



Emerging Digital Harms: Identifying Service Gaps and Support Needs for Identifying Emerging Digital Harms

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1. Executive Summary

Given Playtech's considerable investment in their 2020-2025 Sustainability Strategy, it is imperative to explore digital wellbeing and safer gambling behaviours. In 2023-2024, RG+ examined the information needs and service gaps in delivering information and support to those presenting with co-occurring risky online behaviours. The goal of this research was to understand: 1) the scope of emerging risky online behaviours and harms and, 2) how and in which context these harms are presenting. RG+ identified and assessed the needs and resources most relevant to frontline workers (e.g., call centre staff, responsible gambling (RG) and customer service support staff, financial service providers, treatment providers) who are seeing firsthand and providing information and/or support to those presenting with digital harms.

The current report presents the results of this research project which focused on:

- An evidence review to understand the scope of engagement in emerging online behaviours and associated harms
- Specific avenues and contexts in which people present with co-occurring digital harms
- Assessing the information and service needs among frontline workers to support those experiencing harms from emerging online behaviours
- Locating relevant sources of service data for emerging digital harms
- Generating actionable recommendations for addressing identified gaps through frontline worker education, research, and public health policy

Findings






Literature Review: The literature review was conducted to gain insight into emerging online behaviours and associated harms. Various digital harms were identified including gaming, simulated gambling (free-to-play games), high-risk cryptocurrency, and high-risk financial trading (e.g., margin trading, day trading, etc.). Co-occurring harms were also investigated, and mental health was found to often be accompanied by digital harms.

Environmental Scan: The environmental scan highlighted more specific information about digital harms. Digital harms identified in the environmental scan were gaming, internet, cryptocurrency, and financial trading addictions. The environmental scan uncovered more details about specific emerging digital harms. For example, within gaming, various types of simulated gambling games and actions were identified such as loot boxes, skin gambling, and skin trading. Common treatment suggestions were some of the additional details found in the environmental scan.

Call Centre Data: ConnexOntario serves the province with 24/7 access to information for mental health and addiction services via call centre. Data from ConnexOntario was collected regarding any inquiries about digital behaviours. 31 contacts were made in 2022-2023 to discuss stock trading behaviours and 4 contacts were made to discuss cryptocurrency behaviours. While there were not many contacts about emerging digital harms, it is important to note that many of these behaviours can go unreported or can go unnoticed with co-occurring harms. It is important for call centres to have the most up-to-date information about emerging digital harms and ask individuals about the less prominent digital harms (i.e., high-risk financial trading, cryptocurrency, etc.).

Stakeholder Consultations: Stakeholders were identified through a stakeholder mapping exercise, and those that participated in consultations included treatment providers, call centres/hotlines, as well as RG support staff. Stakeholders identified that the most common digital harms they were seeing were pertaining to gaming. The co-occurring harms identified by stakeholders included problem gambling, substance use, digital dependency/internet addictions, problematic pornography use, and mental health. Stakeholders were also asked what information and/or resources they were sharing with individuals who are seeking help with digital harms. Resources shared included information on gambling, gaming, financial literacy, outpatient care and/or treatment, and ConnexOntario. Barriers to support for those experiencing digital harms included access to facilities, awareness of digital harms, stigma, and a lack of training and resources for frontline staff.

The following are recommendations to adequately equip frontline workers with the proper information and resources to ensure they can support those experiencing harms from emerging online behaviours:

	<p>Develop guidelines for emerging digital behaviours (e.g., definition of emerging digital harms, what qualifies as an emerging digital harm, types of behaviours that qualify as digital harms, etc.)</p>
	<p>Develop training for stakeholders about emerging digital harms and best practice to support those experiencing harms.</p>
	<p>Develop a resource hub for stakeholders to get up-to-date information about emerging digital harms (e.g., terminology, tips, conversation starters, examples of where to refer patients, etc.).</p>
	<p>Investigate the impacts of digital harms on youth and young adults (e.g., impact on gambling knowledge, attitudes, and beliefs, long-term impact, etc.).</p>
	<p>Explore other avenues in which individuals could be presenting with emerging digital harms (e.g., financial counselling, treatment, etc.).</p>

2. Background

Playtech's 2020-2025 Sustainability Strategy aims to help people live healthier online lives by focusing on digital wellbeing and safer gambling behaviours. As part of RG+'s work to support the Sustainability Strategy, one of the objectives for 2023-2024 was to examine the information needs and service gaps in delivering information and support to those presenting with risky online behaviours.

