A Parent's Dilemma:
A study of parent's decision-making process and their children's online gaming behaviour

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Abstract

Children are spending more time online than ever before and it is the parent's job to help equip their children with the tools and knowledge necessary to safely navigate the online world, so they can become responsible online citizens. The challenge for parents is the volume of interactions that can occur between people online and their children, including social media, chat programs, and online gaming. This research focuses on how online gaming is introduced to a child's life, and how the parents decide whether the game is appropriate for this child to play. A purposeful sample of seven parents were interviewed and asked about their decision-making process and the different variables that affect that process. The data shows that parents are not well informed about the risks of the games, as well as the safeguards available to them to properly protect their children while they play the games. There is a huge disconnect between the school systems and the parents with regards to digital literacy education and connections need to be made in order to help foster better literacy for not only the children engaging online, but for the parents mentoring them.

Keywords: digital literacy, parental mediation, Roblox, online safety, children safety, online video games

Introduction

With the rise in mobile apps designed specifically for babies and toddlers, children are being exposed to technology at an earlier age than ever before. Children in Canada are spending an average of 7.5 hours in front of screens each day (Jones, 2015), and when considering this is seven days per week, it works out to more time spent online than most adults spend at their jobs. Studies have shown that kids are spending "practically every waking minute – except for the time in school – using a smart phone, computer, television or other electronic device" (Lewin, 2010, para 1). The screen time is actually compounded by the fact that kids are multitasking and using more than one device at a time, resulting in the average daily usage being almost 11 hours packed within those 7.5 hours (Kaiser Family Foundation, 2010). Siobhan Freegard, co-founder of the online parenting resource Netmums, explains, "No past generation has ever had access to so much information so fast – and not all of it desirable" (Ward, 2013, para 21).

A large portion of the information bombardment that Freegard refers to comes from online gaming. A study exploring the online activities of children reported that 71% of students claimed that they played online video games, with this activity being significantly more popular among boys than girls (Johnson, 2013). The rate of online game usage is also higher for younger kids as the study shows that 77% of children in grade 5 are participating in online games, compared to the 42% of gamers in grade 10 (Johnson, 2013).

With the ubiquity of technology, how can parents effectively manage their children's online behavior, while staying current with new apps and technologies themselves? What factors affect their decision-making process and what does that process look like?

My research set out to answer these questions with the objective of exposing knowledge gaps and common themes, providing strategies for parents who have the responsibility of preparing children to navigate the online world safely as responsible online citizens.

This study uses Roblox, an online interactive video game aimed at a younger demographic, as a case study to provide a specific focus for parents to refer their experience to. Roblox is incredibly popular, with millions of active users, and is even used in elementary school classrooms as a teaching device for beginner computer programing (NobleDragon, 2015). Despite the popularity and educational benefits of Roblox, the online social aspect of this game has left children as young as seven years old exposed to predatory activity from people posing as children while playing the game. These activities include exposure to pornographic imagery, explicit language, and propositions for disturbing sexual acts. Through my experience talking with parents whose children play Roblox, most parents had little to no knowledge of this issue or how to mitigate it.

Why my research is important

The social functionality of the game is an important feature to Roblox' success as it allows players to communicate with one another and play within each other's game. However, this level of accessibility leaves children vulnerable to risks imposed by other, more mature players. Such risks include sexual harassment and sexual assault of the user's avatar (Lagerquist, 2017) (see Figure 1). A mother of an eight-year-old girl explains her daughter's experience in the game, "She said all of the Roblox characters had their clothes removed. She said a male character got on top of her and started making comments in the chat […] She got very upset. She wanted me to call Roblox and have it shut down" (Lagerquist, 2017).

Figure 1: Example of sexual harassment within Roblox game play (Lololee, L. 2011).

More recently a mother banned Roblox from her home due to an incident where her seven-year-old daughter's Roblox avatar was being sexually assaulted by multiple players (Racco, 2018). This was after the mother allegedly set up the account with the maximum safeguards possible. Game developers have considered the potential risks and created safeguards to protect the users. For instance, users under the age of 13 have their chat filtered for both inappropriate content and behavior, as well as to avoid any personal information being posted (Roblox, n.d.). The chat function can also be disabled entirely, and the user can limit the type of accounts they interact with, for example, "Friends" or "No one". Should the chat function be left enabled, the chat history is also stored so parents can look through the log if there is concern of abuse (Roblox, n.d.). During my conversations with parents, it seemed that many were unaware

of these safeguards despite the information being available on the game's website, but they were also unaware of many of the risks involved in social online gaming. If parents are so oblivious to important factors of online games that directly affect their child, what criteria are they looking at with which they base their decisions? Is this inattention typical? Or is it specific to Roblox due to its "E for everyone 10+" game rating (ESRB, ND) and innocuous cartoon characters?

Literature Review

This research explores how a parent prioritizes their own digital learning, and how they apply that knowledge to mediate their children's online activities. Roblox offers a case study that provides the opportunity for the research to ask specific questions about game set up, game monitoring, and related anecdotes. By having this level of specificity, I am able to compare what the parent claims they do in terms of monitoring and mediating with what actions they have actually taken with regards to Roblox. Their subsequent experience with Roblox either validated their answers or revealed a disconnect between how the parent thinks they are mediating, and what they are actually doing.

In order to gain a deeper understanding of digital literacy, parental motivations, external influences and a myriad of other topics surrounding the issue of youth's involvement with online gaming, I conducted an in-depth literature review using a wide variety of sources.

My literature review included peer reviewed academic journals, books, trade publications, dissertation, and relevant statistics. Paul Oliver (2012) asserts how news articles may be more relevant for some research subjects than others, and I believe my research topic to be that exception. The dangers of online gaming, specifically with Roblox, have been in the news as recently as 12 days prior to the submission of this capstone, and for that reason it is important to include these sources to provide the most current sentiment on the issue.

Any articles specific to social media were filtered by publishing date. There are many academic journals on the topic of social media, but since technology is changing so rapidly, filtering for publishing date helps narrow the search and ensures that the information is relevant. Oliver (2012) states, "The disadvantage of the edited book […] is that the time from inception of the idea to publication may be rather longer than the publication time for an academic article" (p.

24). I would argue that even an academic article has a very limited shelf life with regards to the topic of social media and online gaming. Therefore, I only focused my attention on journals that were published within the last seven years. I was also careful to take information from published books that were not dated or obsolete due to technological innovation.

During my literature search, I relied on bibliographic and citation searching as well, to capitalize on the snowball effect that occurs within the research (Booth, Sutton, & Papaioannou, 2016). To effectively organize my search, I categorized many aspects of each source into a spreadsheet. This practice helped me cross reference information to identify consistencies or inconsistencies within the studies, as well as to avoid being overwhelmed by the sheer volume of information collected. This approach facilitated a critique of the literature and how it may inform data collection and analysis.

My spreadsheet included the following columns:

- Category (where I identified which theme the source belonged)
- Source type
- Number of times cited (to establish credibility)
- Date published
- Methodology (when relevant)
- Sample size (when relevant)
- Strengths of source
- Weaknesses of source
- Full APA reference (for ease of citing later)
- Academic (Y/N)
- Peer reviewed (Y/N)

I also highlighted the articles that were particularly helpful to my research, in other words "star articles". These articles provided more depth into the topic, either through their own bibliographies, or unique insights into the issue.

