were supported by a 10.8% reduction in reported general psychological well-being scores in the UK in April 2020 compared to scores measured between January 2017--May 2019. Moreover, this reported reduction was 8.1% worse than initially predicted (Xu & Banks, 2020). Research suggests that the lockdowns presented individuals with numerous stress-inducing risk factors, such as needing to adapt to new ways of working and increased feelings of job insecurity (Rorong, 2021; Wilson et al., 2020), concerns over food/water/shelter scarcity (Jeżewska-Zychowicz et al., 2020), and general financial insecurities (Wilson et al., 2020), all of

which contributed to a perceived *mental health crisis* (Owens et al., 2022, pg. 1).

Humans naturally orient themselves towards creating and maintaining social relationships, which offer emotional support and physical protection (Leary, 2007). The emotional distress of relationship breakdowns is particularly salient (Slavich, 2016). Stressors associated with experiencing the loss of social connections are among some of the strongest predictors of emotional distress (Slavich et al., 2009) and may increase the sensitivity to subsequent stressors involving loss in the future (Slavich et al., 2011). This is reflected in research conducted towards the beginning of the lockdown, with younger individuals reporting worse scores across several mental health questionnaires compared to older individuals, possibly due to a significant decline in freedom of movement and consequent strain on maintaining social connections that would contribute to a negative impact on well-being (Niedzwiedz et al., 2021; Pieh et al., 2021; White & Van Der Boor, 2020).

When individuals feel overwhelmed with stress, there is a natural tendency to gravitate towards activities that would facilitate *stress-coping* (Kar et al., 2021; Lazarus & Folkman, 1984). According to Lazarus and Folkman's Transactional Model of Stress and Coping (1984), stress results from an individual interacting with their environment in a way that exceeds their physical or psychological resources and endangers their well-being

(Berjot & Gillet, 2011). This comprises two phases: (1) cognitive appraisal and (2) coping. The dual-phasic process involves cognitive assessment of the threat (i.e., the stressor) and appraisal of whether the individual can use the resources at their disposal to cope with the stressor, which in turn relies on an individual ability to mitigate, reduce, or tolerate the physical or psychological demands created by the stressor (Berjot & Gillet, 2011). This framework is particularly relevant to those who experienced distress due to the lockdown, as individuals were facing a situation they had not experienced before and had little agency over controlling their circumstances, which would exceed most individuals' resources and demonstrably jeopardise their well-being.

Looking at specific factors contributing to stress relief, previous work has suggested that performing tasks that provide a sense of individual mastery is associated with better health outcomes (Folkman et al., 1986). This has been supported by recent reviews of the coping literature (Taylor & Stanton, 2007) and included as a part of positive coping frameworks (Samios et al., 2020). As well as mastery, positive self-esteem, social support, and optimistic expectations are all coping resources associated with improved psychological health (Taylor & Stanton, 2007). There are a range of media-based activities associated with stress-coping, including watching television (Nabi et al., 2017), using the Internet (Nimrod, 2020), and playing video games (Halbrook et al., 2019). Therefore, it is not

unreasonable to suggest that activities like video gaming may have helped to buffer the negative effects of the COVID-19 lockdown.

Many articles within video game psychology suggest negative health and personal consequences of participating in this form of media, with a push to pathologize this behaviour (Bean et al., 2017). For example, previous studies have proposed links between video gaming and addiction (Plante et al., 2019; Triberti et al., 2018), depression (Andreassen et al., 2016), and stress (Siervo et al., 2018), as well as a variety of negative personal outcomes such as poorer academic performance (Drummond & Sauer, 2020). The most recent example of this is the inclusion of Internet Gaming Disorder into the ICD-11 by the World Health Organization (WHO; Aarseth et al., 2017). However, much of this literature derives from selfreport, cross-sectional data (Bean et al., 2017; Przybylski, 2016), and most notably, addiction-based research articles have been critiqued for overreporting false positive cases of video game addiction amongst an ongoing empirical debate regarding the nature of gaming addiction as a construct (Bean et al., 2017; Festl et al., 2013; Przybylski, 2016). Considering this, the reliability of these data may be called into question, and further investigation is needed, taking a bottom-up approach.

Against this backdrop, more recent research has explored the positive health benefits of video gaming (Halbrook et al., 2019; Johannes et al., 2021; Jones et al., 2014; Nuyens et al., 2019). Such work describes the

potential for video games to encourage social interaction, which is reported to have benefits for psychological well-being (Jin & Li, 2017), reduce psychological symptoms of illnesses such as depression (Li et al., 2016), and are reported to be used as a popular form of mood management to recover from psychological stress (Bowman et al., 2022). Video gaming can also be used as a distraction from potentially harmful ruminations about stressful life events (Reinecke, 2009), assisting in the fulfilment of basic psychological needs such as autonomy (the need for agency over one's own life), competence (the need to experience control over and mastery in a domain), and relatedness (the need to feel connected to and cared for by others) (Ryan & Deci, 2000; Przybylski et al., 2010). This is supported by previous research, which suggests that video gaming has the potential to provide players with a sense of mastery and fulfil basic psychological needs (Allen & Anderson, 2018; Formosa et al., 2022; Peng et al., 2012).

These three basic psychological needs are core principles from a popular theory of human motivation known as self-determination theory (Ryan & Deci, 2000). Self-determination theory has been used as a theoretical basis for many studies of video game use (Billieux et al., 2021; Botte et al., 2020; Mills et al., 2018; Mills & Allen, 2020; Peng et al., 2012; Sherrick et al., 2022), with many suggesting that the affordances of video games as a medium can fulfil these psychological needs through meaningful, or eudaimonic, entertainment experiences (Daneels et al., 2021; Halbrook et al., 2019; Oliver et al., 2016; Rigby & Ryan, 2017; Rogers

et al., 2017). There are also unique features of video gaming that can enhance need satisfaction. Tamborini et al. (2010) found that engaging in multiplayer or social-oriented video game experiences increased relatedness satisfaction and experiencing improved video game control interfaces increased competence satisfaction (Rigby & Ryan, 2017). This was emphasised within the COVID-19 lockdown, with enforced social isolation placed on several nations worldwide as a preventative measure to inhibit the spread of the coronavirus. Indeed, the pandemic provided opportunities for individuals to increase their frequency of video gaming (Iacovides & Mekler, 2019), engage in social interactions that transcended physical barriers (Kriz, 2020), and relieve stress (Cheng, 2019; Iacovides & Mekler, 2019; Kriz, 2020; Oe, 2020).