Digital wellbeing and online gambling continue to be at the forefront of many discussions internationally. Previous research conducted by RG+ in 2021-2022 found conceptual and empirical links between digital wellbeing and online gambling, suggesting a need for a more holistic understanding of, and focus on, the risks, benefits, and overall impacts of online spaces (RG+, 2022). However, there is limited attention placed on the interconnections between these areas. As online gambling is one component of an individual's time spent online, there is a need for the realm of digital wellbeing to encompass all online behaviours and emerging forms of risky online activity.

RG+ community engagement activities from 2022-2023 revealed that many people with lived experience utilising support services are presenting with co-occurring harms from other emerging risky online behaviours (e.g., gaming, high-risk cryptocurrency, social casino gaming, simulated gambling) (RG+, 2023). However, a service gap exists in that many frontline workers do not have the capacity or specialization to address these emerging concerns.

In 2023-2024, RG+ leveraged these findings to examine the information needs and service gaps in delivering information and support to those presenting with co-occurring risky online behaviours. The goal of this work was to first understand the scope of emerging risky online behaviours and harms, as well as how and in what contexts these harms are presenting. In doing so, RG+ identified and assessed the needs and resources most relevant to frontline workers (e.g., call centre staff, RG and customer service support staff, financial service providers, treatment providers) who are seeing firsthand and providing information and/or support to those presenting with co-occurring digital harms. More specifically, this study considers the following question: ***What information and resourcing do frontline workers need to better equip themselves to support those experiencing harms from emerging online behaviours?***





In order to understand the informational needs and experiences of frontline workers supporting those experiencing digital harms, RG+:

- Reviewed evidence to understand the scope of engagement in emerging online behaviours and associated harms,
- Identified specific avenues and contexts in which people present with co-occurring digital harms,
- Assessed the information and service needs among frontline workers to support those experiencing harms from emerging online behaviours,
- Located relevant sources of service data for emerging digital harms, and
- Generated actionable recommendations for addressing identified gaps through frontline worker education, research, and public health policy.

This final report details key findings from the data collection activities and provides practical recommendations to better equip frontline staff to better support those experiencing harm from emerging online behaviours.

3. Methodology

The data collection activities completed were:

	<p>A literature review of peer-reviewed and grey evidence on emerging forms of risky online behaviours and harms.</p>
	<p>An environmental scan and stakeholder mapping exercise of the entry points and avenues in which people present with and seek support for harms from emerging online behaviours.</p>
	<p>Stakeholder mapping exercise identifying relevant stakeholders (e.g., treatment providers, customer support staff for online operators, financial services, call centre staff).</p>
	<p>Analyses of call centre and/or online support service interaction data.</p>

