“The Lived Experience of Gaming and Gambling: Guiding Practitioners' Understanding for Supporting Children and Young People”

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August 4th 2021

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Abstract

Introduction

Recent innovations in gaming technology have raised concerns about gambling-type harms for children and young people (CYP) who play video games. Whereas alcohol and drug addiction are known to be associated with health risks, there is less awareness of the potential risks of gambling-like behaviour within video games, and the support services available to young people and their parents. Therefore, the focus of this research is to understand the current context in which the risks of gaming and gambling-related harms for CYP are addressed by health and social care systems in the UK.

Research Methodology

Four 90-minute focus groups were conducted online with practitioners and people with previous lived experience of gaming and gambling harm in the UK. Two focus groups included 4-5 practitioners working with CYP in health and social care settings. Two focus groups included 2-3 people with previous lived experience of gaming and gambling harm in the UK. Focus group data was analysed by Thematic Analysis and the themes arising in different groups were compared and contrasted.

Results

Similar patterns of negative consequences were found to result from behavioural addiction to both gambling and gambling-like content within video games, supporting a suggestion that gambling-related harms and gaming-related harms may be converging through digital

technology. A perception of low levels of practitioner awareness of this convergence may lead to increased risks of gambling-type behaviour for CYP. Key themes for practitioner focus groups were Safeguarding, Whole Systems Approach and Barriers to Support. Key themes from the lived experience focus groups were Escapism, Preventative Measures, Public Perception and Ecological Dynamics.

Implications

These findings carry implications for practitioners seeking to support CYP and also for policy makers and regulators who are seeking to address this issue, including a range of recommendations within a whole-systems public health approach to safeguarding CYP from the risks of gaming and gambling-related harm.

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1. Introduction

Huizinga argues that play is inherent to human nature and a primary driver of human cultures (Huizinga, 1938). Huizinga's ideas have been discussed in relation to games design, where games may be regarded as a form of meaning-making generated by the reciprocal relationship between play and culture (Rodriguez, 2006). Gambling is a type of game. The two words share an etymological root through the Old English *gamen,* meaning "joy, fun; game, amusement," (Etymonline, n.d.). Archaeological finds from China, Egypt, and Persia show that gambling has been a pastime for 5 millennia (The Lancet, 2017) and occurs in almost all human societies (McMillen, 2005). Whilst many different forms of gambling have been identified in different cultures and time periods, in contemporary academic literature the convention is to define gambling as the staking of money, or something of economic value, on the uncertain outcome of a future event (McMillan, 2005, p. 6). Video games are a much more recent invention, defined as 'an interactive form of digital entertainment' (Esposito, 2005). The first video game has been credited to nuclear physicist William Higinbotham for his creation of "Tennis for Two" in 1958, with the first popular arcade video games following in the early seventies (Rossen, 2017). Over the next thirty years video games rapidly evolved "from Pac Man to photorealistic, massively populated, three-dimensional environments" (Van Rooji, 2011, p. 9). Video games have become immersive and interactive experiences, embedded within the lives of children and young people (CYP) (King & Delfabbro 2018) who are growing up in "digitally infused surroundings of the interconnected world" (Belani, 2021, p. 1).

Video games provide wide ranging opportunities to CYP and also novel types of risks (King & Delfabbro, 2018). Specifically, the convergence of gaming and gambling activities online raises concerns over potential risks of gaming and gambling-related harm for CYP (Gainsbury et al., 2015; Kim & King, 2020; Macey & Hamari, 2019; Wardle, 2020). In this study CYP refers to

those between 7 and 25 years of age. Gaming and gambling-related harms can impact upon the physical and mental health of CYP, as well as their social life and developmental outcomes (Wardle et al. 2018). The Gambling Act (2005) includes a regulatory framework which is designed to protect CYP from gambling-related harms, however it may now be outdated due to technological development since 2005 (House of Lords, 2020). Whilst there are existing public health (PH) approaches to address gambling-related harm, a different strategy may be required to protect CYP from converging gaming and gambling-related harms.

It has been recognised that a broad range of factors may influence the risks of gambling-related harm for CYP, including psychological development, home life and peer groups, media and education, as well as broader social and cultural norms (Blake et al., 2019; Gambling Commission, 2020b). In order to understand these multi-layered factors, there is a need for research which takes an 'ecological' approach by drawing upon a wide range of different perspectives to develop holistic strategies (Halsall et al., 2018). Modern health systems have been described as 'fragmented', lacking intersectoral collaboration and focusing on disease-based curative care models, so there is a need for integrated health services and close collaboration between health, social care, education and the wider range of local services that can all contribute to better health for individuals, families and communities (WHO, 2015). Therefore, in order to reach an integrated and ecological understanding of gaming and gambling harms for CYP it is necessary to draw upon a range of perspectives from the health and social care (HSC) systems in which their lives are embedded. HSC systems have been defined as 'consisting of all organisations, people and actions whose primary intent is to promote, restore or maintain health' (WHO, 2007). The focus of this research is to understand how health and social care (HSC) systems in the UK can respond to a changing online environment for CYP, specifically in relation to video games and gambling activities. To achieve this, two focus groups

were conducted with practitioners from different professional fields to explore a range of perspectives upon the risks of gaming and gambling-related harms and the support which is currently available. Two further focus groups were conducted with adults with lived experience of both gaming-related harm and gambling-related harms to understand their experiences and how the associated risks were addressed with them. Data from each focus group was analysed by thematic analysis, the results of which are brought together in shared findings, from which recommendations are made for policy-makers, regulators and practitioners.

In order to explain the rationale for the study, the following literature review highlights the way digital technology has changed the nature of gaming and gambling experiences for CYP, leading to a blurring of the boundaries between the two activities. Next, it is recognised how this has influenced the risks of gaming and gambling-related harm in the lives of CYP. Finally, there is a consideration of the way practitioners and public health systems can identify and address these risks to safeguard CYP.

2. Literature Review

2.1 Digital Technology, Video Games and CYP

Video games are central to the lives of many CYP. Recent research suggests that over 90% of young people play video games (CCfE, 2019; Ofcom, 2021b) and 12-15 year olds spend an estimated 13 hours 48 minutes per week playing video games (Ofcom, 2019a). Recent technological innovations have changed the way CYP interact with video games. These changes will be addressed in terms of access, social dynamics, and the integrated and immersive quality of contemporary video game entertainment.

2.1.1 Access

The way CYP access video games has changed. In recent years the processing performance of mobile devices has become comparable with non-mobile computers, and some commercial reports suggest that mobile gaming now accounts for approximately 52% of the video game market (Newzoo, 2021) and approximately 82% of the mobile app market (Nelson, 2018). It is important to acknowledge that the methodological approaches behind some commercial reports into video game usage are either not published or insubstantial, and therefore should be treated tentatively. Research has found that 88% of children have their own smartphone by the time they are 12 (YouGov, 2020) and 60% of 10-16 year olds play games on a smartphone (Parentzone, 2019). Given that the UK currently has reliable 4G mobile coverage over between 91-95% of its landmass (Ofcom, 2019b), video games may be played on a mobile device in almost any physical location. Therefore, CYP may now access video games in a wider range of physical spaces, including when ‘on the move’ and private spaces such as bedrooms.

Over the last 10 years there has been an increasing proportion of mobile games using a ‘freemium’ or ‘free-to-play’ (F2P) funding model (Schöber & Stadtmann, 2020). At the time of

writing 29 of the top 30 games in the AppleStore are using the F2P model. With this model a limited form of the game is free to download and revenue is generated through in-game advertising and purchases, or ‘microtransactions’, which unlock the full game (McCaffrey, 2019). Through this funding model CYP are able to download the free version of many mobile games without upfront payment, which reduces financial barriers to access. This also has potential implications for the level of advertising and promotional sales approaches which CYP may be exposed to and the oversight which parents may have over their childrens’ engagement in video games.

2.1.2 Social dynamics

The move from offline to online modes of play has transformed the social dynamics of video games. Game-based online communities (tribes, guilds, groups) create the potential for people who have never met in person to play together, develop relationships and experiment with different identities (Van Rooji, 2011). Games-based online communities can be vast. In 2016 the MMORPG World of Warcraft had over 5.5 million subscribers across six continents (Statista, 2016) and mobile game Fortnite has been downloaded 350 million times internationally (Statista, 2021). Online gaming may be embedded within digital platforms such as Discord which allow gamers to communicate with fellow players instantaneously during play, either by texting or voice chat (Bankov, 2019). This type of social engagement is still relatively new and has grown quickly; Discord was founded in 2017 and has 250 million users in 2019 (Kerr, 2019). Through these technological affordances, video games have become a dominant medium for social connection and community-building in the lives of many CYP, which is potentially accessible 24 hours a day.

2.1.3 Integrated Entertainment

Video games are increasingly integrated with other forms of digital entertainment media which are prominent in the lives of CYP. For example, ‘Let’s Players’ is a YouTube® channel which integrates TV talk show-style ‘personality entertainment’ with live social media feeds in what has been described as a “manifestation of contemporary gaming culture” (Kreissl, 2021, p. 1). Youtube is watched by approximately 90% of all UK children from the age of 3 years old and the majority (59%) of UK children use social media from the age of 11, with 95% engaged by the age of 15 (Ofcom, 2021a). Social media platforms such as Twitch have changed the landscape of video games, allowing gamers to livestream and “transform their private play into public entertainment” in a novel form of ‘broadcast play’ (Taylor, 2018, p. 6). Esports, the professional playing of video games, is a popular form of broadcast play which has seen huge growth as a new form of entertainment among younger generations (Smith & Nairn, 2019). Esports is “leading the world’s charge towards modernised live-streamed entertainment” with an estimated 13.5% year-on-year audience growth rate from 2016 to 2020 (PMG 2018, p 4). The World Championship for the video game League of Legends had peak viewing figures of 44 million in 2019, compared with 9 million viewers of the Wimbledon men’s final in the same year (Rossi & Nairn, 2020), highlighting how credible Esports has become as a form of entertainment.

2.1.4 Immersive Entertainment

Immersive technologies integrate virtual content with the physical environment. For example, the video game *Pokémon GO* allows players to see virtual content superimposed onto their physical location by looking through a smart device, and social media platforms such as Instagram and Snapchat offer image-enhancing ‘filters’ (Digital, Culture, Media and Sport (DCMS), 2019). The video game Fortnite incorporates elements of immersive theatre and storytelling by hosting live music concerts within the game, inviting players to watch the concert in the guise of their virtual character (Webster, 2021). It has been suggested that immersive

experiences are more psychologically intense than more passive forms of entertainment such as books, TV, and films on the basis that players actively shape their own experience and become part of the environment (DCMS, 2019). In role-playing games (RPGs) the gamer is often placed in the role of the protagonist in a never-ending journey through the game during which resources and accomplishments are earned, which has been suggested to lead to a greater emotional investment in the activity (Tham & Perreault, 2021). Furthermore, in some RPGs the narrative continues whilst the player is not online, which has the potential to continue to immerse the player even when they are not playing the game (Griffiths 2014).

In sum, over the course of a generation the nature of video games has fundamentally changed. Within the "digitally infused" (Belani, 2021) lives of CYP, video games are highly accessible and integrated into social interactions and leisure time. In contrast to the high proportion of CYP who play video games, research suggests that over the last ten years typically less than 50% of adults above 35 years of age play video games (Statistica, 2021), although this figure increased to 62% during the pandemic (Ofcom, 2021b). Data suggests a trend that younger players are more likely to play games online with or against other people, whilst older players are more likely to play offline (Ofcom, 2021b). Furthermore, research suggests that the features of online video games are not well understood by many adults (Mik, 2021; Pothong, 2021). This could be due to the fact that immersive, integrated and mobile gaming emerged from around 2005 with the introduction of mobile technology and wireless communications (Zagorsky, 2019), so some adults may have no experience of online video games. With reference to Rogers' (1951) 'person-centered approach', it may be difficult for practitioners to support CYP who are at risk of harm if they do not understand the nature of contemporary video games. Rogers' (1951) theory states that one of the core conditions for a positive therapeutic environment is the practitioner's empathic understanding of the client's

frame of reference which is generated by “entering the private, perceptual world of the other” (Rogers, 1980, p. 142). This may be difficult for a practitioner who has no familiarity with the digitally infused video game experience. Therefore, there is a need for research to understand the current context in which practitioners and HSC systems respond to the opportunities and risks posed by video games for CYP.

2.2 Digital Technology and Gambling

Gambling is restricted to 16 or 18 year olds and above, and legally defined as ‘betting, gaming or participating in a lottery’ where ‘gaming’ is understood as ‘playing a game of chance for a prize’ (Gambling Act, 2005). In response to the affordances of digital technology, gambling has transitioned towards an activity which is predominantly carried out online. From 2011 to 2018 the gross gambling yield (GGY) of the UK gambling industry nearly doubled from approximately £8.4 billion to approximately £14.4 billion (Lock, 2020). Despite a slight decrease in GGY from 2018 to 2020, online (or remote) gambling has continued to grow, with an increase of 8.1% from April 2019 to March 2020 (Gambling Commission 2020b). Online gambling now represents the largest sector of GGY, comprising 39.9% of the overall market at £5.7 billion, which is predominantly online casino games (£3.2bn) and sports betting (£2.3bn) (Gambling Commission, 2020b). The vast majority (95%) of all online gambling takes place at home, 50% of which is from mobile devices (Gambling Commission, 2020a). Whilst a majority of online gambling activity may be solitary from a physical perspective, it is often connected through social media platforms such as Twitter (Gambling Commission, 2020a; Smith & Nairn, 2019).

2.2.1 Access

The development of mobile technology has widened access to gambling opportunities, since online gambling products are subject to fewer physical limitations than their equivalent offline

counterparts, such as book-makers and casinos. For example, an online poker player may play multiple games simultaneously rather than travelling to the casino and waiting for the next game. Furthermore, whereas different gambling activities such as poker and sports were traditionally separated by physical space, in the online world they can be hosted on the same platforms with customers accessing a range of gambling activities through one account (House of Lords, 2020). Therefore, the growth of online gambling also increases the accessibility of gambling experiences.

2.2.2 Interactive Gambling

Online gambling provides potential for a wider range of gambling opportunities and a more person-specific relationship between the player and the gambling operator. Rapid digital communication generates the possibility of ‘in-game’ bets, providing multiple betting opportunities throughout the course of an event, including the possibility to arrange custom in-game bets with operators (Newall et al., 2021). At the same time, online gambling generates person-specific data about online gambling behaviour which offline gambling does not, and through the use of Artificial Intelligence (AI) technology operators may learn about the gambling habits and preferences of individual gamblers, offering a more personalised experience (House of Lords, 2020). It is also possible for online gambling to be more directly integrated with other forms of entertainment such as sport. Research suggests that ‘free bet’ incentives and in-play promotions have contributed towards gambling becoming a normalised aspect of sports fandom for male youth demographics, in a process which has been described as the ‘gamblification of sport’ (McGee, 2021).

2.2.3 Regulation of Gambling

The Gambling Act (2005) relaxed the regulations around gambling, leading to a wider range of gambling opportunities and increased advertising of gambling products (Blank et al., 2021;

Bramley et al., 2019). There is evidence that the 2005 regulations are ill-equipped to protect CYP and other vulnerable groups following the transition towards online gambling described above For example, The Gordon Moody Association, which provides intensive residential treatment for problem gamblers, have highlighted that there was no ability to gamble on mobile phones when the 2005 Act was drafted. (House of Lords, 2020). It has been suggested that data gathered about individual customer's online gambling habits is used for targeted advertising which increases the risk that players will gamble more than they can afford (Hing et al. 2014, cited in Cemiloglu et al. 2020), which has been confirmed by statements from former gambling industry employees (Busby, 2018). Novel forms of online gambling have been generated by the introduction of virtual currencies, including virtual assets from video games (Macey & Hamari, 2019) and decentralised digital cryptocurrencies secured by data encryption, both of which are potentially generating new forms of unregulated online gambling (Gainsbury, 2017). Since evidence suggests that CYP have higher levels of digital skills than adults (Belani, 2021), it is arguable that they are more likely to be exploring these novel forms of unregulated gambling with virtual currencies. There is a consensus between charities, treatment providers and recent political party manifestos that "the Gambling Act (2005) is increasingly becoming an analogue law in a digital age" and call for a new Gambling Act (House of Lords, 2020, p. 39), although this view was not shared by the Betting and Gaming Commission (BCG) who represent 90% of gambling operators. This is important because CYP may be exposed to unregulated gambling activities online which are associated with risks to physical and mental health.

In sum, parallels can be drawn between the impacts of mobile technology on both gaming and gambling in terms of higher levels of accessibility and interactivity, and the immersive quality of these activities in the 'digitally-infused' lives of CYP. It has been suggested

that the rapid growth of technological innovation has created a “digital divide” between CYP and adults, including HSC practitioners, and that there is an obligation upon policy makers and digital health regulators to recognise potential risks of harm and offer digital health guidance, measures and recommendations (Belani, 2021). This is of particular concern in light of suggestions that the legal regulations designed to protect CYP from harmful gambling experiences are outdated. In an online gambling “ecosystem” which has been described as “huge, noisy and diverse” (Smith & Nairn, 2019, p 12) there is a need to understand the current context in which HSC practitioners address the risks faced by CYP who engage with video games and gambling.

2.3 Blurred Boundaries between Gaming and Gambling

Studies suggest that there has been a convergence between gambling and gaming through digital technology which has implications for CYP (Gainsbury et al., 2015). Kim & King (2020, p 373) suggest that the increasing “co-location” and “inter-relationship” between different types of activities is leading to the distinction between gambling and gaming activities becoming “increasingly blurred”. They refer to research on the integration of gambling-like content into video games (e.g. Macey & Hamari, 2019) as well as the introduction of game-like elements into gambling products (Delfabbro et al., 2020). Kolandai-Matchett & Abbott (2021) set out five ‘convergence contexts’ in which this blurring is taking place, which includes; i) gaming elements in gambling, ii) gambling elements in video games, iii) gambling on the outcome of video games, iv) free simulated online gambling, and v) gambling-like games within social media platforms. Within these five convergence contexts, four novel forms could be identified which are of particular relevance to CYP: Social Casino Games, Esports, Loot boxes, and Skin betting.

2.3.1 Social Casino Games

Social Casino Games (SCGs) are F2P simulations of real-money gambling games, such as roulette or slot machines, which often include the opportunity to spend real money to purchase in-game currency which reduces waiting periods between games (Kolandai-Matchett & Abbott 2021). Conducting research in Finland, Macey & Kinnunen (2020) express concern that SCGs lack regulatory oversight and that young people's engagement in convergent gambling-gaming experiences such as these may lead them towards traditional gambling activities.

2.3.2 Esports

The growth in Esports described above in section 2.1.3 has been accompanied by a growth in betting on Esports events. For example, in the UK monthly revenues generated by Esports betting rose 30-fold between March 2019 and March 2020, and that 17% of esports gamblers were aged 18-24 (Rossi & Nairn, 2020). Smith & Nairn (2019) suggest that Twitter advertising uses humour to build brand awareness and encourage sharing of tweets, which may implicitly build a positive image of gambling in the minds of young people. Their analysis of Twitter marketing found that Esports gambling is more attractive to children than traditional gambling, with 28% of UK users responding to Esports content likely to be under 16 (Smith & Nairn, 2019). They also found evidence that "Esports related content also sees the worst advertising practice" by apparent flouting of regulations and a lack of labelling about the risks of gambling (Smith & Nairn, 2019, p. 9). The implications of this may be that CYP are drawn into gambling activities through an interest in video games.

2.3.3 Loot boxes

Loot boxes have been defined as "a consumable virtual item which can be redeemed to receive a randomized selection of further virtual items" (Schwiddessen and Karius (2018, p. 18). Loot boxes are prevalent; found in the majority of top-grossing mobile games (Zendle et al., 2020), and commercially significant; worldwide revenue generated from loot boxes used in video

games was $15 billion in 2020 and continues to rise (Juniper, 2021). Some researchers argue that loot boxes constitute a form of gambling (Brooks & Clark, 2019). Drummond & Sauer (2018) suggest that loot boxes are ‘psychologically akin’ to gambling, noting that they fulfil Griffiths’ (1995) five criteria for the psychological definition of gambling. Loot boxes provide players with a randomised reward of uncertain value (Zendle et al. 2021). It has been suggested that the randomised reward generates thrills of anticipation and winning game-changing items which ”exploit the same psychological traits and financial risks of traditional gambling” and contribute towards excessive play and psychological overinvestments in video games (Derrington et al. 2021, p. 304). This carries implications that CYP who play games with loot boxes may be exposed to experiences which are psychologically akin to gambing. In some jurisdictions, such as Belgium and Germany, loot boxes have been subject to legal regulation as a form of gambling product. However, in the UK and many other jurisdictions, loot boxes have failed to meet the legal criteria for gambling (Gambling Commission, 2017b).

2.3.4 Skin betting

‘Skins’ are virtual in-game items which can be obtained by opening loot boxes, usually decorative or cosmetic items which have no direct effect on gameplay (Macey & Hamari 2019). Skins may be used as a form of virtual currency in established online gambling activities such as poker and Esports, and also in new forms of skin gambling which cannot be accessed with other forms of currency, such as ‘skin lotteries’ and ‘crash betting’, the legalities of which have been disputed (Macey & Hamari 2019, p. 25). It has been predicted that global skins gambling revenue will rise to $321 million in 2025, which is a $100 million increase from 2020, although this is highly dependent on the extent to which these practices are prohibited by legal regulation in different jurisdictions (Juniper, 2021). Macey & Hamari (2019, p.20) found a positive association between online spectating of esports and use of gambling products, highlighting

how esports, skins and loot boxes are interconnected in the increase of “emergent gambling behaviours in contemporary digital culture”.

In sum, SCGs, Esports, loot boxes, and skin betting are examples of the convergence of gaming and gambling through digital technology which may present risks to CYP. There are concerns about the ‘normalisation’ of gambling among young people, and it has been suggested that young people in Great Britain are growing up in a “fundamentally altered” environment where “gambling, gaming and digital technology are increasingly intertwined” (Wardle 2020, p. 2). These concerns form the basis of a ‘gateway hypothesis’ which suggests that engagement in video games is associated with engagement in gambling.

2.3.6 Gateway hypothesis

The gateway hypothesis was initially proposed in the context of substance abuse, suggesting that a young person’s experimentation with alcohol, tobacco or cannabis may progress to more addictive drugs later in life. (Kandel, 2002). More recently, in light of the gaming-gambling convergence, it has been suggested that gambling-like content within video games may act as a gateway towards gambling-type behaviour. Kim & King (2020) suggest that this hypothesis is plausible because both ‘gambling disorder’ and ‘gaming disorder’, as defined in the International Classification of Diseases (ICD-11), are characterised by the persistent pursuit of winning in a game involving chance and as such they may share underlying risk factors.

In evaluating the evidence relating to the gateway hypothesis, Delfabbro & King (2020) find that problem gambling symptoms appear to be positively and consistently related to the purchase of loot boxes, indicating that loot boxes may be a gateway towards problem gambling. However, the research is not clear on the causality of this relationship. On the one hand, it is plausible that engagement with loot boxes increases the likelihood of problem gambling by, for example, introducing CYP to the exciting properties of gambling mechanisms for the first time,

which could lead from recreational gambling to more high risk forms of gambling (Zendle et al., 2020). On the other hand, it is also plausible that people who already have a predisposition towards problem gambling also spend more money on loot boxes, which simply provide another avenue to risk money and experience financial harm (Zendle and Cairns, 2019). As such, there have been a number of calls for further research to understand the nature of this relationship (Kim & King, 2020; Zendle et al., 2020; Zendle et al. 2021). In any case, given the prevalence of young people using loot boxes in a converging gaming-gambling online environment, and the outdated regulation of online gambling, there are concerns over the potential harm which may result.

2.4 Gambling-Related Harms and Gaming-Related Harms for CYP

2.4.1 Problem Gambling

Gambling is an entertainment activity which is enjoyed without harm by the majority of players, and is associated with benefits including social connection and positive wellbeing (House of Lords, 2020). However, for some people gambling can lead to negative consequences, including stress-related physical conditions, as well as depression and anxiety-spectrum disorders (Sanju & Gerada, 2011). The Problem Gambling Severity Index (PGSI) identifies Problem Gambling (PG) as that which is accompanied by negative consequences and loss of control (Currie et al. 2013) and PG has been defined as “gambling to a degree that compromises, disrupts or damages family, personal or recreational pursuits” (Sproston et al., 2000, cited in Bramley et al., 2017 p. 6). Despite the fact that gambling is illegal for this age group, in the UK it is estimated that 1.7% of 11-16 year olds are classified as problem gamblers, 2.7% as at-risk gamblers and 31.5% as non-problem gamblers (Gambling Commission, 2020b). The rate of 11-16 year old problem gamblers quadrupled from 2017 to 2019 and the average

age of gamblers is decreasing (Rossi & Nairn, 2020). Problem gamblers in the 16-25 age group may be particularly vulnerable to the risk of suicide attempts (Wardle & McManus, 2021). This suggests that PG is a growing concern in relation to the health and wellbeing of CYP.