Qualitative work in this area suggests that video gaming has a positive effect on the overall well-being of video gamers and is a viable option for stress coping. There have been several qualitative studies that suggest *Animal Crossing* was a popular video game during lockdown, allowing for the fulfilment of basic psychological needs by offering a chance for players to explore their freedom of expression to satisfy autonomy needs, setting goals to enhance their feelings of competence, whilst also offering psychological relief from stress (Lewis et al., 2021; Pearce et al., 2021, 2022; Yee & Sng, 2022). Whilst some researchers were vocal about the potential for addictive behavioural patterns of video game use during

the pandemic (King et al., 2020), video gamers were also supported by video game companies to follow health guidelines issued by the WHO.

Indeed, in 2020, several major video game studios such as *Microsoft*, *Ubisoft*, and *Sega* partnered with the WHO to encourage the principles of distanced play and cooperation using the hashtag *#PlayApartTogether* on Twitter (now known as 'X') to encourage a public-facing message of preventing the spread of the virus (Balhara & Chandiok, 2020; *Play Apart Together Uses Games to Promote Social Distancing*, 2020). Video gamers were also observed using promotional offers from video game companies to gift video games to their friends or family, convincing traditional non-video gamers to participate as a collective (Toledo, 2020), which further encouraged positive well-being by completing enjoyable activities with others.

In the academic field, there is a clear need to understand how video games might help or hinder our ability to cope with stressful circumstances at an individual level. This opportunity presented itself during the COVID-19 pandemic: to document the lived experiences of video gamers in a powerfully salient stress-inducing environment and explore this phenomenon through a psychological lens. Whilst there have been articles published on the experience of using video games during the lockdown since the end of the social lockdown in the UK (Barr & Copeland-Stewart, 2022; Close et al., 2022; Pallavicini et al., 2022), an opportunity for more

qualitative research exists to provide deeper insights into the lived experiences of video game players (Pearce et al., 2022) and how they perceive gaming influences their responses to stressful events (Zhu, 2021).

The results of this study will be able to add to the existing literature, providing further examples of how individuals can use video gaming to satisfy basic psychological needs and maintain social connections in a time of physical and social isolation.

Materials & Methods

Procedure

Due to the constraints of the lockdown, this qualitative interview-based study was conducted online, with all interviews taking place during June 2020. The research question guiding this study is: *How did individuals use video gaming to navigate the psychological stressors of COVID-19?* Participants were recruited through advertisements on social media networks and had the option of conducting structured interviews either by email (n = 6) or by Skype (n = 7), an online messaging service, via the chat function. This research was approved by the University of Wolverhampton's research ethics committee.

A mix of UK and US participants were recruited. Participants were asked to confirm that informed consent had been given prior to starting the interview. Participants were asked questions based on demographic

information, such as age, gender identity, employment status, and whether they were considered a 'key worker' during the lockdown. Participants were then asked questions relating to their current video game play (e.g., "How many hours do you spend playing video games per week?", "What would you say are your top three video game titles during quarantine?") and general video game questions (e.g., "What kinds of benefits would you say video games offer you, compared to other digital mediums such as social media?").

Interviews conducted on *Skype* lasted approximately 30 – 60 minutes, whereas individuals who participated via email were sent the structured interview questions and asked to send their replies to the lead researcher (GF) at a time convenient to them. The interviewing stage of the study concluded when the researchers agreed that enough data had been collected to answer the research question and begin the process of thematic analysis.

Participants

Interviews were conducted with 13 participants between the ages of 20 and 42 (M = 28.38, SD = 6.56), with the majority identifying as male (61.5%). Participants indicated that they spent between 3 and 30 hours gaming every week (M = 13.77), which could be spread across 2 to 7 days (M = 5.08). At the time of the interviews during lockdown, six participants were in current employment, five were students, one was furloughed, and one did not

disclose their employment status. See Table 1 for an overview of demographics by participant.

Data Analysis

Data was analysed using reflexive thematic analysis (Braun & Clarke, 2006, 2021), a method for systematically identifying, analysing, and reporting shared patterns of meaning across a qualitative dataset, focusing on reflexivity. The analysis was inductive, meaning that it was driven by the contents of the data and not approached with a pre-existing theoretical framework in mind. An experiential approach underpinned the analysis, focusing on participants' lived experiences and understanding how they make sense of their worlds. Reflexive practice was at the core of the analytic process, with the research team meeting to discuss the project's development and collectively consider how their own experiences, beliefs, values, and identities as video gamers impacted the analysis and generation of results.

Analysis of the interview transcripts was guided by Braun and Clarke's (2006, 2021) six-phase process and was led by one author. In phase one, [Second Author] read and re-read the transcripts to become familiar with the data, alongside taking notes of initial points of interest. In phase two, [Second Author] undertook line-by-line coding of the transcripts using NVivo software. Coding was done at a semantic (i.e., participant-driven) and latent level (i.e., researcher-driven). In phase three, [Second Author] began to

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combine codes to generate initial themes; each focused on addressing the study's main research question. In phases 4 and 5, [Second Author] consulted with [First Author] and [Third Author] to review and refine the initial themes, which included developing theme titles and summaries of

what was included. In phase six, [Second Author] wrote up the results, with

feedback from both [First Author] and [Third Author].

Results

Table 1

Participant demographics and characteristics

[Insert Table 1 here]

Themes

Analysis of the data generated three themes that collectively showcase video gamers' experiences during the COVID-19 lockdown and the impact of video games on their mental well-being (see Figure 1 for a thematic map).

Figure 1

Thematic map

[Insert Figure 1 here]

Theme 1: Providing what lockdown took away.

Participants described how playing video games during lockdown provided them with the opportunity to engage with experiences that the imposed restrictions had made difficult or impossible. This is explored through three subthemes: (1.1) Agency and autonomy, (1.2) Social connectedness, and (1.3) Progression and development.

1.1 Agency and Autonomy.

A core element of many COVID-19 restrictions governments imposed worldwide were limitations on where people could go and what they could do. This limited people's sense of freedom and the level of control they felt they had over their lives (McKenna-Plumley et al., 2021; Statz et al., 2022). In comparison, video games seemed to allow players to regain this lost sense of control through the restoration of agency and autonomy to make decisions in these virtual settings. Participants discussed how this was made possible across various genres, including roleplaying games (RPGs), online multiplayer strategy games, and simulators.

"In ACNH [Animal Crossing New Horizons] you choose what to do with your island and what villagers you have. In League [of Legends] you choose what game mode, and depending on that, what character you play with. In Persona 5, you have the goal and a deadline but when you meet the

deadline is up to you as long as it is met. You also get periods of free time where you choose what to do. Having that autonomy is really cool." (Mia)

While participants acknowledged that many games include some level of restriction, particularly ones that are more linear and plot-driven, they still experienced enough freedom of choice to feel in control. For some, this seemed related to how immersed they felt in the game, with increased personalisation and player-driven narratives heightening this sensation.

