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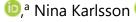
Responsibilities for harm reduction and prevention in online gambling: Evidence from newly regulated license-based markets

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Abstract: Gambling harm prevention and reduction consists of a range of upstream and downstream solutions. Responsibilities for implementing and ensuring these tasks falls across a range of actors, including policymakers, regulators, health professionals and industry. Increased harms caused by online gambling necessitate new regulatory measures, and potentially new responsibilities for their implementation. The current study uses key informant interview data (N=10) conducted in four jurisdictions that have recently introduced a license-based online gambling market (Germany, the Netherlands, Sweden, Ontario). Our aim was to identify what kind of responsibilities for harm prevention and reduction emerge in competitive online markets, to whom responsibility for these tasks is assigned, and what kind of barriers to harm prevention exist across responsibilities. Our analysis shows that most universal responsibilities are assigned to policy makers and regulators. Selective measures aiming at those who gamble, are largely implemented in collaboration between regulators and industry. Indicated and treatment-focused measures are the shared responsibility of treatment professionals, regulators and industry. The main barriers to effective harm prevention related to conflicting interests, industry power, lacking harm prevention resources, lacking centralisation and offshore provision. We argue that improved harm prevention would require balancing existing asymmetries that relate to power, responsibilities and prioritisations.

Introduction

The prevention and reduction of gambling harm involves different stakeholders and actors. A mapping study on responsibilities in harm prevention (Akçayır et al. 2022) found six different groups that were perceived to have responsibilities in gambling harm prevention: consumers, gambling industry operators, policymakers, health services, families and educational institutions. Other stakeholders can also include researchers, lobbyists, digital platforms, payment services or even artificial intelligence solutions (Parker et al., 2024; Marionneau et al., 2023; Gray et al., 2021b). Assigned responsibilities can vary depending on

how gambling harm is defined. The so-called "responsible gambling" (RG) approach focuses on promoting the role of individual responsibility and industry-led solutions. In contrast, a public health approach to gambling harm acknowledges wider system-level responsibilities and upstream determinants of harm, targeting full populations (Wardle et al., 2024; Reynolds et al., 2020; Livingstone & Rintoul, 2020; Livingstone, 2023).

Responsibilities for preventing and reducing gambling harm can also differ between regulatory systems and types of gambling offers. The emergence of online gambling, in particular, has challenged existing regulatory practices and, potentially, responsibilities. In comparison to land-based gambling, online gambling

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environments are characterised by wider availability, data-driven marketing and complex ecosystems of provision (Marionneau et al., 2023). In recent years, countries across the world have regulated online gambling to reduce associated harms and raise revenue for governments (Ukhova et al., 2024). Competitive licensing systems, in which operators can apply for a license to provide online gambling in a regulated jurisdiction, have become a particularly common model for regulating online gambling globally (Goedecke et al., 2023). This article therefore focuses on responsibilities in preventing and reducing gambling harm in recently established license-based systems for online gambling.

Who Assigns Responsibility to Whom?

Most existing research into responsibilities for gambling harm prevention and reduction has focused on the perceptions of individuals who gamble. Overall, studies have shown that individuals engaging in gambling allocate the main responsibility to themselves. Two survey studies (Gray et al., 2021a; 2021b) conducted in the United States focused on perceptions of responsibility amongst individuals with a loyalty card to a local operator. These studies found that less than 10 percent of those surveyed considered any other stakeholder to be responsible, besides themselves. However, those who experienced problem gambling were more likely to attribute responsibility to other actors, such as industry employees, regulators, and public safety officials (Gray et al., 2021a; 2021b). Another study, conducted in Australia (Marko et al., 2022), similarly found that individuals assigned responsibility to themselves. Individual-level responsibilities included maintaining rational behaviour and seeking help when needed. Government responsibility, according to participants, was limited to public education that supports individuals in their self-control (Marko et al., 2022).

Less research has focused on the perceptions of responsibility amongst other stakeholders, such as regulators, researchers, health professionals or industry. Some evidence suggests that industry, government and health care actors may also stress the role of individuals (Forsström & Cisneros Önrberg, 2019; Alexius, 2017; Miller et al., 2016). Governments may also rely on the gambling industry to self-regulate and provide solutions for harm prevention and reduction (Livingstone & Rintoul, 2020).

Responsibilities Across Different Harm Prevention and Reduction Measures

Views on responsibility vary across concrete harm prevention measures. The review study by Akçayır et al. (2022) compared stakeholder responsibilities for different harm prevention and reduction actions. Findings showed that most concrete measures were perceived as the responsibility of health professionals, but in collaboration with other stakeholder groups such as industry and policymakers (Akçayır et al. 2022).

Downstream harm prevention and reduction measures that align with RG discourses and individualistic framings of gambling harm (Livingstone, 2023) fall under the responsibility of industry or individuals. Measures focusing on industry responsibility include, for example, displaying signage to "gamble responsibly", providing personalised feedback on patterns of consumption, providing voluntary limit-setting tools, implementing behavioural algorithms to identify those at risk of harm, and developing interventions with individuals who appear to be experiencing gambling problems (Akçayır et al. 2022; Livingstone & Rintoul, 2020; Ukhova et al., 2024). In many jurisdictions, industry actors draft voluntary codes of conduct that set out recommendations on RG measures (Casey, 2024).