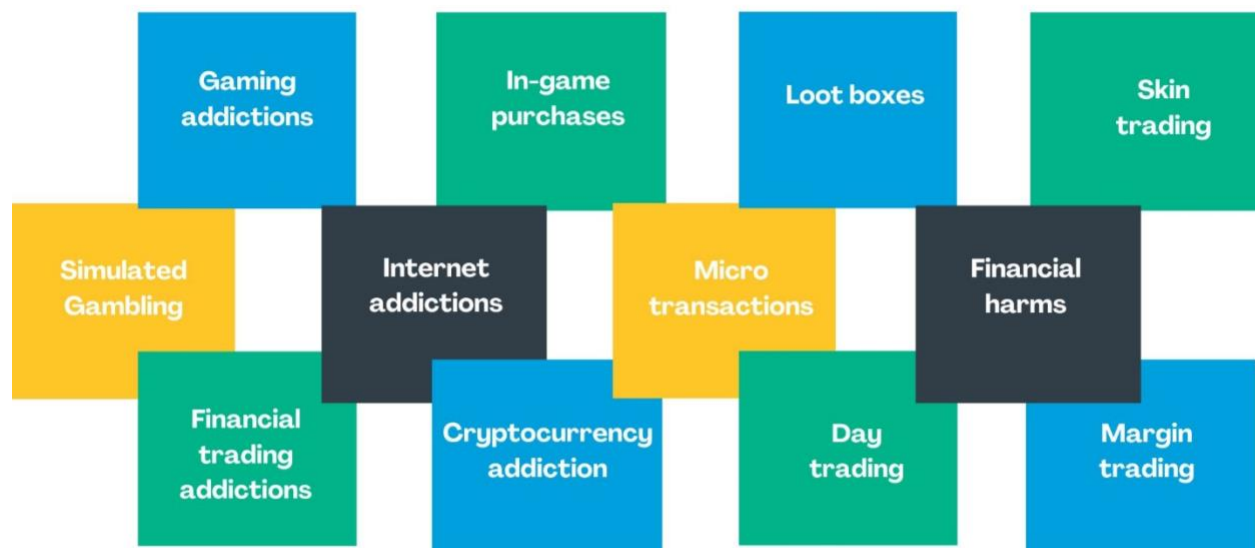
Literature Review

A literature review was conducted using Google Scholar. Search terms included (“online gambling” OR online gaming”) AND (“financial harms”). This resulted in 159 articles, of which were then scanned using exclusion criteria. Exclusion criteria consisted of whether the paper was in English, published between 2010-2024, and whether the paper discussed emerging digital harms in relation to financial risk. One duplicate was found, and two were excluded as they were not in English. 21 articles were included in the final analysis.

Another search was conducted specific to online currency and financial trading. Search terms included: (“day trading” AND “cryptocurrency” AND “financial risk”). This search strategy resulted in 93 articles, of which were then scanned using exclusion criteria. No duplicates were found, and five articles were included in the final analysis.

Environmental Scan

A previous literature review from 2021-2022 identified several emerging online behaviours and digital harms including:



The aim of environmental scan was to uncover a deeper understanding of emerging digital harms, specifically the entry points and avenues in which people present with and seek support for harms from emerging online behaviours.

Google Scholar was used for the environmental scan. A breadth of information was found about emerging digital harms, specifically for gaming disorders, in-game purchases, and simulated gambling/free-to-play games. There was very little information found about treatment for financial trading and cryptocurrency addictions. This highlights the need for more research in the online currency and financial trading spaces.

Key words and search terms for the environmental scan included:

- Treatment
- Types of treatment
- Call centre
- Gambling
- Gaming
- In-game purchases
- Simulated gambling
- Gaming disorders
- Internet addictions
- Financial trading
- Day trading
- Cryptocurrency

Stakeholder Mapping

A stakeholder mapping exercise was conducted using Google search to identify stakeholders to interview. The following list of key terms were used:

The following list of key terms were used:

- “gambling” OR “gaming” AND “digital harms” AND “treatment”
- “gambling” OR “gaming” AND “cryptocurrency” AND “treatment”
- “gambling” OR “gaming” AND “day trading” AND “treatment”
- “gambling” OR “gaming” AND “social casino gaming” AND “treatment”
- “gambling” OR “gaming” AND “simulated gambling” AND “treatment”

Stakeholders considered in the study had to be operating in North America. 42 stakeholders were identified across various sectors, such as: treatment providers, call centers/hotlines, and credit counselling. Many treatment providers identified offered a variety of services for addictions including gaming, internet, gambling, digital dependency, cryptocurrency, day trading, as well as the convergence of gambling and gaming and other behavioural addictions.

All 42 stakeholders were contacted via email. 13 stakeholders responded willing to participate in the research. 12 interviews were conducted with the majority being treatment providers.

Unfortunately, credit counselling and stakeholders in the financial sector did not respond to the request for participation. This is a limitation of this work as there may be individuals presenting with harm in the financial sectors (e.g., credit counselling, financial trading, etc.) and the input of stakeholders in this area could have provided some valuable insights around financial harms.

Call Centre Data

To better understand the landscape of emerging digital harms, call centre data was requested from ConnexOntario. ConnexOntario serves the province with 24/7 access to information for mental health and addiction services via call centre. Information was requested from ConnexOntario about the frequency in which they are receiving inquiries about emerging digital harms, if/how information is being recorded, and the information they provide to individuals. ConnexOntario shared various data sets that identified the volume in which they have recorded in 2022-2023 in terms of emerging digital harms.