"I am controlling my character and while the games can influence me in certain ways, in the end I choose how I would like the game to go [...] I do my best to project my own choices onto my in-game character for full immersion." (Bella)

For a few of the participants, this autonomy also allowed them to make choices that they would not ordinarily make in everyday life, such as stealing a car or goading an enemy into a fight. This seemed to be experienced as cathartic as well as fun.

"It gives me the option to make reckless choices and not worry so much about the consequences given they don't [affect] my real life." (Ryan)

1.2 Social connectedness.

One of the most keenly felt restrictions imposed in response to COVID-19 was social distancing, which involved maintaining physical distance from anyone outside one's household. The extent of social distancing ranged between countries and in levels of severity but resulted in feelings of isolation (Taylor et al., 2022; Williams et al., 2020). Participants described how video games combat loneliness and disconnection by providing a remote way of actively socialising with others.

Some participants already used video gaming prior to the pandemic to connect with friends in different countries. The fact that the pandemic resulted in more people engaging in socialising through video games was seen as positive.

"I had already used online gaming as a social outlet due to living far from friends in other states, so the increase in usage across the country (and world) has helped me socialize with others even more." (Bella)

Other participants, who had less experience of gaming prior to the pandemic, were pleasantly surprised by online gaming communities and how they felt a sense of connection from strangers engaging with their content:

"I'm also a member of a Facebook group page for Animal Crossing and I find it really interesting to see other people's islands - I actually posted a picture of my character in a graduation gown on my island when my graduation should have been as it was cancelled because of the pandemic.

Thousands of people liked this picture and congratulated me, which was really nice. There's a real sense of community!" (Paige)

Participants emphasised how these interactions were facilitated through video streaming platforms like YouTube and Twitch, which "can create a community surrounding a shared love of video games which has definitively helped me get through the isolation of this quarantine" (Jackson). This was contrasted against other forms of social media, which were understood to be "a toxic environment where you can compare yourself to others. Online gaming is generally a more friendly atmosphere" (Will).

Even within households, video games provided participants with opportunities to deepen their relationships with their families and partners through the shared experience of their chosen games. Participants reflected that this was not necessarily something they would have done outside of the lockdowns.

"With the lockdown and us all being at home, my children were already into Minecraft and I had resisted playing until then [...] when lock down hit I just started playing it with them and entering their world a bit more." (Michael)

"My wife and I played this together as a co-op game and it was a really good alternative to the other things we did together pre-lockdown, such as going out for a meal or to the cinema. Again, I felt like I was sharing something with her through the game." (Stephen)

Participants also felt this sense of social connection towards characters in video games; for some, this meant that character development and relationship-building were key factors that drove their engagement with games.

"With Animal Crossing New Horizons, I love the characters that are my residents on my island. It really feels like a little community." (Mia)

1.3 Progression and development.

Lockdowns and resultant restrictions led to widespread disruptions to everyday life, including attending school and working. With many individuals 'stuck' inside and facing uncertainties regarding their future, this led to feelings of stagnation and a lack of development opportunities (Gittings et al., 2021). In contrast, participants described how video games provided them with a sense of purpose and progress, allowing them to continue developing and refining their skills in ways that provided a sense of achievement and growth. This was experienced through levelling up characters, completing quests, and winning more games.

"The sense of accomplishment and progression. I know I am getting better at the game as I understand the mechanics and systems of the game, and the game visually tells me that I am getting better. There is a tangible thing that I can see that reflects my improvement. Whether that be I reach higher levels in an RPG or get better rankings and win more matches in a Fighting Game." (Jackson)

"Your account gains levels but you also gain Mastery for every champion. I recently got to a new level with my favourite champion and it felt amazing as a sense of achievement but also gave me the drive to play the character more." (Mia)

For some, these in-game accomplishments translated into real feelings of progression and skill development, providing additional confidence and motivation for real-life tasks and challenges.

"Accomplishing mini-goals in video games gives me a huge boost in confidence and ability to know I can achieve goals with practice and work."

(Bella)

"With the games that I play most, the content that is played in a group can often be chaotic and requires quick thinking or adjustment in order to be successful. With this I believe it has made me more capable of staying focused on the task and calm in stressful scenarios, or managing other people while in such situation." (Chloe)

Theme 2: Proactive and protective: Video games as a coping mechanism.

Participants reflected on how they used video games as a coping mechanism throughout the pandemic, both to protect and enhance their mental health and well-being. Three subthemes were generated: (2.1) Gaming to escape the pandemic, (2.2) Gaming to unwind, and (2.3) Gaming to support mental well-being.

2.1 Gaming to escape the pandemic.

For many participants, video games provided them with the opportunity to escape from "the mayhem of reality" (Paige) and be transported to an entirely different world. This was seen as particularly vital during the context of the pandemic, where significant anxiety, stress, and uncertainty was experienced on a daily basis.

"I can 'zone out' of the real world and fully immerse myself in a virtual world and prioritise that for a few hours." (Emily)

"I honestly believe that video gaming is more important than ever. It allows for people to distract themselves from all of the stuff that['s] going on both in the world and in their nation [...] in engaging with the virtual worlds and stories that are being told through video games we are in a much better mental state than being dragged down by all of the negativity in the current media waves." (Jackson)

However, participants reflected that some games were better placed to afford this escapism than others, with fantasy RPGs and historical actionadventure games preferred over genres such as horror (e.g., The Last of Us). The ability to be immersed in a story far removed from reality was a key component of this protective mechanism.

"As for fantasy content, I prefer to interact in a game environment that is as far away from 'real life' as possible due to immersion in a whole new world I only get to experience online." (Bella)

"RDR2 [Red Dead Redemption 2]: A total distraction from life's problems given the scale and subject matter of the game, something totally removed from modern life." (Ryan)

"Nothing too grim (e.g., The Last of Us) either, since I want some escapism from games." (Stephen)

2.2 Gaming to unwind.

Alongside escapism, participants described the importance of video games in allowing them to de-stress. The uncertainty experienced during the pandemic was a significant proponent of this stress, alongside changes to everyday activities, like increased childcare and remote working. Video games were seen as an easy and enjoyable way to relax, with some participants specifically purchasing consoles at the outset of the pandemic for this reason.

