Rethinking Canada's approach to children's digital game regulation

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Introduction

In Canada and elsewhere in the Global West, digital games (herein referred to as simply games) are classified and regulated based on ideas about what constitutes "age-appropriate" content. These ideas are expressed in industry-managed ratings systems, through government regulation, or both. During the 1990s and early 00s, questions about how to define and enforce notions of age-appropriateness were highly controversial and heavily debated by policymakers, industry representatives, parents, academics, and advocacy groups. Much of the discussion centred on the perceived risks associated with young players' exposure to violent and sexual imagery and themes. The debates eventually subsided and industry-led ratings systems were established as the dominant framework for evaluating and classifying games by age category (Felini, 2015).

In some instances, as with the Entertainment Software Rating Board (ESRB) in the US, industry self-regulation has largely stood alone. In others, adherence to industry-led rating systems became part of public policy, enforceable by governments. Canada and the UK are compelling comparison cases in this regard. Although the ESRB is a US-based self-regulatory organization whose ratings are not currently enforced by any US federal or state laws, its system *is* enforced in five Canadian provinces (Ontario, Manitoba, New Brunswick, Nova Scotia, and Saskatchewan).[1] The UK adheres to the Pan-European Game Information (PEGI) system and participates directly in the assessment and ratings of games rated PEGI 12 (appropriate for children aged 12 years and older) and above, through the Video Standards Council Ratings Board, which is accountable to the UK government.

Neither of these systems consider children's literacies, maturity, or positionality in their evaluation of game content. Nor do they adequately address elements that may be embedded within games while remaining "distinct" from its contents, such as third-party ads or the collection of players' data. Meanwhile, such elements can include adult-targeted content and activities that contravene existing laws, such as Canada's new *Consumer Privacy Protection Act* (Part 1 of the Digital Charter Implementation Act, or Bill C-27), which classifies the personal information of minors as "sensitive," and Quebec's *Consumer Protection Act*, which prohibits advertising targeted to children under 13 years of age. Research suggests that ratings are largely used alongside other information resources by parents and other gatekeepers (e.g., teachers, librarians) during decision-making about which games are "appropriate" for different children and youth (e.g., Lee, Clarke & Rossi, 2016; Shin & Huh, 2011). Indeed, while game industry ratings systems are largely heralded as success stories because of their high compliance rates and awareness among parents (e.g., Jay, 2019; FTC, 2013), their effectiveness and scope are limited to a specific set of thematic concerns and a small slice of children's overall gameplay experience.

Over the past several years, the games ecosystem has expanded significantly. Games are now played on a range of electronic devices. Their reach has also expanded through an increased incorporation of connectivity and online features, some of which appear in the game itself (e.g., chat systems, player-versus-player competitions), and some of which operate behind the scenes (e.g., data collection, micro-targeted advertising). Today, most games contain an online component, and even "offline" games often collect large quantities of data from users. This data may or may not be disaggregated by age, may be used for different purposes or sold. The recent

growth in popularity of mobile or "app" games introduces additional challenges, foremost among which is the emergence of platform-specific ratings systems based on even more ambiguous definitions of age-appropriateness. The rise in prominence of "free-to-play" games has produced a resurgence of in-game advertising from pop-up video ads and banner ads to "velvet-rope marketing" for purchasable game items and areas (Grimes, 2021). Monetization through "loot boxes" and other gambling mechanics is commonplace in games, including titles targeted to and rated as appropriate for very young children.

The gaps and omissions that permeate game regulation in Canada, the UK, and around the world have allowed a range of questionable trends and industry practices to establish themselves within the children's digital ecosystem. Existing game classification systems are ill-equipped to handle these developments. For instance, the ESRB provides an "Interactive Elements" content descriptor designation to games containing "online features that may be of interest or concern," but it does not rate online content or offer any details about the elements themselves (ESRB, 2020). Although the PEGI system was supplemented by PEGI Online in 2007, a program that grants certificates to online games that "commit themselves to banning inappropriate material" and interactions between players, little to no information is provided about the multitude of game titles that are *not* certified by the program.