4. Evidence Review

Literature Review

The digital space is rapidly evolving which presents a significant need to better understand emerging digital harms. A literature review was conducted to gauge the current understanding of digital harms. Since there are many avenues of digital harm, the focus for this study was on emerging digital harms with financial risk, such as simulated gambling games, in-game purchases, and high-risk financial trading (e.g., cryptocurrency, day trading, etc.) . Co-occurring harms were also found within the literature and are outlined below.

Simulated Gambling

Simulated gambling is becoming a popular form of entertainment for many youth and young adults and is now readily available through multiple online platforms. Many online games now have various features that mimic gambling (e.g., lotteries, jackpots, slots, etc.). There have been links between simulated gambling engagement with internet gaming disorder, as well as psychological and emotional harm (Greer et., al 2022). This can be extremely detrimental to youth and young adults' mental health who commonly play simulated gambling video games. Similarly, Armstrong et al., found that youth are highly exposed to simulated gambling and that those who engage with these products are more likely to be prone to monetary gambling and gambling problems. It was also found that virtual currency, in-game events, and gambling themed content are likely to promote biases about gambling or desensitize consumers to monetary losses (Armstrong et al., 2018). The integration of simulated gambling into video games, especially those targeted to youth and young adults, can have negative effects on gambling knowledge, attitudes, and beliefs. More research in this area is needed to analyze the

long-term effect of simulated gambling games on youth and young adults' gambling habits as they age.

In-game Purchases

In-game purchases are also very popular in many online games today. Many free-to-play games have the option for individuals to make in-game purchases. These purchases can be made on a variety of things such as loot boxes, skins, or other virtual goods that can benefit game play. Players may feel that they need to make these purchases in order to have a better standing within a game, or that it will benefit their play (Costes & Bonnaire, 2022). Various studies have found that in-game purchases (e.g., loot boxes, skins) were associated with gambling-related harms (Greer et al., 2022; Carey et al., 2022; Brooks & Clark, 2023; Delfabbro et al., 2021).

Loot boxes, which are becoming increasingly popular, are gambling-like components within online video games where players can win randomized rewards that provide gameplay advantages or cosmetic changes to characters in the game (Xiao et al., 2022). Players can buy loot boxes with virtual currency which is purchased using real money, or they can earn loot boxes through game play. Players trying to earn loot boxes through game play often play more frequently and for longer periods due to the idea that the more they play, the more they can win. Loot boxes appear in most games now, mostly within free-to-play games, as a means of monetization. According to Xiao et al., in 2019 in the UK, 59% of games on the Apple iPhone platform contained loot boxes. Prevalence rates increased in 2021 to 77% for UK iPhone games (Xiao et al., 2022). Interestingly, 91% of the 100 highest-grossing iPhone games contained loot boxes in China which suggests that simulated gambling might be different across different cultures and communities (Xiao et al., 2021). A study funded by GambleAware showed the tangible link between gambling and gaming and the “psychological nudge” that encourages people to buy more boxes and gamble in real life (Close & Lloyd, 2021). More research in this area is required to better understand the impact that in-game purchases have on individuals and the relationship with gambling in the long-term.

Much like the increase in loot boxes, skin betting and skin gambling have also been seen more frequently in online games. Esports skin betting involves using skins – often purchased in-game, earned through gameplay, or found in loot boxes – to bet on esports, most often in the unregulated market (Greer et al., 2023). By making certain skins rarer than others, skin gambling has increased, and vulnerable youth and young adults have become exposed to the risks. Players can also use their skins to bet on the outcomes of esports, much like sports betting. Similarly, skin gambling can be a part of online games where unregulated online operators allow skins to be used to gamble on games of chance (e.g., roulette, jackpots, slots, etc.). The similarities between these actions mimic the way in which betting happens in the real world on sports, or casino games which can especially be detrimental to youth and young

adults playing these games and can affect the knowledge, attitudes, and beliefs one has about gambling (Greer et al., 2023). Many skins gambling websites are unlicensed with little to no safeguarding in place. Thus, there is a risk especially for youth and young adults as they do not always fully understand the risks that are associated with gambling.