2.4.2 Gambling-Related Harm

Whilst PG prevalence rates have been used as a key indicator to assess the extent of harm which results from gambling, it has been suggested that this practice is misleading and potentially underestimates the scale of the problem (Gambling Commission, 2020a). It has been recognised that prevalence rates of PG may fail to capture harm experienced by gamblers' 'affected others' (Gambling Commission, 2020a) and research suggests that 6 other people or organisations are affected by a problem gambler (Goodwin et al., 2017). Also, in a consultation of stakeholders Wardle et al. (2018) found a consensus that those who fall short of the category of PG may still experience harm. Therefore, it is important to distinguish 'problem gambling' from a wider category of 'gambling-related harm'. Langham et al. (2016) propose that gambling-related harm can be defined as:

> "Any initial or exacerbated adverse consequence due to an engagement with gambling that leads to a decrement to the health or wellbeing of an individual, family unit, community or population.
>
> Langham et al. (2016, p.4)

This definition is accompanied by a taxonomy of gambling-related harms including decrements to health, emotional distress, relationship breakdown, reduced performance at work or study, financial harm, cultural harm and criminal activity, with an additional overarching category of 'life course and intergenerational' harms. (Langham et al., 2016, p. 6). This definition and taxonomy

is designed to emphasise harm as an outcome, allowing the focus to be on consequences rather than causes or symptoms of harmful gambling. This distinguishes ‘gambling-related harm’ from other categorisations of gambling behaviour such as PG, and from clinical diagnoses such as gambling disorder. It has also been suggested that the category of problem gambler may locate the source of the problem in a ‘pathologised minority’, rather than producers of harmful products or custodians of regulatory frameworks (Young & Markham, 2013).

2.4.3 Young People and Gambling-Related Harm

Young people and university students are two groups who have been identified as being particularly vulnerable to experiencing gambling-related harms (Wardle et al., 2018). A specific framework has been proposed to measure gambling-related harms among CYP because key aspects of their lives differ from those of adults and they may experience harm differently (Blake et al., 2019). For example, interruptions to social and emotional functioning of CYP may impact educational outcomes leading to ‘developmental harm’ (Blake et al., 2019). In light of the digital social interactions surrounding video games, described above in 2.1, convergent gaming-gambling forms such as skin betting and loot boxes may influence relationships of CYP in unique ways. It has been suggested that those young people currently aged 16-25 represent a unique group since they are the first cohort to fully experience the altered gambling landscape following the Gambling Act (2005) and also due to their status as ‘emerging adults’ (Wardle, 2020). Arnett (2000) describes ‘emerging adults’ as a distinct group, free from both parental constraints and adult responsibilities, who may have a greater propensity for risk-taking behaviour or sensation-seeking experimentation to obtain life experiences before settling into adult roles. Wardle (2020) argues that, with an upcoming review of the Gambling Act (2005), it is vital to understand the impact of gambling upon emerging adults in the digital age.

2.4.4 Young People, Gaming, and Addictive Technologies

Video games have been shown to offer many benefits to CYP including positive outcomes in wellbeing (Johannes et al., 2021), mental health, cognitive and social skills (Kovess-Masfety et al., 2016) as well as supporting literacy, creativity, empathy, and mental wellbeing through shared cultural experiences (Picton et al., 2020). However, it has also been recognised that the highly engaging nature of video games can be problematic. Research suggests that 35% of 12-15 year olds and 44% of parents of 12-15 year olds find controlling their 'screen time' to be a challenge (Ofcom, 2019a). Tristan Harris of the Center for Humane Technology has argued that some digital platforms are deliberately engineered to capture and keep users' attention "under the guise of creating engagement that masks other problems like addiction" (DCMS, 2019, para. 2). Cemiloglu et al. (2020) suggest that when harm results from obsessive use of technology this can be regarded as behavioural addiction. The Chinese government recently introduced a new law restricting online gamers under the age of 18 to one hour of play between 8-9pm on Fridays, weekends and holidays, with a state media outlet describing online games as "spiritual opium" (BBC, 2021). As noted above in relation to gambling-related harm, behavioural addiction can lead to wide ranging forms of harm, including towards the family, friends and community of those connected with the addict. It is therefore important to understand the impacts of addictive technologies upon CYP.

In the 2019 Parliamentary report into 'Addictive and Immersive Technologies', the term 'addictive technologies' is carefully chosen and distinguished from a technology 'addiction'. This is because academics are divided over whether it is accurate to talk of people as being 'addicted' to digital technologies such as video games in the same way as people are 'addicted' to substances such as smoking or alcohol (DCMS, 2019, para. 8). In 2013 a new condition of 'Internet Gaming Disorder' (IGD) was included in the appendix of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) as a subsection of 'Substance-related and addictive

disorders'. This decision attracted some controversy. For example, Przybysky (2017) has suggested that there is a lack of clinical clarity as to the nature of IGD and more evidence is required of the clinical and behavioural side-effects. Petry & O-Brian (2013, p. 1187) suggest that introducing poorly established conditions into the DSM-5 may lower the credibility of psychiatric disorders more generally. This has been linked to a 'slippery slope' argument, that almost any human activity could be understood as an addiction, by Dowling (2014), who suggests that IGD will face similar diagnostic difficulties to gambling disorder, which is the other behavioural addiction in DSM-5. Griffiths (2005) argues that, whilst many behavioural addictions (such as gambling, sex, exercise, video game playing and Internet use) have particular and idiosyncratic characteristics, they all follow a common biopsychosocial process with many shared components (salience, mood modification, tolerance, withdrawal, conflict and relapse). Griffiths (2005) suggests that acknowledging this may have implications for how the general public perceive addictive behaviours, as well as addicts, researchers and practitioners. In the present case, if addictive engagement with video games and addictive engagement in gambling share a root cause, then it may be effective to address them together in a coordinated way.

2.4.5 Converging gambling-related harms and gaming-related harms for CYP

As the boundaries between gaming and gambling are becoming less distinct, it might be expected that the boundaries between gambling-related harm and 'gaming-related harm' might equally become less distinct. In other words, it could be argued that gambling-related harms and gaming-related harms might also be converging through the digital context. The NSPCC have suggested that there are six categories of potential harm related to online games, including bullying, scamming, trolling, grooming, exposure to inappropriate content and frustration related to in-game purchases (NSPCC, 2021). Emergent forms of gambling-like content within video

games have been linked with emergent forms of harm. For example, it has been recognised that in-game microtransactions have been used in the process of grooming young people (Thinkuknow, 2020).

Surprisingly, ‘gaming-related harm’ is not well-established in the literature or clinical practice. In ICD-11 gaming disorder is characterised by the “continuation or escalation of gaming despite the occurrence of negative consequences” which must be ““of sufficient severity to result in significant impairment in personal, family, social, educational, occupational, or other important areas of functioning” (WHO, 2018, para. 1). This is similar to Langham’s definition of gambling-related harm in the sense that the emphasis is on the consequences rather than the activity itself. If, for example, one young person was suffering social isolation and negative wellbeing through obsessive engagement with loot boxes and skin betting, and another young person experienced the same symptoms through online gambling, the similarity in consequences seems potentially more relevant than the difference in causal activities, particularly from the perspective of those seeking to provide healthcare support. Therefore, for those interested in protecting CYP against gambling-related harms, it may be necessary to consider converging gaming-related harms as well.

The convergence of gaming-related harms and gambling-related harms is also highlighted by age classification systems for video games. The Pan European Games Information (PEGI) has provided the legally enforceable system for video game age classification in the UK since July 2012 (BBC, 2012). PEGI highlights categories of content which may present risks to CYP, including ‘gambling’ and ‘in-game purchases’. Since 2020 games which include ‘gambling’ have been given an age 18 rating (PEGI, 2021). However, the ‘gambling’ descriptor applies only to games that ‘teach’ and ‘encourage’ gambling such as SCGs, and therefore does not include gambling-like content such as loot boxes (Taylor, 2019).

Video games which include loot boxes are given a content descriptor of '*In-game Purchases (includes random items)*' but this does not affect the age rating (PEGI, 2021). As a result, video games which expose CYP to loot boxes are rated as '*suitable for all ages*', with a sub section advising parents to check what is being offered before making a purchase on behalf of their child (PEGI, 2021). In light of the fact that many adults do not understand contemporary video game features such as loot boxes (Mik, 2021), this may be insufficient information for parents to safeguard CYP. Derrington (2021) suggests that the current age classification system for video games therefore fails to take account of the risks presented by new forms of gambling-like content within video games such as SCGs, Esports, loot boxes and skin betting. This raises a need to improve public awareness around the risks of converging gaming and gambling-related harms for CYP.

2.5 Public Health Approaches

'PH' has been described as "what we, as a society, do collectively to assure the conditions for people to be healthy" (Institute for Health 1988, p. 19). A PH approach seeks to take account of all of the determinants of health including individual behaviour, social and physical environments, as well as the way public policy affects access to care (Satcher & Higginbotham, 2011). It has been recognised that there is a need for cross-sector collaboration and systems-level actions in order to address the broader social and environmental determinants of health problems, particularly where behaviour is powerfully driven by the social and physical environments in which people live, work, and play (DeSalvo et al., 2016). Halsall et al., (2018) argue that this is particularly important in relation to the health and wellbeing of CYP because these formative years represent a critical phase of human development. They draw upon Bronfenbrenner's (2005) bioecological model of human development, based on Ecological

Systems Theory (Bronfenbrenner, 1979), which recognises the bidirectional relationship between biopsychological characteristics of human beings, both as individuals and as groups, and their surrounding environmental contexts including home lives, peer groups, technological and media influences, political environments, educational systems, economic conditions, as well as societal and cultural norms.

2.5.1 Gambling-related harms

Research suggests that HSC practitioners are aware of the pervasiveness and appeal of gambling but lack knowledge around the complexities of gambling-related harm and are uncertain how to support those at risk (Bramley et al. 2019). It has been previously suggested that GPs limited knowledge about how to identify and support those experiencing gambling-related harm is due to this being regarded as a 'social' problem rather than a health issue (Sanju & Gerada 2011). Johnson & Regan (2020) identify a need to develop the narrative of 'gambling as a health harm' through campaigns which will raise awareness amongst practitioners, enabling them to identify and signpost patients towards more effective treatment. In the UK there is currently no nationally recognised treatment pathway for gambling-related harm (Blank et al., 2021). Shortly before the Gambling Act (2005) came into force there was a recommendation from the British Medical Association (BMA) that GPs should be provided training in identifying those who may be at risk of gambling-related harm, due to an expected increase in problem gambling as a result of the legal and technological changes (Hitchen, 2007). The BMA suggested that GPs are most likely to come into contact with those at risk of gambing-related harm and lack awareness about how to offer treatment (BMA, 2007). In giving evidence to the House of Lords Select Committee on the Social and Economic Impact of the Gambling Industry, Liz Ritchie, co-founder of 'Gambling with Lives', claimed that there has been a failure to act on this recommendation since there is still no training for GPs. She suggested

that “If a young man, in particular, goes to the doctor now and says he has anxiety, depression and sleeplessness, the first or second question should be about gambling.” (House of Lords, 2020, p. 83)

Following calls for PG to be considered a PH issue (Nature, 2018; The Lancet, 2017, Welsh Government, 2018), PH England (PHE) listed gambling as one of ten key areas of focus in the NHS Long Term Plan (NHS, 2019a) and introduced the ‘National Strategy to Reduce Gambling Harms’ (NSRGH) in 2019. The strategy recognises that gambling may lead to a complex mix of harmful consequences and that “we do not have a full understanding of where and how these harms are felt and how best to protect against them” (NSRGH, 2021, p. 4). Additionally, it is recognised that a PH approach must not be solely the responsibility of healthcare provision and the term ‘PH’ has been criticised for incorrectly conveying that this work is the primary responsibility of PH professionals (Kings Fund, 2019). Looking forwards, it has been suggested that the phrase ‘population health’ may be more effective in communicating a collective responsibility across organisations outside of PH specialists, including civic planning and education (Kings Fund, 2019, p. 9). This has also been described as a ‘whole-system approach’, which acknowledges the “many other organisations, networks and individuals who may play a key role, including those who have lived experience of gambling harms” as well as education and civic planning. (GambleAware, 2021, p. 4). This perspective is shared by the NSRGH which suggests that the voice of consumers and those with lived experience of gambling harm, or ‘experts by experience’, be placed at the heart of the strategy (NSRGH, 2021).

2.5.2 Gambling-related harms for CYP

The Gambling Commission (2017a, p. 7) suggests that “from a PH perspective we do not know enough about the effects of a normalised attitude to gambling on the development and wellbeing

of children and young people". Building on the findings of Blake et al. (2019) about the specific ways in which CYP may be affected by gambling-related harms, the NSRGH recognises the need for research and further action to improve the links between research and policy, (NSRGH, 2021, p. 26). It has been suggested that CYP may require lower-threshold intervention to address co-occurring problematic behaviours, and that a preventative approach be taken to reach CYP before they have gambled, by considering environmental factors such as products and marketing (Gambling Commission, 2017a). A preventative approach would therefore need to address emergent gambling behaviours such as Esports and associated marketing approaches which are suggested to build a positive image of gambling in the minds of young people (Smith & Nairn, 2019). It is difficult to see how this preventative PH approach to gambling-related harms can be achieved without also considering the emergent gambling behaviour in some video games.

2.5.3 Gaming-related harms for CYP

The demand for treatments for gaming‐related problems is growing internationally, particularly among adolescents and young adults (Billieux et al., 2021). However, very few of those experiencing gaming-related problems will access the healthcare system and it has been suggested that this could be due to a lack of appropriate treatment options and that healthcare systems are accessed only upon more acute issues such as mental health problems (Park et al., 2021). There is a need for further research on preventative public health approaches to gaming-related harm (Park et al., 2021; Stevens et al. 2021). Whilst the NHS Long Term plan highlights that the lives of some CYP are being adversely affected by complex behavioural issues associated with gaming, gambling and social media (NHS, 2019b), the NSRGH makes no specific reference to gaming-related harms (NSRGH, 2021). Due to the fact that 'gaming-related harm' is not well-established in the literature, PH responses to gaming-related

harm have been framed in other ways. One example of a strategic PH response to gaming-related harms is demonstrated by the work being done by the UK Council for Internet Safety (UKCIS), a collaboration between government, the technology industry and the third sector. The UKCIS includes a Digital Resilience Working Group (DRWG) who have published a strategy to enable individuals to have the digital skills and emotional understanding to feel empowered to take action when they encounter problems online (UKCIS, 2019). The DRWG describes Digital Resilience as a ‘dynamic personality asset’, acknowledging the influence that digital environments have upon an individual's resilience, and calling for families, carers, educators, policy makers, frontline service workers and industry to contribute towards an ecosystem which supports resilience. This implies the need for a whole systems approach to address gaming-related harms for CYP.

2.5.4 Gaming and Gambling-related harms for CYP

There are good reasons to suggest that a specific PH approach is necessary to protect CYP from risks of converging gaming and gambling-related harms. Firstly, given their high levels of engagement with video games CYP are more likely to come into contact with emergent forms of gambling such as loot boxes and skin betting. Secondly, CYP are affected differently by regulatory frameworks such as Gambling Act 2005 because many of them are below the legal age for gambling. Thirdly, specific stakeholders can raise awareness amongst CYP in unique ways, including educational institutions such as schools and universities, as well as third sector organisations and charities who have a mission to safeguard CYP. Fourthly, targeting parents is potentially an effective way of reaching CYP, particularly those who are still under the legal responsibility of parents. Fifthly, it has been suggested that systems of health and social care need to be redesigned to suit CYP, and which may include the use of social media and other digital channels to reach target audiences (Belani, 2021).

Based on the above review of the literature it would appear that current PH approaches are not addressing the convergence of gaming and gambling-related harms for CYP. Whilst there is a growing body of research into PH approaches towards gambling-related harms (GambleAware, 2021, PHE, 2021; Johnson & Regan, 2020), the need and scope for a public health response to gaming-related harms is less well established (Park et al., 2019). This could be due to the fact that evidence of the gaming-gambling convergence, through activities such as SGCs, Esports, loot boxes and skin betting, has only arisen over recent years and so the effects are still unknown. There is a lack of clarity about the relationship between problematic gaming and problem gambling, highlighted in 2.3.3 in relation to loot boxes. Also, there is a lack of research which captures the lived experience of these converging gaming-gambling related harms. As noted above in 2.5.1, the NSRGH recommends that a PH approach draw upon the voices of lived experience in order to reach a better understanding of where and how gambling-related harms are felt and how best to protect against them (NSRGH, 2021). Therefore, there is a need for research with participants with lived experience of both gaming and gambling activities to understand the relationship between gaming-related harms and gambling-related harms. This research could have important implications for those seeking to protect CYP from harm, including HSC practitioners from a wide range of different disciplines, as well as parents, schools, charities, gambling operators and software developers. The findings of this research could also help policy-makers to understand how to create an effective PH response to emergent forms of gambling amongst CYP.

2.6 Rationale

Technological developments have changed the nature of video games and gambling for CYP. The convergence of gaming and gambling activities online raises concerns over potential risks

to gaming and gambling-related harm for CYP. An increasingly out-dated regulatory framework does not account for rapid technological innovation. Whilst it has been recognised that there is a need for PH approaches to address gambling-related harm, a more targeted approach may be required to protect CYP from converging gaming and gambling-related harms (GGRHs). Therefore, this study aims to gain a deeper understanding of the current context in which risks of GGRHs for CYP are understood within healthcare systems and offer recommendations as to effective PH responses. This will be achieved by conducting research which draws upon the expertise of those with lived experience of both gaming and gambling harms, as well as a wide range of different practitioners from both clinical and non-clinical settings. Through this process it will be possible to understand how the convergence of gaming and gambling-related harms may impact upon population health, and offer recommendations for how a PH approach might address this.

The following Research Questions (RQ) were posed:

RQ1: What is the current context in which the risks of gaming and gambling-related harms for young people are addressed by healthcare systems in the UK:

> RQ1a: What are practitioners' perceptions of the risks of gaming and gambling-related harms for CYP and effective responses to these risks?
>
> RQ1b: What are the perceptions of adults with lived experience of gaming and gambling of the risks of gaming and gambling-related harms for CYP and effective responses to these risks?

3. Methodology

3.1 Design

The research questions were addressed through a series of four focus groups. Focus groups are group interviews guided by a facilitator, offering an effective way of exposing participants to a range of opinions and creating opportunities for follow-up and probing by the facilitator and the rest of the group (Van Teijlingen & Pitchforth, 2006; Van Teijlingen & Pitchforth 2007). Focus groups are therefore potentially effective in understanding the relationships between different parts of a system, building dialogue from a range of different perspectives. In this case, healthcare systems in the UK could be explored by analysing the discussions emerging from participants sharing their experiences and understanding of the risks of gaming and gambling-related harms for young people. As Kitzinger (1994, p. 116) suggests, focus groups may be an effective method to "examine how knowledge and, more importantly, ideas both develop and operate within a given cultural context". The author notes how focus group participants have the potential to become 'co-researchers' and take the research into new and unexpected directions. This interactive process has the potential for group members to stimulate each other to think more deeply about a topic than they otherwise would, and raise issues that the others, including the researcher, may not have thought of (Van Teijlingen & Pitchforth, 2006). A key disadvantage associated with the focus group method is that minority views may be overwhelmed by majority views and not captured by the data. However, this can be mitigated against by managing the number of participants in each session, by careful use of cues from the researcher (Stewart & Shamdasani, 1990) and by informing participants at the beginning of the interview that disagreement is welcome and there are no right or wrong answers (Van Teijlingen &

Pitchforth, 2007).

The interaction between participants is a key source of data from focus groups. As Crossley (2002) suggests, rather than being a 'window' into the participants' views, attitudes and opinions are actively constructed during the focus group in a constant negotiation of meanings. This is founded upon an understanding that "all talk through which people generate meaning is contextual, and that the contexts will inevitably somewhat colour the meaning" (Dablgren 1988, p. 292). In analysing the data the different contexts of the participants were captured through 'thick descriptions' which "trace the curve of a social discourse", adding specific understanding to a particular situation (Geertz 1993, p. 19). This approach is consistent with an interpretive epistemology which recognises that "the social world is always a human creation" (Saratakos 1998, p. 46). An interpretive approach is well-recognised within qualitative methodologies which seeks to capture meaning through understanding rather than measurement (Geertz 1993). Just as participants influence each other, so it is assumed that the researcher may affect the research process and outcome (Berger 2015). It is therefore important to include a process of "critical self-evaluation of the researcher's positionality" including an explicit recognition of the ways in which they may influence the research outcomes (Berger 2015, p. 220). Through the process of data analysis the researcher "actively constructs, the collection, selection and interpretation of data" (Finlay, 2002, p. 212), so it is important to acknowledge "the constitutive role of the researcher in research design, data collection, analysis and knowledge production" (Ping-Chun 2008, p. 212). It is suggested that this approach can lead to higher ethical standards and more rigorous research (Seidman, 2013).

3.2 Online focus groups

Due to the UK lockdown in response to Covid-19 it was necessary to conduct the focus groups online. Whilst internet-based focus groups may be either text-based or audio/video-based, the video format was chosen due to the fact that text and audio formats may limit the nuances of communication (Collard & van Teijlingen, 2016). In comparison to in-person focus groups, the online video focus group has a mixture of advantages and disadvantages. Advantages include speed and cost efficacy, and the ability to reach hard-to-access populations (Rhodes et al., 2003, as cited in Fox et al., 2007). In the current research it was possible to recruit participants from all over the UK without substantial costs and travel time, which removed some practical barriers to participation. Also, this facilitated the recruitment of participants who work in different services, who may be more comfortable in openly expressing disagreement than those who work together within a team (Merton et al., 1998). It has been suggested that online focus groups might increase disclosure related to sensitive issues (Fawcett & Buhle, 1995; Joinson, 2001; as cited in Fox 2007), which may include sharing experiences of harm. Finally, the online focus group allowed participants to join from the comfort of their own home or workplace, which may lead participants to share more openly (Van Teijlingen & Pitchforth, 2006). Participants who share more openly are likely to give more authentic responses which may lead to greater validity in data.

However, a disadvantage of the online focus group is that the research environment may be subject to interference, introducing elements of context which the researcher is not aware of. For example, there may be other people in a home or office environment which limits privacy and confidentiality, or which influences what the participant says by joining the discussion (Collard & van Teijlingen, 2016). Another disadvantage of the online focus group is that a smaller number of participants can be included in the research, thereby reducing the number of different perspectives which are included. In considering the size of the focus

groups, it has been suggested that focus groups should be large enough to include people with a range of viewpoints, but small enough to allow participants to interact (Corbetta, 2003). In the case of online focus groups, it has been suggested that this number should be between 3-6 participants (Collard & van Teijlingen, 2016). Finally, it has been suggested novel methodologies such as online focus groups can demonstrate rigour through transparency of decision-making processes at every stage (Mann & Stewart, 2000).

3.3 Participant recruitment

Participants were recruited based on satisfying one of the two categories to participate in focus groups. The first category were healthcare practitioners whose work included CYP who may be at risk of gaming and gambling related harms. The second category were people with lived experience of gaming-related harm or gambling-related harm. In order to gain a broader perspective and allow for smaller numbers in the focus groups, two focus groups were run for each category of participant. Participants were recruited through a mixture of convenience sampling and snowball sampling. Efforts were made to recruit practitioners from a broad range of contexts, including General Practitioners (GPs), psychiatrists, community-based practitioners, charities and national helpline operators. Likewise efforts were made to recruit participants with lived experience of both gaming-related harm and gambling related harm.