There is rising interest among the public and policymakers in revisiting how children's games are regulated, particularly around questions of privacy and commercialization. In the UK, the Information Commissioner's Office (ICO) has responded through the introduction of a new code of practice on age-appropriate design commonly referred to as "the Children's Code." The Code

is oriented to digital service providers who handle children's data and privacy, and specifically names online games as covered by its standards. Although it remains to be seen how enforcement and compliance to the Code will play out, there is evidence that it has already had an effect beyond the UK, with policymakers in California passing a cognate bill in 2022 (the "Kids' Code"),[2] and The Netherlands Ministry for the Interior and Kingdom Relations commissioning the *Code voor Kinderrechten* ("Code for Children's Rights") in 2021. Most recently, the US Federal Trade Commission (FTC) put out a call for comments on commercial surveillance and digital security focused on exploring new regulation aimed at protecting children and teens from harms such as privacy infringement and "dark patterns" online (Federal Trade Commission, 2022).

In Canada, however, there has yet to be any meaningful discussion or movement on these issues. Canada has fallen behind the UK, the EU, and the US, where shifting approaches to "age-appropriateness" are producing promising new frameworks for supporting children's rights across the digital environment. These frameworks build on existing regulation such as the General Data Protection Regulation (GDPR), which is enforced in both the EU and the UK (retained post-Brexit as the "UK GDPR"), contains several rules supporting children's digital rights, and advances a non-standardized definition of "child" that enables countries to (some extent) locally determine the age of consent for the collection and use of personal information.[3] In contrast, much of Canada defers to US industry-made classification systems, including the ESRB, and platform-specific rubrics, such as Apple's rating system for the App Store, that are ill-equipped to address children's rights, best interests, and intersectional diversity. Indeed, even the federal government's current privacy modernization mandate has thus far failed to effectively

support the rights of children and adolescents, their varying needs, literacies, and potential vulnerabilities. For instance, beyond the stipulation that "the personal information of minors is considered to be sensitive information," the recently implemented Bill C-27 barely mentions children at all. In this paper, we argue there is a growing and urgent need for a rights-based, child-centred Canadian response to the problematic issues that have emerged within the digital game landscape.

Canadian game regulation and the ESRB

Canadian media regulation is spread across a range of specialized and somewhat uncoordinated federal and provincial policies, which co-exist with (and often defer to) industry-generated codes of standards or ethics. Film classifications are determined at the provincial/territorial level, while nation-wide television rating systems (one for Canadian English television and one for Canadian French television) are developed by the Canadian television industry. As a condition of their broadcast licenses, traditional television services must also comply with the Canadian Radio-television and Telecommunications Commission's (CRTC) *Voluntary Code Regarding Violence in Television Programming*, the *Sex-Role Portrayal Code*, and the *Broadcast Code for Advertising to Children.* Thus, industry involvement in Canadian media regulation is common and until recently configured as the preferred response to emerging media issues and technologies (Geist, 2022). It is unusual, however, for Canadian media regulation to revolve around an industry system based in another country. Yet, such is the case with five of the existing provincial statutes on video game classification. Legislation in Ontario, Manitoba, New Brunswick, Nova Scotia, and Saskatchewan currently enforce the ESRB's age-restrictions on the

sale and rental of games, despite having no direct involvement in the organization's game review process or classification decisions.

The ESRB is a self-regulatory board established in 1994 by the US Entertainment Software Association (ESA), largely in response to the "violent video games" controversies and congressional hearings that unfolded in the early 1990s (Boyd, Pyne, & Kane, 2019). Since its inception, the ESRB's primary function has been to review and classify games. For the first several years, this was done using a two-pronged system of age-based ratings[4] and a set of content descriptors that alert consumers to the presence of themes or images that could be deemed "inappropriate" for children (e.g., "Alcohol Reference," "Blood and Gore," "Comic Mischief"). Today, the ESRB also provides a third category of ratings in the form of "Interactive Elements" warnings, which flag features that "may be of interest or concern but do not influence the rating assignment" (ESRB, 2022), including "In-Game Purchases" and "Users Interact." In order to receive a rating, a game must be submitted to the ESRB for review by its developer or publisher, in the form of a completed questionnaire and a video showing both typical gameplay, cut-scenes, and missions as well as any "extreme" content (playable or non-playable) relevant to the ratings process (Boyd et al., 2019).