Following the RG discourse, informed individuals who gamble are expected to assume responsibility for any harm (see Livingstone & Rintoul, 2020; Livingstone, 2023; Marko et al., 2022). Concrete harm reduction measures that focus on individual responsibility include, for example, adherence to voluntary limit-setting

policies or self-exclusions, maintaining consumption to set limits, seeking help, and employing strategies of self-help (Akçayır et al. 2022; Ukhova et al., 2024). These measures are in line with wider "consumer responsibilisation" techniques identified across different markets (Bankel & Sóler, 2025).

At a systemic level, policymakers, regulators and public service providers can be seen responsible for upstream harm prevention. Policymakers and regulators can mandate binding limit-setting policies, reduce gambling availability, limit the nature and extent of advertising, regulate product design, or use taxation to direct consumption (Ukhova et al., 2024; Akçayır et al. 2022). Policymakers are also responsible for adequate resourcing of health care and population-level harm prevention. If properly resourced and empowered, health professionals and other public service providers can assume responsibility for screening for comorbid gambling problems, providing access to and ensuring availability of treatment services, running public health interventions and educational efforts to minimise harm, and providing financial counselling (Akçayır et al. 2022; Ukhova et al., 2024).

The Current Study

This study focuses on responsibilities for gambling harm prevention and reduction in jurisdictions that have recently opened their online gambling markets to licensed operators (Germany, the Netherlands, Sweden and Ontario, Canada). The choice to focus on these jurisdictions is motivated by the prevalence of this regulatory model for online gambling. Furthermore, as these four jurisdictions have recently introduced a license-based model, their experiences are expected to shed light on current practices in harm prevention and reduction.

Using interview data collected amongst key informants (N=10), we ask what kind of responsibilities for harm prevention and reduction emerge in competitive online markets,

to whom responsibility for these tasks is assigned, and what kind of barriers to harm prevention exist across responsibilities. In line with a public health approach to gambling (Wardle et al., 2024), our aim is to understand how jurisdictions with licensed online gambling markets divide responsibilities for multi-level harm prevention and reduction measures. In addition, we investigate views on optimal harm prevention and factors that may be preventing effective interventions (also Livingstone, 2023).

Methods

Data Collection

We interviewed 10 key informants between December 2023 and January 2024 as part of a larger project aiming at gathering insight on experiences on licensing systems in online gambling. We focused our data collection on four jurisdictions that had regulated their online gambling markets with a licensing configuration after 2018 (Germany, the Netherlands, Sweden, Ontario). The jurisdictions were chosen based on a global gambling policy analysis conducted by Ukhova et al (2024) that mapped major legislative and regulatory changes globally between 2018-2022. The study identified Germany, the Netherlands, Sweden and Ontario as examples of jurisdictions that had recently introduced competitive licensed online markets. In Sweden and Ontario, licensed online markets were introduced to replace monopoly systems. In the Netherlands and Germany, licensed markets were created. In Germany, the Netherlands and Sweden, legislation on online gambling is national. In Ontario, legislation is state-specific.

Participants were recruited via existing contacts in each country, snowballing, and directly contacting relevant stakeholders. We included

academics with no stated industry connections[2], regulators, representatives of non-governmental organisations (NGOs) and representatives of industry who were knowledgeable about online gambling regulation and harm prevention. All participants were recruited due to their expertise in understanding harm prevention and reduction in the license-based system for gambling. The choice to recruit only academics without industry connections was motivated by our desire to have an impartial view. We included several interviewees from each country to have a broader picture and to cross-verify the veracity of statements. We were also able to include one representative of industry. As some of the participants wished to remain anonymous in this study, we anonymised all participants and refer to them using stakeholder type. A list of participants is presented in Table 1.

Interview Protocol

The interviews were conducted by a trained research assistant and a member of the author team (VM). The interview protocol was based on a thematic interview grid that included four distinct themes: (1) background on national gambling policy and the choice to implement a licensing system; (2) national gambling harm prevention strategy and practices; (3) changes in gambling harm prevention practices after the introduction of a licensing system; (4) views and expectations on the future of gambling harm prevention. As the interviews were semi-structured, we also elaborated on other themes that were brought up in the interviews.

Most interviews were conducted online, individually and in English. One interview was conducted with two participants at the same time (Ontario regulators). One interview was conducted via email in German following the request of the interviewee due to language

Table 1. List of participating key informants

Country	Stakeholder Type
Germany (GER)	Researcher Regulator
Netherlands (NL)	Researcher Regulator Industry responsibility representative
Ontario, Canada (ON)	Researcher Regulator 1 Regulator 2
Sweden (SE)	Researcher NGO representative

fluency (Germany regulator). Interviews lasted between 40 and 60 minutes. All interviews were transcribed verbatim. The interview conducted in German was translated into English using online translation software.