3.3.1 Lived experience participants

Table 1

Lived Experience participants basic information

Focus Group	Codename	Gender	Age	Type of Harm	Location
1	OJ	Male	33	Mostly gambling	UK
1	Trevor	Male	28	Mostly gambling	Yorkshire & Humber
1	Nicola	Female	48	Mostly gambling	Essex
2	Andrew	Male	30	Mostly gaming	London
2	Johnny	Male	49	Mostly gambling	Kent

3.3.2 Practitioner participants

Table 2

Practitioner participants basic information

Focus Group	Codename	Gender	Age	Role	Time in role	Employer	Service location	Previous Gaming/Gambling Training
3	Cantona	Male	31	NSPCC Helpline Practice Manager	5 years	NSPCC, Charity	Greater Manchester	Yes, NSPCC
3	Juniper	Male	64	Sessional General Practitioner	36 years	NHS	Bristol	No
3	Claire	Female	29	General Practice Specialty Trainee	3 years	NHS	North East	No
3	Sonic	Female	38	General Practitioner	8 years	NHS	Scotland	No
3	Roland	Male	65	Minister of Religion	35 years	Church of England	Bristol	No
4	Tudor	Male	64	General Practitioner	36 years	NHS	South Lanarkshire	No
4	Fiona	Female	33	Child and Adolescent Psychiatrist	3 years	NHS	North East of England	No
4	Cavendish	Male	35	Higher Trainee in Psychiatry	4.5 years	NHS	Tyne and Wear	No
4	Fran	Female	33	National Helpline Adviser	1.5 years	Gamcare	National	Yes, Gamcare

3.3.3 Participant Recruitment in Focus Group 2

Due to challenges with recruitment there were only two participants in focus group 2. Three participants were planned but one participant did not attend. It is unusual for a focus group to have only two participants and this had an impact on the dynamics of the discussion. With no other participants to consider, both participants felt able to reply to each other's comments which generated a conversational dynamic with minimal intervention from the facilitator. The facilitator spoke only occasionally (5%) to guide the participants back to the questions on the research instrument where necessary. It was notable that the participants' conversation naturally followed the research instrument in many places. The advantage of this unexpected research context

was the potential reduction of researcher bias. The disadvantage of this context is that the sample size is smaller so any consensus reached may be less meaningful.

3.4 Ethical considerations

Prior to recruitment ethics approval was obtained via the University Faculty of Science and Technology Ethics Committee. Upon expressing interest in participating in the research, participants were sent information forms with further details on the study. This information included measures which would be taken to protect participant confidentiality and wellbeing, including participants' rights to withdraw at any point during the research process, as well as information on how participants' data would be handled, including the recording of the discussion. Participants signed consent forms to participate in the study based on this information. For the lived experience participants, an additional form was sent to ensure that their experiences of harm were not continuing. CYP were not included as potential participants for the research due to the fact that it may have been difficult to ascertain that experiences of harm are not continuing. In order to protect confidentiality participants chose codenames which were used throughout the focus groups and in the recording of the data. At the beginning of the focus group the facilitator reminded participants of their right to withdraw from the research process at any point and the need for confidentiality around anything that was shared in the group. At the end of the focus group participants were given an opportunity to share anything which they had not had a chance to say. After the focus group participants were sent a debrief form including links to resources they could use for further information.

3.5 Materials

An online survey was designed using the Qualtrics platform to gather basic data about the participants. The survey for practitioners gathered data on the participants' age, area of practice, role title, length of time in role and previous training experiences in gaming and gambling-related harm. The survey for lived experience experts gathered data on the participants' age and the type of harm they had experienced - gaming or gambling.

Two different semi-structured instruments were designed to guide the focus groups; one for the practitioner focus groups and one for the lived experience focus groups (see Appendix 5 and 6). The instrument for the practitioner focus groups were designed to generate data to answer RQ1A, including questions on awareness of GGRHs, professional role and services, extended support and training opportunities (see Appendix 6). The lived experience focus groups were designed to generate data to answer RQ1B, including opportunities to share lived experiences of harm, lived experiences of HSC services and questions about support offered to those experiencing harm (see Appendix 5). A comparison between the data from all four focus groups was designed to answer RQ1.

3.6 Procedure

Upon delivery of written consent to participate in the study, participants were sent a short survey to gather basic data about their context. Upon completion of this survey participants were sent details on how and when to access the online focus group. As recommended by Collard & van Teijlingen (2016), the lead researcher gave each participant a brief courtesy call prior to each focus group to build trust and rapport.

Focus groups were conducted upon the Zoom video conferencing platform. The focus groups with practitioners were conducted first, followed by the groups with lived experience

participants. The lead researcher facilitated the groups by implementing the relevant research instrument, with support from the first supervisor who was also present throughout. As recommended by Kitzinger (1994), the facilitator asked open questions and let the discussion flow naturally, encouraging interactions between research participants by regularly pausing and inviting others to comment on what had been shared in response to a structured question. Data was transcribed live using the Otter.ai transcription tool. Each focus group lasted approximately 90 minutes including a five minute comfort break. After each focus group the participants were sent a debriefing form and a £25 electronic gift voucher as compensation for their time.

3.7 Data Analysis

Data was analysed by a process of thematic analysis, a method for identifying, analysing, and reporting on thematic patterns within data. (Braun & Clarke, 2006). Thematic analysis is one of the most commonly used methods of analysis in qualitative research analysis due to its flexibility (Thomas & Harden, 2008). It has been described as an accessible form of analysis for researchers early in their qualitative research career (Guest et al., 2011) which is well-suited to the author. As noted by Braun & Clarke (2006, p. 79), “there is no clear agreement about what thematic analysis is and how you go about doing it”. However, they have drawn comparisons between different broad approaches, including an ‘essentialist’ method which reports the participants’ experiences and realities, and a constructionist method which examines the ways in which these experiences and realities are the effects of wider social discourses (Braun & Clarke 2006, p. 81). They further explain that a third ‘contextualist’ method can be identified, sitting between the two poles of essentialism and constructionism, which:

> “focuses on the ways that individuals make meaning of their experience as well as the ways the broader social context impinges on those meanings, while retaining focus on the material and other limits of reality.”
>
> (Borrell 2017, p. 198, as cited in Braun & Clarke, 2006)

In the current research, a contextualist approach was taken. In the first instance categories of meaning were derived from the data itself through a process of inductive reasoning. The broader social context was then taken into account in the later stages of the analytical process by reducing themes to more abstract and literature-based codes.

3.8 Phases of Analysis

The thematic analysis process took place over the course of six phases in accordance with the process set out by Braun and Clarke (2006). The first phase was focused on data familiarisation, including checking and correcting the Otter.ai automatic transcriptions. In the second phase initial codes were generated by tagging items of interest. These codes were recorded in a research journal to reflect upon potential relationships between codes. In the third phase these initial codes were categorised, grouped into potential themes and organised into a thematic framework. This third phase included distilling and merging codes generated in phase two. In the fourth phase themes were restructured and arranged into further subthemes. In the fifth phase themes and subthemes were reduced to more abstract and literature-based codes in order to create a final framework of themes for reporting purposes. In the six phase analytical memos were written to accurately summarise the content of each thematic category and propose empirical findings against these categories. The lead researcher was supported by the

research supervisory team for phases four, five and six through a process of discussion which helped to develop the themes.

3.9 Reflexivity

As noted in 3.1, there is a need for qualitative researchers to point out their “sources of subjectivity” so that the readers may evaluate the study in terms of the accuracy and usefulness of the research outcomes (Hosking and Plunt, 2010, p. 64). The lead researcher was primarily responsible for facilitating the focus groups and analysing the data. Therefore the author’s positionality, or “baggage” (Ping-Chun 2008, p. 212) is hereby examined, followed by a consideration of how this positionality may affect the research process and outcomes.

The lead researcher was trained and worked as a teacher in Steiner-Waldorf schools which typically take a critical view of the use of screens in childhood and where parents are discouraged from allowing their children to play computer games or use smartphones at home (Manzoor, 2016). These experiences may have given him a negative stance towards the value of video games or impacted his perception of video games. This positionality may lead to a tendency to focus on the risks of GGRHs in order to reinforce his underlying beliefs that video games are not age-appropriate in childhood. On the other hand, the lead researcher had positive experiences playing video games in his own childhood. Whilst he has not played video games during adult life, as part of the research process he played some modern video games, such as ‘Star Wars: Galaxy of Heroes’ to gain some practical experience of gambling-like content within video games. In order to mitigate against any potential bias from the lead researcher, he was accompanied in all focus groups by the first supervisor and his thematic analysis of the data was shared with all the supervisors to

ensure that a rigorous approach was being taken.

The research supervisors were from different backgrounds with different levels of knowledge about gaming and gambling-related harm. The first supervisor was from a Cyberpsychology background and had a lot of knowledge of gaming through both personal gaming experience and academic research. She also had knowledge of gambling-related harm through academic research. The second supervisor, also from a psychology background, had expertise in the effects of socioeconomic disadvantage and adverse life events on children's and adolescent's psychological adjustment. She had limited direct experience of gaming but she had an appreciation of the role of digital technology in the lives of CYP through her children. The third supervisor had a background in HSC with expertise in qualitative research methods. This combination of different perspectives and knowledge was regarded as a positive quality in providing a balanced approach to the analytical process.

4. Results

This chapter presents the results of each focus group in turn, beginning with the lived experience focus groups. Each section presents the themes and sub-themes derived from the data in the form of a table, followed by an explanation of these accompanied by illustrative quotes.

4.1 Focus Group (FG) 1 Lived Experience Results

Thematic analysis of the data revealed four main themes of Experts by Experience, Escapism, Public Education Strategy and Compassionate Practice which can be represented as follows in Table 1.

Table 3

Themes and Subthemes of FG 1 Lived Experience

Theme	Experts by Experience	Escapism	Public Education Strategy	Compassionate Practice
Subtheme	Harm	Rush of Excitement	Educational settings	Personable communication skills
	Ongoing recovery	Negative Cycles	Family	Person-centred care
	Taking responsibility	Disconnection from Reality	Health and Social Care Settings	Treatment as a Journey
	Compassionate Peer Support		Industry	Compassion for Practitioners
			Community Services	

4.1.1 Theme 1: Experts by experience

There was a sense of unity generated between all participants through a shared identity as ‘experts by experience’ in the field of gambling. This sense of unity increased as the focus group progressed, as interactions revealed shared experiences and perspectives between participants. The shared identity of ‘expert by experience’ was represented through experiences of harm, recovery, responsibility, courage, an urgent cause and peer support.

Subtheme 1a: Harm. All participants shared their experiences of a wide range of gambling-related harms, including health issues, emotional distress, relationship breakdown, reduced performance at work or study, and financial harm. There was a consensus that the most distressing of these harms was relationship breakdown because it was difficult to repair. There was also a recognition of the seriousness of potential harm. Nicola: “This is how serious it

is, you know, during lockdown, I've known people that have hung themselves, its awful, you know, committed suicide in different ways".

Subtheme 1b: Ongoing Recovery. All participants talked about recovery from gambling as an ongoing process and they all continue to take measures to protect themselves. OJ: *"it's referred to as a disease for a reason...recovery now is a daily thing".*

Subtheme 1c: Taking Responsibility. All participants took responsibility for their experiences of gambling-related harm by acknowledging their own agency in decisions which led to harm, and by admitting dishonest and manipulative behaviour related to their gambling. All participants shared a perception of having had a good upbringing and their loss of control in relation to their gambling could not be attributed to adverse early experiences. Nicola: *"I had a fantastic upbringing, I couldn't have wished for a better mom and dad".*

Subtheme 1d: Compassionate Peer Support. There was a strong consensus that 'experts by experience' are in a good position to offer compassionate peer support to others who may be at risk of gambling-related harm, because they have a sensitive understanding of the need for appropriate communication and because they can provide a sense of hope to people who are struggling with addiction by showing that "*there is a way out* "(OJ).

4.1.2 Theme 2: Escapism

In their initial accounts of their journey through gambling harm, all participants used the word 'escape' to refer to their engagement with gambling. The word escape or escapism were used 9 times in total and of these, all referred to escaping from challenging life circumstances (*"the real world", "problems", "things in life", "negative feelings", "stress", "pressure"*) through gambling.

Subtheme 2a: Rush of Excitement. There was a consensus that during recovery other activities arise to take the place of gambling as other forms of escapism. Trevor was the only

participant who used video games for this purpose and he expressed concern over their addictive quality and the potential for overspending which he compared with gambling. Trevor: *"I was spending hundreds of pounds on these loot boxes, not knowing that there were loot boxes. And it was just trying to get that hit again, but in a different way, I'm spending money to open something, I don't know what's on the other side of it, is a good player? And I get that adrenaline rush, I get that dopamine rush. So as soon as I figured out that, you know, this could be gambling."*

Subtheme 2b: Negative Cycles. All participants reported negative cycles of escapism, in the sense that the challenging life circumstances which gambling provided an escape from in the first place were exacerbated by the additional problems which gambling created, which in turn lead to more harmful forms of gambling. OJ described how negative cycles of escapism became *"both cure and cause"* of addictive behaviour: *"the impact of the relationship breakdowns, the stress and the pressure from the financial position that I was in...so then you just come back around and there's more confusion, more hurt, more loss and then back to addiction"*.

Subtheme 2c: Disconnection from Reality. All participants reported a disconnection with reality through their gambling experiences, lying to friends and family as well as convincing themselves that they were in control. OJ: *"I used social media to almost kind of try and convince myself that actually my life was okay. Whereas like, behind the scenes, it was, it was very, I was just in a real mess".*

4.1.3 Theme 3: Public Education Strategy

There was a strong consensus on the need for a PH education strategy to increase awareness and understanding of gambling-related harm as a way of improving support for those at risk.

Participants described the need for increased awareness and understanding through the language of ‘education’. The words ‘educate’ and ‘education’ were mentioned 28 times by participants, the majority of which (22) referred to a need to improve awareness and understanding around gambling harms in a range of contexts, including educational settings, families, healthcare settings, the media, civic society and industry settings. All participants suggested that their experiences of harm were related to a lack of awareness and understanding of gambling-related harms in these various contexts. Therefore, the need for improved awareness and understanding was highlighted as a key strategy for supporting those who may be at risk of harm. In expressing the need for greater awareness and understanding around gambling-related harms, comparisons are made with other issues where awareness of potential harm has improved through PH educational strategies. Participants shared how PH approaches could have reduced the gambling-related harm they experienced.

Subtheme 3a: Educational Settings. All participants suggested that the lack of education about the potential for gambling-related harm at school and university was significant in their experiences of addiction, because and therefore raising awareness of gambling-related harm in educational settings is a very important priority. This included educating both teachers and students by including the risks of gambling and gaming within the national curriculum, as part of Personal Social Health and Economic (PSHE) education. OJ highlighted the need to *“normalise the conversation around it”* through extra-curricular events such as Gamble Awareness Week, drawing comparisons with other PH issues. *OJ: “And at university, there was loads of good stuff around. You know, avoiding taking drugs and making sure that you are having alcohol in moderation, loads of stuff around, practicing safe sex, sexual health, all this kind of stuff. Absolutely nothing on gambling at all...I didn't even really know you can become addicted to gambling...I didn’t know where to turn”.*

Subtheme 3b: Families. All participants shared experiences of being given money by family members to support their gambling behaviour, suggesting that their families were unaware at the time of the risks associated with this. All participants suggested that their families' low awareness of gambling-related harm contrasted with higher awareness of harm relating to alcohol and drug addiction. Nicola and Trevor both highlighted a need to also inform parents about the risks of gambling-related harm through video games to avoid similar problems arising. *OJ: "They didn't know that you could become addicted to gambling...whereas if I'd gone on to them and said 'I've spent 50 quid on some drugs last week or whatever, can you give me some cash?' Like, obviously, that would be a completely different conversation".*

Subtheme 3c: Health and Social Care Settings. When participants referred to health and social care settings, the vast majority of references were to GPs (12 out of 16 occasions). All participants agreed that awareness of gambling-related harm is low in health and social care settings, particularly when compared with awareness around alcohol and drug addiction. All participants described examples of what they considered bad practice in their experiences with health and social care practitioners. There was a consensus that prescribing antidepressants following a disclosure of a gambling problem was an inappropriate response and that there was a lack of basic information about where people suffering gambling-related harm can seek support. Nicola: *"Gambling, out of all of them, it's not recognised enough, you know, if you're an alcoholic, or you're a drug addict, you go to the doctors, and straight away, you know, we can refer you here and refer you there. But with gambling, it's 'what do we do with this person?'"*

Subtheme 3d: Industry. There was a consensus that the video games industry needs to take more responsibility for gambling-related harms. Nicola described how she had worked with gambling operators to embed safety measures into ethical product design and recommended that a similar approach needs to be taken in relation to gaming-related harm. The

need for ethical product design was linked to responsible practice by operators. Nicola: *“when you first log in...there should be like, 10 questions about gambling and then it should be to the end question, do you think you've got a problem with gambling? And then if so it throws you to all the different helplines. And I think with FIFA, Call of Duty, all these games that you can buy packs, or you can buy add-ons, they should have the same thing so their parents can monitor the spending cap, you know, what they're doing”*. There was also a consensus that advertising of gambling products to young people was inappropriate and that contemporary media channels should be used to raise awareness of gambling-related harm which had been done effectively in relation to alcohol and drug addiction. Trevor: *“So there is more that can be done around social media. But again, going back to the raising awareness, and campaigns with YouTube, you know, vlogs, you know, that kind of taps into this era now, in terms of what content they see, you know, someone within the recovery community did pilot that, and it was really beneficial, and people did reach out to him as a result of that.”*

Subtheme 3e: Community Services. Two participants suggested that there was a lack of awareness and signposting towards other support services for gambling-related harm when they engaged with civic and commercial services and shared evidence of gambling harm. OJ shared his experiences of using self-excluding services to block any gambling transactions taking place on his accounts. Whilst he described these as part of his journey towards addressing his gambling problem, these were insufficient to prevent him from gambling and he suggested that they would have been good opportunities to signpost towards additional support, which were lacking. Nicola shared her experiences of engaging with civic services when she declared herself homeless and on a separate occasion when she declared herself bankrupt, both of which were due to gambling. In both cases she felt there was a lack of support and signposting. Nicola: *“(I was asked) where is all my money gone? And I say that I'd gambled it*

away. She said, 'if you'd have been a compulsive drug addict or an alcoholic, we would have helped you but because you're a compulsive gambler you're going in a hostel, there's nothing we can do...Nobody once nobody once said to me, you know, you've obviously got a problem with gambling. Have you ever thought about getting help?"

4.1.4 Theme 4: Compassionate Practice

There was consensus among the participants about the need for a compassionate approach in addressing gambling-related harms, which all agreed was more important than a practitioners' specific expertise or understanding about gambling-related harm. A compassionate approach was described in terms of personable communication skills, person-centred care, familiarity, understanding treatment as a journey, and compassion towards practitioners. OJ: *"most of it has been about the just the way that they are, that compassion, you know, that connection, you know, their intent, their commitment to me as a patient."*

Subtheme 4a: Personable Communication Skills. A number of specific ways of interacting were highlighted by participants as contributing towards a compassionate approach. All participants agreed that body language is important in communicating openness and empathy. In describing his own experience Trevor described his need for *"putting a metaphorical arm around me"* and *"coming down to that emotional level"* rather than being *"sat at the desk typing away"* (Trevor). All participants referred to the importance of listening skills, creating an environment where it is possible to share openly and gain a sense of release. It was also recognised that when personable communication skills are lacking, such as saying hello and eye contact, this can generate an atmosphere where it is difficult to share.

Subtheme 4b: Person-Centred Care. In describing the compassionate approach participants used phrases which implied the practitioner providing supportive person-centred

care. This was characterised by communicating interest in the patient's broader life experiences rather than just their specific health problem. It was also suggested that discussing the patients broader life experiences, such as leisure activities and family life can be an excellent way to open up a difficult conversation about gambling-harm. OJ: *"When I think about the best conversations I've had with healthcare professionals, it's been the ones that have started where there's been, like, so OJ how's running going? you're really into running, have you been recently or what? I'm like, No, actually, I haven't been running...so going into the conversation like that, I was much more likely to kind of open up whereas if someone ever sat there and said, Tell me on average, how many times you gambling a week, how much are you betting per week or whatever, honestly, it would have been a completely different conversation".* This was linked with a consensus that a sense of familiarity between a practitioner and a person can generate a sense of connection. This familiarity could also be generated through shared demographic characteristics such as gender, race or age. OJ gave an example of females in male-dominated GA groups who often find strength and connection when other females are present. There was a consensus that practitioners with experience of gaming-related harm might be in a strong position to provide compassionate support for young people at risk of gaming-harm. Trevor: *"I think it's really important that our young people are having conversations with people who they are familiar with, who they can kind of see themselves through, right?"*

Subtheme 4c: Treatment as a Journey. All participants expressed their experiences in terms of stages in a journey, including active addiction, denial, abstinence, recovery, relapse, and ongoing recovery. OJ explained that this understanding of "*treatment as a journey*" included an acknowledgement of prior experiences, *"recognising what I've been through"*, as well as a commitment to *"long term support"* and the development of supportive relationships. This linked to an appreciation of the courage required to share prior experiences with a practitioner and the

hope which may be attached to what happens next. OJ shared an experience of a counselling session he received from which the only thing he could remember was the practitioner saying that he was only entitled to one session. He perceived this as a lack of commitment towards his journey towards recovery. He described how, despite there only being resource available for one session, the message could have been delivered in a more compassionate way, as follows. *OJ: "so there's a whole network of people that are going to support you now and I'm just one of those people. That network is going to be around for you forever. And within that network, you get the opportunity to do loads and loads of different things, they're gonna support your recovery."*

Subtheme 4e: Compassion for Practitioners. All participants shared an appreciation of the challenges which GPs face in delivering a compassionate approach. These challenges included short consultation times, busy schedules, long hours and "*a whole host and variety of different issues that they deal with with people walking through the doors"...i've got massive appreciation for what they're up against. And so...how can we help them?"* (Trevor). There was a consensus that there may be a level of discomfort from practitioners if they are not well-educated in this field. OJ linked this to a need for practitioners to "*be kind to themselves and be realistic about, you know, what they can expect of themselves*", focusing more on a compassionate approach as opposed to building up knowledge and expertise in gambling-related harm.

4.1.5 Summary of FG1 findings

In summary, this focus group offered examples of how gambling and gambling-like content within video games has the potential to lead to interconnected forms of physical, psychological, social and developmental harm, through deepening cycles of escapism and disconnection from

reality. There was a consensus that a PH educational strategy is necessary to raise awareness and understanding about the potential for gaming and gambling harm, which may reduce the risks of harm for CYP and increase the availability of support services. This strategy should target a wide range of different systems beyond health and social care settings. Within this PH education approach two aspects were drawn out for particular attention. Firstly, ‘experts by experience’ are in a uniquely valuable position to improve awareness and support. This is due to their first-hand understanding of the lived experience of harm and because they provide an example of a route towards recovery which can offer hope to others. Secondly, health and social care practitioners are encouraged to take a compassionate approach to be able to support those at risk of gaming and gambling-related harm.

4.2 FG2 Lived Experience Results

Thematic analysis of the data revealed four main themes of Online Environment Design, Real and Virtual Worlds of CYP, Psychosocial Experiences, and Preventative Approaches, represented as follows in Table 2.

Table 4

Themes and Subthemes of FG 2 Lived Experience

Theme	Online Environment Design	Real and Virtual Worlds of CYP	Psychosocial Development	Preventative Approaches
Subtheme	Interface ● Proximity ● Aesthetics ● Accessibility ● Cashless Transactions	Generational Difference	Community	Regulation
	In-game purchases ● Social Dimension ● Competitive Dimension ● Status	Socialising	Identity	Public Perception
	Lack of transparency ● Pay-to-win ● Inflation of Value ● Odds of Success	Virtual Assets	Agency ● Power ● Escapism	Responsible Adults

4.2.1 Theme 1: Online Environment Design

This theme addresses the ways in which design of the environment and related affordances influences players experiences in gaming and gambling. This included subthemes of game interface, in-game purchases, and lack of transparency.

Subtheme 1a: Interface. The design of the gaming or gambling technology interface influenced each participant's experiences. This included aesthetic features, accessibility, cashless payments and the proximity of entertainment and gambling environments.

Proximity. For both participants, the proximity of an entertainment environment and a gambling environment was a factor in their transition from engaging in video games to engaging in gambling or gambling-type behaviour. The distinction between an entertainment environment and a gambling environment was raised by Johnny. In Johnny's case, this was a physical proximity as he was attracted to slot machines when playing video games in an arcade: *"While I was there, I think I saw someone or saw the lights of the fruit machine. So I put a couple of quid in. And then I was attracted to the noises and the sounds"* (Johnny). In Andrew's case, a triggering factor for his harmful behaviour was the introduction of loot boxes into mobile gaming, *"once in-purchases sort of started to spiral out of control"* (Andrew), creating a digital/technological proximity between gambling and gaming.

Aesthetic features. For both participants the aesthetic features of both video games and gambling machines were engaging aspects of the interface design. Jonny described how he *"was attracted to the noises and the sounds...it's a bit of a buzz"*. Andrew made a connection between these features and feelings of power.

Accessibility. Both participants agreed that the move from offline to online gaming and gambling activities made this much more accessible *"with just a press of a button, just a thumbprint to authenticate a purchase* (Andrew)". This increased the potential for harm in their own cases. For Johnny, it was easier to make the step from an offline to an online form of gambling because one brand linked both the physical shop and the online version.