While initially established as an alternative to government regulation in the US, in the 00s the ESRB system became the focus of a series of state bills seeking to regulate children's exposure and access to games. As in the early 1990s, this regulatory push was driven by a widespread moral panic about the alleged negative impact of games on children's psychological health and development (Markey & Ferguson, 2017). While catalyzed by tragic real-world events such as

the Columbine Massacre, much of the public outcry focused on a handful of games that contained unusually mature themes and imagery. A popular target was Rockstar's *Grand Theft Auto: San Andreas*, an M-rated game about organized gang crime in Los Angeles that featured prostitutes as secondary characters and a hidden (available only by modifying the game code) scene depicting the protagonist in a sexual encounter. While not designed or rated as appropriate for children, titles containing mature content were frequently held up as evidence that games were corruptive and dangerous despite their relative rarity across the games market.[5]

In the end, the bills were even more controversial than the games. By the early 2010s, nearly half of all US states had tried and failed to pass legislation making ESRB ratings mandatory and enforceable. While multiple forms of evidence and arguments were presented in the various hearings involved, a recurring reason for the dismissal of these bills was their perceived infringement of the game industry's right to freedom of speech. In the US, where freedom of speech is paramount, government media regulation is highly susceptible to this challenge. Over the past two decades, the last remaining state laws requiring movie theatres to adhere to the Motion Picture Association's (MPA) (formerly the Motion Picture Association of America or MPAA) age-based ratings were repealed. The MPA continues to provide film classifications of motion pictures submitted to them for review, as most cinemas opt to only exhibit films that have been rated and refuse to exhibit films rated "NC-17" ("No one 17 [years] and under admitted," the highest rating in the MPA system).

During this same period, several Canadian provincial governments introduced comparable legislation—with very different outcomes. Like their US counterparts, these new provincial laws

made compliance to age-based game ratings mandatory at the point of sale or rental. Unlike in the US, however, they were met with little resistance or even much debate. Most were introduced to supplement existing film classification legislation, as in the case of Ontario, Manitoba, New Brunswick, Nova Scotia, and Saskatchewan. Another province, British Columbia (BC), decided that children's access to games was subject to the province's existing motion picture legislation. By 2008, five provinces had passed game regulation enforcing the ESRB's rating system. Authority and responsibility for determining age-appropriateness in games was thus delegated to a US-based industry organization with a relatively opaque review process and no formalized accountability to the Canadian public.

Notably, as game regulation became an issue of policy interest in parts of Canada in 2005, the ESRB did form a Canadian Advisory Committee in collaboration with the ESA's Canadian branch (ESAC) and a now-defunct organization called the Interprovincial Film Classification Council of Canada (IFCCC) (ESRB, 2005). It is possible that the establishment of this Committee reassured provincial governments that Canadian values and interests would be represented in the ESRB system as these laws were introduced. Since that time, however, there has been little to no mention of an ESRB Canadian Advisory Committee made in the news media or industry press.[6] No information about the group or its involvement in game ratings is provided on the ESRB website. While ESAC representatives have described themselves publicly as representing Canada in the ESRB ratings process over the years (e.g., Kyllo, 2007), there is no mention of the Committee on the ESAC website either. Moreover, the ESAC website does not provide any information about the organization's role in or contributions to the ESRB. In its digital resources for parents seeking information about age-appropriateness in games, the ESAC

merely provides a brief description of the ESRB and a link to its website, without clarifying that the organization is distinct from the ESAC or that the ESRB is US-based. The current status of the Canadian Advisory Committee to the ESRB is unclear.

Canada's widespread enforcement of a US-based ratings system, the contents of which are determined by unelected ESRB employees,[7] and whose original purpose is to provide a voluntary (i.e., non-enforceable) set of guidelines, is in and of itself questionable. While the ESRB is widely regarded as a self-regulatory success story (e.g., FTC Lauds, 2007), it remains the product of a very specific political context and culture. This matters because of the organization's mandate to determine and monitor "age-appropriateness" in games. Age-appropriateness is far from a universal or uncontroversial concept. Any definition or assessment of what themes, images, and ideas are "appropriate" for children of different ages is necessarily a social construction—one that is shaped by ideological assumptions about children and childhood. The socio-cultural situatedness of age-appropriateness is well established in the literature (Corsaro, 2005; Fromme, 2003; James, Jenks & Prout, 1998), wherein a growing body of scholarship applies an intersectional lens to reveal how race and other "axes of difference," such as gender and geographical location, produce and politicize children's lived experience of "childhood." As Konstantoni and Emejulu (2017) argue, a more useful "starting point of understanding childhood is not necessarily a homogenous and universalising notion of 'age' but, rather, 'difference', as structured by the particular dynamics of race, class, gender, geography and other categories of difference" (p.11).[8] Some acknowledgement of different childhoods is present in other areas of Canadian media regulation, content ratings, and classifications. The very