Cryptocurrency and Financial Trading

There was a small body of literature regarding financial trading and financial risk. Although financial trading can be a positive way of investing money, it can also be harmful at times. The line separating investing from gambling has become very fine, especially in terms of high-risk trading behaviours and riskier financial assets such as cryptocurrencies and other virtual currencies (Lee et al., 2023).

Cryptocurrencies can have volatile price fluctuations and can bare more of a financial risk than traditional stock markets and financial trading (Sonkurt, 2023). This investing behaviour can become gambling-like over time due to the constant risk associated with the extreme fluctuations (Sonkurt, 2023). This type of risk can target impulsive and stimulus-seeking individuals to continue to invest despite extreme fluctuations.

The research examined supports the overlap between financial trading and possible problem gambling. Johnson et al., (2023), found that high-risk stock traders have very similar behaviours to those with gambling problems, as well as similar demographics and personality traits. Sonkurt surveyed financial traders in 2020 to better understand the fine line between financial trading and gambling related harm. The pathological trading scale, South Oakes Gambling Screen Test, and the Barratt Impulsiveness Test were used to investigate pathological trading, gambling, and impulsiveness. 300 financial traders were surveyed, and results showed that 48.7% were considered pathological traders (Sonkurt, 2021). High frequency traders were more pathological, and their impulsivity was higher than those who did not participate in trading as frequently. Sonkurt (2021) found that the 18-25-year-old age group had the highest rates of impulsivity, and that margin and day traders showed more pathological behaviour. This research suggests that 18–25–year–olds should be at the forefront of discussions and educational interventions to reduce harm.

The risk of gambling related harms has increased among financial traders in the last decade due to new technologies, which has increased the access to riskier financial assets and have encouraged risky trading behaviours (Lee et al., 2023). Currencies and financial trading can be accessed at any time of the day and any day of the year. This unlimited access can unfortunately lead to overconsumption and increased risk of harm as there are usually little to no safeguards in place on many of the trading platforms.

Co-occurring harms

A common co-occurring harm seen with emerging digital harms in the literature is mental health disorders. Gaming many times can be used as an escape, a way to cope with distress, and the time to live a different life (Costes et al., 2022). The longer individuals stay in a game, the more a distorted relationship may be created with the game. The escape predictor is one that is most often seen within gaming and is used to mask other mental health struggles that individuals are experiencing (Costes et al., 2022).

Environmental Scan

The environmental scan was conducted to identify the specific contexts in which people present with digital harms and common treatment options. Various addictions were identified such as internet, gaming, cryptocurrency and high-risk financial trading addictions.

Internet Addictions

Internet addictions can include a wide range of problems from compulsions to use social networking sites, through to shopping, gambling, and pornography (Priory, 2024). Internet addiction is often described as an impulse control disorder or a behavioural addiction (an addiction that doesn't involve substances to feel desired effects). Internet addiction is often seen with various risk factors including sociodemographic, internet use variables, psychosocial factors (e.g., impulsivity), and comorbid symptoms (e.g., anxiety, depression, etc.). Cognitive behavioural therapy, behavioural activation techniques and family therapy have been seen as effective treatment options for internet addictions (Priory, 2024).

Gaming Addictions

Video gaming addiction is considered a clinical impulse control disorder like gambling addictions. Similar to substance addictions, individuals who are addicted to video games require more of the source as time goes on and can become irritable when they cannot access them. Those who are experiencing gaming addictions can become withdrawn from their everyday life, isolated, forgoing work or school as well as other daily responsibilities. Individuals who are younger in age can miss out on critical social development, education, and creating relationships. Many treatment options are recommended for those with addictions or who are experiencing harms including counseling, psychotherapy, cognitive behavioural therapy, 12-step programs and medication either individually or in combination with other treatment options (PsychGuides, 2022).