After systematically analyzing the secondary research, the information collected was categorized into five larger themes:

- Mediation
- Role of educators
- Parental digital literacy
- Qualitative methodology
- Peer influence

I created a coding schema word map to help identify observations and questions I had within the main themes. See Figure 2 for word map.

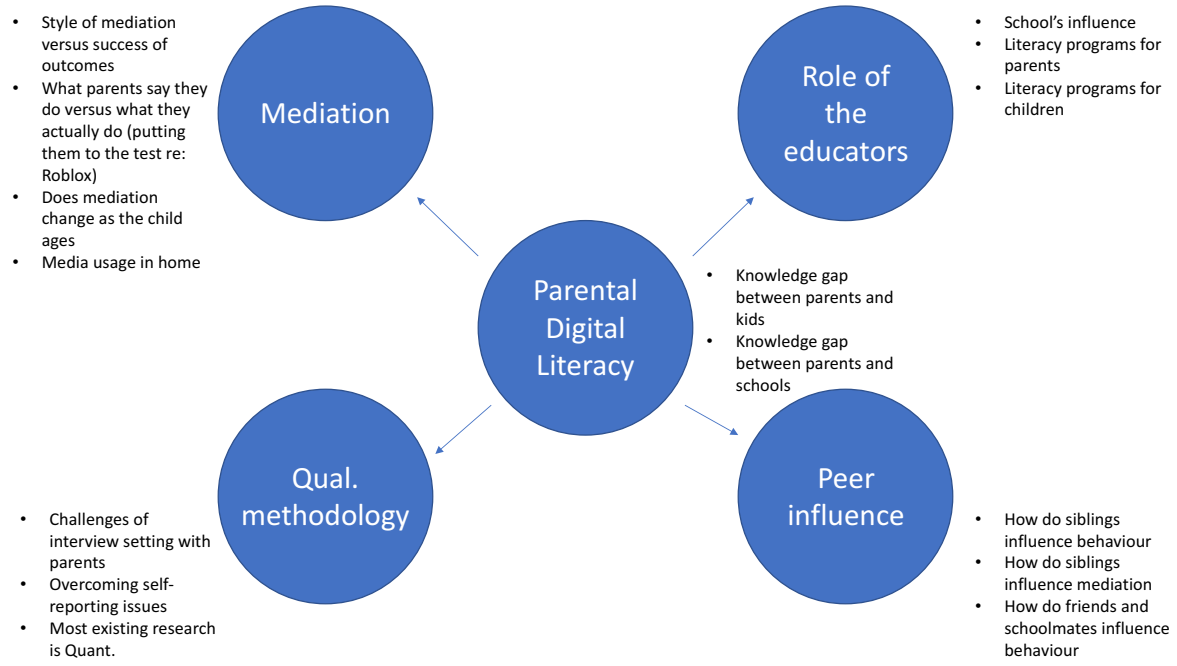

Figure 2 Coding schema word map

My coding schema helped me compare different views on each subject (Oliver, 2012). Some articles were applicable to multiple themes, so I further narrowed the list to two themes: parental Mediation and digital literacy. These themes speak more specifically to my research question, and therefore provided a more in-depth analysis of my data.

Theme 1: Parental mediation

As mentioned, the research explores a parent's decision-making process when they allow their child to play online games such as Roblox. The interviews have shown that part of that process does involve some level of mediation. Parental mediation refers to the "diverse practices through which parents try to manage and regulate their children's experiences with the media" (Livingstone, Mascheroni, Dreier, Chaudron, & Lagae, 2015, p. 7). According to Livingstone et al. (2015), parental mediation is important within families as it ensures that the domestic media environment is tailored to the specific needs of each child, as well as to the values and priorities of the parents. It is also important for a child's development as it is "a key strategy in developing children's skills to use and interpret the media, foster positive outcomes and prevent negative effects of the media on children" (Nikken & Schols, 2015, p. 3424). With children gaining access to online technologies at earlier stages of their life, parents are now expected to consider the value of media for the development of their child, and as a result adapt their mediation styles to those values (Nikken & Schols, 2015).

One of the biggest consistencies in the literature was that all of the authors agree that there are three types of mediation that parents can employ: restrictive mediation (controlling usage and exposure), active mediation (talking to children and mentoring them on safe media content consumption), and co-use (using media together without any purposeful discussion) (Fousiani, Dimitropoulou, Michaelides, & Van Petegem, 2016; Chang, Chiu, Miao, Chen, Lee, Huang, & Pan, 2015; DeSmet, Veldeman, Poelsm Bastiaensens, VanCleemput, Vandebosch, & Bourdeaudhuij, 2014). The mediation styles were sometimes labelled differently, but the definitions were synonymous, as were the effects of each mediation style. For instance, Shin and Ismail (2014) explain how excessive restriction is actually counterproductive as it causes a

"forbidden fruit effect", thus growing the desire within the child to challenge parental authority. Livingstone et al.'s (2015) research adds that restrictive measures may be associated with lower levels of risk online, but they also "limit children's online opportunities to learn, explore, develop digital skills or gain resilience to risk" (p. 9). They go on to say that active mediation appears to be the most promising technique in terms of minimizing risks without minimizing opportunities (Livingstone et al., 2015). Parents encouraging more autonomy have also shown to be more empathetic on behalf of their children (Fousiani et al., 2016). "When the need for autonomy was satisfied, adolescents reported higher capacities in responding to the others' emotions, which in turn related to their capacity to recognize civilized and moral individuals and thus delegitimize harm-doers (i.e., bullies)" (Fousiani et al., 2016, p. 2125).

Evolving mediation. Many studies identified the parents' tendency to adapt their mediation styles as the child ages. (Rudi, Dworkin, Walker, & Doty, 2015; Bilici, 2014; Ng, 2012; Yardi & Bruckman, 2011). For instance, Nikken and Schols (2015) found that parents of children between the ages of 0 and 8 years apply supervision and co-use mediation styles while the older children may experience more restrictive mediation or monitoring. Nikken and Jansz (2014) believe that restrictive meditation is applied to older children because their level of autonomy is higher, leaving them more exposed to online risks. Studies have shown that this is a positive approach in that "parental restriction of teens' online peer-to-peer interactions was negatively associated with teenagers' exposure to online risks and contact with strangers on the Web" (Shin & Huh, 2011, p. 948) and when parents actively monitored websites their children used, teenagers were less likely to be cyberbullied (Shin & Huh, 2011). "Parents cannot and are not going to be present all the time their children use technology and media, so the ultimate goal

is to foster accountability and independence in order for children to be able to make safe choices for themselves and take ownership of their actions" (Patrikakou, 2016, p.17).