"They can be an easily accessible way of unwinding and switching off from whatever it is that I need to switch off from. My [job] does not involve particularly pleasant subject matter and so it can be helpful to switch on a game and redirect my thoughts." (Michael)

"I think at first video games curbed my anxiety and de-stressed me. I actually purchased a Nintendo Switch during the pandemic just so I could play Animal Crossing and my partner commented that I seemed less stressed out." (Paige)

Games that were passive and required less effort were particularly appreciated as a way to de-stress, potentially because they required less mental energy to engage in. Participants expressed how tired they had become due to the pandemic and appreciated opportunities where they did not have to focus.

"Lockdown has been really tiring [...] my work has got more difficult because it's hard to focus, but I feel under the same pressure as before [...]

it's been a tough time." (Adam)

"The simplistic and repetitive nature of this game combined with its freedom to be creative allows for the more mellow and relaxing moments of playtime during this quarantine." (Jackson)

2.3 Gaming to support mental well-being.

Participants also used video games more actively to support their mental health and well-being. In the context of anxiety disorders, video games were seen as being able to provide a safe, controlled environment where participants could build their confidence and practice exposure at their own pace.

"Video games really help my social anxiety when trying to meet new people, and provide me with safe areas to explore myself when interacting online with others, which has been the biggest benefit overall." (Bella)

Video games were also used as a way to cope with stress, with some participants using the promise of later gameplay as a reward and motivator to complete tasks.

"If I'm having a stressful day, say at work for example, I always think something along the lines of 'get through today then you can play games when you get home'. This gives me something to look forward to." (Mia)

Theme 3: To game or not to game? Conflicts faced by lockdown gamers

This final theme summarises some of the conflicts expressed by participants regarding video gaming; whilst the positive aspects of the hobby dominated many of the interviews, there was explicit and implicit discussion of some of the negatives experienced. This is captured through three subthemes: (3.1) An enjoyable hobby or a 'good enough' alternative?; (3.2) Guilt-free or guilt-ridden?; and (3.3) Helpful or harmful?

3.1 An enjoyable hobby or a 'good enough' alternative?

Many participants expressed how they enjoyed playing video games as a hobby, particularly in the context of lockdown, as it enabled them to engage in activities they may have otherwise been unable to do.

"It was kind of like going on an adventure with [the children] without leaving the house." (Michael)

"I played online for the first time so I could try Streets of Rage 4 (co-op) with my friend in [country]. He had to cancel his scheduled visit to come see us over Easter, so it was really nice to at least play through the game with him. We talked on Zoom at the same time." (Stephen)

That said, some participants seemed to position video games as a 'good alternative' to in-person activities and not necessarily what they would prefer to do if given the option of both. In this way, video gaming seemed less like an enjoyable hobby and more like an alternative which was 'good enough' but not what would have been chosen under ordinary circumstances.

"I prefer getting out and visiting historical places and actually experience some of the type of places I see in the games (such as battlefields, historical houses, playing football, etc.)." (Ryan)

"I was near the end of my assessments for the year at university and other summer plans were unable to go ahead, so I could play more games than usual due to more free time." (Chloe)

"It became one of the main things to do every evening in our household, since other options were either unavailable or weren't safe." (Stephen)

3.2 Guilt-free or guilt-ridden?

For some participants, the COVID-19 lockdown provided them with the opportunity to play video games to a greater extent than they would normally be able to. This was due to increased free time due to circumstantial changes like furlough and working from home, removing the need to commute.

"I was made redundant and was quarantined throughout lockdown for 3 months and this was my 'hobby', so ended playing many more hours than usual. Also felt like 'there will not be another opportunity where this would happen again' and I enjoy spending time online gaming so enjoyed spending more time with friends and progression." (Will)

This change was eagerly received by some, allowing them to participate in "guilt-free" (Stephen) gaming and return to more labour-intensive games that they did not typically have time for in their everyday life.

"I've been playing League of Legends on and off for a few years so it's a game I usually come back to every once in a while. Quarantine was a good time to come back to the game since playing the game can take a lot of time up in the day." (Mia)

However, throughout the interviews, there was an underlying narrative of worry regarding increased gaming. Participants described internal feelings of guilt provoked by deciding to play video games instead of other activities, which were understood to be more productive and worthwhile. Some participants even went as far as to suggest that they were "wasting my life" (Paige) when video gaming. In this way, there seemed to be an internal battle between enjoying the opportunity to game more whilst also feeling guilty about doing so.

"On the rare occasions where I have time to myself, I'll often play games but constantly feel like I should be exercising or doing something productive instead." (Ryan)

3.3 Helpful or harmful?

Whilst the many benefits of video gaming were discussed at length, such as increased autonomy, the opportunity to socialise, and improved mental well-

being, participants also acknowledged that video games could be harmful in certain situations. In particular, participants emphasised the addictive element of gaming, which could distract from real-world tasks and responsibilities and have a felt detrimental impact.

"I think at first I became quite obsessive with gaming at the beginning of the pandemic so it perhaps distracted me from work." (Paige)

While video gaming during lockdown largely seemed to reduce stress, participants reflected that in certain situations, gaming could increase levels of stress.

"If I'm already quite wound up, something on a video game going wrong can just tip me over the edge." (Ryan)

"Sometimes I can find the games increase my stress when there is a particularly tense situation I am playing through." (Chloe)

The same could also be said for mental health; while gaming largely seemed to provide benefits for participants, in certain situations, it could be

detrimental to mental well-being. This was identified as a particular issue in the context of toxicity from other players and less due to the games themselves.

"The only time video games really affect me negatively is when I'm playing

League of Legends and people are being toxic towards me. I've got better at

dealing with it but it still affects me." (Mia)

Discussion

The speed and magnitude of the spread of COVID-19 created a global health catastrophe, resulting in far-reaching economic, social, and mental health consequences. In addition to the stress and uncertainty generated by the pandemic, extended periods of social distancing brought about their own challenges, including the need to adapt to new ways of working and isolation from friends and family. Unsurprisingly, people became more reliant on digital technologies for entertainment, distraction, and social connection. Video games quickly developed into one of the most popular activities during COVID-19, with statistics suggesting a 39% global increase in gaming from May to June 2020 (Clement, 2021).

The current study provides an intriguing window into the worlds of video gamers during the pandemic, generating insights into the benefits and pitfalls of using video games to help navigate the psychological stressors of COVID-19, particularly those brought about by social distancing measures.