fact that media classification is a provincial, rather than federal, matter is one important way that cultural differences and contexts are accounted for in existing legislation.

The key example is film classification, which occurs at the provincial/territorial level, and where noticeable differences emerge in how age-appropriateness is assessed. A recent comparative study of 355 films rated by motion picture classification boards across Canada and the US in 2019, found that of the 83 films rated "G" in BC, only 32 also received a G rating in Alberta (Bui, Grimes & Brown, 2022). The contrast is even greater when comparing BC and the US, where only 10 of those same films were also given a G rating by the MPA. Notably, 52 of the films rated G in BC, a list that included several Canadian productions and foreign-language films, were never rated by the MPA. In 2019, of the 207 films rated G in Quebec, only 13 were also given a G rating by the MPA, and nearly half were not rated by them at all (Bui et al., 2022).

Differences in how a film is rated across classification systems reflects deeper differences in societal norms, cultural values, and considerations about how age-appropriateness intersects with children's rights to access information, leisure, and culture (Covell, 2015). The gaps that exist between film classification systems raise important questions about Canada's reliance on the ESRB's game ratings. If films are rated so differently across these provinces and countries, particularly regarding what content is deemed "appropriate" for young viewers, why wouldn't this also the case for games? Would provinces and territories classify games in similarly distinct ways if ratings were done locally? Additional questions emerge around inclusivity, in terms of which games obtain ESRB ratings in the first place. Are there similar gaps in the ESRB's ratings

database when it comes to Canadian and independent productions? What about French language and other non-English titles?

The ESRB system has long boasted high compliance rates among retailers, even in the US where adherence is strictly voluntary (FTC Lauds, 2007). Academic research also indicates high levels of awareness and use of the ESRB's ratings among parents of children and teens (e.g., Stroud & Chernin, 2008). That said, in recent years, the system has lost some of its prominence and relevance, both in the US and worldwide. Although the ESRB system has been updated numerous times, most recently through the addition of the Interactive Features ratings, it fails to address many contemporary trends and business practices. For one, the spread of online features in games has greatly expanded the types and range of contents and interactions available to players.[9] This presents valuable opportunities for social connection and cultural participation, but also new challenges when such features are used for illegal or otherwise "inappropriate" activities. The ESRB's Interactive Features rating of "Users Interact" does not provide any details about the presence of moderators or other features that might impact children's experiences, safety, freedom of expression, and other rights as they interact online. Increased connectivity also means increased access to children's personal data that may infringe upon children's privacy rights (Smith & Shade, 2018). Again, the implications extend far beyond the existing ESRB system, wherein the only category relating to privacy is the "Shares Location" label.

Connectivity also facilitates the integration of design mechanics that expose children to unprecedented levels of pay-to-play commercialization (Grimes, 2021). This increasingly

includes the incorporation of manipulative techniques imported from the gambling industry, as seen in "loot boxes"—in-game "prizes" that are often purchased with real money for a randomized chance at winning a valuable (or worthless) item (Johnson & Brock, 2020). While gambling is generally understood to be "inappropriate" for children, and the presence of loot boxes or other such mechanics may be flagged under Interactive Features, their presence will not impact the game's ESRB rating. Moreover, although some parents and children may track down and read all three categories of ratings and content descriptors before purchasing a particular game, it is likely that many rely primarily on the highly visible age rating icon.