Understanding the risks. Participating in online activities comes with a fair share of risk, depending on the activity. As mentioned, predators have used online games such as Roblox to harass and victimize children. Much like the previously mentioned story about the 8-year-old, whose Roblox character was sexually assaulted in front of her, a nine-year-old girl in Australia was also targeted by someone who exposed her to explicitly sexual language without her mother knowing (Toli, 2017). There are many more situations like this that sadly tell the same story (Crenshaw, 2017; Gault, 2017; "It's a pedophile's gateway", 2017). The game has also been used to issue threats of violence to entire communities. A county in Alabama suffered a two-day shutdown of all area schools because of some threats posted within the game (Crenshaw, 2017). Roblox was also hacked by people who flooded children's accounts with pornography and Nazi images (Gault, 2017). All of these instances support McInroy and Mishna's (2017) study that found online gaming to be a major contributor to a child's physical health issues, psychological and emotional issues, and school performance problems. Other online risks include threats against privacy, identity theft, and cyberbullying. Cyberbullying is extremely common with one report finding that 78% of their respondents had been victims of cyberbullying and 91% had been a witness to it (Fryling, Rivituso, Matthews, & Pratico, 2015). The prevalence of this behavior is very serious as the impact of cyberbullying is considered more profound than traditional bullying (Fryling et al., 2015). The reason for this is that the "negative comments, threats, and accusations are often visible to a wide audience and are long lasting" (Fryling et al., 2015, p. 5). With the content immortalized online, it can also be viewed repeatedly by the victim

and used by their peers to repeat the victimization (Fryling et al., 2015). It is because of this that victims of cyberbullying are more prone to anxiety and depression (Wright, 2016).

Despite the high rate of cyberbullying and the negative outcomes, adolescents and teens are not eager to tell their parents or teachers when abuse happens for fear that it will result in lost internet privileges (DeSmet et al., 2014; Hilt, 2013). Children also refrain from confiding in their teachers about instances of cyberbullying as they do not believe their conversations will be kept confidential (DeSmet et al., 2014).

The positive aspect is that parental mediation is proving effective at reducing instances of cyberbullying. A survey was conducted with 629 parents and adolescents to better understand how parental monitoring affects the prevalence of online harassment. Their findings showed that parental monitoring reduced rates of online harassment, but the way in which the monitoring was executed made a difference (Khurana, Bleakley, Jordan & Romer, 2014). Consistent with other research (Wright, 2016; Evans, Jordan, & Horner, 2011; Kremar & Cingel, 2016; Navsaria & Sanders, 2015), more restrictive monitoring was less effective and being involved and engaged in their child's lives showed the greatest success.

An example of the failings of a more restrictive mediation approach is the tendencies children have to become more deceptive in their online activities:

> Parents recounted ongoing games of digital cat and mouse with their kids. Over my three years with them, I observed them learning to check browser history, then their kids learning to delete history, then parents learning that an empty history meant it had been deleted, then kids learning to delete select items, and finally to keep an open tab on private browsing with regular browsing kept public (Yardi, 2012, p. 91).

When it comes to issues of online harassment, "[p]arents utilize different mediation strategies (i.e. restrictive, co-viewing, instructive), which could potentially contribute to differential patterns in the relationships between cyberbullying victimization and the associated psychosocial adjustment difficulties (i.e. depression, loneliness, anxiety)" (Wright, 2016, p. 345). Given the victimization happening within online games is often sexually charged, the risk of sexual activity must also be addressed. One study focused on the level of sexual risk adolescents are likely to take based on different levels of parental mediation (Romo, Garnett, Younger, Stockwell, Soren, Catallozzi & Neu, 2017). According to the authors, the more frequently adolescents use social media, the higher the risk that they will engage in sexual activity (Romo et al., 2017).

Understanding the benefits. Open-ended games such as Roblox are more susceptible to abuse, but creativity and innovation usually shines through much more often than the vulgarity (Gault, 2017). As we become more reliant on technology, it becomes less realistic to guard children from internet activity. "No matter which career the students decide to pursue, they will be using computers" (NobelDragon, 2015, para 3). This is why shielding children from the digital world is not an effective solution. There are many benefits to encouraging children to participate and explore the Internet, and another reason effective parental mediation is important as it will keep them safe in the process. The issue is that it seems that parents do not understand how important digital literacy is for their children, and how beneficial the Internet can be for childhood development. According to a study entitled "Parenting in the Age of Digital Technology", researchers asked parents what their main concerns were with regards to their children, ages 8 and under. "Media use" was rated as one of the least concerns to this sample of people (Wartella, Rideout, Lauricella & Connell, 2013). This could be due to a lack of

understanding of the impact media use can have on a young person. For instance, two of the highest rated concerns parents had were "verbal skills" and "Math and science skills" (Wartella et al., 2013). Studies have found online video games to be beneficial for both of these subjects (McInroy & Mishna, 2017; Gee, 2005). "Starting computer science in elementary school gives our students the skills and the confidence to excel in middle, high school, and beyond" (NobelDragon, 2015, para 4)

James Gee discusses the learning benefits derived from video games compared to the way traditional education teaches children. According to Gee (2005), some of the learning principles that quality video games incorporate are identity shaping, interaction, production, risk taking, and system thinking. One example he uses is how video games encourage kids to take risks, explore, and try new things. Failure is helpful as it allows the child to identify patterns and gain feedback within the game. Compare this to the traditional school system where failure is not encouraged, and you will see that kids have less space for risk (Gee, 2005). Unlike school, games encourage the players to think about relationships and not isolated facts and skills (Gee, 2005). Consistent with Gee (2005), McInroy and Mishna (2017) found that the positive outcomes of gaming include improved prosocial behavior and self-monitoring, social cooperation and support, motivation, perseverance, and resilience. Gaming is also beneficial for building problem solving skills, memory retention, improved attention and processing skills, as well as better visual and spatial skills (McInroy & Mishna, 2017). The authors go on to say that gaming "may be especially critical in developing and maintaining friendships for boys enabling daily recreational connections and interactions with peers" (McInroy & Mishna, 2017, p. 2). Roblox, specifically, is helping children learn the art of computer coding and many teachers are incorporating the game into the classroom to further promote and foster this skill (NobleDragon,

2015). The Roblox website boasts "Coding, digital modeling, communication, entrepreneurship, business savvy – these are all things anyone can pick up by participating in Roblox's bustling creator community" (NobleDragon, 2015, para 1).

With more online technologies being developed on a daily basis, the ideal would be that children learn how to properly use the tools available in a responsible way, and not be shielded from them for fear of potential risks. In order to succeed in this aim, I move on to my next theme: parental digital literacy.

Theme 2: Parental Digital Literacy

The research in parental mediation has proved that parents who take an active role in the monitoring and mentoring of their child's online behavior see the most success with risk mitigation. In order for this to be true, parents need to educate themselves within the online spaces to become more digitally literate. "Parents are one of the most important socialization agents in the process through which children acquire and develop a broad range of attitudes, knowledge, and social skills" (Shin & Huh, 2011, p. 947). "Nearly one-quarter of adolescents log onto social media more than 10 times per day, but only 4% of parents thought their children were logging on so often" (Bass, 2016). This statistic supports the general concern that parents have with regards to how difficult it is to supervise their children. As Vincent's 2015 study states, "How can [parents] negotiate supervision online when they have no idea what their child is doing?" (p.9). A study done by Benrazavi, Teimouri and Griffiths (2015) showed that parents who possess strong mediation and digital literacy skills are more successful in mitigating their child's problematic online behavior. An awareness piece produced by Brown University targeting parents explains that "[s]ocial media is ever-present in the lives of children and

adolescents and impacts the behavior and mental health of children and adolescents, and as such it is important for parents and caregivers to be aware of the risks and benefits" (Fritz, 2014, p. 1).

> **What is Digital Literacy?** Digital literacy is defined as the following:
>
> The awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyze and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process (Ng, 2012, p. 1067).