Analysis Methods

We analysed the interview data using an inductive content analytical approach (Kyngäs, 2019). The method consists of abstracting data to study a phenomenon conceptually or categorically. The choice to use an inductive rather than theory-driven approach was based on the overall paucity of existing literature on the topic and our desire to understand emerging patterns that may have become apparent under the new licensing system configurations.

All members of the research team first read through the material after which observations and potential codes were discussed in the research group. We then built a guideline for the analytical framework focusing on (1) responsibilities for harm prevention or reduction

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[2] We included only academics who declared no conflicts of interest, including collaborations with the industry or funding from sources with industry connections.

(2) to whom these responsibilities were assigned and by whom, and (3) barriers for effective harm prevention. The coding framework was refined during the final qualitative coding, with the inclusion of further sub-codes. Initial coding was performed by MK. VM and NK double-checked codes, and all disagreements were discussed and resolved in the full research group.

When the coding was finalised, we combined codes and sub-codes into conceptual categories (Kyngäs, 2019). Although our interviews initially focused on gambling harm prevention, many concrete responsibilities that were discussed in interviews were more in line with harm reduction approaches. Therefore, we combined these perspectives in our reporting. We also cross-verified results within national contexts across respondents and found that responses were consistent. Interviewees from the same context listed similar harm prevention and reduction measures, although perceived responsibilities for these varied depending on the position of the interviewee.

Research Ethics

Following the guidelines of the Finnish National Board on Research Integrity, no ethics permission was required for this study. All participants were provided information about the aims of the study during recruitment and during the interview. All participants gave informed consent to participate. All participants were also informed that they could withdraw from the study at any time and that they could choose not to answer any questions during the interview. We gave participants the possibility to appear anonymously in the study and following the request of some participants, results are reported anonymously. We also provided participants with the possibility to verify any direct quotes we use from their interviews.

Results

Table 2 presents an overview of different measures and responsibilities for gambling harm prevention and reduction in competitive online license-based systems. The table lists all measures and responsibilities that were mentioned in our dataset, irrespective of jurisdiction, to provide a

Table 2. Allocation of responsibilities for gambling harm prevention and reduction measures

Measure	Primary Responsibility
Public information, awareness campaigns, research and education	Policymakers, health professionals, researchers, industry, NGOs
Restricting advertising	Policymakers, regulators, industry, NGOs
Restricting availability and product design	Policymakers
Pre-commitment strategies and self-exclusions	Policymakers, regulators, industry, individuals
Duty of care policies	Policymakers, regulators, industry
Informing about risk and signposting to support	Industry
Provision of and access to support and treatment	Policymakers, individuals, health professionals, NGOs
Proactive interventions	Industry, regulators

summary of the scope of discussion. The qualitative detail and most important themes are discussed below. Primary responsibilities listed in Table 1 reflect how interviewees perceive the current division of responsibilities in harm prevention and reduction. Many respondents also shared views on how responsibilities should ideally be divided. These critiques are further discussed in the section regarding barriers to responsibility.

Overall, we found that policymakers, regulators and industry were seen to carry the primary burden of responsibility for most harm prevention and reduction measures. We have separated policymakers and regulators due to their different overall role: policymakers refer to legislators who set frameworks for gambling policy; regulators refer to agencies in charge of overseeing the implementation of these policies. Some responsibilities were also allocated to other actors, such as health services (including health and social care workers and public health agencies), NGOs, researchers, or individuals who gamble.

We also found some mentions of other potential stakeholders that could be held responsible for gambling harm prevention or reduction. Banks and internet service providers were seen as potential future partners in preventing offshore gambling. In addition, media companies were identified as potentially responsible for raising awareness of gambling harms and reporting on harmful company practices. However, these actors did not have specific current responsibilities.

We found some divergence amongst our interviewees in terms of who was considered to hold primary responsibility for specific measures. The interviewee representing industry highlighted the role of industry across various measures, including universal measures such as public information and restricting advertising. Regulators highlighted the responsibility of policymakers and regulators across domains. Regulators also highlighted the importance of

collaborative action between regulators and industry. Measures such as duty of care and pre-commitment were considered best implemented if industry and regulators work together.

In the following, we review the identified harm prevention or reduction measures in terms of who is seen to have primary responsibility. The results are presented depending on the level of gambling harm prevention or reduction measures (universal, selective, targeted), as summarised in Wardle et al. (2024) and Marionneau et al. (2023).

Universal Harm Prevention Measures

Public Information, Awareness, Research and Education

Most interviewees perceived public information, awareness, research and education to be the responsibility of policymakers and state officials. Across the four jurisdictions, our interviewees identified different local and national agencies and other state actors that should carry part of the responsibility. These included gambling regulators, public health institutes (Sweden, the Netherlands), state-level consulting centres (Landesfachstelle, Germany), and a research funding agency (the Netherlands). As described by one interviewee, "everyone has to do something" (NL regulator). These actors were expected to produce information sheets, educational materials, and to fund independent research into gambling:

> We have a—governmental institute that funds research at universities and academic institutes, and they have set up a program on gambling research. [...] The idea here is that you want the polluter to pay. [...] So it's a way of having them pay for it, but it's not that they can influence how it's being spent. (NL regulator)

Some assigned part of the responsibility to NGOs, usually in collaboration with state agencies. NGOs consisting of individuals with

lived experience of gambling harm were considered highly impactful within the field.