Recent developments in how games are played also diminish the ESRB's relevance. The ESRB has never rated *all* games, but rather games that are submitted for review. Since most major US retailers will only sell games that are ESRB rated, historically there was a compelling reason for developers to voluntarily submit their game for review. For independent developers, the fees associated with obtaining an ESRB rating have long been prohibitive (e.g., Conditt, 2017) and many "indie games" are released without one.[10] Today, the ESRB has further limited its purview to games that are "available physically (e.g., boxed)" ("Ratings Process," 2022). Games that are released in digital-only format can obtain a rating from the International Age Rating Coalition (IARC), an automated classification system co-founded by the ESRB and five other ratings authorities (governmental and self-regulatory) from around the world. While a great number of games are still released on a physical format (e.g., disc, cartridge, etc.), a growing percentage are digital-only. Notably, this also limits the scope of provincial game regulation. For instance, the Ontario government's *Film Content Information Act, 2020*, specifies that its regulation applies

only to “The sale or rental of physical copies of video games” (Legislative Assembly of Ontario, 2020, p.iv).

The growth and popularity of mobile or “app” games introduces yet another set of challenges, foremost among which is the emergence of new, platform-specific ratings systems. Major mobile storefronts, including the Apple Store, assign and manage their own age-based rating systems, advancing competing definitions of “age-appropriateness.” The predominance of “free to play” games has produced a resurgence in in-game advertising, including pop-up video ads and banner ads that promote purchasable content and products. Many of these ads are selected using rudimentary “contextual information” (location, language settings) associated with the (often parent-owned) device or account in use, and thus don’t always accord with a game’s age rating or the age of the player. Like the ESRB, platform-based systems do not consider an app’s data practices and potential infringement of children’s rights as part of its age-based rating. For instance, Apple provides short descriptions of the data collection practices of the apps sold in its store, using general statements such as “may include handling of data” or “data may be collected and linked to your identity” (Apple Store, 2022). These details are displayed in a separate section (“App Privacy”) that appears below the app’s official description, user reviews, and version history. Under its system, privacy is treated as distinct from content. Thus, an app that breaks children’s privacy protection laws can still be rated as “appropriate” for children aged 4 years and over. While academic research on the effectiveness of platform-based rating systems is still emerging, a growing number of studies indicate such trends are dominant (Göksu, Aslan, & Turgut, 2020; Reyes et al., 2018; Radesky, Schumacher, & Zuckerman, 2015).

Throughout this discussion, the lack of consideration for children's rights within existing game classification systems is clear. Yet, in important ways, the very purpose of the ESRB and other age-based rating systems is to support and protect children's access to games. Both the ESRB's origin as an appeasement to moral panics about violent games corrupting children, and the alternative path taken by social media platforms to simply ban children outright from participating, are important reminders of the crucial function regulation can play in ensuring children's access to media is protected. As Felini (2015) argues, "[S]ome forms of regulation are necessary in order to ensure children's access to media—a right also guaranteed by the Convention [on the Rights of the Child] (Art. 29)" (p.107). He warns, however, that this access must be secured without violating children's other rights and interests. This includes the right to privacy, the right to freedom of expression and freedom from discrimination, the right to play and engage in culture, among others. The applicability of children's rights to the digital environment was recently confirmed by the United Nations Convention on the Rights of the Child (UNCRC) through its adoption General Comment 25. The General Comment is an authoritative document and Signatory States are required to meet the obligations it outlines. The Government of Canada must now ensure that "all duty bearers within their jurisdiction meet their responsibilities to children's rights – including businesses and others whose activities significantly impact on children" (Livingstone, 2021).[11]

The need to revisit existing frameworks for classifying and regulating children's access to games and other digital media is critical. Public awareness is at an all-time high as many of these issues were amplified—and in some instances aggravated—by the increased visibility of the unregulated and problematic aspects of children's gaming during the COVID-19 shift to "online

everything" (Timberg et al., 2020). In other areas of the world, policy development in this area is already underway. In the US this includes the *California Age-Appropriate Design Code Act*, introduced in early 2022, which makes direct reference to the UNCRC and children's privacy rights. The most significant, however, is arguably the UK's *Age Appropriate Design Code*, more commonly known as the Children's Code, which came into effect in 2021. Innumerable game companies and platforms made changes to their privacy policies in response to the recommendations provided in the Children's Code (and possibly in anticipation of more to come), especially those relating to children's privacy. These changes occurred not only in the UK and EU but also in the US (Ovide, 2021). The UK example provides a particularly relevant and compelling case study for the types of approaches and issues that Canadian policymakers might consider moving forward.