Ng (2012) describes five types of literacies that are incorporated in the term 'digital literacy' (See Figure 3):

1. Photo-visual literacy – learning from visuals
2. Reproduction literacy – the ability to create new works of art and writing from existing content
3. Branching literacy – the use of hypertext in the creation of non-linear medium of information and the ability to navigate through the displayed information freely
4. Information literacy – ability to think critically and the ability to search, locate, and assess web-based information effectively
5. Socio-emotional literacy – literacy associated with emotional and social aspects of online socializing, collaborating, and undertaking day-to-day chores such as banking and online shopping. It requires the ability to be highly critical to avoid online scams, or to be able to identify abusive people in online chat environments.

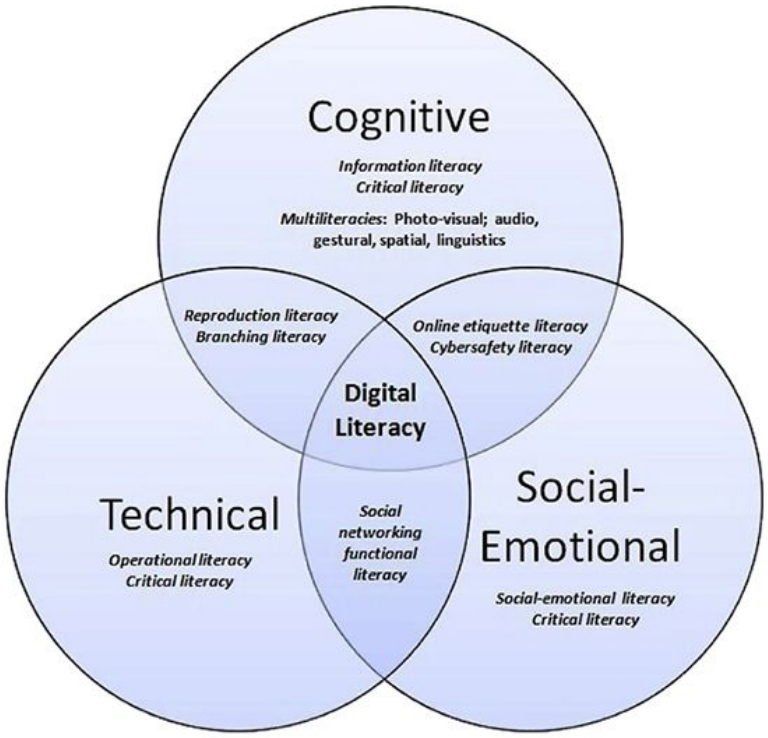

Figure 3: Digital literacy model (Ng, 2012)

This model was valuable in shaping the questions used for interviews with the parents. For instance, online gaming requires a high degree of visual literacy especially in young children. Sonia Livingstone's study found that children aged 8 and younger tend to treat what they see on television as "real" and do not have a strong grasp of the conventions of representations (Livingstone, 2014). This was a major concern for one of the parents in the study. She was very worried that her two sons were too immature to understand that what is depicted in online video games is not representative of what is real. This included violence and lack of consequence that is common in video games, but also, more innocently, the disregard to the laws of physics in some of the building games, including Roblox.

Understanding parents' decision making and mediation requires insight into their own level of digital literacy. Green, Yu and Copeland (2014) view digital literacy as "critically inclusive of searching, vetting and integrating information into the meaning-making process during online learning" (p. 56). So not only are parents technically adept in knowing how to function in the online environment, but do they truly understand the implications of the different aspects of the environment. For instance, a study from 2010 found that parents were more lenient with their mediation when it came to online gaming, as opposed to chatting with friends or spending time on social media sites (Shi-Jer, Ru-Chu, Hung-Tzu, Yuan-Chang and Kuo-Hung, 2010). This is an example of a clear knowledge gap as it has been shown that a great deal of risk exists within online gaming that often comes from the chat functionality, and mediation and mentorship is crucial for the children's protection. According to Ng (2012) and Green et al. (2014), parents need to have the cognitive ability to search out the risks and benefits, learn how to manipulate the game to best suit their child's needs, and properly communicate with their child in such a way that properly mentors them in responsible game play.

It takes a village. With the ubiquity of mobile technology and the steep and rapid learning curves for a generation that did not grow up in an online environment, it is increasingly difficult for parents to effectively mentor their children in that space. Despite the pervasiveness of mobile phones, few studies considered them within their research. Terras and Ramsay (2016) had one of the few studies that focused on smartphone usage, which is relevant for me as Roblox is a mobile game. Terras and Ramsay identify smartphones as a unique challenge for parents as the "decreasing size of smart handheld devices means their use is less obvious and easier to conceal, and the ability to regulate internet access by technological filters is determined by the

user's digital literacy knowledge and skills" (Terras & Ramsay, 2016, p.4). "The relentless innovation in apps for children also imposes upon parents the task of keeping up with the latest offerings and being able to judge potential benefits and harms" (Lim, 2016, p. 22). A study conducted by Rudi et al. (2015), asserts that parents must adapt to meet the developmentally appropriate needs of their children, which puts a great deal of pressure on parents to maintain strong media literacy skills. Ng (2012) explains that a child's exposure to technology makes them more susceptible to picking up new digital skills without a problem. This makes the knowledge gap between parent and child greater as the child ages.

External forces can also affect a parent's mediation strategies, such as increased family conflict, defiance, and the effect on parental benefits (Evans et al., 2011). Parents would benefit from supporting agencies, and they are requesting that support. One study examining levels of parental mediation based on geographic location found that parents who lacked confidence in their digital media expertise revealed a need for policy and practitioner support. They expressed a preference to receive much of this guidance and support from schools, and yet it was shocking to the researchers just how little guidance was offered. There was also little to no communication regarding their child's digital activities while at school. (Livingstone, et al., 2015).

Many studies argue that the school system (Alexander, 2016; Lim, 2016; Bilici, 2014; Gold, 2014) and in some ways pediatricians (Bass, 2016; Moreno, Chassiakos, & Cross, 2016; Navsaria & Sanders, 2015) should play a greater role in supporting the development of a child's digital literacy levels. Teachers need to embrace the younger generation's concentration on computers, games, and mobile devices and evolve the learning cultures accordingly (Bilici, 2014). Bjørgen and Erstad (2015) agree with Bilici as they research how kids are transitioning their digital skills and practices from school to home. Their study set out to discover if the

information children are learning in school is influencing their online behavior at home. Their qualitative study found that some children did not translate the digital practices from school to home. The children "framed school's digital practices as irrelevant or meaningless for their leisure-time interests in technology" (Bjørgen & Erstad, 2015, p. 123). The authors suggest that tracing digital literacies from school to home has to do with an awareness of contexts. "This implies being able to manage and utilize different 'literacy-practices' outside of and inside the classroom" (Bjørgen & Erstad, 2015, p. 123). Children do not see the value of what schools are teaching them because schools do not see the value in including contexts that the kids are passionate about. This is consistent with James Gee's 2005 comparison of video gaming and the education system. Understanding how children's digital literacy skills are being shaped is important as it emphasizes the need for parents to hone their own skills.