Cashless Transactions. In addition to the ease of access generated by technological innovation, the virtual nature of the financial interaction made it easier to spend money. Andrew: *"you're always far more conscious of handing over something tangible and physical, than just sitting there on a phone just tapping a screen."*

SubTheme 1b: In-Game Purchases. It was suggested that a potentially harmful engagement with in-game purchases may arise through social pressure, competitive pressure and the need to maintain online social status. This part of the discussion in particular was led by Andrew as he was the participant with experience of gaming harm, and Johnny reflected back his thoughts, including comparisons with his experience of gambling harm. Andrew suggested that the combination of the social environment, competitive environment and the maintenance of online status created a potentially *"toxic"* community. Andrew: *"So it's going to draw somebody who might not necessarily even have any previous history of any sort of gambling or gaming addiction to sort of enter into that realm where they're actually spending considerable amounts of money on that game."*

Social Dimension. Andrew suggested that where in-game virtual items are purely aesthetic and unrelated to game play (e.g., skins), this may create a social pressure to keep up to date with virtual fashions in order to feel accepted within the community *"because that's what people are going to see me as in-game. That's how people are going to perceive me"* (Andrew). Andrew connected this social pressure to an incident within his own family where a young member stole £1500 from their parent's mobile bill to fund in-game skin purchases. This idea of social pressure was further highlighted by a contrast between skins and other forms of DLCs (downloadable content) which do not carry the same social pressure. These DLCs extend game play for the individual gamer (e.g., through additional maps) but are not embedded within a broader social context. Johnny referred to his son who purchased a DLC *"for himself, as opposed to, from a social point of view, trying to keep up with other people".*

Competitive Dimension. A third form of in-game purchase was distinguished from skins (which are in-game aesthetic items) and DLCs (which offer new content for the individual gamer alone). The third category of in-game purchases were those which give a competitive game play

advantage in ‘pay-to-win’ games. Pay-to-win games were described as free-to-play until the player hits a ‘paywall’ upon which they become *“virtually unplayable unless you spend considerable amounts of money”* (Andrew) on in-game purchases. Based on his experience, Andrew strongly suggested that these pay-to-win games have the potential to be very harmful when set within competitive gaming environments, such as those which use leader boards or ranking tables, since a high rank may only be maintained by continued and potentially unsustainable financial investment. Johnny reflected back his understanding of this as “*fighting with the Joneses or all the other players all the time...just to keep up with them”* which Andrew agreed with. Johnny recognised that the competitive dimension had a more intense quality than his gambing experiences on slots where: Johnny: *“I'm in competition with nobody when I bet, as opposed to for you, it seems like it's an integral thing for you to be, to keep being competitive. Almost like survive, keep my head above the water sort of thing?”.* Andrew strongly agreed with this image of ‘keeping my head above the water’.

Status. Over the course of time, Andrew’s continued engagement with competitive ‘pay-to-win’ games generated an online presence and *“social status”* within the gaming communities by virtue of his place at the top of the leaderboards. He was contacted through a range of digital channels with requests for advice. Andrew recognised that his enjoyment of gaming was derived more from receiving this attention than from the fun of playing the game. He described it as a *“big ego boost”* to be seen as a mentor in the gaming community, “*having other people in those communities come to you and ask you for help and advice and guidance*” (Andrew). However, the maintenance of Andrew’s social status required substantial ongoing financial investment in in-game purchases.

Subtheme 1c: Lack of Transparency. There was a consensus that a lack of transparency over game design prevented new players from making informed choices about

their engagement with the game. "*So I think if that's something I would have known more at the time, it would have discouraged me from getting involved in the first place"* (Andrew). The lack of transparency was represented through subthemes of Pay-to-Win, Inflation, Hidden Odds, and Variable Odds.

Pay-to-Win. Andrew suggested that there is a deceptive element in 'pay-to-win' games, since they communicate an inaccurate perception that they are accessible 'free-to-play' games when in fact pay-to-win elements are "*built into the back end of the game" (*Andrew). Andrew also suggested that Youtube streamers gave a misleading impression of the nature of the activity and the likelihood of success. *"You know, they're not gambling with their own money. They're gambling with essentially the sponsorship they've already received for the game...they kind of lead you into a false sense of security, thinking, you know, anybody can do this."* (Andrew). It was suggested that a lack of transparency over the nature of a game carries a risk that a young person will invest time and social energy in the game and be later faced with a decision to pay or relinquish their investment.

Inflation of Value. Andrew introduced the concept of 'power creep' to describe the effect of the ongoing updates to games, introducing new characters or weapons with stronger statistics than the existing ones. This creates a situation whereby *"even if you have the best of the best now, in two months time, that might not be the case, there might be better ones that you have to go and then chase and carry on paying money to have those on your team"* (Andrew). Andrew gave examples of popular games such as *Ultimate FIFA* where this inflation of asset value is evident. He also described the concept of 'Rinse and Repeat' whereby players spend a lot of money on a specific game which is then lost when the game is replaced by a new game. In this sense, there is no limit to the extent to which virtual assets may be inflated.

Odds of Success. In relation to in-game purchases where the contents of the purchase are random and hidden upon purchase (e.g., loot boxes), Andrew suggested that *"the odds"* of receiving prized items are not openly communicated by games developers. This makes it difficult for players to make informed choices about the chances of receiving prized items. Andrew suggested that some games developers engage in "shady practises" to encourage high spenders to continue spending. For example, where a high spending player has been identified, their 'rates' will be reduced so that they are less likely to receive crucial prized items from loot boxes, thereby ensuring they need to spend more to remain competitive. Meanwhile "they will try and get players with low power levels to draw the new characters. So they sort of become competitive" (Andrew). Alternatively, Andrew suggested that a competitor (such as a company employee) may be 'planted' within the game and given substantial levels of in-game currency so that they are able to become competitive very quickly. Andrew had gained this knowledge through conversations with ex-game developers after noticing that *"all of a sudden, a new player appears out of nowhere. And they've got almost the same level as power was you and you're thinking `Hang on a minute, this isn't quite right"* (Andrew). Both of these practises generate a *"fake element of competition where it doesn't exist"* (Andrew) and have the effect of applying pressure on high spenders to continue spending to maintain their position.

In summary, from his experiences of playing competitive 'pay-to-win' games, Andrew was left with feelings of mistrust towards some games developers due to a lack of transparency and an impression that *"it's just a very, very, very corrupt system"* (Andrew). Many of these design elements were unknown to Johnny, who was shocked to hear Andrew's knowledge and experiences, describing it as *"almost like a form of blackmail"* (Johnny).

4.2.2 Theme 2: Real and Virtual Worlds of CYP

At different times throughout the discussion, both participants referred to *"cultural shifts"* which have taken place in relation to the role of digital technology in the real and virtual worlds of CYP. In relation to his experiences of harm, Andrew described an increasing disconnection between the real and virtual worlds, and a resistance to *"face the real world"* (Andrew) because his online world felt safer, which led to reduced in-person social skills and a fear of in-person gatherings.

Subtheme 2a: Generational difference. The digital cultures of CYP were distinguished from that of adult culture, which Andrew described as a "*generational difference*". He gave the examples of a *"worldwide known celebrity"* gamer who would be well-known to those under 20 years but likely unknown by older generations.

Subtheme 2b: Socialising. The normalisation of digital technology was related to different expectations around the way CYP occupy their leisure time, when compared with the participants' own childhoods. Both participants agreed that as video games and surrounding digital culture form a central channel for social exchange, a reduced and different engagement with non-digital social activities, such as outdoor play, youth centres and sports clubs, has been normalised. In recounting the interactions of young players at his local rugby club, Andrew described how: *"they're all sat there, buried in their mobile phones, exactly. After the game, they don't shower, they just straight back on their phones, again, they don't come for a drink in the pub, not that the club sort of bar afterwards, they just straighten their cars disappearing, and they're straight back online, again, with their friends. So it's just such a change"* (Andrew).

Subtheme 2c: Virtual assets. Both participants suggested that the development of video games as a form of broadcast entertainment has generated virtual assets which are valuable in the digital lives of CYP. For example, CYP may buy virtual items to feel connected with their 'streamer' role models or pay for their name to be called out during a broadcast to

generate social status. There was a sense that these virtual assets may sometimes be more important than physical assets. Andrew: "*Rather than can I have a new pair of trainers, they're saying, can I buy a skin in a game please...If I haven't got that, then I'm not cool."*

4.2.3 Theme 3: Psychosocial Development

Comparisons were made between psychosocial dimensions to addictive experiences in gaming and gambling, including community, identity and agency, and the ways in which this may influence risks of harm.

Subtheme 3a: Community. Both participants described positive feelings emerging from a sense of belonging to a community surrounding the gaming or gambling activity. This sense of belonging was a factor in keeping them engaged in their gambling or gaming activity. In a gambling context Johnny described a positive sense of "*community spirit*" within the bookies where he engaged in offline gambling. Johnny described this as *"almost like the opposite of GA (Gambler's Anonymous)"* in the sense that they *"understand how you're feeling"* (Johnny). The bookies was described as the opposite of GA because the sense of community was generated through shared engagement in the addictive activity rather than through shared recovery. Andrew described the online social culture around gaming, often based around 'Discord' channels where many thousands of players collaborate on *"theory crafting"* to understand how to overcome a challenge in a game. Andrew felt like he *"had a place in the virtual world"* which was lacking in the 'real' world.

Subtheme 3b: Identity. For both participants, their membership of the gaming or gambling community became part of their identity. This was brought to light through their processes of recovery as they needed to find a new sense of identity separate from the gaming or gambling community. Both participants agreed that, due to the shifts in socio-cultural norms

described above, the virtual life of some CYP has become a meaningful component of their broader identity. This was evidenced by the fact that virtual fashion products such as skins have an impact upon the way CYP are perceived by others. Andrew shared how "*I was perfectly happy to sort of sit there and reinforce the opinions I had of myself online rather than sort of face the real world and just go and be a person again".* It was also recognised that some CYP may gain social status among peers by publicly making financial contributions to a streamer who is being watched live by many thousands of viewers. He gave the example of his cousins who "*will find out what time each of their friends are going to be watching the stream so that they can donate or subscribe so their name pops up when their friends can see it"* (Andrew). Furthermore, there was a consensus that transitional moments in life, such as finishing education, may represent vulnerable times for gaining a sense of identity since it can be challenging to re-establish oneself in the world and look ahead towards adult life.

Subtheme 3c: Agency. Both participants experienced feelings of agency when participating in their gaming and gambling activities, in the sense of having the capacity to take action and be in control. This was expressed in terms of escaping challenging situations in day-to-day life to their gaming or gambling activity where they felt a sense of agency.

Feeling Powerful. Both participants referred to feelings of power when talking about their experience of gaming and gambling. At one level this was described as a very physical feeling of power or excitement when receiving a good outcome in a game of chance, with both participants referring to a *"rush of adrenaline"*. For Andrew this had a second level, a social form of power and high status which came through his esteemed position in the gaming communities where he was asked "*for help and advice and guidance*" (Andrew).

Escapism. Both participants used the word 'escape' to refer to their addictive behaviour, in the sense that they could avoid negative feelings by gaining a sense of being in control. For

both participants, this escapism came in two forms. Firstly, the addictive behaviour was an escape from challenges elsewhere in life. For Johnny, his betting on slot machines increased to harmful levels when his relationship with his partner was breaking down. For Andrew, his addiction to gaming was a way of escaping feelings of depression which was later diagnosed. Secondly, as the problematic nature of their gaming and gambling behaviour became increasingly apparent to both participants, it continued to offer a "*fantasy land"* (Andrew) in which the real life consequences of the behaviour could be avoided. Both participants expressed feelings of remorse and shame shortly after a gaming or gambling transaction and had been deceitful and manipulative in order to avoid others finding out about their problem. Johnny described how, as he became increasingly aware of his gambling problem, *"you know in your mind what you're doing is wrong...I gambled to escape how it made me feel"* (Johnny). In these ways escapism was about a resistance to accept the realities of life by escaping to a false sense of agency.

4.2.4 Theme 4: Preventative approaches

Both participants agreed that there was a lack of protection for CYP, particularly in relation to the loot boxes. There was a consensus around a need for preventative approaches in addressing risks of GGRHs, including measures to strengthen regulation, influence the public perception of risks and open up conversations between young people and trusted adults.

Subtheme 4a: Regulation. Both participants agreed that regulation can provide a degree of protection against potential harm caused by addictive behaviour. There was a strong feeling that the video gaming sector was insufficiently regulated to protect CYP against the risks of gambling-type content described above. Andrew suggested that *"Probably the biggest difference between your gambling and my gambling is that one, yours is quite highly regulated*

in terms of the element of chance, you know, you can see that level of chance on any machine or any game before you put your money. Whereas with what I was doing, what appeared to be fair odds weren't fair odds, you know, they're working against me." Both participants contributed examples of regulation in the gambling sector in order to describe how video games could be more effectively regulated to protect CYP. Firstly, it was suggested that games could be age-restricted where they contain gambing-like content. Secondly, spending caps could limit overspending on in-game purchases. Thirdly, the rates of success in a loot box could be published so that the gamer is well-informed of the likelihood of success. Fourthly, there could be rules around the way that games with gambling-type mechanisms are marketed towards CYP. It was also recognised that the regulation of the video games industry in the UK is influenced by other systems of regulations, including the regulation of video games in other countries which are accessible in the UK and financial regulations such as 'pay-day' loans.

Subtheme 4b: Public Perceptions. Participants contrasted public perceptions of gambling and video games, identifying lower levels of awareness in relation to gaming-related harm, which was associated with advertising regulations and support groups.

Gambling-related harm. Both participants agreed that the public perception of gambling has changed, with greater public awareness of the potential for harm whilst many people continue to enjoy gambling safely. Johnny related this change was linked to the publication of news media stories, public awareness campaigns carrying warning messages on advertisements, such as *"When the fun stops, stop"*, which were associated with support services such as "*Gamblers Anonymous, Gambling Help, you know, you've got all the resources there"* (Johnny). Johnny made an analogy between the changes in public perception around gambling and those that took place around cigarettes, suggesting that *"people are starting to wake up, it's like cigarettes...the worm is turning"* (Johnny). However, he also suggested there

remains a public perception that substance addiction is more deserving of sympathy than behavioural addiction.

Gaming-related harm. Both participants agreed that the public perception of video games is different to gambling due to a lack of awareness of the risks of gambling-like content within games. They shared concerns that many parents aren't are not aware of the complexity of microtransactions which are being normalised in the public's perception through highly popular streaming communities. Andrew suggested that awareness was particularly low among older adults and that this may influence the regulatory framework. Andrew: *"I think trying to explain some gaming concepts to MPs who you know, upwards of sort of 60/70 years of age is nigh on impossible"* (Andrew). This was attributed to a lack of education and publicity around gaming-related harms and the support services which are available for those at risk. Both participants strongly felt a need to educate adults to raise their awareness to these harms and also to use platforms and media channels which are used by young people, such as Twitch and Youtube, to raise their awareness to potential harms and avenues for support. Johnny suggested that the journey towards public recognition of the risks of gaming harm is in the early stages which he linked to a lack of awareness about avenues of support, highlighting that *"for your addiction, there is no gaming anonymous"* (Johnny).

Subtheme 4c: Trusted Adults. Both participants agreed that schools and families are best placed to identify at-risk individuals and therefore need to play a central role in a preventative approach. They suggested that interventions within school environments can create *"ripple effects"* (Andrew) by generating opportunities for conversations about GGRHs between CYP, trusted adults, siblings and peers. Both participants agreed about the importance of having opportunities to talk openly about troubling experiences. Johnny described how *"Talking about it helps...like a weight lifted"*. This was said to be helpful in two ways. Firstly,

conversations can help in identifying problematic behaviour to oneself. Secondly, conversations create opportunities to learn that there are others who have the same problem and that there are avenues of support. Both participants agreed that there is a need for parents to take greater responsibility for their child's interactions in online environments, by monitoring CYP's digital engagement more closely, asking questions to understand their activity, and trying out video games. Andrew suggested that if children are *"consciously aware"* that their parents are taking this approach then potential barriers to conversation may be reduced and hidden harm is less likely.

4.2.5 Summary of FG2 findings

As noted above in 3.3.3, this focus group of two participants emerged as a conversation between a participant with lived experience of gambling-related harm (Johnny) and a participant with lived experience of gaming-related harm (Andrew), with minimal (5%) input from the facilitator. The conversation was guided by Andrew's sharing of his experiences of harm through engagement with loot boxes, in response to which Johnny made comparisons with his experiences of gambling-related harm. The findings include a greater number of illustrative quotes from Andrew than there are from Johnny, which is reflective of Andrew's leading role in the conversation and Johnny's role in asking questions to understand Andrew's experience.

Both participants shared a strong consensus around the need to take a proactive approach in protecting CYP from the risks of GGRHs through video games, recognising that cultural shifts towards the ubiquitous use of digital technology by CYP has not been accompanied by online safeguarding measures. The risks of specific game designs within online environments were highlighted and connected with psychosocial development of CYP alongside their engagement with real and virtual worlds. Competitive pay-to-win video games

which lacked transparency around the implementation of loot boxes were considered to be potentially toxic environments and bring about gambling behaviour in those who had no previous experience of gambling. There was a consensus around the need for a preventative approach to reducing risks for GGRHs for CYP, including stronger regulation of video games, raising awareness to change the public perception around potential risks, and creating opportunities for conversations between trusted adults and CYP, all of which are mutually reinforcing.

4.3 Results of Practitioner FG3

Thematic analysis of the data revealed four main themes of Practitioner Contexts, Hidden Harm, Barriers to Conversation, and Systems of Support which can be represented as follows in Table 3.

Table 5

Themes and Subthemes of FG 3 Practitioners.

Themes	Practitioner contexts	Hidden Harm	Barriers to conversation	Systems of support
Sub themes	Professional role: ● Role expertise ● Consultation context ● Service demographics ● Career stage	Lack of physical symptoms	Hidden Harm	GP Services: ● Registration ● Training ● Funding ● Bridging ● Signposting
	Life experience	Comorbidities	Service Conventions	Role Expertise
		Online environment: ● Awareness ● Safeguarding ● Regulation	Lack of solution	Public Health Drivers
			Socio-cultural barriers: ● Stigma ● Sensitive Issues ● Public Health	

4.3.1 Theme 1: Practitioner Contexts

This theme represents how different dimensions to each practitioner's context influenced their experience of gaming and gambling-related harms, including both their professional role and personal life experiences.

Subtheme 1a: Professional Role. Each practitioner's context was influenced by their professional role, including their role expertise, consultation context, service demographics and career level.

Role expertise. The three GPs are 'general practitioners' and as such are expected to be able to address a wide range of ages and issues, both clinical and social. As a Minister of Religion was also a general practitioner in this sense, although embedded within the community in a non-clinical role. Cantona was a specialist working with a service for CYP who may be at risk. Cantona shared his specialist knowledge of gambling-type harm within some video games and other online risks for children. The sharing of this information had a strong impact upon the other focus group participants who did not have awareness of these risks. There was a consensus that many parents would not be aware of this. Cantona agreed that he would not have had this awareness were it not for expertise gained from his professional role. There was a consensus that, particularly where adults have little or no experience of gaming themselves, it can be difficult to know the risks involved and that awareness about these risks could be important for practitioners working with CYP. Sonic: *"I think, well from my own friends I guess I don't think any of them are particularly aware that a game like FIFA or something like that, that you can actually gamble. I know that most people are aware that you can pay for extra things in a game but you pay to get them. I hadn't really made the link between the game and gambling...it's hugely worrying".*

Consultation Context. It was recognised that the practitioners' different roles are associated with different consultation contexts which may affect the nature of the interactions with CYP. For GPs there may be a long-standing relationship with the person accessing the service and their family, including a mixture of home visits and surgery consultations which are booked in advance. In contrast, a telephone helpline or text-based service may be accessed anonymously and spontaneously with no pre-existing or ongoing relationship. It was recognised that, when working with CYP at risk or experiencing harm, the practitioner often communicates with the parents of the young person. Cantona suggested that for his national helpline CYP are

often more comfortable using text-based services than telephone services. The different consultation contexts were illustrated by Roland, the minister of religion: *“I locate our contact with young people between the two models that other people have offered. So it's fascinating to hear the GPs, you know, fixing fixation which prevents you then asking questions which you can't fix. But on the other hand, the NSPCC experiences acute issues with helplines etc. And in my field, it's about open questions, just being with people, as you say, travelling with them literally travelling with them, rubbing shoulders with them doing the washing up together, whatever it is, and conversation, things come up”* (Roland).

Service demographics. The demographics of the community who accessed the practitioner’s service influenced their experiences of gambling-related harm. For four of the participants these were local communities. For Cantona, this was a national community who accessed the NSPCC helpline. Two GPs shared different professional experiences of gambling related harm and social demographics was raised as a possible explanation for this. Sonic described herself as working in a *“deep end practice”* with some of the highest levels of deprivation within Scotland. She connected this with her numerous professional experiences of responding to gambling harm *“because I work in an area with quite a deprived population, I see families that are crippled with debt, and some of that is through gambling”* (Sonic). In contrast, Juniper had only two instances of gambling harm in 30 years of practice, which he suggested could be due to the fact he served a community which he described as “‘*mostly middle class*’ (Juniper). The group rejected the idea that gambling harm only takes place in areas of higher deprivation, but agreed that it may be more impactful in such areas due to lower levels of financial security. An analogy was drawn with domestic violence which also is believed to be more obvious in areas of higher deprivation.

Career level. An alternative explanation was proposed for the contrasting experiences of the two GPs, which was about the different stages they were in in their careers due to their different ages. Juniper, who had very minimal professional experience of gambling harm and is nearing retirement explained that "*I grew up, in a sense 'medically grew up' at a time when it wasn't something that was even on our radar" (*Juniper). This suggests that professional experience of gambling harm is affected by the culture surrounding health and social care which changes over time.

Subtheme 1b: Life experience. Life experience of gaming and gambling outside of their professional role was another dimension to each practitioner's context. Of the five focus group participants, none shared any direct or indirect personal experience of either gambling-related harm or gaming-related harm. Cantona had an experience of gambling in his adult life which was described as enjoyable and well-regulated, and Roland described a similar experience in childhood. None of the three GPs shared any experience of gambling. Cantona shared positive experiences of gaming in his recent adult life, particularly for maintaining relationships with friends through the pandemic and also because "*it can be mindless, and just a little escape session on the break at work"* (Cantona). The other participants had little or no direct recent experience of gaming. Juniper suggested that their low levels of awareness and understanding around video games could be due to *"the lives we lead and the circles we move in" (*Juniper). In relation to CYP, there was a consensus that the playing of online video games is "*normalised from a very young age and throughout their teenage years"* (Sonic) and Claire and Sonic described indirect experience of gaming through family members including partners and children, and both expressed concern around gaming-related harm in relation to their young children.

4.3.2 Theme 2: Hidden harm

There was a consensus that gaming and gambling-related harm will often be hidden in the sense that it is not obvious to practitioners or family that harm is taking place to the child or young person. The harm is more likely to be hidden due to a lack of physical symptoms, co-occurrence with other social harms, and characteristics of the online environment.

Subtheme 2a: Lack of physical symptoms. There was a consensus there may be no physical signs or symptoms of gambling-related harm until it had become a severe problem. *Claire: "People can get quite deep into trouble without any obvious signs"*

Subtheme 2b: Co-occurrence. There was a consensus that gambling-related harm was often co-occurring with other social challenges such as mental health, substance addiction, domestic abuse and financial hardship, all of which may be examples of hidden harm. There was a consensus that gambling-related harms are usually raised in response to another issue such as mental health or financial difficulty, arising indirectly into the consultation or session. Juniper: "*I think in all the 30 years of my practice...maybe even only one or two in that time with an issue with gambling to the point that I become aware of it, having a financial impact on their health."*

Subtheme 2c: Online environment. There was a consensus that online gaming and gambling could lead to hidden harm due to a lack of awareness, lack of safeguarding and lack of regulation. Following discussions around Cantona's specialist knowledge in the field, there was a shared concern that online video games presented newer forms of potential for hidden harm.

Lack of awareness. There was a consensus that many adults are unaware of the potential risks of gaming and gambling-related harms since they are conducted through the privacy of a young person's phone or device. Claire: "*if you don't realise that these dangers are*

there then how do you know, to, to kind of make the game safer for your children. And it's kind of an unknown unknown isn't it".

Lack of safeguarding. There was a consensus that hidden harm is related to a lack of safeguarding to ensure children's safety in *"the whole internet gaming world. There's not enough measures to keep children safe"* (Cantona). The group shared concerns that the range of hidden harm may result from addictive games impacting upon children's academic performance and mental health, through to risks of online bullying and inappropriate content such as pornography.