Cryptocurrency Addictions

Cryptocurrency has become extremely popular in recent years thus, there has been a rise in the number of individuals experiencing cryptocurrency addiction. Crypto addiction is “the compulsion to trade in cryptocurrencies such as Bitcoin, Ethereum, and other alternative coins” (Kindbridge, 2021). There is a lot of cross over in terms of behaviours between gambling addictions and crypto addictions such as constantly monitoring price fluctuations, compulsively reading crypto news and analysis, and obsessively searching for new cryptocurrencies to buy and sell. This can have an extreme impact on an individual’s mental health and well-being. Some of the reported common motivations to compulsively trade in cryptocurrencies include: to forget about daily responsibilities, to escape from life problems, to relieve feelings of stress, anxiety, and/or depression, to fill time when not working, to trade alongside drinking alcohol and recreational drugs, and to experience a high (Kindbridge, 2021). Treatment options that have been recommended include similar treatments for gambling addictions such as cognitive behavioural therapy, counselling, etc.

Financial Trading Addictions

Financial trading can be both stimulating and exciting, however, it can become addictive. Like gambling, trading holds the promise of great financial rewards. However, with those rewards also come great risks. Much like gambling addictions, financial trading has very similar behaviours such as taking bigger risks, obsessing over trading, research, and watching the markets, losing interest in activities that you once enjoyed, seeking an adrenaline rush, inability to take a break, experiencing urges, feeling stressed, looking for ways to fund trading activities through stealing, borrowing, or using savings, etc. (Bloch, 2023). Treatment options that have been recommended are similar to those of gambling addictions such as cognitive behavioural therapy, counselling, etc.

Connex Call Centre Data

ConnexOntario serves the province with 24/7 access to information for mental health and addiction services via call centre. ConnexOntario helps Ontarians discover mental health, addiction, and problem gambling services in the province. RG+ accessed available ConnexOntario call centre data to see how individuals were presenting with emerging digital harms. According to 2022-2023 ConnexOntario call center data, there were 4,495 total gambling contacts to ConnexOntario. Of those, 31 contacts (0.7%) were individuals inquiring about stock trading, and 4 contacts (0.1%) were individuals inquiring about cryptocurrency (Connex Ontario, 2023). These inquiries were identified and categorized as gambling inquiries

on the ConnexOntario database. Inquiries about gaming and/or simulated gambling were not present within ConnexOntario data.

Data was shared about the supports to which ConnexOntario referred individuals based on the harms they were experiencing. Although ConnexOntario refers individuals to a few treatment options regarding digital harms, there are more options in Ontario that are available to individuals that are not being promoted. More options for treatment should be added to the list that is shared with individuals seeking help for their emerging digital harm or behaviour. This outlines the need for information sharing amongst stakeholders about the services being offered for emerging digital harms and behaviours.

Stakeholder Interviews

Emerging Digital Behaviours

To better understand the individuals presenting with emerging digital harms, it was imperative to speak with various stakeholders who support individuals experiencing harms. 12 stakeholders across North America were interviewed from various sectors including mental health, gambling, and behavioural addictions. Treatment providers, call centre/hot line staff, as well as responsible gambling staff were interviewed. Emerging digital behaviours were explained to stakeholders prior to the interview which included high-risk cryptocurrency, financial trading, simulated gambling, gaming, etc.


Stakeholders were asked whether they have been seeing any recent inquiries regarding emerging digital behaviours. The highest reported emerging digital behaviour by the participating stakeholders was gaming. This was a common theme throughout nearly all interviews. There was a lot of discussion about simulated gambling games within these conversations as well as in-game purchases, the use of loot boxes and how it relates to gambling. Similarly, there was a lot of discussion around the volume of inquiries from families about their children's gaming participation and habits and how to best support their children.



"I've seen an influx in the last couple of months of parents being concerned about their children's gaming"

Co-Occurring Harms

Often with gambling harms, co-occurring harms such as substance use, mental health, and other online harms can also be present. Participating stakeholders were asked whether they were seeing any co-occurring addictions with emerging digital harms. Many stakeholders reported that they frequently see co-occurring harms when clients come to them with concerns about gambling, gaming, or other internet use. For example, many treatment providers mentioned that they often work with individuals reaching out for mental health support, however, after further discussions, other digital harms are often apparent. This is important to note because when it comes to mental health screening questionnaires within treatment centres or call centres, digital wellbeing is not always something that is discussed with individuals. If screenings included questions about gaming, simulated gambling, and high-risk financial trading, the treatment professional may get a more fulsome picture of the current interplay of possible issues.



“Generally, when we see someone come through with gaming harms, we are almost always seeing co-occurring harms whether that be problem gambling, substance abuse, mental health, or even other internet addictions.”