Importance of modelling. The old adage "do as I say, not as I do" applies directly to effective parenting of children's online behavior, in terms of modelling. In her TedTalk, Children's Media Expert Sara Dewitt explains the juxtaposition of how adults check their phones an average of 50 times per day but get nervous about their children using the technology (Dewitt, 2017). There seems to be a general lack of self-awareness within parents when it comes to their own online behavior. Another example of this is with the idea of "sharenting", where parents are oversharing information about themselves and the lives of their children, often without the consent of the child (Steinberg, 2016). This models poor online behavior as it helps to justify similar behavior in the mind of the child or adolescent. For instance, a young girl shares inappropriate, and potentially damaging photos of herself on Facebook because she sees her mother's flirtatious photos, or because she does not understand the concept of the digital tattoo - the permanent collection of information about us that is available online ("How are you

defining", ND). This behavior can have lasting effects, as we have seen in heartbreaking stories such as Amanda Todd - a girl who committed suicide after being bullied mercilessly for a nude photo of her being leaked online ("The unforgettable Amanda Todd", 2017). Understanding privacy rights, and the ramifications of over sharing or public shaming are important aspects of digital literacy. "Kids and teenagers often self-reveal before they self-reflect" (Steinberg, 2016, p. 863). Parents need to teach these lessons to their children, but also model them within their own behavior. Sherry Turkle's book "Alone Together" adds to the importance of modeling good online behavior. She describes how children complain that their parents are constantly staring at their smartphones, even during important family time such as dinners and school sporting events (Turkle, 2011). In the book, Turkle talks to Hannah, a 16-year-old girl who is often competing for attention with her mother's smartphone. She goes on to describe a typical scenario where her mother picks her up from school: "The car will start; [my mom will] be driving still looking down, looking at her messages, but still no hello" (Turkle, 2011, p. 164). This not only models poor habits with regards to mobile phone etiquette in a social space, it models reckless and dangerous driving, prioritizing the mobile phone over the well-being of those in the vehicle. There are external factors that affect a parent's abilities to practice responsible tech-use modelling such as the increased expectation of immediacy in today's digital culture. Turkle uses the example of employers who have an expectation now to always be able to connect with their employees through email. How can parents properly model moderation when they are expected to be "available" 24/7? (Turkle, 2011).

Moderation is especially key in young children as their recommended allowance of screen time is only 2 hours per day (Ghose, 2013). According to Scientific America, the average 8-year-old spends eight hours per day using various forms of media (Ghose, 2013). Pediatricians

argue that too much screen time leads to poor health outcomes, such as obesity (Ghose, 2013). Dr. Vic Strasburger, a professor of pediatrics at the University of New Mexico, also urges parents not to allow internet usage in the child's bedroom as it is more difficult to monitor. "If you have a 14-year-old son and he has an Internet connection in his bedroom, I guarantee you, he's looking at pornography" (Ghose, 2013). Most of the parents interviewed did allow their children to play online games and access the internet in their bedrooms. The risks around this behavior did not seem to concern the participants of this study.

Gaps in the existing research

Many of the studies I read were consistent with one another, but I did see several gaps in the research. One major gap was the lack of research done with smartphones as a focus. Researchers were very focused on laptops and home computers, but rarely with smartphones. Considering that 76% of Canadians own smartphones (Catalyst, 2016), and Roblox is a game intended for mobile technology, I felt it was important to inquire about smartphone usage during interviews.

Another gap was the reliance on quantitative surveys to gather data. I feel this misses many opportunities for clarification, or for deeper study. For instance, the participant could over estimate their own technical ability when answering a quantitative question and there is no opportunity for follow up questioning as it is all self-reported and leaves no room for the researcher's keen judgement.

The most important gap I found was that researchers were not testing parents' mediation techniques or digital literacy skills against a real-world problem. By including the case study of Roblox in my interviews, it provided an immediate test as to whether the parents were reporting on their abilities accurately. For example, in the case of the 9-year-old girl from Australia, her

mother was co-viewing the game when the predatory attack happened (Toli, 2017). According to the cited research, she was practicing good mediation skills. But after her daughter became a victim of the offensive act, she immediately deleted the Roblox app, which is a more restrictive form of mediation, and as previously argued, a less effective approach. These more reactionary and restrictive actions are an unfortunate result of parents being unprepared when dealing with the challenges online gaming provides.

Research Questions and Methodology

Based on the literature review and continued concerns about risk related to online gaming as represented in the media, it was determined that the following research objectives would inform the research question of parental digital learning and application of that knowledge to the mediation of their children's online activities:

Objective 1: To explore the decision-making process that parents go through when deciding to let their children play Roblox.

Objective 2: To understand and document the mediation styles parents employ with regards to their child's online behavior.

A qualitative descriptive approach identifies common themes beyond what the participants reported (Willis, Sullivan-Bolyai, Knafl, Cohen, 2016) exposing any gaps between participants' narrative and their behaviours (Sandelowski, 2000). To succeed with qualitative descriptive studies, it is important that interview questions remain fluid to properly adapt to circumstances (Willis et al., 2016). MacDonald and Greggans wrote about the large gap that exists between the theories that exist on the subject of interviews, specifically interviewing families, and the realities of what occurs in the field (MacDonald & Greggans, 2008). They warn aspiring researchers about the chaotic environment family homes present and stress the importance of reflexivity on behalf of the interviewer. Only a small selection of articles from my literature search used a qualitative approach (Livingstone et al., 2015; Livingstone, 2014; Yardi, 2012; Evans, et al., 2011; Yardi & Bruckman, 2011) Given the heavy reliance on more of the nuances of the interview, a face-to-face approach was more appropriate, despite the challenges. Having the opportunity to observe the participants while testing their perceived knowledge against behavior was invaluable. For instance, being able to read the facial expressions of the

parents as they navigate the game setup offered insights into whether they were truly comfortable with this process, or if they were in fact confused or frustrated. Also, having a friendly face to talk to during the interview likely resulted in higher quality responses versus what would have come from answering a survey.

Research Plan:

Sampling Strategy and Participants. The research design is a purposeful sample of seven parents, located in Edmonton, Alberta, whose children, ages 8-12, play or have played the online game Roblox. Using purposeful sampling strategy ensured that participants would be able to provide the richest information about their family's experience with Roblox (Mayan, 2009). Snowball sampling by using word of mouth and social media engagement assisted me in reaching the data's saturation point (Patton, 2002) which was evident once the variation began to level off, and there were no longer new perspectives or explanations from the participants (Morse, 1995). In fact, this sampling technique led to a wait list as the interest in participating was higher than expected.

Data Gathering Strategies. The seven parents who volunteered each participated in a face-to-face interview, allowing me to gather data in a more naturalistic setting. My goal was to have the participants converse as they would with an acquaintance, and not a researcher (Sandelowski, 2000). It was vital for the success of the research that I established trust with the parent (Merrigan, Huston & Johnston, 2012). Being a parent of young children, I felt I would be able to relate to their struggles, To add to their comfort level, I interviewed them in their home, except for one who preferred a different location.

During the design of the interview questions, one challenge was evident. It was unclear as to whether or not the controversy surrounding Roblox should be explained to the parent prior to

the interview. If the news stories that were mentioned earlier were shared with the parents, there was concern they may adjust their answers as they may feel their parenting is being judged if they admit to not researching the game ahead of time, or not monitoring their child's game play. The argument in support of explaining the controversy prior to the interview was to avoid the risk of the participants feeling tricked or that the interview was dishonest in any way. To mitigate this, an ice-breaker activity was introduced into the plan. The activity walked participants through the installation and setup of Roblox on a smartphone. This strategy would help identify any knowledge gaps without the need to ask specific and pointed questions about the parent's level of involvement in this step of game mediation. Also, asking questions such as "What about that experience was new to you?" is a gentler approach to understanding the knowledge gap. The ice-breaker activity provided added value as it was an opportunity to teach the participant about parental controls, if they are indeed struggling or completely unaware of this process.