Lack of regulation. Cantona suggested that hidden harm is also related to a lack of online regulation, highlighting the ease with which CYP can spend using their parent's card details, a lack of age restrictions for some games, and age restrictions not being observed by parents which *"opens up a world of risk"* (Cantona). There was a consensus that games developers also hold some responsibility for protecting children and Roland described some practices as *"insidious exploitation"*.

4.3.3 Theme 3: Barriers to conversation

There was a consensus that some issues are difficult to talk about in a consultation or session. Gambling was identified as one of these issues and a range of 'barriers to conversations' about gambling were developed through discussion, some of which may also relate to gaming-related harm.

Subtheme 3a: Hidden harm. There was a consensus that gambling-related harm could potentially be quite severe before physical symptoms arise, and physical symptoms are common ways of beginning conversations.

Subtheme 3b: Service Conventions. There was consensus that GPs do not routinely ask about gambling behaviour in consultations. This was contrasted with other forms of addictive behaviour, such as alcohol and drug consumption, which are routinely asked about. Claire, a recently qualified trainee working in GP education, linked this service conventions to the fact that gambling and gaming-related harm are not covered within GP training, suggesting that there's an implication that *"if it's not mentioned then it's not a problem"* (Claire). In contrast, Cantona highlighted that in the NSPCC service gambling behaviour is within the range of "probing questions" which would be asked as a follow up to questions about any financial challenges.

Subtheme 3c: Lack of Solutions. There was consensus among the three GPs that the lack of a solution may present a barrier to starting a conversation about a problem. Sonic: "*And I think another barrier to asking the question is, 'what is the solution?' So, as a doctor, we always try and offer help and solutions and we try to fix things for people. And sometimes if you're uncertain yourself about what there is available to help support individuals with a problem, whether it's gambling or gaming or whatever, then that is another barrier".*

Subtheme 3d: Socio-cultural barriers. There was a consensus that it's more difficult to ask about a personal area of conversation if it's not regularly talked about within your service. This idea was captured by Juniper in his explanation that "*if it's not on your radar it's difficult to ask about"*. The issues which are 'on the radar' of practitioners are influenced by factors including stigma, sensitive issues, and public health campaigns, all of which change over time.

Stigma. There was consensus that a perception of stigma around problem gambling can make it more difficult for those experiencing harm to raise this with practitioners. Claire: *"I guess it's a combination of shame, stigma and denial as to whether it's a problem or not".*

Sensitive issues. There was a consensus that some areas of conversation can be sensitive and therefore uncomfortable for practitioners to address directly with the people who access their service, due to the fact that they impinge upon personal issues such as finance, sexual health, or identity. It was suggested that asking about gambling behaviour and asking a parent about their child's use of digital technology could be considered sensitive. Juniper: *"I would feel uncomfortable to ask them, are you gambling?".* Cantona: *"a lot of people don't like being asked about what their 15 year old is playing on the computer in the bedroom".*

Lack of a PH campaign. In contrast to their awareness of PH campaigns in relation to other addictive behaviours ('counting units' in relation to alcohol and Talk to Frank in relation to drugs), none of the participants had any awareness of an equivalent campaign for gaming or gambling harm, apart from the NSPCC manager who referenced GambleAware's 'when the fun stops, stop'). This lack of a PH awareness campaign was linked to a lower socio-cultural awareness of this kind of harm. Claire: *"i don't think it's as much in society's minds eye as a problem"*.

4.3.4 Theme 4: Systems of Support

Participants engaged in a free-flowing discussion around ways to improve support for CYP who may be at risk of gaming and gambling-related harms. There was a recognition of the need to raise awareness around risks of gaming and gambling-related harm as well as a need to make connections between different areas of HSC systems.

Subtheme 4a: GP Services

There was a consensus that there is a lack of awareness about the risks of GGRH to CYP in GP services which makes it difficult for practitioners to talk about these issues within a consultation. Sonic: *"a lack of awareness about the associated risks of gaming and gambling and lack of*

education to general practice or doctors and training. We don't know very much about this and if we don't know much about it ourselves then we're not equipped to ask the right questions". A number of elements of GP services were highlighted as being influential in this lack of awareness, including registration, training, funding, bridging services and signposting.

Registration. There was consensus that adding screening questions around finances, gambling or gaming to the GP practice registration process could have the effect of raising awareness around these as health-related issues. Claire and Sonic gave examples of where this approach had effected change in relation to public health issues including alcohol consumption and sexual health. Sonic: *"HIV, for example, we ask that routinely now, we didn't before"*.

Training. There was a consensus that the GP training curriculum influences the levels of awareness of specific types of harm amongst practitioners. Claire suggested that adding GGRHs to the GP training curriculum would raise awareness, adding that *"it needs to be assessed because that's what trainees pay attention to"*. However, Claire also recognised that the GP curriculum is *"hugely over-saturated as it is, so the question is how do you distinguish yourself in this kind of sea of other issues that we have to learn about".*

***Funding*.** There was a consensus that GP funding arrangements influence the types of harm which practitioners are more focused on. Claire suggested that the Quality Outcomes Framework (QOF) could be a way to motivate GPs to screen for gambling harm more actively because it carries implications for their payment. Claire *"one way to motivate them to, to kind of screen for this problem is QOF".* Juniper suggested that the QOF framework is manipulated by the pharmaceutical industry towards medical issues related to their products.

Bridging services. There was a consensus about the important role of 'bridging' or 'link' services to connect GPs to the local communities around issues with a social component, such

as addiction. Cantona: “we'll be looking at universal services like Early Health is where you will be directing people”. Sonic described how link workers in her *“deep end practice”* are particularly helpful because they are locally-based and embedded within communities over sustained periods of time. There was consensus that these workers are more likely to have specific expertise, good relationships with the community and up-to-date knowledge about the support services available in the third sector, which change frequently. However, it was also acknowledged that, for many GP service areas, link workers will not be available.

Signposting. There was consensus that the ease of signposting towards further support in a GP consultation session is important. It was recognised that within 10-12 minute consultation a GP has very limited time to signpost a patient towards further services where issues can be explored in more depth. Therefore, the process of referral *“has to be slick and quick” (*Juniper) and administrative blocks such as referral forms can slow this down. It was suggested that giving the patient a number to call is an option but that sometimes *“they need a bit of help to make that connection but maybe not ready to make that connection themselves”* (Juniper). Claire offered an example of good practice in relation to support for PTSD, where a website has a function to search for all national and local options available so that patients can be signposted to relevant services swiftly.

Subtheme 4b: Role Expertise*.* There was a consensus that practitioners whose role helped them to develop expertise in the lives of CYP were a good resource for raising awareness. Cantona shared the expertise gained from his role about a range of support services available to CYP which was widely appreciated by the whole group. Claire: *“I feel like I’ve learned more in the last hour than I’ve ever known about the facilities and organisations that are out there...I’ve heard of these organisations it never would have occurred to me to engage with them.”*

Subtheme 4c: Public Health Drivers. There was a consensus around the need for a stronger PH campaign in relation to gaming and gambling-related harm which would help these issues to *"infiltrate into our consultations appropriately*" (Sonic). In reflecting upon how a PH approach can effect change in GP practice, Juniper recalled a similar change in the awareness of risks in relation to drug abuse services among GPs: *"I remember a period of time when it (drug addiction) just became talked about, it was something that there were local meetings about, GP colleagues discussed it, it just became part of your conversation, and it somehow became the norm within the practice chat at coffee time, at lunchtime a speaker from the drug service would come and discuss stuff with you. Maybe that needs to happen. So it is on everybody's radar on a regular basis it just becomes part of your regular thought and conversation." (*Juniper).

4.3.5 Summary of FG3 findings

The practitioners' different contexts were influential in framing their perspectives on gaming and gambling, as well as associated harms. This included both professional dimensions of context, such as role, service area and career stage, as well as personal dimensions of context, such as family life. Despite their different contexts, there was a consensus that harm to CYP resulting from both gaming and gambling activities may be hidden from their service. The risk of hidden harms was thought to be heightened in relation to online environments, due to a shared perception of lack of safeguarding, lack of regulation and that practitioners and parents may have limited understanding of modern video game content. In improving support for children an overarching factor which influenced all practitioners irrespective of context was a need to put these risks of harm 'on the radar' of healthcare systems. Practitioners identified potential barriers to conversations around gaming and gambling-related harm in their professional

contexts. Building on this, practitioners suggested ways in which systems of support for those at risk could be improved, both in and around GP services, as well as in broader systems of PH.

4.4 Results of Practitioner FG4

Thematic analysis of the data revealed four main themes of Generational Divide, Public Perception, Safeguarding, and Training, which can be represented as follows in Table 4.

Table 6

Themes and Subthemes of FG 4 Practitioners.

Theme	Generational Divide	Public perception	Safeguarding	Training
Subtheme		Stigmatised Gambling	Brain development	Psychiatry
		Normalised Gaming	SEN	Continuing Professional Development
		Gaming-Gambling Convergence	Online environments	Lived Experience
			Marketing	Online

4.4.1 Theme 1: Generational Divide

There was a consensus that there is a generational divide between practitioners and CYP in the knowledge and understanding of video games, and that many practitioners have a very limited understanding. Fiona described how video games *“play a huge, huge part in a lot of our patients' lives...and a lot of us know absolutely nothing about it”*. There was a consensus that the impact on video games in the lives of CYP is a complex mix of positive and negative influences. The negative impacts were recognised as ranging from problems with sleep and

associated educational interruption, to cyber-bullying and inappropriate content. Positive influences including social connection and games specifically designed to support mental health. It was recognised that it is difficult for practitioners to understand these issues when they have limited direct experience of video games.

4.4.2 Theme 2: Public perception

There was a consensus that there were contrasting public perceptions of the risks of gambling and gaming which influence the way in which those experiencing harm access support from HSC systems.

Subtheme 2a: Stigmatised Gambling. When discussing support services for a person experiencing gambling harm, Tudor and Fran agreed that patients tend to reach out only when they hit a crisis point in their lives, usually triggered by associated mental health problems or unmanageable levels of debt. They suggested that this is due to the fact that patients often feel a high degree of shame related to the fact that they are not able to manage responsible consumption of this addictive behaviour which many other people are able to enjoy in moderation. Tudor described how "*there's a huge amount of shame, they sometimes apologise for wasting my time"* and Fran described how many of her service users were *"too embarrassed to tell their GPs"* which is why they preferred to use the anonymous helpline.

Subtheme 2b: Normalised Gaming. There was a consensus that gaming is highly prevalent in the lives of CYP, and addictive gaming was associated with health and social problems such as sleep deprivation and family arguments. Fiona: "*It comes up so often, you know, I don't know how many times I have the same conversation with families, particularly around sleep"*. Cavendish drew a distinction between addictive gaming and addiction to spending money within a game.

Subtheme 2c: Gaming-Gambling convergence. At the beginning of the discussion three of the participants considered gaming and gambling to be separate activities, with a representative view being that *"I know that you have to pay to advance through a game but I don't see how that fits into the definition of gambling"* (Cavendish). One participant, Fran, shared her knowledge about gambling-like content in video games, which led to other participants sharing different aspects of the gaming-gambling convergence, including gambling advertising towards CYP and safeguarding risks in video games related to financial inducements. All participants expressed concern that these risks were not within public perception. Through the course of the discussion participants reached a consensus that this issue represents an emerging problem which is not within the realms of public perception. Tudor suggested that this could be an *"emerging problem with a lot of unmet need".*

4.4.3 *Theme 3: Safeguarding*

There was a consensus that there is a need for improved safeguarding of some groups of CYP who are particularly vulnerable to addictive behaviour, such as those with Special Educational Needs (SEN). Also, there are specific environments where CYP are more likely to be vulnerable, such as online environments and those with marketing directed towards CYP.

Subtheme 3a: Brain development. There was a consensus that CYP are considered to be particularly vulnerable to addictive behaviour since the brain is still developing at this age and impulsive behaviour is more likely due to a lack of self-regulation capacity.

Subtheme 3b: Special Educational Needs (SEN). There was a consensus that Neurodiverse CYP with SEN such as Attention Deficit Hyperactive Disorder (ADHD) and Autistic Spectrum Disorder (ASD) were considered to be particularly vulnerable to addictive technology due to impulsive characteristics (ADHD) and obsessional behaviour (ASD). Fiona discussed

experiences of her service users with SEN who often presented problematic behaviour related to video games. Fiona shared evidence that these conditions were underdiagnosed which could be associated with a lack of safeguarding protection for these CYP.

Subtheme 3c: Online environments. A distinction was drawn between offline gambling experiences based in physical locations such as bookmakers, and online gambling experiences. There was a consensus that online experiences are more likely to lead to GGRHs due to the ease with which bets can be placed, the potentially hidden nature of the activity, and the less rigorous identity checks which open the potential for CYP under the age of 18 to gamble. Fran noted that the vast majority of calls to her service are related to online gambling as opposed to offline gambling, and suggested that the reason for this is that the legal regulations are designed for offline gambling and fail to protect against online gambling harm.

Subtheme 3d: Marketing towards CYP. There was a shared concern over the high prevalence of adverts for online gambling services on commercial radio and social media. It was also suggested that some of these marketing promotions are directed specifically towards CYP who may be more susceptible due to lower self-regulation capacity. This concern was linked to a potential normalisation of gambling as an activity, which may in turn lead to increasing gambling among CYP.

4.4.4 Theme: Training

There was a consensus that there is a lack of training for practitioners in the identification and treatment of addictive behaviour for CYP, and a need for specific training in the risks associated with the convergence of gaming and gambling in order to counter the generational gap in understanding.

Subtheme 4a: Psychiatry. It was noted that NHS Psychiatry training *"touches upon"* (Cavendish) gambling within the context of addictive behaviours, but the focus is more towards alcohol and drug addiction. The developmental dimension to addiction is not covered in the same way as it was in relation to depression. Fiona was aware that there was a recognisable 'gaming disorder' but had not received training on it. There was a consensus between the psychiatrists that there is a strong need for further training in the risks of gaming and gambling for CYP because it arises so often, and that these issues could be addressed within the context of psychiatry safeguarding training which is mandatory. Fiona: "*from a child and adolescent mental health point of view I think you would have a crowd of people if you did a session on gaming...we kind of recognise it as a problem that we're maybe not quite sure what to do with that."*

Subtheme 4b: Continuing Professional Development (CPD). There was a consensus that risks of GGRHs should be addressed through specific CPD training opportunities which are updated more often than standardised medical training. Tudor suggested that this had the potential to reveal hidden harm particularly in relation to local issues, reflecting upon how "*we received training in domestic violence from the local team which opened our eyes to it - it could be the same here*" (Tudor). Fran's awareness of the convergence of gaming and gambling-related harms was gained through specific CPD training she had received in her role at Gamcare, and there was a consensus from the other participants that this training is needed by their services.

Subtheme 4c: Lived experience. There was a consensus that training should include the lived experience of CYP, *"from the horse's mouth"* (Cavendish) including both positive and negative aspects, as well as parents and the experiences of practitioners and services who relate directly to CYP in relation to gaming and gambling harms. Fiona: *"everything I've really*

learned about video games is through speaking to the young people themselves or their parents complaining about it".

Subtheme 4d: Online training. There was a consensus that training needs to be highly focused (30-60 minutes) and drop-in lunchtime sessions work well for busy practitioners. It was recognised that the Covid-19 restrictions have led to online video calls becoming much more commonplace as a medium for training, which are likely to continue post-covid due to increased accessibility and cost effectiveness. Cavendish: "*it was something we rarely did before...there's teaching sessions left right and centre on Microsoft teams so much so that you can't really attend them all...always looking for new things."*

4.5.5 Summary of findings of FG4

There was a consensus that GGRHs may represent an emerging problem due to practitioners' lack of awareness and understanding of gambling-like content within video games, which may be a result of the generational gap between the digital cultures of practitioners and those of CYP. This relates to contrasting public perceptions of gambling, which has a negative stigma attached, and gaming, which has a complex set of influences in the lives of CYP and has become normalised. There was a shared concern to safeguard CYP who may be vulnerable to GGRHs in online environments which include marketing of gambling-like content, particularly those with symptoms of ASD and ADHD. There is a need for practitioner training in the risks of GGRHs for CYP in online environments which may be provided in the context of safeguarding training and ongoing CPD modules. There is an opportunity to meet these training needs through online sessions which have become more popular and accessible due to Covid-19 restrictions.

4.5 Synthesis of Findings

This section synthesises the findings from the four focus groups. First, the findings of the two lived experience focus groups are combined into one theme table. Second, the findings of the two practitioner focus groups are combined into one theme table. Third, the shared findings from all four focus groups are brought together.

4.5.1 Comparing FG1 and FG2

The foci of the two lived experience groups differed according to the different experiences which participants brought to the group. For FG1 the discussion centered around gambling-related harm due to the fact that all participants' lived experiences were in gambling. This group focused more upon each individual's previous lived experience of gambling-related harm, and the change in public perceptions around gambling which have taken place in their lifetime. They used these insights to offer recommendations for how public awareness of both gaming and gambling-related harms could be improved. Also, this group reached a consensus about the sort of compassionate healthcare approach which would have been more supportive for them in their journey towards recovery.

In FG2 the discussion centered around gaming-related harm, particularly gambling-like content within games such as loot boxes. These experiences of gaming-related harm were compared to experiences of gambling-related harm. This focus was due to the fact that the participant with gaming-related harm was more dominant in leading the discussion and the participant with gambling-related harm was interested in making comparisons between gaming and gambling. The participants used these insights to suggest that the risks of harm through engagement with loot boxes was potentially higher than through gambling experiences, due to some aspects of online game design. Also, they reached a consensus that protection for CYP

against this harm could be developed through regulation, public awareness campaigns and conversations with trusted adults.

All five of the lived experience participants across both focus groups referred to the concept of ‘escapism’ in referring to their gaming or gambing experiences. In both focus groups, escapism was used in two senses; to escape challenging life circumstances and to escape the negative consequences of their addictive behaviour through a deepening engagement with the addiction. In preventing these cycles of negative escapism, both focus groups gave examples of actions which could be taken as part of a preventative PH approach towards protecting CYP from GGRHs, including practitioner training, educational strategies, regulation, compassionate practice and the involvement of experts by experience. Both focus groups recognised that PH measures can change public perceptions. The PH approach currently being implemented to reduce gambling-related harms may be of value in designing an approach for gaming-related harm at the strategic level, through the involvement of those with lived experience of harm, through peer mentoring, and by engaging those who act as role models to CYP. In both focus groups it was recognised that risks of GGRHs may be influenced by ecological dynamics in development of identity, community and agency.

As well as similarities between these two focus groups there were also differences in the language used to talk about gaming-related harm and gambling-related harm. Participants with lived experience of gambling-related harm talked about the need to recognise their addictive behaviour as an ‘illness’ whereas the participant with lived experiences of gaming-related harm described his problems in terms of a personality trait that is exacerbated by specific life circumstances and online environments. These linguistic differences may be important when talking about GGRHs with CYP, their families and practitioners.

Table 7

Combined themes and subthemes of FG1 and FG2

Theme	Escapism	Preventative Measures	Public Perception	Ecological Dynamics
Subtheme	Life Circumstances	Practitioner Training	Gambling-related harm	Identity
	Gambling-type behaviour	Educational Strategies	Gaming-related harm	Community
		Regulation		Agency
		Compassionate Practice		
		Experts by Experience		

4.5.2 Comparing Results of FG3 and FG4

Both practitioner groups shared a strong concern for the safeguarding of CYP against the risk of hidden harms which may result from online environments of gaming and gambling. Practitioners' concerns were heightened by learning about forms of gambling-like content within video games which they felt that many practitioners and parents would not be aware of, in part due to a generational divide in understanding about video games. In both groups the inclusion of a non-clinical practitioner who had a role on a helpline service was important to the development of the conversation, since this participant shared information about newer forms of gambling-like content within video games which other practitioners were unaware of. In this way, both groups had an educative quality, whereby practitioners increased their awareness of gaming and gambling-related harms through the discussion.

Both groups shared an implicit understanding of the need for a whole systems approach to HSC in supporting CYP who may be at risk of harm. In FG3, this understanding was

conveyed through a discussion around the potential barriers to conversations about gaming and gambling-related harm, which was associated with different aspects of GP services and a need for stronger PH campaigns to put these issues ‘on the radar’ of HSC services. There was also a recognition of the need to develop interconnections between different organisations in HSC systems. In FG4 the need for a whole systems approach was directed towards a discussion around how practitioner training in this field could be developed, recognising that learning often takes place through practice with CYP, through informal conversations and through general cultural awareness. Both groups recognised that a whole systems approach has the potential to remove barriers to support for CYP who may be at risk of GGRHs.

Table 8

Combined themes and subthemes of FG3 and FG4

Theme	Safeguarding against hidden harm	Whole systems approach	Barriers to support
Subtheme	Online environment	GP Services	Hidden Harm
	Generational Divide	Connected Services	Public Perception
		Training	Practitioner’s Context
		Public Health	Lack of Solutions

4.5.3 Shared findings

In comparing all four focus groups, a number of observations can be made which represent the main research findings:

1. CYP may be particularly vulnerable to gaming and gambling-type harms due to a range of neurobiological, psychosocial, and socio-cultural characteristics.

From a neurobiological perspective, clinical expertise linked immature brain development of CYP to lower levels of self-regulation and impulse control, which may lead to poor decision-making in gaming or gambling environments. The findings suggest that CYP with SENs including ASD and ADHD may be more vulnerable to harm due to associated characteristics of obsessional behaviour and impulsivity respectively. In terms of psychosocial development, lived experience participants suggested that gaming and gambling activities can fulfill a need for identity, community and agency in the lives of CYP, which can lead to negative cycles of escapism. From a socio-cultural perspective, generational differences in the use of digital technology were associated with changing conceptions of childhood, so that now online virtual interactions including video games are embedded into the social and cultural lives of CYP. The normalisation of regular use of video games by CYP without parental oversight may generate increasing risks of gaming and gambling-related harms.

The findings suggest two particular stages within the 7-25 age range of CYP which represent particularly vulnerable times. Firstly, when a young person goes to university at 18 years of age they may receive access to a student loan at the same time as meeting the legal age for gambling and having the independence of living away from parental responsibility. These three factors in combination could represent a heightened risk of harm. Secondly, younger children who remain under parental responsibility may be vulnerable to harm when the adults responsible for them lack awareness about GGRHs through video games.

2. Where online environments of gaming and gambling are highly accessible and poorly regulated spaces which are not well understood by some adults, there may be risks of hidden harm for CYP.

High levels of accessibility to online environments were associated with the normalisation of digital technology in the lives of CYP described above. In some cases this includes CYP having access to credit through linked accounts. Lived experience participants suggested that some online video games are not subject to the regulatory protections which would be expected in gambling environments, such as age-restrictions, spending caps, published odds and marketing rules, thereby generating an increased risk of harmful behaviour. Specific game design characteristics, such as competitive pay-to-win games with loot boxes, were identified as more likely to lead to harmful behaviour. Moreover, findings suggest that adults who have no recent experience of playing video games may not have a clear understanding of the risks of gambling-like content which is embedded within some games, particularly where there is a lack of transparency over the nature of this content. High levels of accessibility to poorly regulated online environments creates a risk that CYP may be experiencing harm without the knowledge of supportive adults, which may be described as a risk of hidden harm.

3. The safeguarding of CYP is an important priority for practitioners and current safeguarding practices could be improved by raising awareness about the risks of gaming and gambling-related harm online.

The protection of CYP from harm through practices of safeguarding was an important priority for all research participants, particularly in relation to vulnerable categories such as younger children and children with SEN. This was reflected in the fact that safeguarding training is mandatory for all practitioners working with CYP. Furthermore, upon becoming aware of the potential for hidden harms in online environments described above, all research participants

expressed concern about the lack of protection for CYP and felt a need to learn more about these risks. This suggests that GGRHs in online environments is not currently part of current safeguarding training practice. Findings suggest that addressing gaming and gambling-related harms through the frame of safeguarding could be a coherent way to raise awareness and understanding of these risks within the framework of established training practices.

4. Systems of support for CYP at risk of gaming and gambling-related harms could be improved through a whole-systems PH approach.

PH approaches have the potential to raise the awareness of practitioners to hidden harms by putting them ‘on the radar’ of practitioners and open up the potential for compassionate conversations in and around HSC settings as well as in family and educational settings. The whole-systems PH approach which has taken place in relation to alcohol and drug addiction as well as sexual health has been effective in changing cultural perceptions, which is linked to changes in practice in HSC settings. A PH approach needs to include a wide range of different sectors of society, including HSC practitioners, schools, universities, parents, third sector organisations, games developers, regulators, the media, as well as civic and financial services. A strategy to educate these different sectors through PH messaging can lead to more open conversations in HSC settings.