The study's first theme (Providing what lockdown took away) may be considered through the lens of self-determination theory (Ryan & Deci, 2000). Self-determination theory argues that individual psychological health and well-being rely on meeting three basic psychological needs: autonomy, competence, and relatedness. During a time of greater uncertainty with restrictions on individual liberty, these psychological needs would be more difficult to satisfy. Consequently, participants discussed how playing video games gave them a sense of control and agency restoration, a feeling of community and connectedness with others, and a sense of purpose and progress. Playing video games provided participants with an alternative way to satisfy these important psychological needs and maintain positive well-being during an especially challenging time. These findings could thus be interpreted as a compensatory response to the stressors of COVID-19 (Türkay et al., 2023).

Theme 2 (Proactive and protective: Video games as a coping mechanism) suggests video games were used as both reactive and proactive coping strategies during the pandemic. A commonly recounted reactive strategy was one of escape avoidance (Folkman et al., 1986), whereas a more proactive strategy included future-oriented coping, for example, the promise of game time in reward for an anticipated difficult day. While avoidant strategies may help reduce short-term stress, they are considered less effective in the long term and even as a form of maladaptive coping (e.g., see Rippetoe & Rogers, 1987). Moreover, certain groups (e.g., women,

younger adults, and people of lower socio-economic status) were found to be more reliant on avoidant coping during the pandemic (Fluharty & Fancourt, 2021). Given video games' immersive and time-distorting properties (Wood et al., 2007), there may be a danger of becoming too reliant on them as a coping mechanism, particularly if this entails distancing oneself too much from the stressor.

Theme 3 (To game or not to game? Conflicts faced by lockdown gamers) speaks to the tension between viewing video games as a worthwhile leisure activity with psychological, social, and developmental benefits versus a time-wasting activity which detracts from more 'important' pursuits. In the past, video gaming has often received negative press, particularly regarding its potential for harm, for example, its alleged impact on aggression (Przybylski et al., 2010). It is difficult to know, particularly for older gamers, the extent to which this broader societal narrative around video game harms has been internalized, and this may represent a fertile avenue for further investigation.

Considering that the World Health Organization considers the next global pandemic to be a "matter of when, not if" (*WHO Director-General's Speech at the World Governments Summit - 12 February 2024*), the efforts of this study to analyze mental health and video game behaviours during a global pandemic may provide useful insights into how individuals can use video gaming to regulate mood and stress when under extreme psychological

pressure. Indeed, it illustrates the capacity of video gaming to fulfil basic psychological needs and provide a means of coping with heightened levels of stress external to the video game, which is likely to be a key lesson for future health epidemics and beyond.

Conclusion

To conclude, video gaming during the pandemic served as an important coping mechanism for some individuals, providing them with opportunities for social interaction, both within their household and outside of it, a world in which they could become immersed and live autonomously, and a sense that they had progressed, achieved, and grown. While video games are often maligned in the mainstream media, this study adds to the growing research base for their benefits and suggests that video gaming may be an important psychological buffer against the negative impact of heightened stressors in future global health events.

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Declaration of Interest Statement

The Authors declare that there is no conflict of interest.

Data Availability Statement

Access to the data used in this research study is available upon request.

References

- Aarseth, E., Bean, A. M., Boonen, H., Carras, M. C., Coulson, M., Das, D., Deleuze, J., Dunkels, E., Edman, J., Ferguson, C. J., Haagsma, M. C., Bergmark, K. H., Hussain, Z., Jansz, J., Kardefelt-Winther, D., Kutner, L., Markey, P., Nielsen, R. K. L., Prause, N., ... Rooij, A. J. V. (2017). Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal. *Journal of Behavioral Addictions*, 6(3), 267-270. https://doi.org/10.1556/2006.5.2016.088
- Allen, J. J., & Anderson, C. A. (2018). Satisfaction and frustration of basic psychological needs in the real world and in video games predict internet gaming disorder scores and well-being. *Computers in Human Behavior*, 84, 220–229. https://doi.org/10.1016/j.chb.2018.02.034
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, 30(2), 252–262. https://doi.org/10.1037/adb0000160

- Balhara, Y. P. S., & Chandiok, K. (2020). Can #PlayOurpartTogether help prevent miscommunication? *Asian Journal of Psychiatry*, *52*, 102123. https://doi.org/10.1016/j.ajp.2020.102123
- Barr, M., & Copeland-Stewart, A. (2022). Playing Video Games During the COVID-19 Pandemic and Effects on Players' Well-Being. *Games and Culture*, 17(1), 122–139. https://doi.org/10.1177/15554120211017036
- Bean, A. M., Nielsen, R. K. L., van Rooij, A. J., & Ferguson, C. J. (2017).

 Video game addiction: The push to pathologize video games.

 Professional Psychology: Research and Practice, 48, 378–389.

 https://doi.org/10.1037/pro0000150
- Berjot, S., & Gillet, N. (2011). Stress and Coping with Discrimination and Stigmatization. *Frontiers in Psychology*, *2*, 33. https://doi.org/10.3389/fpsyg.2011.00033
- Billieux, J., Stein, D. J., Castro-Calvo, J., Higushi, S., & King, D. L. (2021).

 Rationale for and usefulness of the inclusion of gaming disorder in the ICD-11. *World Psychiatry*, *20*(2), 198–199.

 https://doi.org/10.1002/wps.20848
- Botte, B., Bakkes, S., & Veltkamp, R. (2020). Motivation in Gamification:

 Constructing a Correlation Between Gamification Achievements and
 Self-determination Theory. In I. Marfisi-Schottman, F. Bellotti, L.

 Hamon, & R. Klemke (Eds.), *Games and Learning Alliance* (Vol.
 12517, pp. 157–166). Springer International Publishing.

 https://doi.org/10.1007/978-3-030-63464-3 15

- Bowman, N. D., Rieger, D., & Tammy Lin, J.-H. (2022). Social video gaming and well-being. *Current Opinion in Psychology*, *45*, 101316. https://doi.org/10.1016/j.copsyc.2022.101316
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology.

 *Qualitative Research in Psychology, 3(2), 77.

 https://doi.org/10.1191/1478088706qp063oa
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide.* SAGE Publications Ltd.
- Cheng, Y. (2019). The Mediating Effects of Motivation for Playing Pokémon

 Go on Internet Gaming Disorder and Well-Being. *The American*Journal of Family Therapy, 47(1), 19–36.

 https://doi.org/10.1080/01926187.2019.1583614
- Clement, J. (2021). Increase in time spent video gaming during the

 COVID-19 pandemic worldwide as of June 2020, by region. Statista.