Each interview was audio recorded to provide a failsafe should information be missed in note taking during the interviews. Field notes allowed for post interview thoughts and observations (both verbal and non-verbal) to be recorded.

Figure 3 provides the walkthrough of the research design.

Table 1: Armchair walkthrough of Parent's Dilemma

Theoretical perspective	Naturalistic and postpositivist
Research question	What is the decision-making process that parents go through when deciding to let their children play Roblox?
Method	Qualitative Description
Participants	Parents whose children play Roblox. They must live in Edmonton and have children who are between 8-12 years old
Number of participants	6 sets of parents
Data collection strategy	One on one interviews
Data analysis technique	Content analysis
Results	Descriptive summary

Invitations to participate in the research were sent out to a neighbourhood Facebook group that is known for housing mostly young families and has a kindergarten to grade 9 school within walking distance. The first message was a long explanatory communique that explained the master's program, the purpose of the study, and finally the call to action encouraging qualified parents to volunteer. The response level was very low. It received 3 comments, and only 1 resulted in an interview. The second attempt was a much shorter message that simply asked, "Are there any parents in [the neighbourhood] whose children (age 8-12) play the online game Roblox?" This format of messaging received 30 responses, resulting in a waitlist for volunteers. All interview set ups were organized through the private messaging feature in Facebook, to ensure privacy. If the parent required more context, a letter was emailed to provide more information about the study, and to offer contact information to my supervisor should they

want to connect. The information letter can be found in Appendix B. Using Facebook, and targeting young neighbourhoods was a very successful strategy due to its efficiency, and broad reach.

These recruitment efforts resulted in seven interviews that included 2 fathers and 5 mothers. Four of the parents were married, and three were divorced or separated.

Despite the offer of meeting at the participant's home, one parent preferred meeting at a Starbuck restaurant, which was worrisome due to background noise, but the resulting audio recording was still good quality. Most of the home settings were comfortable but did provide some challenges that were uncomfortable to manage. For instance, one of the participant's children kept entering the room where the interview was taking place because he overheard the mother talking about his game playing. It is likely he was trying to eavesdrop as the mother was talking about how the games affect his behavior, and he kept coming in to clarify information. This was a challenge because it was very disruptive to the flow of the conversation, and there was concern about him participating in any way because it clearly stated in the ethics application that children would not be involved. That being said, I was not comfortable asking the mother to send him away for fear of offending her. To help manage the situation, I patiently waited for him to stop talking, then I focused my attention back on the mother and continued the interview. He eventually stopped coming in, as no one was engaging with him.

One other challenge was during a different interview where the children were upstairs but kept running around and slamming doors. It was mildly disruptive, but there was more concern with whether it would affect the quality of the audio recording.

Both of these challenges are consistent with MacDonald and Greggan's 2008 study that described the challenges of interviews in uncontrolled environments such as a family home. The researchers recommend the interviewer remain flexible, and that strategy was very effective throughout this interview experience.

The first couple of interviews began as planned, with the participant downloading Roblox onto their phone. This specific part of the activity began to feel particularly intrusive, creating additional burden on the participant who had already volunteered their time and welcomed me into their home. Therefore, in the subsequent 5 interviews the participant navigated the settings of the game that I downloaded on my own phone. I explained the download process and just had them use my account. This worked well, except for one participant who held the phone against her body as she worked through the settings, which covered the microphone that was audio recording what she said. The quality of that interview recording suffered a lot for a chunk of time. Moving forward, I would recommend interviewers set up an audio recorder on an external device, such as a tablet.

Interviews lasted between 19:21 and 40:04 minutes, which was much shorter than the 60 minutes that were originally planned for. In some cases, participants would go through longer explanations that answered multiple questions at one time, or their answer to one question would make other questions non-applicable to them. A few participants were either more guarded in their answers, or just less conversational, resulting in shorter interviews. Since the goal was for an open dialogue, "yes/no" questions were avoided as much as possible, but some participants still managed to provide very short answers that made it difficult to casually expand on.

The questions from the ice breaker activity were as follows:

1. Now that we've gone through that activity, was any of that new to you?
    a. How comfortable did you feel navigating through the settings?
    b. How are you feeling now that we went through that activity?

2. Describe to me your introduction to the game Roblox
    a. Did your child ask your permission to play?
    b. How did you come to the decision to allow them access?
    c. Is this scenario typical of other online games?

3. Knowing what you know now, after going through the settings, would you have done anything differently with your child when they originally approached you?
    a. Why do you feel differently?
    b. How do you expect this to affect any future decisions regarding your child's involvement with online gaming?

These questions were only meant to drive a conversation and were not intended to be followed verbatim. Due to the open-ended, dialogical style of the interview, new questions emerged organically. The topics of school involvement and conversations around online safety kept coming up during the interviews, so the topics were added it into the question list.

Ethical considerations

Research ethics was granted by the University of Alberta Research Ethics Office. There were a few considerations that needed to address before ethical approval was granted.

The original research design had the interviews recorded through a video recording device. This was problematic as it was not considered necessary for that level of detail to be recorded. Video was far more intrusive than audio, and the likelihood was high that the participants would feel the same way.

Prior to any research activity, all participants read and signed the consent form found in Appendix A. The form assures participants of their right to privacy and informs them of any risks involved with participating in the study (Merrigan, et al., 2012).

To protect the privacy of the participants, names and identifying information were not recorded and the participants were offered the opportunity to withdraw from the study seven days after the interview concluded. The audio recordings and field notes are only for the purposes of this capstone assignment and are only available to those directly involved in the assignment. All recordings will be destroyed within five years of the study concluding. Since the research relied on snowball sampling, there are risks of privacy violations as participants could decide to speak with one another about their experiences in the study. To ensure that information is kept as confidential as possible, summary findings are presented in general terms without any specific identifiers that could lead back to the participants.

Data analysis

Once the interviews were complete, the data was compiled, transcribed, coded and analyzed thematically.

Early analysis identified 122 unique codes in the transcripts, and the vast majority of the same codes were found through all of the interviews. This provided confidence that the saturation point was indeed met within the seven interviews.

By systematically analyzing and grouping the codes, three main themes were identified that related to the research question "What is the decision-making process parents go through when deciding whether their child can play Roblox." The themes were inductively driven by the data collection, and appeared organically (Sandelowski, 2000). The themes were as follows:

- Abdication of responsibilities onto the partner
- Priorities driving decisions
- External support

The data was revisited numerous times for effective meaning interpretation analysis. This analytical process goes beyond what the parents are directly stating to be true, extracting meaning from interview dynamics such as conflicting information, interesting language use, paralanguage, and body language (Kvale, 1996). This style of analysis is important given the subject matter and the parental role of the participants. Willis et al. (2016) describe the potential gaps that exist between what the participant is explaining, and what is in fact happening. This is compounded by the risk of social desirability bias that describes the motivation parents may have to falsely self-report their own parenting styles to appear more favourably (Fisher, 1993).

