Child Appropriate Game Design: Year 1 Findings

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INTRODUCTION

There is increasing recognition that digital technologies and online services should be designed to accommodate the needs and rights of child users. First codified in the UK, age-appropriate design is a regulatory framework that seeks to embed the best interests of the child in digital environments. As games, and in particular, online games, become increasingly popular with young children, it is important to consider how to conserve their best interests in digital play spaces. In Canada and the UK, the age-appropriateness of games is determined by industry-managed rating systems according to the suitability of a game's content for children. Unrated components of games, such as third-party pop-up advertisements and online interactions with other players are largely ignored by existing regulatory frameworks. Our project aims to further understanding of age-appropriate game design through an in-depth exploration of children's and children's game developers' attitudes to current game rating systems and age-appropriateness. The project is an international longitudinal mixed methods study that will span over three years and includes annual focus groups with children and interviews with children's game developers. In this paper, we will discuss our research design and present our year 1 findings.

METHODOLOGY

The methodology of the project rests on a participatory and child-centric approach that emphasizes the importance of involving children directly in decisions that will affect them. The research design includes multiple methods, including policy analysis, content and design analysis, focus groups, and interviews, which together will allow us to gain a deeper insight into children's experiences of age-appropriate design in games, game ratings, and regulations. In this paper, we limit the discussion to our focus groups with children, which employ an innovative play-based design that will engage the same 35 children aged 6 to 12 years every year for three years in group discussions about a range of issues and experiences related to "age-appropriateness" in games. The longitudinal structure of this

study will allow us to track how these children's experiences, ideas, and beliefs might change over time, as they age and develop, and as they learn from each other and the research team. Each focus group in year 1 included 5-6 racially and gender diverse children in a similar age range.

During the Year 1 focus groups, we began our sessions with a live demonstration of a *Minecraft* (Mojang Studios 2023) world built by our team. This world consists of four mini-games designed to illicit the children's reactions to four concepts identified as relevant in our literature review and policy analysis: fairness, age "appropriateness" (as expressed in ratings, descriptions, and designs), gambling mechanics (such as loot boxes), and "inappropriate" content (through the example of mild comedic horror). The children then took turns playing the mini-games. Across each one-hour session, the research team asked participants a series of questions about how they determined the appropriateness of a game, how they choose which games to play, what (if any) the rules are at home when it comes to which games they are allowed to play or buy, and what they think grownups should consider as they make and regulate children's games. Importantly, our line of questioning focused on hopeful imaginings as much as current criticisms.

At the time of writing, we have completed the first year of children's focus groups and are analyzing the data collected. In the coming months, we will have completed the first round of interviews with game developers, as well as the second round of children's focus groups. Together, this constitutes just over half of the anticipated Canadian longitudinal data. The international component will be conducted in coordination but separately. Future focus group questions and activities will be informed by the insights and suggestions of our child participants.

PRELIMINARY FINDINGS

The preliminary findings of our study confirm that children have meaningful and complex insights into their gaming experiences that are deeply valuable for current and future applications of age-appropriate design guidelines in games. Notable themes that have emerged thus far include a shared desire for increased flexibility and customization options, a demand for decreased advertising, and a belief that many grownups misunderstand the value of games for children.

To elaborate, we heard that children have different ways of deciding which games are appropriate for them and that the appropriateness of a game for an individual child cannot be known through an age-based rating alone. Children described their different tastes, preferences, and goals related to gaming, and they are calling for design options and customization settings that allow for more access to individually appropriate experiences. The key example discussed was "scary games" and "being scared," which many of the children see as complex and deeply subjective categories that are largely misunderstood and vilified by adults. There is a widespread attitude that advertisements are misleading, irrelevant, and detract from the fun of games. Similarly, we received feedback that grownups do not necessarily understand the importance of digital games for children's peer and social relationships, skill development and learning, and experiences of fun.

CONCLUSION

Children are teaching us more about their experiences of gameplay than we could have imagined, and they are taking the conversation in directions that both corroborate existing literature revealing children's advanced capacities to participate in design and policy development (Grimes & Merriman 2021; Galman 2019; Yoon & Templeton 2019), and our assertion that future responses to the many questions raised by age-appropriate design frameworks must consider children's own attitudes, opinions, and experiences. This also speaks to a need for industry, academia and policymakers to collaborate effectively in ways that support children's rights (Third et al. 2021) and facilitate their participation in digital society.

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