After speaking with a few call centers during the interviews, some co-occurring harms with emerging digital harm inquiries included problem gambling, mental health, and substance use (e.g., cannabis, alcohol). Similarly, treatment providers also provided examples of co-occurring harms they are seeing which included substance use (e.g., cannabis, illicit drug, alcohol, etc.), digital dependency/internet addictions, mental health (e.g., anxiety and depression), and problematic pornography use (PPU).

Information and Resources

Stakeholders were asked about the types of information and resources they provide to individuals experiencing emerging digital harms., which included:

- Gambling support
- Gaming support
- Financial literacy support
- Outpatient care/treatment
- ConnexOntario

While some stakeholders reported having available, and sharing, relevant information with their clients, other stakeholders reported that they did not always know where to direct people for the correct support. For example, one stakeholder mentioned that it was difficult to know

what services were offered in their geographical area as they hadn't had many individuals reach out with emerging digital harms. They indicated that if they did, they would have to do their own research to find the correct information before speaking with their client. Another stakeholder mentioned that there is not a lot of culturally specific support. For example, the resources that are available to them do not always relate to their clients which can make it difficult to signpost to effective care.

Barriers for Support

When asked to identify barriers to support individuals presenting with emerging digital harms, participants noted: access to facilities, awareness of digital harms, stigma, and training and resources.

Access to Facilities

Stakeholders frequently commented that they felt a lack of knowledge around where to refer patients and which treatment options are available. For example, many stakeholders did not know where they would refer individuals to if they were experiencing harm from cryptocurrency or financial trading harms as it is generally outside of their expertise. Many stakeholders mentioned that having an accessible list to all treatment providers in the area specializing in digital harms would be beneficial and would reduce time spent researching proper supports. Similarly, another notable observation was the lack of treatment facilities for emerging digital harms thus, individuals may not have access to the facility and/or treatment centre based on where they are located. Stakeholders felt that offering more specialized care in digital health in their practices would help to reduce the access to care barrier.

In some areas, another noted barrier was technology as some people in remote areas do not have access to reliable internet to be able to receive support online. While this can be difficult to manage, it is important to ensure treatment providers (e.g., medical staff, mental health specialists, etc.) are trained in digital harms to ensure those in remote communities can still access the help they need.

Awareness of Digital Harms

Gaming is not always seen as an emerging digital issue. Stakeholders highlighted that many of their clients downplay their gaming and gambling problems, or do not see their behaviours as harmful. Likewise, cryptocurrency and financial trading are often not seen as digital harms, however, it is a behaviour that can become harmful. Stakeholders mentioned that they believe this to be an issue because digital harm is not as tangible as the harms associated with substance use, or other co-morbidities that they often see. This can be a barrier in helping to

support individuals who may be experiencing digital harms. It is imperative to educate the public and increase awareness around digital behaviours so that the risk is better understood.

Another barrier that was highlighted was a lack of awareness of support for digital harms. Individuals were not always aware that there was a hotline they could access or that services were in place to support them. It is important to bring more awareness to digital behaviours and the associated risks. Promoting hotlines and treatment is important to bring awareness to the services provided.

It was often mentioned that clients came in for treatment or support with mental health and/or substance abuse and it wasn't until they started sharing more that the treatment provider brought up digital harms that individuals were aware of the topic. Individuals also were often unaware that digital behaviours can be harmful. This is due to a lack of information around the language of digital wellbeing and digital wellness. Creating a definition of digital wellbeing and digital harm is important to ensure there is a general understanding of the topics.

Stigma

Much like the stigma surrounding mental health and gambling, digital harms also have an associated stigma. Several of the treatment provider participants mentioned that many of their patients did not feel like they could reach out to someone about their digital behaviours because of the downplay of gambling and gaming problems. In order to overcome this barrier, it is important to continue to educate the public about digital harms and promote support.

Training and Resources

The treatment providers who were interviewed all agreed that a lot of their agencies are currently addressing digital behaviours however, a lot of the staff do not have the proper qualifications or training to be able to best support individuals seeking help in this area. Most of the staff are trained in mental health or substance use and not in digital behaviours. Thus, many times treatment providers felt they have had to learn about behaviours and trends on their own. Having dedicated training so that treatment providers in the area are all aligned would be extremely important and effective to ensure the same information is being shared jurisdictionally.