Findings and Discussion

Abdicating Responsibilities

The Partner Fallacy A common theme throughout the interviews was a tendency to abdicate responsibility of online management to the other partner who was assumed to be more technically competent. This points to a gap in the academic literature; addressing the issues around how parents mediate differently.

In almost every situation, the father was held responsible for ensuring the kids were set up in Roblox properly, and that the time in the game was a safe experience.

Each interview had only one parent present, making it impossible to confirm details from the other parent, but when asked about parental responsibilities in overseeing the child's online gaming, there were definite commonalities with the mother's responses:

- "I believe [my ex-husband] is quite knowledgeable about social media and technology"
- When going through security settings: "I'm not sure what my husband added there"
- When asked if they played the game: "Me? No. Probably my husband. Not me."
- "[My husband] is pretty sensitive about [privacy settings]"
- "My husband is quite knowledgeable"
- "My husband is an IT guy"
- "I know their father goes through their settings too"

None of the mothers seemed overly concerned about their child's involvement in the game, speaking more about their confidence in their partner's ability to safeguard the accounts. What

made this interesting was that despite the mother's assurance that the father was monitoring the game set up, they admitted to being the stricter parent when it came to online activities. This contrast of ideas is intriguing as it shows that the interviewed mothers assign more rules than the fathers around online gaming, but clearly are not participating in mediating or moderating which helps to enforce those rules. Another interesting point about this theme is that most of the time the mothers are not even sure that the fathers are doing proper game setup. They often used words such as "probably", or "I believe" indicating an assumption of care, likely based on a false security due to the husband's technical expertise. As a result, important details are being missed. For instance, I asked one mother, whose husband set up the child's Roblox account, if she knew whether the child's correct birthday was used. She admitted that she was unsure. The reason this is important to know is that if the child lies about their age and says that they are older than 13, there are fewer default safety restrictions. The mother stated that her husband "probably" went through the settings with the child. If the child was the one who actually set up the account, which was the case in most of the interviews, and the father did not check the settings, the risk is much higher that the child is leaving themselves more vulnerable. The father was not participating in the interview, so I was unable to cross check this fact.

An interesting counter point to these mother's attitudes came in my interview with a father who had worked in the video game industry for more than 15 years. His attitude regarding his sons' online gaming activity was the most laissez faire of any of the other participants. He did not participate in game set up, nor even know what questions the game set up asked of the child. During the initial ice-breaker activity, the father commented, "They ask for your birth date, that's interesting. And your gender, so that's interesting. I didn't know they did that" He then admitted, "That's a lot of information they can collect on you. I didn't realize it's that much." This

admission is from a father who is a video game expert, and yet it is clear that his role in the child's Roblox experience was extremely minimal. If he did not know that the game asked for the child's age, then he also would not know whether his children inputted their correct age. As Steinberg (2016) noted, understanding the opportunities where children can overshare private information is one of the crucial aspects of digital literacy.

The Bias Trap. A common finding across the interviews was that these parents love their children very much and are striving to raise autonomous individuals, while fostering a relationship based on trust and respect. As mentioned in the literature review, active mediation strategies are ideal when attempting to maximize the opportunities the online world provides while also minimizing the risks that it presents (Livingstone et al., 2015). It is obviously impossible to police every single minute that a child is online, so a more effective strategy is to build independence within the child so they are able to safely navigate various online mediums safely. It was clear in the interviews that the parents were all attempting their own versions of active mediation, but issues such as lack of education and personal bias provided challenges for them.

It was intriguing to witness the ways in which the parents' personal bias affected their behavior, resulting in their minimization of any risks involved for their child online. For instance, one father explained how he played an online game with his son and the son's friends. He explained how the game was completely fine and that they "are good kids." Despite this likely being very true, it was interesting that he did not consider the possibility that the kids behaved very differently with an adult on the team than when they play unsupervised. This same father admitted to walking in the room when his daughter was playing Roblox and it was obvious that she was nervous having him there. "I think it's just text-based chatting and you could tell she

didn't want me to see what was on the screen. I don't think it was necessarily what she would've been saying but more like she didn't want me to oversee what other people were saying around it and not be able to do it anymore." In this statement the father is showing bias as he is discounting the possibility that his own daughter would be participating in inappropriate activity, but he also is not recognizing that despite her passivity in the situation, she is still likely exposed to content he would deem inappropriate. This is consistent with another parent who forbids her son to chat with people in the game. "If [the chat] is on, [my son] can see what people say now, but he can't respond to them." This is another situation where the parent has decided that inappropriate content is only an issue when their own child is engaging. Exposure did not seem to be prioritized as highly when it came to risk level. This is surprising considering stories such as the Roblox hack that occurred, flooding the game with pornographic images (Gault, 2017) or the gang-rape of a seven-year-old's Roblox avatar (Racco, 2018). These extreme examples involved victims that were passively exposed to these highly inappropriate images and activities.

Data shows that parents abdicate responsibility to children as well as partners, seen above. All seven of the participants learned about Roblox from their children, and six out of the seven were not involved in the game set up. In one case, the mother, who spoke English as a second language, relied on her son to explain the game to her. Language is a barrier for some families, and a topic that was not been addressed in the academic literature. Her reliance on his translation of the game required a lot of trust, and she admitted knowing that he hid information from her. For instance, when I brought up the chat functionality of the game, she was completely surprised that it existed.

Additionally, another participant's son set up not only his own account, but also his little sister's Roblox account. The parents were aware of this and trusted that he did it correctly for

both accounts. The mother did not know whether he put the accurate ages for him or his sister, and she did not know, until after the icebreaker exercise, that there was a setting that can allow "everyone" to access your child's character in the game. One parent admitted, "sometimes [the kids] forget to tell you stuff [laughs]."

Parents also forgo any moderating responsibilities based on their own lack of game play, which seems to be a common challenge among the participants. Co-use is widely considered an effective strategy for active mediation (Fousiani, et al., 2016; Chang, et al., 2015; DeSmet, et al., 2014) and yet most of the parents I talked to had little to no interest or motivation to play the video games. This trait was more apparent in the mothers than the fathers but posed a barrier to effective mediation as the task of participating in the Roblox game was not seen as a desirable activity. One mother outright admitted, "I don't like video games" and when asked specifically about Roblox, she said, "The graphics are horrible." Other parents described great levels of boredom when attempting to play, or even just watch as their children play. One mother said, "To be honest with you, sometimes I'm just like, 'I don't want to watch it,' but they're excited and they're sharing so I'm going to pretend that I'm really interested too." The mother's effort to feign interest is her moderating strategy to help build trust and promote open communication between herself and her children on the topic of online gaming.

Self-Unawareness. Despite the abdication of responsibility to the partner, six out of the seven parents reported to me that they themselves were the stricter parent. This contradiction of admitted strictness around video games, and their inaction with regards to participating in setting up and educating their children on these games is consistent with the idea of social desirability bias (Fisher, 1993) as the mothers are likely motivated to make themselves appear more involved than they are (or at least less responsible). A more specific example of where I witnessed social

desirability bias was in an interview with a mother who was adamant at the beginning of the conversation that she and her husband either set up the game for the kids, or made the kids show them the settings after they had set up the game for themselves. Later in the interview, likely when the participant was more comfortable, she admits to never having played Roblox. She said that her husband "probably" played and "I think he read the stuff they set up." Her level of conviction softened as our rapport strengthened. The inconsistencies continued when she admitted that her youngest was playing online games for four hours one Saturday afternoon, but then later said that "we don't really encourage online stuff." There seems to be a certain level of denial when it comes to their own level of mediation. It makes sense that a parent may look at the situation in a very day-to-day context. The interview questions required that parents think bigger picture and, in doing so, exposed the disconnect between what they wish to be true based on their values and prioritization of beliefs, and what is actually true based on the realities of life.