The industry representative also highlighted the role of industry. According to this interviewee, public campaigns on the risks of gambling have been few and far between. This has left space for the industry to develop its own initiatives to raise awareness:

> There haven't been any governmental campaigns about educating people about the risks of gambling. [...] It's now all just done by operators. So, it's like some campaigns, some quotes like: "Be aware you don't spend too much. (NL industry).

Restricting Advertising

Policymakers and regulators were assigned primary responsibility for regulating and restricting gambling advertising. Regulators and policymakers had the responsibility to set legal frameworks that govern advertising and for enforcing these rules. The responsibility of operators was limited to following regulations. For example, in the case of Ontario, "if you or if I had chosen to self-exclude from i-gaming, an operator has responsibility, for example, to make sure that they're not constantly bombarding me with offers." (ON regulator 1)

Several interviewees discussed cases where newly licensed companies had not followed advertising regulations and limitations, such as not targeting young people or those who have self-excluded. Whilst the gambling industry was described to have a responsibility to follow rules, misconduct had been encountered across jurisdictions. Identifying and fining companies for breeches was primarily the responsibility of regulators.

In the first year, there were several cases of companies actually targeting younger people and also, they had products that included players that were under the age of 18. But they got fined for it and you know they got a warning that "you will lose your license if you continue to do this. And you have to change this immediately." (SE NGO)

The role of NGOs or researchers was to nudge policymakers and regulators to take a stricter approach to gambling advertising. These groups did not have a responsibility with regard to advertising regulation, per se, but they did have a responsibility to raise public and political awareness about the harms caused by gambling advertising. This type of approach was particularly exemplified in Germany where one interviewee described how "we have that alliance against sports betting advertisement, not sports betting in general. [...] You have a very similar approach in England, with the coalition against gambling ads." (GER researcher)

Product Design and Availability

Responsibilities to reduce harm by intervening in product design and availability were discussed in a few interviews only. Online gambling is always available and restricting availability is therefore not a key policy lever, unlike for land-based gambling. Discussions on limiting availability focused on restricting access to the unlicensed offshore market or restricting access to the most harmful forms of gambling. Some also discussed limiting harmful product characteristics. Product and availability measures were conceptualised as the responsibility of policymakers and regulatory frameworks:

> Also, for example, autoplay options are not allowed in the Netherlands. So autoplay, so when you gamble well, usually you push a button to gamble. But when you say you can do it automatically, that's not allowed. (NL regulator)

Selective Measures

Precommitment Strategies and Self-Exclusions

Each included jurisdiction had implemented limit-setting policies in the licensing system. Self-exclusion registers were established in all jurisdictions except Ontario. Policymakers were

seen as responsible for drafting legislative frameworks and their concrete parameters, whilst operators had the responsibility for implementing them. Particularly in Ontario, the regulator had the responsibility for setting a framework of outcomes that operators need to attain, but the industry had significant responsibility in designing how these outcomes can be best achieved:

> There's no... again, prescriptive rules. They're more outcomes based. We say that, yes, you're required to have time based and financial limits. And the onus again is on the operator to meet that whatever way they see best (ON regulator 1)

Regulators had the primary responsibility for maintaining self-exclusion systems. Self-exclusion registers were highlighted by many as a unique advantage of the licensing system and as a successful policy. The role of operators in self-exclusion policies was to abide by rules related to self-exclusions, under the supervisory responsibility of regulators.

> [All companies] have to follow these regulations on self-exclusion. It is a fact that you cannot give out any kind of player bonuses, cashbacks, etc. [...] You have to have a self-exclusion [register]. And that's, of course, something that has helped the players. (SE NGO)

Discourses on individual responsibility differed across contexts. In Ontario, where no mandatory limit-setting system was implemented, the interviewed regulators considered individuals to be largely responsible for setting limits that were appropriate to them and their own financial situation. The role of the industry was to provide these tools, but it was the responsibility of the individual to use them:

> We do prescribe the framework for the limit setting. We just don't say it's this limit or it's this loss. Like that's really up

to the player to know their own financial situation. (ON regulator 2)

In the European context where limit-setting is mandatory, many respondents were critical of RG discourses that highlight individual responsibility in limit setting. Placing responsibility on the individual was considered a poor policy choice, particularly when online gambling products are designed in a way that encourages loss of control:

> When it comes to responsible gaming or gambling, they place the responsibility back with you. And a key example here would be that you need to set your own limits. But first of all, you're nudged in the direction of bad limits with dark patterns. And secondly, how would people even make such a decision, right? They're rushing through a procedure to get their bonus. (NL researcher)

Duty of Care Policies

Duty of care policies refer to a legal mandate on gambling operators to track customer behaviours and to intervene when they detect potential problems (Hancock et al., 2008). In our dataset, these types of policies were discussed in each jurisdiction (Germany, the Netherlands, Sweden, Ontario). Overall responsibility for duty of care policies was split between policymakers, regulators and operators. Policymakers and regulators were expected to define and set concrete rules and instructions on how duty of care policies should be implemented. Operators had responsibility to follow these instructions by tracking gambling behaviours and by initiating interventions with individuals who had been flagged.