From content ratings to age-appropriate (game) design and platform regulation

A central focus of the UK's Children's Code is a framework called Age-Appropriate Design (AAD), an approach that is grounded in the UNCRC and prioritizes the "best interests of the child" in the design, development, and operation of digital services and technologies (ICO, 2020). The Code applies to apps, games, sites and connected toys likely to be accessed by children, with a focus on supporting children's privacy rights and data sovereignty, in compliance with the EU's General Data Protection Regulation (GDPR). A key aspect of the ICO approach is the combination of high-level rights-based framing of the standards drawing on UNCRC, along with extensive on-the-ground consultation with industry stakeholders. According to the ICO, rather than provide a set of technical standards, the Code aims to outline

"a set of technology-neutral design principles and practical privacy features" that set a "benchmark for the appropriate protection of children's personal data" (ICO, 2022).

The AAD approach shares many similarities with 'child-centred design' and 'youth-centred design,' both of which are based in human-centred design (HCD), a problem-solving methodology popular among design (e.g., user experience design (UXD)) and management fields. While AAD is highly promising in its prioritization of children's own needs and experiences, comprehensive applications of AAD and other forms of child-centred design are relatively rare and inconsistently applied across the global game industry (Fisher, 2015; Bryant, Akerman & Drell, 2010). Moreover, as Stoilova and Livingstone (2019) argue, "establishing what is an age-appropriate design can be difficult as differences within (as well as across) age groups can be substantial." Applications of AAD must also find ways to address the ongoing challenges associated with ensuring designs are inclusive, especially of children who are systematically *excluded* by design, including BIPOC and disabled children (Stoilova & Livingstone, 2019). Without real guidance on how to apply the approach in an inclusive and informed way, a call for AAD among game developers and policymakers could lead to biased design practices, reproducing the same historic tendencies to marginalize children from underserved and underrepresented groups found across the tech industries. Similarly, systems put in place to monitor and enforce AAD compliance must avoid turning rules intended to support children's rights into tools for discriminatory censorship of applications, services, and content produced by BIPOC and other marginalized communities.

The Code was developed amidst a move towards proactive regulatory approaches to digital platforms unfolding in the UK, a development that Krestchmer, Furgal, and Schlesinger (2021) term "the emergence of platform regulation" (p.1). The authors describe how platforms first emerged as a "distinct regulatory object" in EU law, highlighting Germany's landmark *Netz DG* legislation in 2017, "which dispensed with the safe harbour that shielded internet intermediaries from liability for what their users do on their services" (p.5, footnote 2). The Children's Code is notable as an example of this broader shift—away from media regulation that focuses on individual titles (e.g., games, films) and onto business practices or design mechanics that occur across technologies and platforms. The key example here is the UK's recent exploration of platform regulation as a response to growing concerns around loot boxes in games, which have also informed recent legislative action in Belgium, the Netherlands, and China.

As mentioned briefly above, loot boxes provide players with a random chance to receive virtual rewards after meeting certain in-game requirements.[12] The rewards take various forms, including 'skins' (looks for a character), lowered 'cooldowns' (timers influencing progression in the game), or in-game currency. Loot boxes may resemble boxes or other containers in keeping with the game theme (e.g., eggs which hatch, virtual pinatas, etc.). Opening them is often accompanied by dazzling visual effects, an aspect that has been specifically linked with the aesthetics of automated and virtual gambling. They are sometimes won by playing the game, but frequently sold to players through real money transactions. The techniques employed in loot boxes often lead to them being characterized as a form of virtual gambling or as an example of "dark patterns" -- marketing and design tactics that coerce users into "choices they would otherwise not make, including purchases and sharing personal information" (FTC, 2022).

Questions about loot boxes in games designed for and played by children are increasingly central to discussions about children's rights and wellbeing online. In 2017, the UK's Gambling Commission (2017) released an opinion holding that loot boxes are not gambling under the 2005 Gambling Act. However, in 2019, the UK House of Commons Digital, Culture, Media and Sport Committee released a *Report on Immersive and Addictive Technologies* that focused heavily on the increased presence of gambling mechanics *such as* loot boxes in games, including in titles targeted to children. Responsive to these processes, the DCMS launched a Call for Evidence on Loot Boxes in September 2020 that included a systemic review of academic evidence (Jayemanne et al., 2021). While the DCMS ultimately decided not to introduce new government regulation, the process identified children's engagement with loot boxes as an area for additional research and regulatory scrutiny. Notably, dark patterns and their potential to harm children and teens are a key focus of the FTC's newly proposed rule, described above.