 Retrieved on 01/03/2024 from

 https://www.statista.com/statistics/1188545/gaming-time-spent-covid/
- Close, J., Spicer, S. G., Nicklin, L. L., Lloyd, J., Whalley, B., & Lloyd, H. (2022). Gambling and Gaming in the United Kingdom during the COVID-19 Lockdown. *COVID*, *2*(2), Article 2. https://doi.org/10.3390/covid2020007
- Daneels, R., Bowman, N. D., Possler, D., & Mekler, E. D. (2021). The 'Eudaimonic Experience': A Scoping Review of the Concept in Digital

- Games Research. *Media and Communication*, *9*(2), Article 2. https://doi.org/10.17645/mac.v9i2.3824
- Drummond, A., & Sauer, J. D. (2020). Timesplitters: Playing video games before (but not after) school on weekdays is associated with poorer adolescent academic performance. A test of competing theoretical accounts. *Computers & Education, 144,* 103704.

 https://doi.org/10.1016/j.compedu.2019.103704
- Festl, R., Scharkow, M., & Quandt, T. (2013). Problematic computer game use among adolescents, younger and older adults. *Addiction*, *108*(3), 592–599. https://doi.org/10.1111/add.12016
- Fluharty, M., & Fancourt, D. (2021). How have people been coping during the COVID-19 pandemic? Patterns and predictors of coping strategies amongst 26,016 UK adults. *BMC Psychology*, 9, 1-12.
- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology*, *50*(3), 571–579. https://doi.org/10.1037/0022-3514.50.3.571
- Formosa, J., Johnson, D., Türkay, S., & Mandryk, R. L. (2022). Need satisfaction, passion and wellbeing effects of videogame play prior to and during the COVID-19 pandemic. *Computers in Human Behavior*, 131, 107232. https://doi.org/10.1016/j.chb.2022.107232
- Gittings, L., Toska, E., Medley, S., Cluver, L., Logie, C. H., Ralayo, N., ... & Mbithi-Dikgole, J. (2021). 'Now my life is stuck!': Experiences of

adolescents and young people during COVID-19 lockdown in South Africa. *Global Public Health, 16*(6), 947-963.

https://doi.org/10.1080/17441692.2021.1899262

- Halbrook, Y. J., O'Donnell, A. T., & Msetfi, R. M. (2019). When and How
 Video Games Can Be Good: A Review of the Positive Effects of Video
 Games on Well-Being. *Perspectives on Psychological Science*, 14(6),
 1096–1104. https://doi.org/10.1177/1745691619863807
- Iacovides, I., & Mekler, E. D. (2019). The Role of Gaming During Difficult

 Life Experiences. *Proceedings of the 2019 CHI Conference on Human*Factors in Computing Systems, 1-12.

https://doi.org/10.1145/3290605.3300453

Jeżewska-Zychowicz, M., Plichta, M., & Królak, M. (2020). Consumers'

Fears Regarding Food Availability and Purchasing Behaviors during the COVID-19 Pandemic: The Importance of Trust and Perceived Stress. *Nutrients*, *12*(9), Article 9.

https://doi.org/10.3390/nu12092852

Jin, Y., & Li, J. (2017). When newbies and veterans play together: The effect of video game content, context and experience on cooperation.

Computers in Human Behavior, 68, 556-563.

https://doi.org/10.1016/j.chb.2016.11.059

Johannes, N., Vuorre, M., & Przybylski, A. K. (2021). *Video game play is positively correlated with well-being* [Preprint]. PsyArXiv. https://doi.org/10.31234/osf.io/qrjza

- Jones, C. M., Scholes, L., Johnson, D., Katsikitis, M., & Carras, M. C. (2014).
 Gaming well: Links between videogames and flourishing mental
 health. Frontiers in Psychology, 5.
 https://doi.org/10.3389/fpsyg.2014.00260
- Kar, N., Kar, B., & Kar, S. (2021). Stress and coping during COVID-19 pandemic: Result of an online survey. *Psychiatry Research*, 295, 113598. https://doi.org/10.1016/j.psychres.2020.113598
- King, D. L., Delfabbro, P. H., Billieux, J., & Potenza, M. N. (2020).
 Problematic online gaming and the COVID-19 pandemic. *Journal of Behavioral Addictions*, 9(2), 184–186.
 https://doi.org/10.1556/2006.2020.00016
- Kriz, W. C. (2020). Gaming in the Time of COVID-19. *Simulation & Gaming*, 51(4), 403–410. https://doi.org/10.1177/1046878120931602
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. Springer Publishing Company.
- Leary, M. R. (2007). Motivational and Emotional Aspects of the Self. *Annual Review of Psychology*, *58*(1), 317–344.

 https://doi.org/10.1146/annurev.psych.58.110405.085658
- Lewis, J. E., Trojovsky, M., & Jameson, M. M. (2021). New Social Horizons:

 Anxiety, Isolation, and Animal Crossing During the COVID-19

 Pandemic. Frontiers in Virtual Reality, 2.

 https://doi.org/10.3389/frvir.2021.627350

- Li, J., Theng, Y.-L., & Foo, S. (2016). Effect of Exergames on Depression: A Systematic Review and Meta-Analysis. *Cyberpsychology, Behavior, and Social Networking, 19*(1), 34–42. https://doi.org/10.1089/cyber.2015.0366
- McKenna-Plumley, P. E., Graham-Wisener, L., Berry, E., & Groarke, J. M. (2021). Connection, constraint, and coping: A qualitative study of experiences of loneliness during the COVID-19 lockdown in the UK. PLoS One, 16(10), e0258344.
 https://doi.org/10.1371/journal.pone.0258344
- Mills, D. J., & Allen, J. J. (2020). Self-determination theory, internet gaming disorder, and the mediating role of self-control. *Computers in Human Behavior*, 105, 106209. https://doi.org/10.1016/j.chb.2019.106209
- Mills, D. J., Milyavskaya, M., Mettler, J., & Heath, N. L. (2018). Exploring the pull and push underlying problem video game use: A Self-Determination Theory approach. *Personality and Individual Differences*, 135, 176–181. https://doi.org/10.1016/j.paid.2018.07.007
- Nabi, R. L., Pérez Torres, D., & Prestin, A. (2017). Guilty pleasure no more:

 The relative importance of media use for coping with stress. *Journal of Media Psychology: Theories, Methods, and Applications, 29*, 126–136. https://doi.org/10.1027/1864-1105/a000223
- Niedzwiedz, C. L., Green, M. J., Benzeval, M., Campbell, D., Craig, P.,
 Demou, E., Leyland, A., Pearce, A., Thomson, R., Whitley, E., &
 Katikireddi, S. V. (2021). Mental health and health behaviours before

- and during the initial phase of the COVID-19 lockdown: Longitudinal analyses of the UK Household Longitudinal Study. *J Epidemiol Community Health*, *75*(3), 224–231. https://doi.org/10.1136/jech-2020-215060
- Nimrod, G. (2020). Changes in Internet Use When Coping With Stress:

 Older Adults During the COVID-19 Pandemic. *The American Journal of Geriatric Psychiatry*, *28*(10), 1020–1024.

 https://doi.org/10.1016/j.jagp.2020.07.010
- Nuyens, F. M., Kuss, D. J., Lopez-Fernandez, O., & Griffiths, M. D. (2019).