> Operators also have to have in place in their system the ability to identify, detect and address situations where players are experiencing harm and intervene. (ON regulator 2)

When we look at someone who gambles, of course they gamble at the operator. So, the operator has a primary responsibility [...] to protect and to intervene to make sure when someone shows problematic patterns of gambling, that they maybe contact the player. And of course... the regulators, the legislators... We are also trying to sharpen the rules on this. [...] There's quite a lot of freedom for companies at this moment to fill in how they make the policy on preventing addictions. (NL regulator)

The split responsibilities had led to some misunderstandings or differing interpretations of what is expected of whom. The industry representative highlighted that industry actors would prefer more prescriptive rules on how to implement their duty of care. Without clear guidance, "all operators can interpret this duty of care in their own way" (NL industry). Similarly, in Germany, "every online gambling provider is responsible for its platform and can implement its own early warning system" (GER researcher).

The lack of guidance places further responsibilities on regulators to control operator actions from company data, issue fines in cases of breaches, and to regularly update and specify instructions:

> "Of course, we have had to make some stricter rules on this that they really have to do [...] 24/7 monitoring and also the interventions. (NL regulator)

> The [operators] get guidance and everything, they get these decisions very clearly, what we expect, and then they still say "we don't know, we don't understand." I think that is kind of a mantra from the industry to do as little as possible. It's pretty clear what we expect from them. (SE researcher)

Informing About Risks and Signposting to Support

Operators had the main responsibility for informing their customers about risks and signposting to support or treatment. The role of regulators was to mandate these practices and to ensure that all licensed operators provide informational resources such as information on helplines and self-exclusion registers or personalised feedback on consumption patterns:

> The online venues have information on the sites, it's again regulated by the Ontario government so that the providers of Internet gambling have to have minimum requirements for information on their sites. (ON researcher)

Some interviewees also described encountering misconduct in terms of operator responsibility. If the regulations and rules are not prescriptive and clear, operators can misinterpret them in a way that is advantageous to them:

> And then another blatant example is that people need to be warned about, you know, the risks of gambling [...]. The way they present [it] right now is 12 pages down in small nonvisible grey letter typed at the bottom of the sites. (NL researcher)

Targeted Measures

Proactive Interventions

Duty of care policies should lead to proactive interventions. Interviewees from each context described these interventions as mainly industry led. In Sweden, gambling companies are expected to "have the software that detects problematic gambling and then it's up to them to actually approach" (SE NGO). In the Netherlands, the industry representative described having "seven people in my organisation that have been trained to do these phone calls" (NL industry).

The Dutch gambling industry had clear guidelines from the regulator on how to implement proactive interventions in a stepwise manner, starting with a phone call, but allowing further action such as the operator setting additional limits or even requesting an exclusion to the customer. In other countries, interventions were not as defined:

> The gambling state treaty does not define what to do when the flag is red or [...] what it is about in terms of intervention. A telephone call? Just a note: 'Well, look at your gambling behaviour'? And so that means that it is more or less... It lies in the hands of the gambling providers. What to implement and what to do. (GER researcher)

The role of the individual under these configurations is to decide whether to be receptive to the intervention or not. Most interviewees believed that the interventions had little overall effect. Operators were unlikely to intervene in other cases than those that were the most obvious. In addition, even during an intervention, a customer was unlikely to respond in a positive way or change their behaviour:

> If I'm addicted and I bet away all my money and I am taking huge loans, and my family and my life is crashing. It doesn't help me really if somebody's calling and say, hey, do you have a problem? The first reaction from any player is to lock themselves into their bubble and you know... it's this thing about approaching players. It might work. One out of 100, but the other 99 they don't want to hear it because they're not ready, they don't know how to get out of this bubble. (SE NGO)

Provision of and Access to Support and Treatment

Health professionals and NGOs share responsibility for the provision of support and treatment services. As treatment services are primarily funded by government or the gambling industry via a levy, policy makers and operators are also indirectly involved in service provision:

> [Operators] have to pay a levy to the authorities. So, we as the authorities are being financed and there is a special levy for an addiction prevention fund, which we use, for example to fund 24/7 helpline, anonymous treatment of gambling addictions and research as well, and some awareness campaigning. (NL regulator)

In many cases, the state outsourced part of this research work to independent associations or NGOs. For example, in Ontario, an organisation called the Responsible Gambling Council of Ontario was funded by government to run gambling help centres at land-based casinos. These help centres refer people towards services. Other organisations such as Gamblers Anonymous and nonprofit service providers complemented state-sponsored services and also helped advise state services:

> And then you have NGOs like ourselves, there are three different organisations in Sweden that actually work like a nonprofit organisation to organise help, you know, self-help meetings. (SE NGO)

> We have an organisation from former addicts who.... It's comparable with Anonymous Alcoholics who have their well, their groups want to speak about addiction and help people to ... they do their activities as well. They advise the government as well, of course, and us as well. (NL regulator)

Individuals were seen as responsible for seeking help. Whilst governments and NGOs provided the services, the individual was still expected to seek these services and keep attending sessions:

> The only way to get out of an addiction is to, you know, talk about it. Go to self-help meetings. Go to talk to psychiatrists. Find out who you are. If you, you know, if you don't find out who you are, you'll never be able to handle your addiction right. (SE NGO)

Barriers to Harm Prevention Responsibilities

We looked at potential or existing barriers to assigned responsibilities in harm prevention. We identified five main barriers: competing interests, industry power, lack of funding and resources, lack of centralisation and cooperation, and offshore operations. In the following sections, we review these barriers in detail.