Findings suggest a number of reasons why the whole-systems PH approach which is being implemented for gambling-related harm might also be appropriate for addressing gaming-related harms. Firstly, the introduction of gambling-like content into video games may lead to patterns of harmful behaviour similar to the behaviour of those experiencing gambling-related harm. Secondly, the increased risks presented by online environments which

are highly accessible and insufficiently regulated apply equally to online gambling and online gaming. Thirdly, similar to gambling-related harm, gaming-related harm is embedded within social contexts of families, communities and educational environments, linked to issues such as mental health and financial security.

However, there are also reasons why the approach needs to be different in relation to GGRHs for CYP. Firstly, the PH approach to address gambling-related harms is not specifically targeted towards CYP, who may need to be addressed differently, particularly where they are below the legal age for gambling. Secondly, both practitioners and parents have specific legal relationships towards CYP who are below 18 due to safeguarding policies and cultural norms. Thirdly, since some consumer decisions for CYP are made by parents on their behalf, some measures to protect CYP may need to be directed towards parents, particularly where there is a generational gap in the knowledge and understanding of video games. Fourthly, research suggests that video games are associated with many positive benefits for CYP, including support for mental health and wellbeing, as highlighted in 2.4.4 above. Therefore, any PH approach would need to be sensitive to the complexity of the influence of video games on the lives of CYP.

5. A whole-systems PH approach to gaming and gambling-related harms should incorporate the views of CYP, practitioners who work with CYP and those with lived experience of GGRHs.

Findings suggest that practitioners learn most about gaming-related harms through their practice with CYP, who have a level of knowledge that many adults may not have. Therefore, practitioners working with CYP may generate expertise which is valuable in raising awareness

as part of a PH approach. Also, findings suggest that people with lived experience of GGRHs and older gaming mentors can be easier for CYP to talk to, particularly when they share demographic characteristics such as age or gender or specific gaming knowledge and experiences, and may offer a source of hope and support to CYP experiencing GGRHs,

5. Discussion

5.1 Summary of focus group results

The two lived experience focus groups found that both gaming and gambling-related harm are characterised by repeating cycles of escapism. Risks of harm are affected by developmental characteristics and can be reduced through preventative PH measures which can change public perceptions which influence the provision of HSC services. The two practitioner focus groups found that the safeguarding of CYP from risks of hidden harm in online environments is an urgent priority for HSC services. This can be achieved through a whole systems approach involving multiple services which may remove barriers to support.

5.2 Summary of findings

This study describes an investigation into the convergence of GGRHs which includes both participants with lived experience in gaming-related harms and those with lived experience in gambling-related harms, as well as practitioners who work with CYP. Through this study comparisons were made between lived experiences of gaming and gambling-related harms, specifically in relation to experiences with HSC systems. Similar patterns of negative consequences were found to result from behavioural addiction to both gambling and gambling-like content within video games, supporting the suggestion made in 2.4.5 that gambling-related harms and gaming-related harms may be converging through digital technology. The study findings are valuable because they highlight specific aspects of game design which CYP may be particularly vulnerable to, and specific groups of CYP who may be vulnerable. This knowledge may help to inform and prioritise safeguarding efforts by practitioners and policymakers, which is particularly urgent given the generational gap in the understanding of contemporary gaming culture between practitioners and CYP. Furthermore, the findings support the need for a whole-systems PH approach to the safeguarding of CYP

from GGRHs, offering recommendations which draw upon insights gained from gambling-focused approaches whilst also taking account of the specific context of video games for CYP. These findings are valuable because they offer practical ways to develop awareness and understanding of GGRHs in HSC systems and beyond. The findings suggest that future research into GGRH for CYP should focus upon specific categories of CYP and specific design characteristics within video games.

5.3 Whole-systems public health approach

In highlighting the broader social and environmental determinants of GGRHs, the findings support the need for a whole-systems PH approach (DeSalvo et al., 2016; Kings Fund, 2019) which can help to define the problem, identify risk and protective factors, develop prevention strategies and encourage widespread adoption of good practice (NSRGH, 2019). In order to support practitioners to identify and address risks of GGRHs for CYP, measures should address not only HSC settings but also a wide range of other systems, such as educational settings, families, regulatory frameworks, and the video games industry. Experienced practitioners in the study provided a long-term perspective on the way that other PH issues have been addressed by HSC systems, including alcohol and drug addiction, domestic violence and sexual health. In each of these cases, changes in practice were interconnected with changes in socio-cultural norms and public perception. This perspective was supported by lived experience participants who shared their experiences of changing perceptions of gambling-related harm and related this to PH strategies. Therefore, the findings suggest that a whole-systems PH approach can change public perceptions of GGRHs, put these issues ‘on the radar’ of services, and remove barriers to conversations for practitioners.

As suggested in 2.5, a whole-systems PH approach is consistent with Bronfenbrenner's (2005, Fig 1) bioecological model of human development which may offer a useful way of understanding the health and wellbeing of CYP. For example, Halsall et al. (2018) examine the integration of youth services using the bioecological model, highlighting that social determinants of health are highly influential during the adolescent years, and arguing that it is important to draw upon a range of different perspectives within HSC systems to develop holistic strategies, including the voice of CYP and families. Burns et al. (2015) apply the bioecological model to school psychology, recognising the need for early intervention by addressing systems-level issues through parent training, enhanced student supervision and changes to policy.

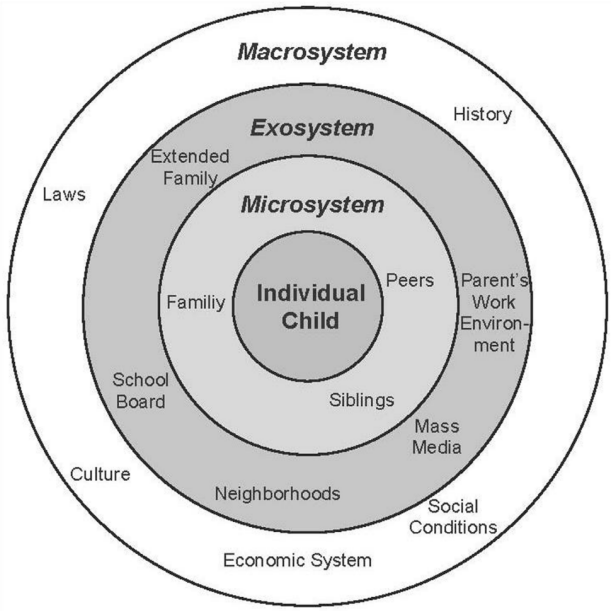

Figure 1: Bioecological Model (Bronfenbrenner, 1994; as published in Niederer, 2009)

Kelly & Coughlan's (2018, p. 168) bioecological model of youth mental health recovery suggests that facilitators and barriers to recovery can be understood by recognising "the ecological context of complex social systems" within which CYP's development takes place. Their model

(Fig 2) suggests that feelings of connection, control and power can be influenced by peers, parents, schools, professional services and society. These examples highlight how the bioecological model can support a whole-systems PH approach by developing an understanding of the complex social and environmental determinants of health for CYP, informing policy and highlighting areas for further research.

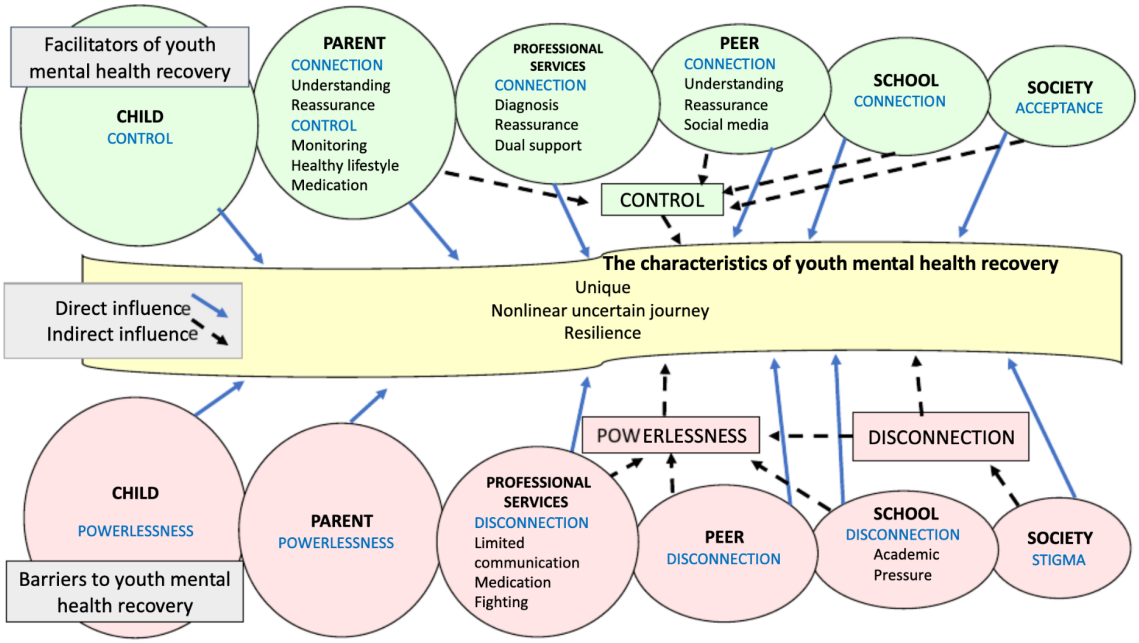

Figure 2: Model of Youth Mental Health Recovery (Kelly & Coughlan, 2018)

Since Ecological Systems Theory (Bronfenbrenner, 1979) emerged prior to the internet revolution, Johnson & Puplampu (2008) have proposed the addition of a 'techno-subsystem'

(Fig 3) to the bioecological model, which is described as a dimension of the microsystem which accounts for the growing influence of digital technology on human development.

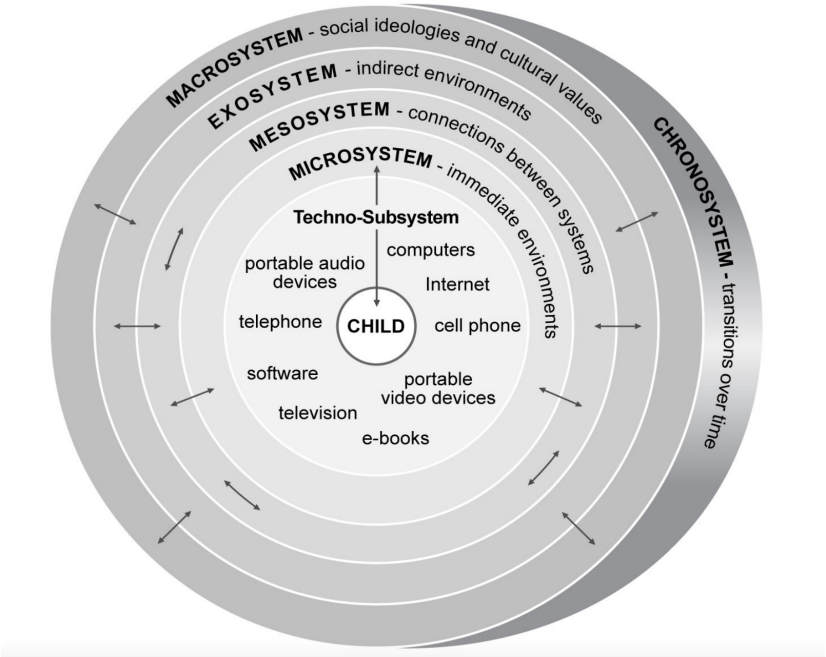

Figure 3: Ecological Techno-Subsystem (Johnson & Puplampu, 2008)

The Techno-Subsystem mediates a person's bidirectional interactions "with both living (e.g., peers) and nonliving (e.g., hardware) elements of communication, information, and recreation technologies in immediate or direct environments" (Johnson & Puplampu, 2008, p. 4).

This section will use the components of the bioecological model including the techno-subsystem as a template with which to discuss the study findings in relation to a whole systems PH approach. Since the focus of the research is upon supporting practitioners, the discussion will begin with a consideration of HSC settings, which would be considered part of the exosystem. Next there will be a consideration of factors which may make particular individuals more vulnerable to GGRHs. This will be followed by a discussion of technological

and social environments as microsystems, the influence of digital technology on psychosocial development as techno-subsystems, regulatory frameworks and media as exosystems, and perspectives upon addiction as macrosystems which influence public perceptions and treatment approaches.

5.2 Health and Social Care Settings

The findings suggest that GPs are regarded as the first point of call in the HSC system, and may play a central role in addressing GGRHs because addictive behaviour is often brought to light upon disclosures in GP settings around mental health or financial problems. These findings support a recent editorial from Royal College of GPs chair Professor Dame Clare Gerada which describes GPs as “the front door of the health system” and experts in understanding the complexity of patients’ risks within the contexts of their families and communities (Gerada 2021, p. 292). However, Gerada also argues that there is an urgent need for GPs to be supported by multi-disciplinary teams to limit the “inordinate expansion” of GP services to avoid them becoming a “sink hole” absorbing unlimited work (Gerada 2021, p. 292). This argument received support from practitioners in the focus groups, who recognised a need for locally-based intermediate teams who collaborate with GP services effectively, with specific references made to Family Lives, Early Help and the Links Worker Programme in Scotland. Furthermore, the findings suggest that a multi-disciplinary provision of services is more able than GPs to keep up-to-date with the support services which are available for their communities. This supports research which suggests that services which are embedded within communities over a sustained period of time are particularly effective in providing compassionate care for the ongoing recovery of those who have experienced GGRHs (NHS Scotland, 2016).

The findings also highlighted the range of influences upon different services in providing HSC, including responses to GGRHs. Psychiatric services were influenced by the need to respond to diagnostic frameworks and provide evidenced-based treatments. GP services were influenced by the need to offer solutions to a wide range of health and social problems in relatively short consultation sessions. National helplines were influenced by the need to provide support to the acute health issues of their service users in moments of crisis. Community support groups were influenced by the need to provide support throughout the day-to-day lives of their communities. This highlights how different HSC settings may play a variety of roles in identifying, treating and reducing risks of GGRHs.

5.2.1 Signposting and Accessing Support

The findings suggest that practitioners need rapid and up-to-date mechanisms to signpost CYP and their parents towards intermediate and support services upon disclosure of GGRHs, particularly where sessions are shorter such as those delivered by GPs. Lived experience participants suggested that being given a leaflet and a telephone number to call does not meet the standards of compassionate care needed by those who have made a disclosure of harm. Digital tools may be more effective than hard copies in this regard because they can be accessed rapidly, integrated with other systems, and updated remotely. Furthermore, practitioners suggested that CYP are more likely to use digital text-based services than phone or in-person services to share experiences of GGRHs, a finding which is supported by Belani (2021). Therefore, the integration of digital modes of healthcare support may provide practitioners with more effective ways of signposting and accessing support for CYP at risk of GGRHs, and further research into this is required.

5.2.2 Registration and Funding

The findings suggest that the administrative infrastructure around HSC settings, such as registration processes and funding arrangements, influences the way treatment is provided, such as the specific health issues which are screened for and the issues which are discussed in sessions. These findings support existing research. For example, Mahase et al. (2019) found that GPs talked to fewer patients about alcohol after a financial incentive scheme ended. Blank et al. (2021) suggest that, whilst screening may be effective in a number of HSC and community settings, it needs to be accompanied by a recognised treatment pathway, including dedicated referral services and appropriate practitioner training.

5.2.3 Training

The findings suggest that the development of addictive behaviours through digital technology such as video games and the associated risks of GGRHs for CYP are not addressed through initial training of GPs or psychiatrists. Whilst acknowledging the pressing demands on training curricula, practitioners suggested that these issues could be accommodated within safeguarding training and that this could be impactful in raising awareness in their services. The increase in availability of online CPD modules brought about by the Covid-19 pandemic led to a wider range of accessible training opportunities for practitioners and research suggests that this is likely to continue (Phillips et al. 2020). Therefore there is a need for further research to evaluate the current online CPD training opportunities in relation to the risks of GGRHs.

In relation to GP training, Gerada (2021, p. 293) criticises “the frequent and unimaginative calls” for ‘more education’ from single issue campaigns”, whilst also arguing that GP training should be extended from 3 to 4 years in length to accommodate the increasing broad range of issues which they are expected to address. In relation to psychiatry training, the findings suggest there is a specific need for a developmental understanding of addiction to support CYP in light of symptoms of behavioural addiction related to digital technology.

European-wide research suggests that addiction psychiatry is not well addressed within psychiatry training programs (Orsolini et al., 2021) and reflective training techniques can be effective in addressing stigmatised attitudes among trainees, leading to a more compassionate approach (Ballon & Skinner, 2008).

5.2.4 *On the Radar*

Findings suggest that the factors highlighted above influence the extent to which particular issues are 'on the radar' of GPs. Such issues are more likely to be discussed in meetings and other informal moments, highlighted in waiting rooms and raised with patients. Participants suggested that a range of different strategies would be required to raise awareness of GGRHs among GPs and other HSC practitioners. These findings support Gerada & Sanju (2011) who recognise that a change of approach in relation to primary care for substance abuse was achieved through a range of approaches, including a multi-disciplinary 'shared care' scheme, improved screening processes, and a nationally-driven training programme.

5.3 Vulnerable groups of CYP

The findings suggest that three groups of CYP may be particularly vulnerable to GGRHs: children with SEN, children who are under parental responsibility, and emerging adults.

5.3.1 *CYP with SEN*

The findings support previous research which suggests that ADHD symptoms are key risk factors for IGD (Lee et al., 2021) and that individuals with ASD are more likely to exhibit symptoms of gaming disorder (GD) (Murray et al., 2021). This suggests that CYP who have ADHD or ASD symptoms may be more at risk of GGRHs. This carries implications for practitioners working with CYP who have ADHD or ASD diagnoses or symptoms, since practitioners may be able to implement a preventative approach by opening up conversations

around video game engagement to explore whether this risk factor is relevant in a specific case. This may also support other organisations such as schools and charities in identifying and safeguarding CYP who may be particularly vulnerable to harm.

5.3.2 Children under Parental Responsibility

The findings support previous research which suggests that parents may not fully understand the role of microtransactions such as loot boxes within video games (Mik, 2021). If parents lack awareness and understanding of GGRHs they are less able to take responsibility for their children's safety in online settings. Therefore, preventative measures to reduce GGRHs may need to be targeted differently where a parent makes decisions on behalf of their children. This is considered further below in 6.5.1.

5.3.3 Emerging Adults

The findings which link impulsive behaviour to brain development support previous research which suggests that 16-25 year olds, who have been described as 'emerging adults', may be particularly vulnerable to GGRHs due to a propensity for thrill-seeking behaviour and experimentation (Arnett, 2000; Wardle, 2020), a lack of impulse control and failure to consider future consequences (Mate, 2018). These behaviours have been linked to evidence which suggests that the brain is not fully developed until age 19 (Cauffman & Steinberg, 2000). Furthermore, the findings suggest those 'emerging adults' beginning university at 18 may represent a particularly vulnerable subgroup within the group, due to increased financial and social independence co-occurring with reaching the legal age for gambling. These findings support research which suggests that, for some university students, both gaming and gambling can be seen as relief from social isolation and recovery from financial insecurity (YGAM, 2019). These findings carry implications for practitioners and universities working with these groups and support recent suggestions that further research should be conducted with the 'emerging

adult' group, particularly since they are the first cohort to experience the new landscape brought in by the Gambling Act (2005) (Wardle & Zendle, 2021).

*5.*4 Online Gaming and Gambling Environments

The findings highlight particular features of the online gaming and gambling environments which could increase risks of GGRHs for CYP, including high levels of accessibility, cashless forms of payment, aesthetic features and the proximity of gaming and gambling environments. These findings support previous research which highlights structural characteristics of gambling environments which may encourage play which continues to the point of harm (Parke & Griffiths, 2007). Furthermore, the findings highlight specific features of loot box design which could increase risks of GGRHs for CYP, including loot boxes which confer competitive advantages in a socially-connected gaming environment, and loot boxes with a lack of transparency over the value of prizes and odds of winning them. These findings support previous research by King & Delfabbro (2019) who suggest that harmful levels of overspending may result from loot boxes with competitive advantages, and from purchasing systems which disguise the true cost of the activity until players have already made substantial financial and psychological investments.

The findings also suggest that the data handling strategies used to target specific gamblers and maintain their engagement, raised above in 2.2.3, are being similarly employed in relation to some loot boxes where odds of winning prizes are automatically adjusted to encourage continued spending. These findings are supported by research by Ballou et al., (2020). In order to reduce the risk of this kind of harm, Cemiloglu et al. (2020) have suggested ethical requirements should be embedded into the design of addictive technology, including an environment that supports informed choice, the monitoring of player data to identify risk factors, and the introduction of measures to tackle problematic online behaviour. It is likely that these

design principles would have reduced the harm experienced by one participant in this study, for whom the lack of informed choice was raised as a factor which led to overspending. The study findings would therefore support the ethical design principles set out by Cemiloglu et al. (2020), which would prevent the deliberate targeting of high spending players to encourage them to spend more. This approach would satisfy the need to balance the competing interests of consumers and commercial actors (Derrington et al., 2021, p. 304) so that children's welfare can be protected whilst not unduly restricting the freedom of adults to make informed choices about their participation in gambling-like activities. These findings may be valuable for policy-makers and regulators seeking to protect CYP from GGRHs.

5.5 Social environments

5.5.1 Parents and families

The findings suggest that parents can play an important role in a whole-systems PH approach, by taking greater responsibility over their children's engagement in video games and digital health. Parents can be assisted in this by improving the games classification information in relation to gambling-like content within video games. As discussed in 2.4.5, the PEGI (2021) age recommendations do not take account of gambling-like content such as loot boxes which may be misleading parents about the psychological risks involved. The findings would therefore support claims that age classifications for video games are updated to take account of gambling-like content, highlighting these to parents more clearly (House of Lords, 2020, para. 86). Derrington et al. (2021, p.321) argue that these measures are important to ensure parents can make informed choices, particularly given "the generational gaps in the knowledge and education about online gaming and the monetization systems used within". However, it should also be recognised that the findings indicate that some parents do not observe age-restrictions

on video games, which is supported by research findings (Valentine, 2018), so this measure will not protect all CYP and should be accompanied by other measures. Also, evidence from other fields of PH education suggests that it can be difficult to engage parents, particularly of vulnerable children, in conversations about gambling. (Gambling Commission, 2020b). If the same is true of video games, this may represent a challenging aspect of a PH approach to GGRHs and further research may be required to understand this more effectively.

5.5.2 Schools

The findings suggest that schools can assist families and communities in addressing these issues by addressing them through the PSHE curriculum and participating in national campaigns, which can create a 'ripple effect' and open up conversations in families and communities. Evidence from the PH approaches to gambling-related harms suggest that it is more effective to promote educational approaches which develop CYP's generic skills for responding to risky situations as part of PSHE, rather than topic-specific interventions which can be difficult to embed (Gambling Commission, 2017a). However, it has been suggested that the non-statutory status of PSHE has led to it being undervalued and not properly addressed by schools (Pugh & Hughes, 2021) which raises questions over the effectiveness of this approach. This also highlights that schools are influenced by national government policies, which further emphasises the need for a whole-systems or ecological approach.

*5.*6 Video Games in Psychosocial Development

The findings offer insights into the role of video games in psychosocial development for CYP, including themes of identity, community and agency. The testimony of lived experience participants suggests that CYP of this age are looking to establish their identity within a community where they feel valued and empowered; they have a need for a 'place' in the world.

In the modern world this personal development takes place within an ‘enveloping’ digital culture in which “there is no longer any such thing as a personal or collective identity that isn’t touched on or mediated in some way by the information systems surrounding us” (Chatfield & Nixon, 2021, p. 8). Video games are now integrated with social media platforms such as TikTok and Snapchat which include augmented reality tools “to conduct a never-ending experiment in reimagining the self”, a socially-interactive performance of identity (Follows 2021, p. 74). Writing about selfie culture for adolescents, eighteen-year-old Taylor Fang suggests that “They aren’t just pictures; they represent our ideas of self” (Fang, 2019, para 3). Maté (2018, chap. 30) argues that “addiction is primarily about the self...the unconscious insecure self” and addictive behaviour becomes inextricably linked to identity. The lived experience participants within this study suggest that, where identity and community becomes connected with addictive behaviour, there is a risk of deepening cycles of harm, particularly where the need for social connection is fulfilled solely through online communities.