Many stakeholders also felt that they did not always know where to refer patients if the topic was outside of their expertise. Stakeholders felt that having a resource or information hub with data about outpatient care in their area, as well as information on different treatment offerings and best practices, would be very helpful to ensure individuals are getting the support they need.

One stakeholder mentioned that there is not a lot of resources for stakeholders who are trying to support someone with either gambling harms or other online digital harms with an anti-oppressive or an indigenous-based lens. Many materials and resources they share with patients do not have a cultural lens in mind. Stakeholders felt it would be beneficial to have culturally inclusive resources in order to better relate to the individuals they support.

5. Recommendations

Digital harms are still relatively new in the research space. Due to this, there was a breadth of information found throughout the various data collection methods. For example, there was a lot of information and research around gaming harms but not as much for high-risk financial trading and cryptocurrency harms. Stakeholders interviewed believed that digital harms were a significant issue and that they are becoming more prominent in their areas of work. Stakeholders agreed that more information and research is needed surrounding this topic to better support individuals seeking help. The following recommendations were developed using the information gathered in the literature, stakeholder interviews, and call centre data.

1. Develop guidelines for emerging digital behaviours

The stakeholder interviews and literature review uncovered the need for some guidelines for emerging digital behaviours. There currently is not a clear definition of emerging digital behaviours. Developing guidelines would help frontline staff to have a clearer understanding of emerging digital harms, the types of behaviours and harms to look out for, and how best to signpost individuals to the proper treatment and support that is needed. The guidelines could also outline steps to take when having conversations with individuals who seem to be experiencing emerging digital harms, specifically in terms of financial trading as there seems to be a lack of understanding for treatment providers in this area.

2. Develop a resource hub for stakeholders to use.

A common recommendation that materialized from the interviews was developing a resource hub focused on emerging digital harms and behaviours. Information that can be housed within the hub may include terminologies and risks associated with new games, particularly given the rapid rollout of novel games. Similarly, there is a lot of confusion and/or misunderstanding amongst stakeholders about high-risk cryptocurrency and financial trading and how that fits into emerging digital harms. Stakeholders also mentioned that it would be beneficial to have information about outpatient care and treatment options in their area if it is outside of their expertise. Lastly, participants emphasized the importance of culturally tailored information to ensure the resources are effective for everyone.

Participants expressed that having more information about emerging digital behaviours in one localized spot would be extremely beneficial to ensure that treatment providers and call centre staff are providing individuals with the best practice and information available.

3. Develop training for stakeholders surrounding emerging digital harms and best practice to support individuals

Many stakeholders agreed that due to a lack of a common understanding of topics such as cryptocurrency and financial trading, training would be very important to be able to effectively support individuals. Training topics should include baseline information about topics such as cryptocurrency, financial trading, gaming, etc., treatment options for digital harms, and up-to-date information on specific nuances to certain games or platforms that individuals are using. Training for front-line staff would be advantageous to help them feel better equipped to support the individual.

4. Investigate the impacts of digital harms on youth and young adults

Despite widespread use of digital products, there is little information about the impact of continued exposure to and involvement with simulated gambling, high-risk cryptocurrency, financial trading, etc., and how it can impact real-money gambling attitudes and behaviours long term amongst young people. It is important to measure the impact of digital harms and identify ways to implement primary interventions to reduce harm. It is especially important to investigate the impact that digital harms are having on youth and young adults, particularly around their overall perception of gambling in the future, and whether they are more likely to participate in more traditional forms of gambling in the future (e.g., casinos, sports betting, etc.).

5. Explore other avenues in which individuals could be presenting with emerging digital harms

The goal of this research was to identify avenues in which individuals could be presenting with emerging digital harms. The financial field was an area in which RG+ wanted to explore in particular. Specifically, financial service providers (e.g., credit counsellors) were stakeholders that could be valuable contributors to this area of study as high-risk cryptocurrency, high-risk day trading, margin trading, and other financial trading could be avenues in which individuals are experiencing digital harms. Future research should investigate more financial avenues and whether financial service providers are seeing individuals present with digital harms.

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