Competing Interests

Several interviewees discussed the inherent conflict of interest that industry actors have between their harm prevention or reduction duties and profit-oriented goals. Participants noted that any effective harm prevention measure will inevitably affect company profits:

> That's the fundamental flaw with gambling as a [...] revenue generating stream, the best customers are the ones who lose control and gamble away their life savings. Not the people who go in once a week and bet $20, they're not going to make money out of those people. So, there's such a conflict of interest between the profit motive and the responsible gambling motive. And that's difficult to resolve. (ON researcher)

According to some, competing interest can be even stronger for smaller companies. Large international companies may be able to afford some harm prevention measures and may even benefit from complying with all regulatory requirements in terms of a favourable reputation. However, smaller companies exist in a much more competitive environment.

Competitive environments, according to one participant, encourage "rivalry [which] is not ideal for preventive activities." (GER researcher). The rivalry was described as particularly strong during the early years of a new licensing system:

> The majority of the companies that have a license in Sweden, they don't have the manpower, and they don't have the real will. They're trying to survive in a very competitive market where there's another 80 online casinos available. If they start limiting their MVPs [most valuable players], they're out of business. That's that simple. (SE NGO)

Industry Power

While industry had wide-ranging responsibilities in harm prevention and reduction, several of our respondents noted that the industry was falling short of expectations. The gambling industry was described as having the power to shift societal debate and downplay its own responsibilities. Industry power was connected to a wider hegemony of the RG discourse and individualistic framings of gambling problems that promote ineffective regulation:

> Well, I mean, the challenges are that we end up or retain a landscape where people are guided by industry discourse and lobbying... to remain in a situation where ineffective measures are promoted and where you have the famous story about the emperor with the new clothes, and everybody's afraid to say that he's actually naked. To a large degree, that's what's happening in the Netherlands. (NL researcher)

Industry actors engaged in widespread lobbying for regulations that were beneficial to them. Even when regulations are put in place to limit industry actions, companies were described as either uncaring or not caring enough to understand. In many cases, policymakers were described as complicit in promoting industry interests. Industry actors have strong lobbying power and arguments that often appeal to policymakers:

> The gambling industry will always have one strong argument, and that is the argument of money. I don't have that argument. Well, we can talk about social costs, and [...] say, well, there are costs in the future. Well, politicians don't care about the future. They want to be elected now. And that's it. But my hope is that the negative part of the story is also more or less heard by politicians, by the public, and other stakeholder groups. (GER researcher)

Lack of Funding and Resources

Participants described how regulators and harm prevention professionals lacked funding and resources. In contrast, the industry was described as having significant resources. Researchers in particular noted that there was very little funding available for research on the effects of the new licensing market:

> So, the provincial government that brought in all this gambling... didn't bring in research to explore the effect which bothers me. I mean they should have. They should have actually put in money and said OK, we're going to track this. We want to know what kind of impact this has [...] and they didn't do that. (ON researcher)

Gambling regulators were also under-resourced for all the new tasks that the licensing system has introduced. Within the harm

prevention realm, the main responsibility of regulators was to draft clear guidance to operators and to enforce these rules. Lacking resources made some of these tasks difficult which, in turn, increased industry power and weakened harm reduction efforts. As described by an interviewee in Sweden, "[the companies] have estimated that the chance of getting caught in this net is small." (SE researcher).

Lack of Centralisation and Cooperation

Regulatory powers were further undermined by dispersed responsibilities. Many participants highlighted the need for further collaboration between regulators internationally. Online gambling companies are global, but regulations are local. This creates an asymmetry between those regulated and those regulating. In Germany, interviewees also described how a federal system where regulation takes place at multiple levels, makes it difficult to coordinate harm reduction efforts:

> So, because of this very complicated system, you have so many loopholes for example. For gambling providers as well, and that is what makes really effective public health strategy, I would not say impossible, but very difficult to implement. (GER researcher)

A lack of centralisation regarding control over operators was also felt. Several jurisdictions in this study had replaced an online gambling monopoly system with a licensing system. This had created a situation where all regulated online gambling used to take place on one platform but now was dispersed across multiple operators. in particular, operator-specific pre-commitment made it difficult to track consumption across operators and implement effective duty of care measures as customers could easily move to another operator:

> People have to set their own playing limits. Well, there is not really a limit because it can be up to 99,000. And they

can do it at any operator. So, what we see quite often, [...] we say, 'well we lower your limit because we're a bit worried about your behaviour.' Very often we don't see these players afterwards. I'm not really sure that they've actually stopped playing. More likely they just moved to another operator. (NL industry)