There was a consensus between all lived experience participants that gambling or gaming can lead to negative cycles of escapism which can be harmful to psychosocial development. It has also been argued that video games can play a valuable role in psychosocial development and positive mental health (McGonigal, 2016). McGonigal distinguishes negative video game experiences as those where there is a lack of connection between the gameplay experience and the gamer’s lived reality, such that the video game becomes a form of escapism rather than a way of gaining self-efficacy (Ward, 2019). She suggests that competitive video games with anonymous strangers are more likely to lead to frustration and negative experiences since they lack any “social fabric” around which the gameplay experience is couched (O’Shaughnessy, 2019). Online gaming and gambling experiences are more likely to lack ‘social fabric’ than in-person gambling experiences and therefore potentially carry greater risks in terms

of psychosocial development. On the other hand, research suggests that it is possible to develop supportive social relationships after meeting strangers in competitive online gaming environments (Freeman et al., 2017; Scholtes et al. 2016).

Puiras et al. (2019) have distinguished between positive and negative forms of escapism in gamblers, gamers, and individuals who both gamble and game. They found that both positive and negative escapism measures were significantly greater in gamers than in gamblers and suggest that differences in motivation for game play may help in understanding the distinction between gamblers and online video gamers. Therefore, existing theories on motivations for play in online games (Yee, 2007) may be useful in understanding risks of GGRHs for CYP. Close & Lloyd (2021) suggest that there is almost no academic literature about the motivations for loot box purchasing, in contrast with gambling research which indicates that gambling is driven by multiple overlapping motivations. These findings have implications for practitioners, parents and other organisations looking to support the emotional and social development of CYP, including practical recommendations for how to generate online environments which can nourish positive experiences of identity, community and agency.

5.7 Regulatory frameworks

The findings suggest that the awareness of risks of GGRHs can be increased by a more robust regulatory framework, in terms of both advertising and game design, adding weight to the argument that existing gambling regulations in the UK are insufficient for digital environments, raised above in 2.2.3. These findings support Smith & Nairn's (2019) suggestion that regulators need to be tougher on addressing the advertising of esports gambling products towards CYP which generates a public perception that gambling is safe for this age group. In relation to the regulation of loot boxes, Derrington et al. (2021) review a range of international approaches,

including those which seek to classify loot boxes as a form of gambling and thereby regulate through existing gambling regulations, and those which take a ‘consumer protection’ approach. Based on this review, Derrington et al. (2021) recommend that a consumer protection approach with graded risks of GGRHs is likely to be more effective because it is flexible enough to apply to all microtransactions, irrespective of whether they meet the legal or psychological definition of gambling, including microtransactions which may be developed in the future. Also, whilst efforts to classify loot boxes as a form of gambling have been unsuccessful to date, governments can incentivize video games developers to adopt consumer protection measures by offering financial benefits such as funding or tax relief (Xiao & Henderson, 2019). Close & Lloyd (2021, p. 4) agree that, since any regulatory action focused solely on upon loot boxes is likely to be soon out-dated, it is better to focus on a wider category of “psychological nudges” by increasing provision for consumer protection, child-focused data protection policies, and educational strategies which mitigate against these harms. These findings may be valuable in evaluating the upcoming review of the Gambling Act (2005) which is currently in development following a consultation (Wardle, 2020).

5.8 Media

The findings suggest that there is a need to raise awareness of GGRHs directly to CYP through social media channels, just as television media carries public health messaging about the risks of gambling-related harms, such as ‘when the fun stops, stop’, and treatment services available such as Gambler’s Anonymous. Recent research suggests that the majority of internet use by CYP is on platforms such as Youtube, TikTok and Snapchat (Ofcom, 2021a). This carries implications for a PH strategy and the channels of communication which are more likely to reach CYP. For example, Belani (2021) suggests that public health approaches need to use social

media and other digital channels to reach CYP in a timely and responsive manner. Halsall et al. (2018, p. 6) suggest that social media is an important tool for engaging CYP in PH issues and conducting research on this “represents a novel context that spans the micro-system through to the macro-system-level”.

Also, the findings suggest that advertising for gambling products is being targeted at CYP, supporting evidence raised above in 2.3.2 that advertising standards are not being met in some parts of the media (Smith & Nairn, 2019). Research has found that 94% of young people aged 11-24 have seen gambling adverts recently and that this is associated with future gambling engagement (MacGregor et al., 2020). It has been suggested that children often do not fully understand the nature of online marketing which targets them (Ofcom, 2021a). Further research is required to understand how to regulate social media channels more effectively and use them to raise awareness as part of a PH approach to reducing GGRHs.

5.9 Perspectives on Addictive Behaviours

The findings suggest that gambling-related harms and gaming-related harms share similar patterns of behaviour. These include negative cycles of escapism, deceit, denial and manipulation, as well as ongoing recovery processes with the support of peer mentoring and families. However, despite these similarities of experience, the findings raised a tension between two different perspectives upon the nature of addictive behaviours. The first perspective represented GGRHs as resulting from the disease of an individual which makes them particularly susceptible. The second perspective represented GGRHs as resulting from online environments which lack sufficient protection for CYP. The first perspective locates the cause of the problem within the individual, whilst the second perspective locates the cause of the problem within regulatory and socio-cultural contexts. This is important because these two

different perspectives on the causes of addictive behaviour imply different health solutions. The first ‘disease’ perspective implies that an individual needs treatment whereas the second ‘environment’ perspective implies that the environment needs to be adjusted.

The data suggests a possible pattern around these different perspectives. Whilst some participants expressed both perspectives, there was a pattern whereby participants who had experienced gambling-related harms expressed the ‘disease’ perspective whilst the participant who had experienced gaming-related harms expressed the ‘environment’ perspective. It is acknowledged that this pattern is based on very low numbers and does not justify any claims about the existence of this pattern more generally. However, a possible explanation for this pattern in the focus groups may be suggested which raises interesting questions. The participants who had experienced gambling-related harm had all been through the 12-step recovery process provided by Gamblers Anonymous (GA), therefore their shared ‘disease’ perspective may have been due to their common experiences of recovery. The one participant who had not been through the GA process held the ‘environment’ perspective. This is only a speculative explanation since the details of the 12-step approach were not captured in the data.

Nevertheless, this highlights how the underlying perspective on addiction which informs a PH approach to addressing GGRHs may influence the measures taken. For example, governments and operators in different jurisdictions around the world have implemented Responsible Gambling (RG) public health programmes in order to reduce gambling-related harms (Ladouceur et al., 2016). RG programmes have received criticism as the “medicalisation” of problem gambling since they focus on detection and treatment strategies, as opposed to prevention strategies that would limit the marketing and accessibility of gambling opportunities, thereby placing responsibility on the ‘sick’ individual to take preventative measures or seek treatment (Mass & Nower, 2020). It could therefore be argued that the ‘disease’ perspective on

addiction is less likely to lead to a preventative PH strategy than the ‘environment’ perspective. On the other hand, our findings indicate the ‘disease’ perspective held by some participants was important in reducing their shame and explaining their behaviour to their family, as part of their ongoing recovery.

Satel & Lilienfeld (2014) argue that there is a need for multiple perspectives to effectively understand and treat addiction, including both the ‘disease’ and ‘environment’ perspectives represented in the findings. The integration of multiple perspectives could also be described as an ‘ecological’ perspective which views addiction as a “changeable and evolving dynamic that expresses a lifelong interaction with a person’s social and emotional surroundings, and with his own internal psychological space” (Maté 2018, Chap. 30). The ecological perspective therefore recognises the interplay between an individual and their environment in the creation of new internal and external resources which can support more healthy ways of satisfying their genuine needs (Maté 2018, Chap. 30). An ecological perspective also recognises interdependent relationships between the different systemic layers of influence, which the bioecological model understands as the ‘mesosystem’ (Bronfenbrenner, 2005). For example, in determining whether to include gaming disorder in ICD-11, the WHO (2018) recognised that that studies suggest only a small proportion of gamers will be affected by the disorder. Nevertheless, part of the rationale for its inclusion was to raise the awareness of both game players and health professionals “to the risks of development of this disorder and, accordingly, to relevant prevention and treatment measures” (WHO 2018, para. 4) and some researchers suggest it is likely to encourage greater social responsibility measures, either enforced by governments or developed from within the gaming industry (Billieux, 2021). The soundness of this rationale was supported by one of the psychiatrist research participants who suggested that the existence of an identifiable psychiatric condition generated an expectation that practitioners should understand how to respond to the

condition. This demonstrates how diagnostic frameworks, which could be regarded as a ‘medicalisation’ of addiction, are embedded within broader socio-cultural systems which influence the lived experiences of CYP, parents and practitioners. This highlights the importance of an ecological perspective which is able to accommodate a range of approaches and recognise the complex interactions of a multi-layered system.

6. Recommendations, Limitations and Conclusions

6.1 Recommendations

The findings support the development of a whole-systems PH approach to addressing risks of GGRHs for CYP which may include a range of measures including:

- Raising awareness of GGRHs among practitioners and HSC services through training and education which includes the voices of CYP, practitioners working with CYP who have experienced GGRHs and those with lived experience of GGRHs.
- Raising awareness among practitioners, families and teachers of specific groups of CYP who may be particularly vulnerable to GGRHs, including those with SENs such as ASD and ADHD-type symptoms.
- Developing support systems for those experiencing GGRHs to include familiar role models, experts with experience of GGRHs and peer mentoring.
- Exploring how digital technology can be used in healthcare systems to enable more effective signposting towards support for those at risk of GGRHs.
- Raising awareness of the risks of GGRHs through relevant social media channels which are likely to reach target audiences of CYP.
- Engaging schools to raise awareness of the risks of GGRHs within the PSHE curriculum as well as extra-curricular initiatives.
- Creating opportunities for CYP to make connections between online gaming communities and in-person socialisation.
- Updating age classification of video games to account for gambling-like content within video games, such as paid loot boxes which deliver competitive advantages.
- Promoting a consumer protection model of self-regulation to highlight examples of good practice in supporting customers to make informed decisions.

- Developing ethical design requirements for video games developers to identify and protect vulnerable groups and individuals.
- Monitoring the advertising of gambling-like products towards CYP more effectively so that current regulations are observed.

6.2 Limitations

There are a number of limitations to this study. Firstly, as noted in 3.2, there are disadvantages of the online focus group method in terms of recording the participants' interactions and controlling the research environment. For instance, in FG2 one participant talked to his son during the mid-session comfort break about the issues raised in the first half, and this influenced the discussion in the second half. This interaction may have taken place in other focus groups without the researchers' knowledge. Secondly, in considering CYP of ages 7-25, this study aims to address a wide range of developmental stages, each of which may be associated with different social contexts including primary schooling, secondary schooling, university and workplace environments. Children would be expected to have lesser capacities for self-regulation than those in their twenties, and yet children are typically guided by their parents in how they spend their free time and in their purchasing decisions. Whilst there has been an attempt to separate out different categories of CYP who may be vulnerable to harm, in addressing a broad range of ages the findings may have become less focused. Thirdly, whilst efforts were made to recruit a broad range of participants, there were some groups who were under-represented. In the practitioner focus groups there was a lack of representation from locally-based communities health services and social care services which the findings suggest could play an important role in addressing GGRHs. In the lived experience focus groups there was only one participant with experience of gaming-related harm and no participants with

experiences of both gaming and gambling related harm. This was partly reflective of challenges in recruiting lived experience participants who can be difficult to reach due to the sensitive nature of harm. This may also reflect the fact that gambling-like content in video games is still relatively new and those who are experiencing harm may not be at the stage where they have entered recovery. Fourthly, due to ethical considerations it is difficult to conduct research with CYP who are currently experiencing harm or who are at risk of harm. Adult participants are more likely to be able to confirm that they have come through recovery than CYP which reduces potential ethical concerns. Therefore, the lived experience participants are reflective of a specific group of those who have already accessed HSC services and entered a process of recovery. As indicated above, this may influence their perspectives and the findings may fail to capture the perspective of those at risk who have not accessed HSC services. Fifthly, since the research focus was on harm, there has been limited scope to acknowledge the positive influence which video games bring to the lives of CYP, including video games which are designed to support the mental health of CYP.

6.3 Further research

The findings of this study suggest that there is a need for further research into the impact of video game design upon specific vulnerable groups of CYP and into the PH approaches which can improve support for these groups.

6.*3.1* *Video Game Design*

It has been recognised that video games contain a highly diverse set of design mechanics which impact upon the risks of GGRHs (House of Lords, 2020, para. 5). For example, Zendle has demonstrated that within the microtransaction category of loot boxes there are at least seven different characteristics which may affect the degree to which the loot box is associated

with GGRHs (Zendle et al., 2020). McGonagal suggests that a distinction should be drawn between those games which are designed to develop self-efficacy and realise something meaningful, and those which involve manipulation towards excessive play and overspending (Ward, 2019). This could be supported by further research into ethical design principles for video games such as those offered by Cemiloglu et al. (2020) in relation to gambling. Carter et al. (2020) note that generalised 'game addiction' discourses perpetuated in the media may present challenges to CYP whose interests and identities revolve around video games and therefore be restrictive of their right to play. By focusing on specific mechanics, it may be possible to generate nuanced legislative and policy approaches and avoid a general demonisation of video games, which bring many positive aspects to the lives of CYP.

6.*3.2* *Vulnerable Groups of CYP*

The findings support existing research which suggests that specific groups of CYP may be more vulnerable to GGRHs and this could therefore be a good focus for further research. Within the group of emerging adults, the findings highlight a specific subgroup of CYP where further research may be valuable, those who have recently turned 18 and left home to go to university. It may be that research which focuses on specific groups and specific game mechanics may lead to more useful insights. For example, Sanderson et al (2020) looked at a specific group of CYP, student-athletes in American universities who play Fortnite, to understand the social dynamics of this particular group, the way they are marketed towards and why they choose a particular game for a shared world. This kind of research can help to develop an understanding of the motivations of specific groups of gamers which is currently lacking in relation to the gaming-gambling convergence (Close & Lloyd, 2021).

6.*3.3* *Preventative PH approaches*

The findings support suggestions that preventative PH approaches to gaming-related harms are in their infancy (Park et al., 2019). In light of the convergence between gaming and gambling-related harms, future research might draw upon the insights from the PH approach to gambling-related harms such as the NSRGH, whilst also taking account of the specific context of CYP. For example, the findings support the need for capturing the voice of CYP and lived experience participants in future research and PH strategy. These participants are sometimes described as 'experts by experience' and have been defined as "people who have recent personal experience (within the last five years) of using or caring for someone who uses health, mental health and/or social care services that we regulate." (Care Quality Commission, 2021). Further research is needed to understand how to develop experts by experience and peer mentoring programmes for CYP at risk of GGRHs.

Preventative approaches may also need to consider which groups are being strategically targeted. Canale et al. (2016) compare two different approaches in the prevention field; high risk strategies, which aim to reduce harms experienced by a smaller group of high risk individuals, and population strategies, which aim to reduce general harm in a population. They cite a previous Finnish population study (Raisamo et al., 2014) which reported that "most gambling-related harms were among the majority of low-risk gamblers, even though the individual risk of harm was highest among problem gamblers" (Canale et al., 2016:2). This study suggests that a public health strategy which aims to raise awareness of GGRHs among low risk groups may be expedient. Further research is required into population strategies for GGRHs.

6.4 Conclusions

It is estimated that the wider health and social costs to the UK of PG are between £260m and £1.16bn per year (Thorley & Stirling et al., 2016) and it has been argued that the broader

impacts of gambling-related harm are much wider (Langham 2016, Wardle et al., 2018). The introduction of gambling-like content into video games is associated with emergent gambling-like behaviours among CYP and this raises concerns about the potential impacts of GGRHs (Wardle, 2020). The study findings suggest that there is a consensus among practitioners and participants with lived experience of harm that there is a need to raise awareness, improve access to treatments and support, and develop a preventative whole-systems PH approach to this emerging problem. Participants were particularly motivated by the need to ensure the safeguarding of vulnerable CYP from novel forms of hidden harm. These findings are valuable because they may help practitioners and parents to identify groups of CYP who may be particularly vulnerable to GGRHs and particular forms of game design which are associated with greater risks of harm.

The focus group discussions highlighted the range of services which can support CYP who may be at risk of GGRHs at different stages in their experiences of harm. These include GP services which are regarded as the 'front door' of the HSC provision, psychiatric services which provide treatment to those experiencing mental health issues, locally-based support services providing care within community settings, and third sector charitable organisations offering advice for those with acute needs through national helplines. Each of these services represented different perspectives on GGRHs through the treatment they are able to offer. It is suggested that Ecological Systems Theory (Bronfenbrenner, 1979) can provide a foundation for a preventative PH approach by integrating these different perspectives and developing an understanding of the interconnections between different parts of the whole HSC system. In doing so this can further an 'ecological' perspective upon addictive behaviour.

Furthermore, models of human development arising out of Ecological Systems Theory such as the bioecological model (Johnson & Puplampu, 2008; Bronfenbrenner, 2005) may

assist researchers in understanding broader systems within which HSC services operate. The research findings suggest that a wide range of systems influence the risks of GGRHs for CYP, including educational settings, family and community settings, regulatory frameworks, government policy and online media environments. In order to develop an effective PH response to the emerging problem of GGRHs, further research is required to more fully understand the interrelationship between HSC services, the digitally-mediated lives of CYP, and the rapidly evolving affordances of integrated online environments.

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8. Appendix

1. Participant Information Sheet A (Lived Experience)
2. Participant Information Sheet B (Practitioners)
3. Debrief Information Form
4. Lived Experience Participant Agreement Form
5. Lived Experience Focus Group Research Instrument
6. Practitioner Focus Group Research Instrument

Participant Information Sheet A

The title of the research project

Supporting practitioners' understanding of gaming and gambling in children and young people

Invitation to take part

You are being invited to take part in a research project. Before you decide if you wish to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Who is organising/funding the research?

This project is a collaboration between a charity, Young Gamers & Gamblers Education Trust (YGAM), a gambling support service Betknowmore UK, Bournemouth University, and an independent non-profit organisation promoting safer gambling, the Responsible Gambling Council. The project is being funded by industry, an online gambling gaming software supplier, Playtech.

What is the purpose of the project?

The purpose of the project is to find out how we can best support practitioners in supporting children and young people at risk of gaming and gambling-related harms. In order to do this we are conducting research through focus groups with healthcare practitioners as well as with people with lived experiences of gaming and/or gambling difficulties. This research forms part of a larger project to develop workshop materials to support the education and training of healthcare practitioners who work with children and young people who may be experiencing gaming and gambling-related harms. Our goal is to improve the support for you children and young people who may be facing these harms.

We have a masters project student on the team, Kevin Davidson who will be leading the focus groups alongside the lead researcher Dr Sarah Hodge. The duration of the research relating specially to the focus groups is one year.

Why have I been chosen?

You have been chosen as you have had previous lived experiences of gaming and/or gambling related difficulties. We are interested in hearing your thoughts and views on the current awareness and support of gaming and gambling for individuals as well as children and young people.

We are looking to recruit 8-16 participants who are over 18 years old with lived experiences of gaming and/or gambling. We are only looking for those participants who have come through the gaming and/or gambling related difficulties and do not currently have any on-going issues related to gaming and/or gambling. We are looking for participants who are at a point where they are able to discuss the topic, without it being a sensitive or difficult topic.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a participant agreement form. We want you to understand what participation involves, before you make a decision on whether to participate.

If you or any family member have an on-going relationship with BU or the research team, e.g. as a member of staff, as student or other service user, your decision on whether to take part (or continue to take part) will not affect this relationship in any way.

Can I change my mind about taking part?

Yes, you can stop participating in study activities at any time and without giving a reason.

If I change my mind, what happens to my information?

After you decide to withdraw from the study, we will not collect any further information from or about you.

As regards information we have already collected before this point, your rights to access, change or move that information are limited. This is because we need to manage your information in specific ways in order for the research to be reliable and accurate. Further explanation about this is in the Personal Information section below.

If I decide to take part, what will my involvement be?

Taking part in this study will involve filling in a short online survey followed by attending one focus group. We are aiming for the focus groups to be 90 minutes in duration and we ask that you set aside two hours in case more time is needed. Please note all activities related to the research will be carried out online through platforms such as Zoom, Skype, or Microsoft teams. If you decide to take part in the study more information will be communicated to you regarding the platform which will be used. We will be using Microsoft Forms to send and receive your Participant Agreement Form which you need to complete to take part.

As a thank you for contributing your time we are offering a voucher of £25 for taking part, this does not affect your right to withdraw from the study at any point. Upon joining the focus group,

we will ask you to send a private message to the researcher with an email address you would like the voucher to be sent to. We aim to email the voucher as soon as possible and once it is sent the email address will be deleted.

What are the advantages and possible disadvantages or risks of taking part?

Whilst there are no immediate benefits to you participating in the project, it is hoped that this work will help support our understanding of the experiences of support for gaming and gambling. The advantages to taking part in the study is that you would get the opportunity to share experiences relating to the services and support available for gaming and/or gambling related harm; as well as make suggestions for improving the current services and experiences.

Whilst we do not anticipate any risks to you in taking part in this study, you may want to consider the possible disadvantages and risks to taking part in the research. The topic of discussions will be highlighting gaming and gambling related difficulties. Particularly for those that may have lived experiences of gaming and/or gambling related harm please consider if this is the right research study for you. Further information for support around these topics can be found at the end of this information sheet.

What type of information will be sought from me and why is the collection of this information relevant for achieving the research project's objectives?

We will be asking questions regarding your experiences of different services to support gaming and gambling as well as in the context of children and young people. We will also ask you some questions about you (i.e., age and gender) to help us understand the sample who took part in the research. This information will be requested through an anonymous survey link before the focus group but after the participant agreement form is signed. You may be asked questions around your experiences of the health care system and support.

Will I be recorded, and how will the recorded media be used?

The focus groups will be recorded. The audio recordings of your activities made during this research will be used only for analysis and the transcription of the recording(s) for illustration in conference presentations and lectures, as well as supporting the creation of the educational workshop materials. We may also use third-party transcription services to support transferring the data from in audio form to written form (https://www.rev.com/ or https://otter.ai/). No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings. Please note in the cases where interviews are requested, they will follow the same procedure as mentioned above in this paragraph.

How will my information be managed?

Bournemouth University (BU) is the organisation with overall responsibility for this study and the Data Controller of your personal information, which means that we are responsible for looking after your information and using it appropriately. Research is a task that we perform in the public interest, as part of our core function as a university.

Undertaking this research study involves collecting and/or generating information about you. We manage research data strictly in accordance with:

- Ethical requirements; and
- Current data protection laws. These control use of information about identifiable individuals, but do not apply to anonymous research data: "anonymous" means that we have either removed or not collected any pieces of data or links to other data which identify a specific person as the subject or source of a research result.

BU's Research Participant Privacy Notice sets out more information about how we fulfil our responsibilities as a data controller and about your rights as an individual under the data protection legislation. We ask you to read this Notice so that you can fully understand the basis on which we will process your personal information.

Research data will be used only for the purposes of the study or related uses identified in the Privacy Notice or this Information Sheet. To safeguard your rights in relation to your personal information, we will use the minimum personally-identifiable information possible and control access to that data as described below.

Publication
You will not be able to be identified in any external reports or publications about the research without your specific consent. Otherwise, your information will only be included in these materials in an anonymous form, i.e. you will not be identifiable.

Research results will be published in a psychology journal or conference proceedings in 2021.

Security and access controls
BU will hold the information we collect about you in hard copy in a secure location and on a BU password protected secure network where held electronically.

Personal information which has not been anonymised will be accessed and used only by appropriate, authorised individuals and when this is necessary for the purposes of the research or another purpose identified in the Privacy Notice. This may include giving access to BU staff or others responsible for monitoring and/or audit of the study, who need to ensure that the research is complying with applicable regulations.

Data from the focus groups will be made anonymous at the earliest opportunity. Once you have agreed to take part, you'll be sent a pseudonym (fake name) or a participant number to take part in the research. This means your data can be made anonymous sooner. Any questions about

you such as age and gender will be asked through an anonymous survey before the focus group.

Sharing your personal information with third parties
As well as BU staff and the BU student working on the research project, we may also need to share personal information in an anonymised for with our external collaborator on the project Dr Ali Lutte-Elliott who works for YGAM and is part of the clinical lead in the project to support analysis and reporting of the results.

Further use of your information
The information collected about you may be used in an anonymous form to support other research projects in the future and access to it in this form will not be restricted. It will not be possible for you to be identified from this data. To enable this use, anonymised data will be added to BU's online Research Data Repository: this is a central location where data is stored, which is accessible to the public: BORDaR – www.bordar.bournemouth.ac.uk.

Keeping your information if you withdraw from the study
If you withdraw from active participation in the study we will keep information which we have already collected from or about you, if this has on-going relevance or value to the study. This may include your personal identifiable information. As explained above, your legal rights to access, change, delete or move this information are limited as we need to manage your information in specific ways in order for the research to be reliable and accurate. However if you have concerns about how this will affect you personally, you can raise these with the research team when you withdraw from the study.