Critiques of loot boxes in games come from third sector groups and other stakeholders, but also from within the games industry and wider gaming community. In recent interviews, game developers discussed a range of motivations for implementing loot boxes – with monetisation sometimes secondary to the use of random rewards as a strategy of user retention. Loot boxes can help to manage player 'churn' (loss of players due to low participation at particular times), guide resourcing for high player counts during special events, and manage the rollout of game content that is expensive and time-consuming to develop. Here too, there is considerable debate on whether loot boxes constitute gambling and under what conditions. That said, for many engaged in this debate it appears reasonable that principles of caution would nonetheless apply when child players are involved. Even if loot boxes are not gambling *per se* it is still possible to

be concerned about the normalisation of gambling-*like* behaviours and desires among children. No matter the rationale for their use in a game, loot boxes also raise questions of privacy covered by the Children's Code. How is user data incorporated into loot box models: for example, in the use of 'pity timers' that adjust the probabilities of opening loot boxes if a player has been unlucky for a given time? What do these techniques mean for children's data? What game design techniques qualify as 'dark patterns' or 'nudges' that the code forbids in services oriented to children?

In July 2022, the UK Government released its response to the loot boxes call for evidence, determining that "it would be premature to take legislative action without first pursuing industry-led measures to deliver protections for children and young people and all players" (DCMS, 2022). The government thus confirmed that it does not intend to make changes to the Gambling Act or to other statutory consumer protections with regards to loot boxes. Instead, they encourage the further development of industry self-regulation, public awareness campaigns, best practice guidance on loot boxes, technical solutions such as age-identification tools, and existing voluntary and statutory protections. Measures also include the development of an improved evidence base on loot box impacts through a Video Games Research Framework. The government response emphasized children's protections and age-appropriate measures throughout. For example, point 29 suggests, "Purchases of loot boxes should be unavailable to children and young people unless and until they are enabled by a parent or guardian."

How the measures outlined in the response develop will be a matter for ongoing research, and the response was not without its critics (Bolding, 2022). What we can note in the context of this

article, however, is the recognition of the complexity of digital trends such as loot boxes and the adoption of an anticipatory approach that encompasses a range of measures and underlines existing statutes. Further recognition of this complexity is found in the Digital Regulation Cooperation Forum (DRCF), a new colloquy of UK regulators formed to "ensure a greater level of cooperation, given the unique challenges posed by the regulation of online platforms" (Competition and Markets Authority, 2021). With regard to children's digital play, the precise application of the ICO code vis-à-vis loot boxes will be important in the future of anticipatory regulation in the UK and elsewhere. Whereas age-based rating systems like PEGI and the ESRB position games as discrete, coherent units for individual review and classification, the loot boxes discussion cuts across games and platforms. This (potential) move from age-based ratings to platform regulation is consistent with the shift identified by Kretschmer et al. (2021) in the "regulatory object"– away from specific titles and programs towards wider platform structures and design trends. In the emergence of platform regulation, policymakers are adopting a systemic perspective. Notably, in the UK example, this perspective supplements an existing regulatory framework (UK PEGI) that continues to review and rate individual game titles.

How these regulatory steps interact, and how robustly frameworks like the Children's Code are enforced will be important in the future of anticipatory or platform regulation in the UK, in Canada, and around the world. As we move toward the increasing incorporation of gaming features in major platforms and 'metaverses,' these developments assume an even greater importance. As a major player in the global games industry, Canada needs to assume an active role in deciding how games and related technologies will be regulated at the various levels

involved, and in ensuring that Canadian children's rights are addressed and supported in the process.