Offshore Operations

A few participants discussed offshore operations as a potential barrier to effective harm prevention and reduction. Despite the introduction of licensing systems, offshore gambling remained available in national markets. Offshore gambling was described as harmful to consumers. In addition, offshore gambling eroded many effective harm reduction measures, such as national self-exclusion registers:

> Even if you've banned yourself from gambling at any of the 100 Swedish gambling sites, you can actually find a way to get abroad if you just know what you're doing. (SE NGO)

Offshore gambling operates in borderless online environments. This has made effective regulation difficult, if not impossible. Furthermore, as one interviewee highlighted, licensed operators use the offshore market as a tool to lobby for less regulation:

> The gambling providers always maintain that the illegal market is growing and accounts for a large part of the total market, so we want to have more products or more freedom in the design of existing products. We want to set more incentives. We want to have less regulation. (GER researcher)

Discussion

This paper has analysed responsibilities for harm prevention and reduction in four competitive, license-based online markets. We

have looked at actors to whom responsibilities for different harm prevention and reduction measures are assigned. We have also analysed barriers to harm prevention across responsibilities. Our results have shown that in competitive online markets, harm prevention takes place at multiple levels, using multiple measures, and in collaboration across different stakeholders and actors. We also identified five barriers to harm prevention and reduction: competing interests, industry power, lack of resources, lack of centralisation and cooperation, and offshore gambling.

Responsibilities Among Different Stakeholders

Our results align with other public health-oriented evidence that supports the need for multi-level harm reduction and harm prevention across universal, indicated, and selective measures (Velasco et al., 2021; Marionneau et al., 2023; Wardle et al., 2024). Our results have shown that a range of measures on all levels have been implemented in newly licensed markets, including provision of public information, restricting advertising, restricting availability and product design, pre-commitment and self-exclusion systems, duty of care policies, proactive interventions, information about support, and providing treatment. These findings are supported by the legislative texts regulating the licensed markets in these countries, as reviewed in Ukhova et al. (2024): the study found legislative provisions for the same measures in the included countries.

Responsibility for setting the framework for most measures was with policymakers. Without legal frameworks, most harm prevention and reduction measures would not be implemented or enforced. The overall responsibility therefore lies with the legislator. This finding is in line with emerging literature on legal determinants of health in the regulation of gambling (Wardle et al., 2024): law sets the aims and goals of any regulatory framework. If harm prevention measures are required by law, these premises

should, at least in principle, be implemented and enforced as concrete policy action.

Alongside policymakers, gambling industry actors and regulators had important responsibilities. Responsibilities assigned to these actors varied across different measures. For universal measures, regulators were seen to have primary responsibility with the help of health professionals and, in some cases, industry. For selective measures, regulators and industry were expected to collaborate closely, with regulators first setting concrete parameters, industry implementing these in practice, and regulators then verifying that rules have been followed. For targeted interventions, industry was expected to collaborate with health professionals or NGOs by referring individuals to treatment.

Our results somewhat contradict the results of a prior mapping review (Akçayır et al. 2022) that identified health service providers as holding primary responsibility for most gambling harm minimisation measures. These differences can be explained by several factors. The dataset used by Akçayır et al. was derived from a large database of academic literature on gambling over three decades prior to the online gambling revolution, while our sample was based on a qualitative key informant approach focusing on online gambling specifically. Online gambling and competitive online markets, in particular, involve distinct regulatory challenges that also affect how harm prevention and reduction can be achieved (Marionneau et al., 2023). In addition, our primary interest was on harm prevention rather than harm minimisation. Finally, the mapping review by Akçayır et al. (2022) focused on Anglo-American contexts while our focus was mostly on European contexts where public health-oriented, system level policies are somewhat more established (Ukhova et al., 2024).

Unlike previous research into responsibilities, our analysis also showed very little emphasis on individuals. Individuals were seen to have some responsibility in adhering to their gambling limits or seeking help. However, even in these cases,

individual responsibility was conceptualised within the framework of harm prevention and reduction measures implemented by other actors. Previous studies, conducted amongst individuals who gamble (Grey et al., 2021a; 2021b; Marko et al., 2022), have found that few attribute responsibility to any stakeholders other than themselves, including governments or industry. This difference can partly emanate from our focus on mostly European contexts. Furthermore, the difference can relate to methodological choices. Previous research has focused on perspectives of individuals while our approach focused on other stakeholders. In our study, regulators and industry representatives highlighted their own responsibilities in gambling harm prevention and reduction. It is possible that the emphasis on individual responsibility in previous literature is also partly a factor of participants viewing the question from their own perspective. From an external perspective, the emphasis on individuals may be less pronounced.

It is also interesting to note what kind of stakeholders were not assigned responsibility for harm prevention or reduction in our study. The banking sector, internet service providers and media companies were briefly mentioned in a few interviews, but these actors had no specific responsibilities under current configurations. Digital platforms and payment intermediaries have been described as a legal blind spot in the gambling field (Parker et al., 2024), yet, digital platforms could, for example, be tasked with blocking unauthorised gambling advertising. Similarly, payment intermediaries could be tasked with overseeing and preventing payments (Parker et al., 2024; Marionneau et al., 2023). Going forward, these actors should be integrated in harm prevention efforts, particularly in online environments.