You can find out more about your rights in relation to your data and how to raise queries or complaints in our Privacy Notice.

Retention of research data

Project governance documentation, including copies of signed **participant agreements**: we keep this documentation for a long period after completion of the research, so that we have records of how we conducted the research and who took part. The only personal information in this documentation will be your name and signature, and we will not be able to link this to any anonymised research results.

Research results:
As described above, during the course of the study we will anonymise the information we have collected about you as an individual. This means that we will not hold your personal information in identifiable form after we have completed the research activities.

You can find more specific information about retention periods for personal information in our Privacy Notice.

We keep anonymised research data indefinitely, so that it can be used for other research as described above.

Contact for further information

If you have any questions or would like further information, please contact
Kevin Davidson s5327548@bournemouth.ac.uk
Lead researcher Dr Sarah Hodge shodge@bournemouth.ac.uk

In case of complaints
Any concerns about the study should be directed to Professor Tiantian Zhang the Deputy Dean Research and Professional Practice, Faculty of Science and Technology, Bournemouth University by email to researchgovernance@bournemouth.ac.uk.

Finally

If you decide to take part, you will be given a copy of the information sheet and a signed participant agreement form to keep.

Thank you for considering taking part in this research project.

Resources and places for support
YGAM – Young Gamers and Gamblers Education Trust:
https://www.ygam.org/
Support for parents and practitioners for children's and young people gaming and gambling
Support for gambling:
Betknowmore - https://www.betknowmoreuk.org/
GamCare - https://www.gamcare.org.uk/
Gamble Aware - https://about.gambleaware.org/ and 24/7 support phone: **0808 8020 133.**
Support for gaming:
The Cybersmile foundation - https://www.cybersmile.org/
General support:
Samaritans - https://www.samaritans.org/
Service available 24/7 365 days a year, to talk to someone
Phone: **116 123** or email jo@samaritans.org
App: https://www.samaritans.org/how-we-can-help/contact-samaritan/self-help/
Mind - https://www.mind.org.uk/
A service for resources and sign-posting further support

Research Note:

Upon sending out the participant information form one participant suggested a change to the wording of the document. They suggested that ‘participants who are recovering from gambling harm’ would be more reflective of the ongoing process of recovery, rather than ‘participants who have recovered’ from gambling-related harm. This insight was welcomed by the researchers who updated the form for future use.

Participant Information Sheet B

The title of the research project

Supporting practitioners' understanding of gaming and gambling in children and young people.

Invitation to take part

You are being invited to take part in a research project. Before you decide if you wish to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Who is organising/funding the research?

This project is a collaboration between a charity; Young Gamers & Gamblers Education Trust (YGAM), a gambling support service; Betknowmore UK, Bournemouth University, and an independent non-profit organisation promoting safer gambling; the Responsible Gambling Council. The project is being funded by industry, an online gambling gaming software supplier, Playtech.

What is the purpose of the project?

The purpose of the project is to find out how we can best support practitioners in supporting children and young people at risk of gaming and gambling-related harms. In order to do this we are conducting research through focus groups with healthcare practitioners as well as with people with lived experiences of gaming and/or gambling difficulties. This research forms part of a larger project to develop workshop materials to support the education and training of healthcare practitioners who work with children and young people who may be experiencing gaming and gambling-related harms. Our goal is to improve the support for you children and young people who may be facing these harms.

We have a masters project student on the team, Kevin Davidson who will be leading the focus groups alongside the lead researcher Dr Sarah Hodge. The duration of the research relating specially to the focus groups is one year.

Why have I been chosen?

You have been chosen as you are a practitioner working in a health, education or local authority service. We are interested in hearing your thoughts and views on the current awareness and support of gaming and gambling for individuals as well as children and young people.

We are looking to recruit 8-16 participants who are over 18 years old and work as practitioners with children and young people (between the ages of 8-25) as well as practitioners from adult services. We are interested in hearing views from a broad range of practitioner job roles within local authorities, NHS services, and educational services who work in the UK.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a participant agreement form. We want you to understand what participation involves, before you make a decision on whether to participate.

If you or any family member have an on-going relationship with BU or the research team, e.g. as a member of staff, as student or other service user, your decision on whether to take part (or continue to take part) will not affect this relationship in any way.

Can I change my mind about taking part?

Yes, you can stop participating in study activities at any time and without giving a reason.

If I change my mind, what happens to my information?

After you decide to withdraw from the study, we will not collect any further information from or about you.

As regards information we have already collected before this point, your rights to access, change or move that information are limited. This is because we need to manage your information in specific ways in order for the research to be reliable and accurate. Further explanation about this is in the Personal Information section below.

If I decide to take part, what will my involvement be?

Taking part in this study will involve filling in a short online survey followed by attending one focus group. We are aiming for the focus groups to be 90 minutes in duration and we ask that you set aside two hours in case more time is needed. Please note all activities related to the research will be carried out online through platforms such as Zoom, Skype, or Microsoft teams. If you decide to take part in the study more information will be communicated to you regarding the platform which will be used. We will be using Microsoft Forms to send and receive your Participant Agreement Form which you need to complete to take part.

As a thank you for contributing your time we are offering a voucher of £25 for taking part, this does not affect your right to withdraw from the study at any point. Upon joining the focus group, we will ask you to send a private message to the researcher with an email address you would

like the voucher to be sent to. We aim to email the voucher as soon as possible and once it is sent the email address will be deleted.

What are the advantages and possible disadvantages or risks of taking part?

Whilst there are no immediate benefits to you participating in the project, it is hoped that this work will help support our understanding of the experiences of support for gaming and gambling. The advantages to taking part in the study is that you would get the opportunity to share experiences relating to the services and support available for gaming and/or gambling related harm; as well as make suggestions for improving the current services and experiences. We hope that this research would bring benefits to practice through providing a context to aid in the development of training materials with regards to supporting young people and children with gaming and gambling. Particularly, understanding the current landscape and how to encourage good practice.

Whilst we do not anticipate any risks to you in taking part in this study, you may want to consider the possible disadvantages and risks to taking part in the research. The topic of discussions will be highlighting gaming and gambling related difficulties. Particularly, for those that may have lived experiences of gaming and/or gambling related harm please consider if this is the right research study for you. Further information for support around these topics can be found at the end of this information sheet.

What type of information will be sought from me and why is the collection of this information relevant for achieving the research project's objectives?

We will be asking questions regarding your experiences of different services to support gaming and gambling as well as in the context of children and young people. We will also ask you some questions about you (i.e., age and gender) to help us understand the sample who took part in the research. This information will be requested through an anonymous survey link before the focus group but after the participant agreement form is signed. You will also be asked questions about your role.

Will I be recorded, and how will the recorded media be used?

The focus groups will be recorded. The audio recordings of your activities made during this research will be used only for analysis and the transcription of the recording(s) for illustration in conference presentations and lectures, as well as supporting the creation of the educational workshop materials. We may also use third-party transcription services to support transferring the data from in audio form to written form (https://www.rev.com/ or https://otter.ai/). No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings. Please note in the cases where interviews are requested, they will follow the same procedure as mentioned above in this paragraph.

How will my information be managed?

Bournemouth University (BU) is the organisation with overall responsibility for this study and the Data Controller of your personal information, which means that we are responsible for looking after your information and using it appropriately. Research is a task that we perform in the public interest, as part of our core function as a university.

Undertaking this research study involves collecting and/or generating information about you. We manage research data strictly in accordance with:

- Ethical requirements; and
- Current data protection laws. These control use of information about identifiable individuals, but do not apply to anonymous research data: "anonymous" means that we have either removed or not collected any pieces of data or links to other data which identify a specific person as the subject or source of a research result.

BU's Research Participant Privacy Notice sets out more information about how we fulfil our responsibilities as a data controller and about your rights as an individual under the data protection legislation. We ask you to read this Notice so that you can fully understand the basis on which we will process your personal information.

Research data will be used only for the purposes of the study or related uses identified in the Privacy Notice or this Information Sheet. To safeguard your rights in relation to your personal information, we will use the minimum personally-identifiable information possible and control access to that data as described below.

Publication
You will not be able to be identified in any external reports or publications about the research without your specific consent. Otherwise, your information will only be included in these materials in an anonymous form, i.e. you will not be identifiable.

Research results will be published in a psychology journal or conference proceedings in 2021.

Security and access controls
BU will hold the information we collect about you in hard copy in a secure location and on a BU password protected secure network where held electronically.

Personal information which has not been anonymised will be accessed and used only by appropriate, authorised individuals and when this is necessary for the purposes of the research or another purpose identified in the Privacy Notice. This may include giving access to BU staff or others responsible for monitoring and/or audit of the study, who need to ensure that the research is complying with applicable regulations.

Data from the focus groups will be made anonymous at the earliest opportunity. Once you have agreed to take part, you'll be sent a pseudonym (fake name) or a participant number to take part in the research. This means your data can be made anonymous sooner. Any questions about

you such as age and gender will be asked through an anonymous survey before the focus group.

Sharing your personal information with third parties
As well as BU staff and the BU student working on the research project, we may also need to share personal information in an anonymised for with our external collaborator on the project Dr Ali Lutte-Elliott who works for YGAM and is part of the clinical lead in the project to support analysis and reporting of the results.

Further use of your information
The information collected about you may be used in an anonymous form to support other research projects in the future and access to it in this form will not be restricted. It will not be possible for you to be identified from this data. To enable this use, anonymised data will be added to BU's online Research Data Repository: this is a central location where data is stored, which is accessible to the public: BORDaR – www.bordar.bournemouth.ac.uk

Keeping your information if you withdraw from the study
If you withdraw from active participation in the study we will keep information which we have already collected from or about you, if this has on-going relevance or value to the study. This may include your personal identifiable information. As explained above, your legal rights to access, change, delete or move this information are limited as we need to manage your information in specific ways in order for the research to be reliable and accurate. However if you have concerns about how this will affect you personally, you can raise these with the research team when you withdraw from the study.

You can find out more about your rights in relation to your data and how to raise queries or complaints in our Privacy Notice.

Retention of research data

Project governance documentation, including copies of signed **participant agreements**: we keep this documentation for a long period after completion of the research, so that we have records of how we conducted the research and who took part. The only personal information in this documentation will be your name and signature, and we will not be able to link this to any anonymised research results.

Research results:
As described above, during the course of the study we will anonymise the information we have collected about you as an individual. This means that we will not hold your personal information in identifiable form after we have completed the research activities.

You can find more specific information about retention periods for personal information in our Privacy Notice.

We keep anonymised research data indefinitely, so that it can be used for other research as described above.

Contact for further information

If you have any questions or would like further information, please contact
Kevin Davidson s5327548@bournemouth.ac.uk
Lead researcher Dr Sarah Hodge shodge@bournemouth.ac.uk

In case of complaints
Any concerns about the study should be directed to Professor Tiantian Zhang the Deputy Dean Research and Professional Practice, Faculty of Science and Technology, Bournemouth University by email to researchgovernance@bournemouth.ac.uk.

Finally

If you decide to take part, you will be given a copy of the information sheet and a signed participant agreement form to keep.

Thank you for considering taking part in this research project.

Resources and places for support
YGAM – Young Gamers and Gamblers Education Trust:
https://www.ygam.org/
Support for parents and practitioners for children's and young people gaming and gambling
Support for gambling:
Betknowmore - https://www.betknowmoreuk.org/
GamCare - https://www.gamcare.org.uk/
Gamble Aware - https://about.gambleaware.org/ and 24/7 support phone: **0808 8020 133.**
Support for gaming:
The Cybersmile foundation - https://www.cybersmile.org/

General support:
Samaritans - https://www.samaritans.org/
Service available 24/7 365 days a year, to talk to someone
Phone: **116 123** or email jo@samaritans.org
App: https://www.samaritans.org/how-we-can-help/contact-samaritan/self-help/
Mind - https://www.mind.org.uk/
A service for resources and sign-posting further support

Debrief Information Sheet

The title of the research project

Supporting practitioners' understanding of gaming and gambling in children and young people

Thank you for taking part in our study

You were involved in a focus group or an interview exploring topic of supporting partitioners understanding gaming and gambling with children and young people. We were interested in hearing your thoughts and views on the current awareness and support of gaming and gambling for individuals. You took part as you were either a practitioner working in a health, education or local authority service or you have had previous lived experiences of gaming and/or gambling related difficulties.

If you would like to be informed of the results of this study, please can you email Kevin Davidson s5327548@bournemouth.ac.uk

If you are interested in the topic and would like further reading please below:

How gaming & gambling affect student life:
https://www.ygam.org/wp-content/uploads/2019/09/research_full_report-FINAL-Online-220819.pdf
Yau, M. Y. H., & Potenza, M. N. (2015). Gambling disorder and other behavioral addictions: recognition and treatment. *Harvard review of psychiatry*, *23*(2), 134.

For more information on the wider project please see link below:

https://www.ygam.org/ygam-leads-new-programme-to-train-gps-on-gambling-gaming-addiction-2/

Contact for further information

If you have any questions or would like further information, please contact
Kevin Davidson s5327548@bournemouth.ac.uk
Lead researcher Dr Sarah Hodge shodge@bournemouth.ac.uk

In case of complaints
Any concerns about the study should be directed to Professor Tiantian Zhang the Deputy Dean Research and Professional Practice, Faculty of Science and Technology, Bournemouth University by email to researchgovernance@bournemouth.ac.uk.

Resources and places for support

YGAM – Young Gamers and Gamblers Education Trust: https://www.ygam.org/

Support for parents and practitioners for children's and young people gaming and gambling

Support for gambling:
Betknowmore - https://www.betknowmoreuk.org/
GamCare - https://www.gamcare.org.uk/
Gamble Aware - https://about.gambleaware.org/ and 24/7 support phone: **0808 8020 133.**

Support for gaming:
The Cybersmile foundation - https://www.cybersmile.org/

General support:
Samaritans - https://www.samaritans.org/
Service available 24/7 365 days a year, to talk to someone
Phone: **116 123** or email jo@samaritans.org
App: https://www.samaritans.org/how-we-can-help/contact-samaritan/self-help/

Mind - https://www.mind.org.uk/

Participant Agreement Form

Full title of project: Supporting practitioners' understanding of gaming and gambling in children and young people

Name, position and contact details of researcher: Kevin Davidson, Masters student (MRes)
s5327548@bournemouth.ac.uk

Name, position and contact details of supervisor: Dr Sarah Hodge, Lecturer in Psychology
shodge@bournemouth.ac.uk

To be completed prior to data collection activity

Agreement to participate in the study
You should only agree to participate in the study if you agree with all of the statements in this table and accept that participating will involve the listed activities.

...

* Required

1. I have read and understood the Participant Information Sheet (Ref and version 1) and have been given access to the BU Research Participant Privacy Notice which sets out how we collect and use personal information (https://www1.bournemouth.ac.uk/about/governance/access-information/data-protection-privacy).

   I have had an opportunity to ask questions.

   I understand that my participation is voluntary. I can stop participating in research activities at any time without giving a reason and I am free to decline to answer any particular question(s).

   I understand that taking part in the research will include the following activity/activities as part of the research:
   - being audio recorded during the project
   - my words will be quoted in publications, reports, web pages and other research outputs without using my real name

   I understand that, if I withdraw from the study, I will also be able to withdraw my data from further use in the study except where my data has been anonymised (as I cannot be identified) or it will be harmful to the project to have my data removed.

   I understand that my data may be included in an anonymised form within a dataset to be archived at BU's Online Research Data Repository.

   I understand that my data may be used in an anonymised form by the research team to support other research projects in the future, including future publications, reports or presentations. *

   ◯ Yes, I agree with these statements and I consent to take part in the project on the basis set out above

2. This research to support practitioners is intended to find out the context around gaming and gambling difficulties, from those with lived experience of previous difficulties with gaming and/or gambling.

   As explained in the Participant Information Sheet, Bournemouth University is looking only for participants who have come through their lived experience to the point where they are able to discuss it without it without difficulty or sensitivity and do not have any on-going issues related to gaming and/or gambling.

   I confirm that:

   - I have recovered from, and am no longer experiencing, gaming and/or gambling difficulties;

   - having read the Participant Information Sheet, I have no reason to believe I will experience a relapse by discussing or taking part in the research and consider myself fit to participate in the study; and

   - I will let the researchers know as soon as possible if I start to experience issues while discussing or taking part in the research. I understand I may be asked to withdraw from further participation in that case and acknowledge the support resources noted in the Participant Information Sheet.

   University and researchers not liable to you as a result of your participation

   I agree that neither Bournemouth University nor the researchers are assuming a legal duty of care to me in relation to my participation in the research. I agree that, to the maximum extent the law allows, neither the University nor the researchers will be liable to me for any gaming and/or gambling difficulties I experience as a result of participating in the research. Accordingly, I will not sue, commence, voluntarily aid in any way, prosecute or cause to be commenced or prosecuted against the University or any of the researchers any action, suit or other proceedings arising from my participation in the research. *

   ◯ Yes, I agree with these statements and I consent to take part in the project on the basis set out above

3. Your name: *

Enter your answer

4. Date: *

Please input date (dd/MM/yyyy)

5. Researcher's name: (internal use)

Enter your answer

6. Date: (internal use)

Please input date (dd/MM/yyyy)

Submit

Never give out your password. Report abuse

Lived Experience Focus Group Research Instrument

A) Housekeeping

- Audio/visual tech check
- Code names check

B) Ground rules:

- Reminder that the session is being audio recorded and that these recordings will be passed to a professional third party transcription service on a secure basis. Please speak clearly so other people can hear and their voices are recorded properly. Only one person should speak at the same time (to enable transcribing).
- You can be unmuted all the time unless there's background noise or interruption in which case please mute.
- Privacy: as many people are working from home please try to keep this as private as possible. If someone from your family enters the room you may wish to mute the audio. Please inform the facilitator if you need to address a family matter briefly.
- Remind that what members say in the discussion should remain confidential within the group.
- Remind participants that they can withdraw at any point.
- Please give us your point of view. No right or wrong answers.
- Aiming for 90 mins, plus a comfort break mid-way through.

C) Introduction script:

“Our topic for this focus group today is gaming and gambling for children and young people. I’m going to give you a few definitions first.

When i say gaming, i mean playing video or digital games on consoles, devices or phones.

When i say gambling i mean ‘to stake or risk money, or anything of value, on the outcome of something involving chance’ REPEAT

When I say Children and Young people I mean people between the ages of 7-25.

Purpose of the FG to have a free-flowing discussion around these topics so that we can learn from your experience. I’ll ask some open-ended questions, we’ll see where the discussion goes and from time to time I might bring us back to a new focus.”

D) START Recording

Each participant was invited to state their name and whether their lived experience related to mostl gaming, mostly gambling or a mixture of the two.

<u>Lived experiences of harm</u>

“I’d like to start with an open invitation which I’d like to offer to each of you in turn. This invitation is to share a summary of how this issue came about for you in your life.”

1) How did you find yourself in the position where you had a problem or a challenge? If we hear each of these stories we'll gain a sense of what our backgrounds are. And then from there other things might come up, and we can talk about those.
    a) What was the tipping point when you accepted that this was a problem?
    b) At that point, what did you do?
    c) What was most helpful in allowing you to do this?
    d) Looking back, what would have been more helpful?
    e) Where did you seek help and support?

Experiences of Health and Social Care Services

"We're now going to look more specifically at your experiences of Health and Social Care services"

2) What are your experiences of Health and Social Care Services in relation to your gaming or gambling issue?
    a) Did you seek help and support from a healthcare professional?
    b) If you didn't seek help from health professionals, why not?
    c) Did you see it as a health problem?

3) What are your experiences of other services in relation to your gaming or gambling issue?

4) In your journey of getting better, what are the points where it would have been good to have professional intervention?
    a) What would have helped you reach out sooner?
    b) What were the barriers to reaching out?
    c) Would it have been helpful if gambling and gaming is more openly discussed?
    d) Why would this be helpful?

Identifying gaming and gambling-related harm

"*The next question is about the ways in which Health and Social Care services can more effectively identify those at risk of gaming and gambling-related harm".*

5) What might be the signs if someone was having difficulties with gaming or gambling?
    a) What would you look for?
    b) Are there any special considerations in relation to CYP?

Improving support for those experiencing gaming and gambling-related harm

"The next questions are about the support which is offered to those experiencing or at risk of gaming and gambling-related harm"

6) What can be done to support CYP experiencing gaming and gambling-related harms?
    a) What can be done by Health and Social Care Services?

b) What can be done by other services or organisations?

c) Could you share any other examples of where a more integrated approach has improved healthcare provision for CYP?

7) What is your awareness of the support currently available for gaming and gambling-related harms?

a) Do you think the support available covers the need?

b) How can we help practitioners to provide better support?

c) How can we help services to provide better support?

Practitioner Focus Group Research Instrument

A) Housekeeping

- Audio/visual tech check
- Code names check

B) Restate ground rules:

- Reminder that the session is being audio recorded and that these recordings will be passed to a professional third party transcription service on a secure basis. Please speak clearly so other people can hear and their voices are recorded properly. Only one person should speak at the same time (to enable transcribing).
- You can be unmuted all the time unless there's background noise or interruption in which case please mute.
- Privacy: as many people are working from home please try to keep this as private as possible. If someone from your family enters the room you may wish to mute the audio. Please inform the facilitator if you need to address a family matter briefly.
- Remind that what members say in the discussion should remain confidential within the group.
- Remind participants that they can withdraw at any point.
- Please give us your point of view. No right or wrong answers.
- Aiming for 90 mins, plus a comfort break mid-way through.

C) Introduction script:

“Our topic for this focus group today is gaming and gambling for children and young people. I’m going to give you a few definitions first.

When i say gaming, i mean playing video or digital games on consoles, devices or phones.

When i say gambling i mean ‘to stake or risk money, or anything of value, on the outcome of something involving chance’ REPEAT

When I say Children and Young people I mean people between the ages of 7-25.

Purpose of the FG to have a free-flowing discussion around these topics so that we can learn from your experience. I’ll ask some open-ended questions, we’ll see where the discussion goes and from time to time I might bring us back to a new focus.”

D) START Recording

Each participant was invited to state their name and role.

<u>Awareness</u>

“I’d like to start with a really broad question, which I’d like to address to each of you in turn.”

1) <u>What are your associations, your thoughts, your feelings, your experiences, with gaming and gambling?</u>
    a) <u>What are your thoughts about gaming and gambling?</u>

b) What is the relevance of gaming and gambling to healthcare services?

c) Why would CYP choose to game and gamble

i) Why do you think that is

ii) What about for CYP

d) What do you think about when someone says they game and gamble

i) Why do you think that is

2) Of those that you work with on a regular basis what is your experience of the level of awareness of gaming/gambling?

a) Why do you think that is?

b) What about within your role?

c) What about for CYP?

<u>Consultation / Service / Professional Role</u>

"All of you support children and YP in various ways. Whilst there are positive aspects to both gaming and gambling, we are also aware that they could have negative effects on health and wellbeing and we're interested in learning about that from your experiences."

3) How often does gaming or gambling emerge during a consultation/workshop/session/encounter?

a) How often does gaming/gambling get raised by your service users as a reason for the consultation?

i) Why do you think that is?

ii) What about for CYP

4) What happens when topics of gaming and gambling are raised?
    a) Why do you think that is?
    b) What about for CYP
    c) How about when there is evidence of harm related to gaming and gambling?

5) What might be the signs if someone was having difficulties with gaming or gambling ?
    a) Would you know what to look for?
    b) What about for CYP
    c) How would you open up a conversation about gaming and gambling?
    d) What are some of the issues that lead to a young person disengaging from a difficult conversation?

<u>Extended support</u>

"The next section is about the sorts of specialist or extended support which is available in relation to gaming and gambling."

7) What is your awareness of the support available for gaming and gambling-related harms?
    a) Do you think support available covers the need?
    b) Do you think there is a shared consus on how to support CYP with gaming and gambling
    c) What could be done to lead to more integrated services in supporting CYP with gaming and gambling related-harms

d) Could you share any other examples of where a more integrated approach has improved healthcare provision for CYP?

8) To what extent, if at all, is gaming and gambling is a priority in your service?

Training and Education

"The final section is about training and education in relation to gaming and gambling."

9) What training / educational materials would be helpful for you to support people in their relationship with gaming and gambling more effectively?

a) What would you want to know more about? What would you hope to gain from this?
b) What training / education have you had in the past around gaming and gambling
c) What forms of training / education do you find most useful? So would it better if it was:

- Online/in-person?
- What length of session do you think it might be?
- Theoretical / Practical?
- Live / recorded
- Research-backed / engaging