 The Empirical Analysis of Non-problematic Video Gaming and
 Cognitive Skills: A Systematic Review. *International Journal of Mental Health and Addiction*, 17(2), 389-414. https://doi.org/10.1007/s11469-018-9946-0
- Oe, H. (2020). Discussion of digital gaming's impact on players' well-being during the COVID-19 lockdown. arXiv:2005.00594 [Cs]. http://arxiv.org/abs/2005.00594
- Oliver, M. B., Bowman, N. D., Woolley, J. K., Rogers, R., Sherrick, B. I., & Chung, M.-Y. (2016). Video games as meaningful entertainment experiences. *Psychology of Popular Media Culture*, *5*, 390–405. https://doi.org/10.1037/ppm0000066
- Owens, M., Townsend, E., Hall, E., Bhatia, T., Fitzgibbon, R., & Miller-Lakin, F. (2022). Mental Health and Wellbeing in Young People in the UK during Lockdown (COVID-19). *International Journal of*

- Environmental Research and Public Health, 19(3), Article 3. https://doi.org/10.3390/ijerph19031132
- Pallavicini, F., Pepe, A., & Mantovani, F. (2022). The Effects of Playing

 Video Games on Stress, Anxiety, Depression, Loneliness, and Gaming

 Disorder During the Early Stages of the COVID-19 Pandemic: PRISMA

 Systematic Review. *Cyberpsychology, Behavior, and Social*Networking, 25(6), 334–354. https://doi.org/10.1089/cyber.2021.0252
- Pearce, K. E., Yip, J. C., Lee, J. H., Martinez, J. J., Windleharth, T., Li, Q., & Bhattacharya, A. (2022). "I need to just have a couple of White claws and play animal crossing tonight": Parents coping with video games during the COVID-19 pandemic. *Psychology of Popular Media*, 11(3), 324–332. https://doi.org/10.1037/ppm0000367
- Pearce, K. E., Yip, J. C., Lee, J. H., Martinez, J. J., Windleharth, T. W.,

 Bhattacharya, A., & Li, Q. (2021). Families Playing Animal Crossing

 Together: Coping With Video Games During the COVID-19 Pandemic.

 Games and Culture, 15554120211056125.

 https://doi.org/10.1177/15554120211056125
- Peng, W., Lin, J.-H., Pfeiffer, K. A., & Winn, B. (2012). Need Satisfaction

 Supportive Game Features as Motivational Determinants: An

 Experimental Study of a Self-Determination Theory Guided Exergame.

 Media Psychology, 15(2), 175–196.

https://doi.org/10.1080/15213269.2012.673850

- Pieh, C., Budimir, S., Delgadillo, J., Barkham, M., Fontaine, J. R. J., & Probst, T. (2021). Mental Health During COVID-19 Lockdown in the United Kingdom. *Psychosomatic Medicine*, *83*(4), 328. https://doi.org/10.1097/PSY.0000000000000871
- Plante, C. N., Gentile, D. A., Groves, C. L., Modlin, A., & Blanco-Herrera, J. (2019). Video games as coping mechanisms in the etiology of video game addiction. *Psychology of Popular Media Culture, 8*(4), 385–394. https://doi.org/10.1037/ppm0000186
- Play Apart Together Uses Games to Promote Social Distancing. (2020, April 7). Digital Trends. https://www.digitaltrends.com/gaming/play-apart-together-covid-19-gaming/
- Przybylski, A. K. (2016). Mischievous responding in Internet Gaming

 Disorder research. *PeerJ*, 4, e2401. https://doi.org/10.7717/peerj.2401
- Przybylski, A. K., Rigby, C. S., & Ryan, R. M. (2010). A Motivational Model of Video Game Engagement. *Review of General Psychology*, *14*(2), 154–166. https://doi.org/10.1037/a0019440
- Reinecke, L. (2009). Games and Recovery: The Use of Video and Computer

 Games to Recuperate from Stress and Strain. *Journal of Media*Psychology: Theories, Methods, and Applications, 21, 126-142.

 https://doi.org/10.1027/1864-1105.21.3.126
- Rigby, C. S., & Ryan, R. M. (2017). *Motivation for Entertainment Media and Its Eudaimonic Aspects Through the Lens of Self-Determination Theory*.

- Rippetoe, P. A., & Rogers, R. W. (1987). Effects of components of protection-motivation theory on adaptive and maladaptive coping with a health threat. *Journal of Personality and Social Psychology*, 52(3), 596.
- Rogers, R., Woolley, J., Sherrick, B., Bowman, N. D., & Oliver, M. B. (2017).

 Fun Versus Meaningful Video Game Experiences: A Qualitative

 Analysis of User Responses. *The Computer Games Journal*, *6*(1), 63–79. https://doi.org/10.1007/s40869-016-0029-9
- Rorong, E. (2021). Working from home during pandemic Covid-19: Effects of mobile technology use, supervisor support and job insecurity on employee's role stress and job satisfaction. *Jurnal Akuntansi, Manajemen Dan Ekonomi, 23*(2), Article 2.

 https://doi.org/10.32424/1.jame.2021.23.2.4145
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*, 67.
- Samios, C., Catania, J., Newton, K., Fulton, T., & Breadman, A. (2020).