Barriers and Asymmetries in Gambling Harm Prevention and Reduction

Our results showed five barriers to effective harm prevention: competing interests, industry

63

power, resourcing, centralisation and cooperation, and offshore gambling. As also argued by Livingstone (2023) as well as The Lancet Public Health Commission on Gambling (Wardle et al., 2024), effective prevention of gambling harms is possible. However, existing orthodoxies and framings continue to promote ineffective regulations and interventions. Based on our results, at least three types of asymmetries appear to promote and perpetuate ineffective harm prevention.

First, we found an asymmetry of power between industry actors and other stakeholders. The power imbalance was most clearly visible in industry influence over policy and discourses. RG discourses emphasise partnerships with the industry as part of the solution for improved control (Reynolds et al., 2020; Livingstone & Rintoul, 2020; Hancock & Smith, 2017). RG discourses have become established amongst industry actors, to the point where no alternatives are considered (Forsström & Cisneros Örnberg, 2019). Similarly, in our study, collaboration with industry and employing industry-led solutions were described by many participants, leading to competing interests and overall reliance on industry due to poor resourcing of other actors.

Second, our results suggest an asymmetry of responsibilities. Industry actors have conflicting responsibilities and face conflicting expectations (also Fiedler et al., 2021; Borrell, 2008). Regulators and policymakers assign industry actors with responsibilities to prevent, detect, and intervene with gambling harms. At the same time, privately owned gambling operators have a responsibility to their investors and shareholders to produce profit and value (Berret et al., 2024). This asymmetry likely explains some of the industry misconduct identified by our respondents. At the same time, revenue interests amongst state actors may similarly prevent effective regulatory action (Livingstone, 2023).

Third, our results suggest that there may be an asymmetry between gambling harm prevention and gambling harm reduction. Our study initially focused on gambling harm prevention in newly licensed online markets. However, most discourses in our interviews focused on harm reduction. Although the finding needs to be further explored in future studies, our study suggests a potential mixing of harm prevention with harm reduction. This may result from industry power. As described by Livingstone and Rintoul (2020), RG discourses, endorsed by industry, imply that harm prevention is impossible, as some degree of harm will inevitably result from 'irresponsible' gambling. Following this logic, the focus of regulation should instead be placed on harm reduction or harm minimisation. Similarly, in our study, even when asked about harm prevention directly, most interviewees discussed harm reduction as these types of interventions were more commonly available.

Policy Implications

Our results have implications for harm prevention and reduction responsibilities in the future. While our results have shown that some form of collaboration is needed across different actors, industry involvement should not be a key component in designing concrete measures. Policymakers and regulators should define standards and actively enforce these. Regulators are also needed to centralise actions across operators. This requires significant improvement of regulatory resources and powers (also Rintoul, 2019). When industry is involved in harm prevention and reduction, this should take place within clear frameworks that leave little room for interpretation. More symmetrical roles in harm prevention and reduction are in the interests of all stakeholders, including industry, as this can reduce misunderstandings and potential enforcement action (Gray et al., 2021a).

In addition to responsibilities in harm prevention and reduction, it is important to consider responsibilities in harm creation. Borrell (2008) has argued for a public accountability approach to gambling. Such an approach would

focus on identifying and acknowledging responsibilities in harm production. A step in this direction would involve a systematic application of the precautionary principle (Borrell, 2008; Wardle et al., 2024). Currently, industry actors across jurisdictions do not have the burden of proof to show that their products are not harmful before releasing them in the community. This is the inverse of, for example, pharmaceutical products (Borrell, 2008). In addition, reducing asymmetries of responsibilities, power, and perceptions of harm prevention could help prevent harmful practices before they cause damage to individuals.

Limitations and Further Studies

Our study is limited by a small sample (N=10). The small sample size did not allow for more systematic comparisons between stakeholder groups. We interviewed only one industry representative due to difficulties in recruiting more participants. Our results should therefore be considered as exploratory. Further research should look at stakeholder perceptions of responsibilities with larger sample sizes. In addition, our data were collected in four countries representing European and North American contexts. The results may not be applicable to other emerging gambling markets, notably in the Global South.

Conclusion

Gambling harm prevention and reduction takes place at several levels and requires collaboration across different stakeholders. This study has investigated responsibilities and potential barriers within this field. Our results have shown that while policymakers have the overall responsibility in drafting legislative frameworks and resourcing different actors in harm prevention, industry and regulators share most of the responsibility for implementation. The role of health professionals and NGOs is largely limited to providing treatment. Individuals are expected to have responsibility for maintaining their consumption to set limits and for seeking treatment when needed. We identified five barriers to responsibilities in effective harm prevention—competing interests, industry power, resourcing, centralisation and cooperation, and offshore gambling. To improve gambling harm prevention in the future, it is crucial to address asymmetries that emerge from these barriers. These include asymmetries of power between industry and regulators, asymmetries of responsibility, and asymmetries of prioritisation between harm prevention and harm reduction.

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