Conclusion

With the adoption of the UNCRC General Comment 25 in 2021, Canadian federal, provincial and territorial governments were called to action to uphold children's rights online and while using connected technologies. Many of the gaps found in Canada's current game regulation relate to recent technological developments and industry trends that diminish the effectiveness of self-regulatory game classification systems. Age-based rating systems are themselves problematic in their very definitions of "age-appropriateness," uneven review processes, and lack of consideration of children's rights beyond those of (restricted) access. Concurrently, many provinces and territories do not formally regulate games, while growing swaths of the children's gaming landscape remain sparsely regulated, if at all. Policy development on these issues that advances an anticipatory approach and a shift toward platform regulation is already underway in the UK, the US, and elsewhere, with ripple effects felt around the world. Canadians are now faced with a unique opportunity to reassess existing regulatory frameworks and engage in a more balanced discussion of how to best support children's rights, needs, and interests in an area that is highly popular and deeply meaningful to many of them (i.e., games). It is crucial that those involved in the design, development, and operation of children's games across Canada are part of this discussion. In keeping with the principles of AAD and the UNCRC guidelines for supporting children's rights in the digital environment, Canadian children of various ages, geographic regions, socioeconomic backgrounds, and intersectional identities must also be consulted and involved in each step of the process.

Footnotes

1. A sixth province, British Columbia (BC), is sometimes included in this list for its official and somewhat misleading representation of the ESRB as "responsible for assigning ratings for video games and applications, helping parents make informed choices" in Canada (Consumer Protection BC, 2014).
2. Assembly Bill no. 2273, California Legislature – 2021-22 Regular Session, The California Age-Appropriate Design Code Act: An act to add Title 1.81.46 to Part 4 of Division 3 of the Civil Code, relating to consumer privacy. Introduced by Assembly Members Wicks and Cunningham, February 16, 2022.
3. Member States can opt to lower the default age at which parental consent is no longer required which is 16 years, but to no younger than 13 years of age.
4. The current ratings categories include: "E" for Everyone, "E10+" for Everyone aged 10 years and over, "T" for Teen, "M" for "Mature" players aged 17 years and over, and "AO" for "Adults Only 18+" for players aged 18 years and over.
5. Industry statistics consistently show that most rated games receive child-friendly age classifications. E.g, in 2020, 49% of games rated received an "E" rating, while 16% were rated E10+ (ESA, 2021).
6. Additionally, a cursory search for mentions of the ESRB's Canadian Advisory Committee in policy documents and public consultations available online yielded but one result. It was briefly described by an ESAC employee during testimony delivered to the Legislative Assembly of Alberta in 2008—around the time the province made ESRB ratings enforceable.

7. These employees are described on the ESRB website as “trained raters” responsible for reviewing each game submitted to the ESRB. At least three raters are asked to recommend a rating category, Content Descriptors and Interactive Elements (if applicable) based on a review of a questionnaire and video submitted.
8. A key concern for Konstantoni and Emejulu (2017) is ensuring that the original purpose of intersectionality of prioritizing race, class and gender remains at the forefront. They propose that understanding childhood as a concept primarily defined by difference creates “a powerful link between intersectionality and childhood studies that does not de-prioritise race but puts age in the context of race and other axes of difference” (p.11).
9. For several years this was due to the lack of guidance provided by the ESRB about online features and content. This was remedied to some extent in recent years through the introduction of the “Interactive Features” ratings. Nonetheless, information provided through these ratings is minimal and only a handful of features or issues are addressed.
10. For a time, the ESRB offered the option of applying to a “Short Form” ratings process free of charge, as a way of accommodating independent developers and small sized studios for whom the fee for a regular (“Long Form”) review was out of reach. The Short Form review process was only available to digital-only games , while games released on physical format remained limited to the Long Form review. The ESRB ended the Short Form option in 2018, shortly after the establishment of the IARC, and began directing digital-only game developers to the IARC for reviews instead (Batchelor, 2018).
11. It should be noted, however, that UNCRC has attracted its share of controversy in the UK and elsewhere. An especially pertinent example is the Scottish Government’s attempt to pass a Bill in 2021 giving legal force to the UN Convention on the Rights of the Child, which was

immediately challenged by the UK Government in the Supreme Court (Cormack, 2021). The judgement for this case is due on October 6, 2022 (https://www.supremecourt.uk/cases/uksc-2021-0079.html).

12. These requirements vary from a certain amount of time playing the game (time-gating), to a direct ('in-app') purchase with real world or in-game currency, to demonstrated skilful play.

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