 Stress, savouring, and coping: The role of savouring in psychological adjustment following a stressful life event. *Stress and Health*, *36*(2), 119–130. https://doi.org/10.1002/smi.2914
- Sherrick, B., Hoewe, J., & Ewoldsen, D. R. (2022). Using narrative media to satisfy intrinsic needs: Connecting parasocial relationships, retrospective imaginative involvement, and self-

- determination theory. *Psychology of Popular Media, 11*(3), 266–274. https://doi.org/10.1037/ppm0000358
- Siervo, M., Gan, J., Fewtrell, M. S., Cortina-Borja, M., & Wells, J. C. K. (2018). Acute effects of video-game playing versus television viewing on stress markers and food intake in overweight and obese young men: A randomised controlled trial. *Appetite*, 120, 100–108. https://doi.org/10.1016/j.appet.2017.08.018
- Slavich, G. M. (2016). Life Stress and Health: A Review of Conceptual

 Issues and Recent Findings. *Teaching of Psychology*, *43*(4), 346–355.

 https://doi.org/10.1177/0098628316662768
- Slavich, G. M., Monroe, S. M., & Gotlib, I. H. (2011). Early parental loss and depression history: Associations with recent life stress in major depressive disorder. *Journal of Psychiatric Research*, *45*(9), 1146–1152. https://doi.org/10.1016/j.jpsychires.2011.03.004
- Slavich, G. M., Thornton, T., Torres, L. D., Monroe, S. M., & Gotlib, I. H. (2009). Targeted Rejection Predicts Hastened Onset of Major Depression. *Journal of Social and Clinical Psychology*, 28(2), 223–243. https://doi.org/10.1521/jscp.2009.28.2.223
- Statz, T. L., Kobayashi, L. C., & Finlay, J. M. (2022). 'Losing the illusion of control and predictability of life': experiences of grief and loss among ageing US adults during the COVID-19 pandemic. *Ageing & Society*, 1-24. https://doi.org/10.1017/S0144686X21001872

- Sublette, V. A., & Mullan, B. (2012). Consequences of Play: A Systematic Review of the Effects of Online Gaming. *International Journal of Mental Health and Addiction, 10*(1), 3–23.

 https://doi.org/10.1007/s11469-010-9304-3
- Tamborini, R., Bowman, N. D., Eden, A., Grizzard, M., & Organ, A. (2010).

 Defining Media Enjoyment as the Satisfaction of Intrinsic Needs.

 Journal of Communication, 60(4), 758–777.

 https://doi.org/10.1111/j.1460-2466.2010.01513.x
- Taylor, S. E., & Stanton, A. L. (2007). Coping Resources, Coping Processes, and Mental Health. *Annual Review of Clinical Psychology*, *3*(1), 377–401. https://doi.org/10.1146/annurev.clinpsy.3.022806.091520
- Taylor, C., Lafarge, C., Cahill, S., Milani, R., & Görzig, A. (2022). Living through lockdown: A qualitative exploration of individuals' experiences in the UK. *Health & Social Care in the Community*, 30(6), 2240-2249. https://doi.org/10.1111/hsc.13772

Timeline of UK government coronavirus lockdowns and restrictions. (2022, December 9). Institute for Government.

https://www.instituteforgovernment.org.uk/data-visualisation/timeline-

<u>coronavirus-lockdowns</u>

Toledo, M. (2020). *Video Game Habits & COVID-19* (SSRN Scholarly Paper ID 3676004). Social Science Research Network.

https://doi.org/10.2139/ssrn.3676004

- Triberti, S., Milani, L., Villani, D., Grumi, S., Peracchia, S., Curcio, G., & Riva, G. (2018). What matters is when you play: Investigating the relationship between online video games addiction and time spent playing over specific day phases. *Addictive Behaviors Reports*, 8, 185–188. https://doi.org/10.1016/j.abrep.2018.06.003
- Tromans, S., Chester, V., Harrison, H., Pankhania, P., Booth, H., & Chakraborty, N. (2020). Patterns of use of secondary mental health services before and during COVID-19 lockdown: Observational study. *BJPsych Open, 6*(6), e117. https://doi.org/10.1192/bjo.2020.104
- Türkay, S., Lin, A., Johnson, D., & Formosa, J. (2023). Self-determination theory approach to understanding the impact of videogames on wellbeing during COVID-19 restrictions. *Behaviour & Information Technology*, 42(11), 1720-1739.
- White, R. G., & Van Der Boor, C. (2020). Impact of the COVID-19 pandemic and initial period of lockdown on the mental health and well-being of adults in the UK. *BJPsych Open, 6*(5), e90. https://doi.org/10.1192/bjo.2020.79
- Wiederhold, B. K. (2020). Social Media Use During Social Distancing.

 Cyberpsychology, Behavior, and Social Networking, 23(5), 275–276.

 https://doi.org/10.1089/cyber.2020.29181.bkw
- Williams, S. N., Armitage, C. J., Tampe, T., & Dienes, K. (2020). Public perceptions and experiences of social distancing and social isolation

- during the COVID-19 pandemic: A UK-based focus group study. *BMJ Open, 10*(7), e039334. https://doi.org/10.1136/bmjopen-2020-039334
- Wilson, J. M., Lee, J., Fitzgerald, H. N., Oosterhoff, B., Sevi, B., & Shook, N. J. (2020). Job Insecurity and Financial Concern During the COVID-19 Pandemic Are Associated With Worse Mental Health. *Journal of Occupational and Environmental Medicine*, 62(9), 686.
 https://doi.org/10.1097/JOM.000000000001962
- Wood, R. T., Griffiths, M. D., & Parke, A. (2007). Experiences of time loss among videogame players: An empirical study. *Cyberpsychology,*Social Networking & Behavior, 10(1), 38-44.
- Xu, X., & Banks, J. (2020). The mental health effects of the first two months of lockdown and social distancing during the Covid-19 pandemic in the UK. The IFS. https://doi.org/10.1920/wp.ifs.2020.1620
- Yee, A. Z. H., & Sng, J. R. H. (2022). Animal Crossing and COVID-19: A

 Qualitative Study Examining How Video Games Satisfy Basic

 Psychological Needs During the Pandemic. Frontiers in Psychology, 13.

 https://www.frontiersin.org/articles/10.3389/fpsyg.2022.800683
- Zhu, L. (2021). The psychology behind video games during COVID-19 pandemic: A case study of Animal Crossing: New Horizons. *Human Behavior and Emerging Technologies*, 3(1), 157–159.
 https://doi.org/10.1002/hbe2.221

Pseudon	Ag	Gende	Employment	Hours	Days spent
ym	e	r	during lockdown	spent	gaming per
				gaming	week*
				per week	
Adam	35	Male	Employed	3-4	Every day
Bella	25	Femal	Student	18	Most days
		e			
Chloe	20	Femal	Student	6-12	Some days
		e			
Emily	24	Femal	Student	25	Every day
		e			
Jackson	23	Male	Student	12	Some days
James	32	Male	Employed	15	Most days
Kieran	31	Male	Self-employed	14	Most days
Mia	23	Femal	Employed	20-30	Most days
		e			
Paige	26	Femal	Employed	10	Most days
		е			
Ryan	25	Male	Furloughed	15	Some days
Stephen	38	Male	Not disclosed	7	Every day

Will	26	Male	Redundancy, then	22	Every day
			Employed		

Table 1.

Participant demographics and characteristics

*Days spent gaming coded as: 1 = one day; 2-4 = some days; 5-6 = most days; 7 = every day.

Figure 1.

Thematic map