Another example of a strong disconnect was with a father who was not at all concerned with his sons' online game play. He was very confident that they were only participating with friends and family, and prior to our interview he did not even consider issues around privacy or access. Later in the conversation the topic of Instagram came up as both his sons have accounts. He admitted that neither he nor his wife have Instagram accounts, and therefore are not able to check the sons' activities. This lack of awareness did not seem to concern the father at all, which I found very interesting because he explained how his son once ran up to him and excitedly told him, "Dad! I got 80 likes!" The father said, "[My son] is still a little bit celebratory of it, he hasn't used [Instagram] yet to do anything shady that I know of at least." Putting the admission of ignorance of the son's Instagram activity aside, I found it striking at the idea that 80 people, who the father cannot confirm if the child knows personally, have access to his son's account.

Again, this point either did not occur to the father, or he is just generally unconcerned by this level of exposure. The father's approach can be seen as worrisome as Nikken and Jansz (2014) believe that older children with a higher level of autonomy are going to be exposed to more online risk. The question in this specific case is whether the mother is the one participating with more active mediation, ensuring the children are equipped with the knowledge necessary should they face that risk.

There was no clear correlation between a parent's level of rigidity with regards to rules involving their child's online gaming, and the level of disconnect that existed between what they claimed they were doing to enforce these rules and what the reality of the situation was. In a separate interview with a mother whose involvement was higher than the average, she explained a zero tolerance to online chatting that wasn't with personal friends and close family. Despite her lack of involvement in the actual game set up, she explained the rules she outlined for the kids to follow: "I always get the kids to check off that they don't receive private messages. Friend requests I'll let go as long as it's someone they know from school (…) I won't let [son] talk to anybody online." Later in the conversation, when we were going through the game set up activity, she noticed that one of the settings would expose the player to "Everyone". "I did not know about these settings. [Son] never told me." So, despite the mother's best efforts, she was still unaware of the potential exposure that her children face if the game is not set up properly. This shows a strong conflict between her ideal level of protection and safety over her children and the reality of the situation where she is oblivious about details that directly affect that ideal. I find this example interesting because in a 2010 study surveying parents of sixth graders, the researchers found that parents were far more lenient with online gaming than other internet activities, such as chatting online with friends (Lou, Shih, Liu, Gui, Tseng, 2010). Were these

parents aware of chat capabilities within the game when answering this survey? Or more likely is that online games are just far more social now than they were at the time the study was conducted. It would be interesting to know how the attitude has shifted.

The perception of risk seemed quite low among most all of the participants, but the justification behind that perception was not always rational. For instance, one mother assured me that her young daughter's smartphone was not connected to a network, "It's just on our own Wi-Fi." She stated this fact as if the lack of network was a barrier between her daughter and the online world. I feel that it provided her a sense of security, despite the fact that being connected to Wi-Fi provides the same level of exposure, at least within the home.

Another example is where a father explained his strictness when it came to his sons playing the Sony PlayStation gaming console: "On PlayStation, my sons have child accounts under my parent account, which completely limits what they can input. It completely limits what they can do." This same father admitted to being a lot more hands-off with regards to online games which shows where he perceives the greater level of risk to be. He admits that there is a rule against shooter games, and perhaps that is the reason the PlayStation is far more restricted since very violent video games are made specifically for that system. This bleeds into more of what the parents believe and prioritize as important when it comes to setting up the household rules.

Priorities that Drive Decisions

Violence and Language. When exploring a person's decision-making process, their own personal experience and values are going to play a big part in affecting their final decision. Ravlin and Meglino explain how values have traditionally played an important role in the

understanding of decision-making and motivation, "individual values are important constructs for understanding behaviour not directly based on striving to maximize pleasure or individual gain, they may well assume a more prominent role in future theories of motivation" (Ravlin & Meglino, 1987, p. 666). With so many similarities in the participants' behaviours, it is not surprising to see so many commonalities within how they prioritize what is important. The majority of the parents prioritized violence as their number one concern with regards to their children's game play:

- "I didn't know what [Roblox] was. I was actually really scared. I thought it was a fighting game until I sat down with him."
- "I wonder what the difference is for [Roblox] games if you're under 13. If you are over 13 do they have a bit more violence?"
- "I just happened to look over and there was blood and guts and I'm like, 'Whoa! No."
- "Now that [my son] is getting older, he can play the violent games now, but there can't be any blood and guts. If he shoots someone, nothing happens, or they disappear."
- "No shooters. They're not allowed to play mature shooters.
- "I don't like game where there's fighting, blood, (…) crime"

According to research, the prioritized concerns of the parents in this study are consistent with those of the children studied by Livingstone, Kirwil, Ponte, and Staksrud (2013). In a study of 10,000 children, the researchers discovered that violent, aggressive, or gory content was listed as one of the top concerns of children. "They reveal shock and disgust on seeing cruelty, killings, abuse of animals and even the news – since much is real rather than fictional violence, this adds to the depth of children's reactions" (Livingstone, Kirwil, Ponte, & Staksrud, 2013, pg.1). The

children found sexual images and content to be annoying and disgusting, while violent images scared them, giving them a much stronger and, one could argue, more serious reaction (Livingstone et al, 2013).

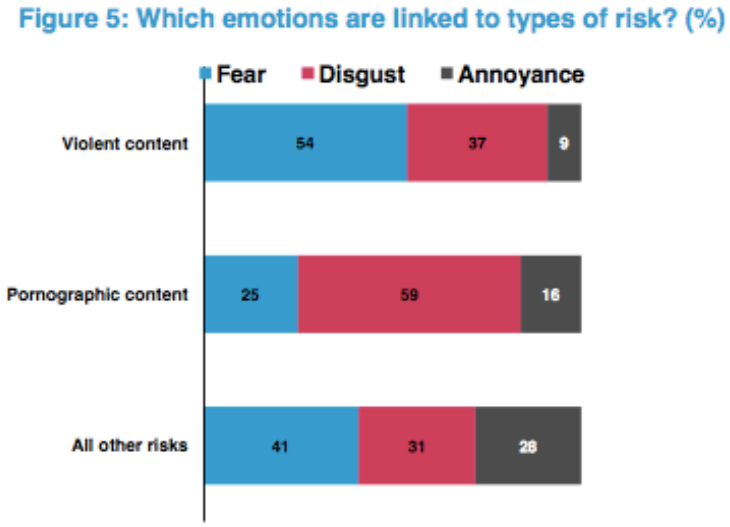

Figure 4: Emotions links to risk (Livingstone, 2013)

The interviewed parents who were most concerned about violence had only sons. This is consistent with Eastin, Greenberg and Hofschire (2006) whose study found that parental risk mitigation was predominantly targeted towards young males.

Roblox is not a graphically violent game, especially for accounts that are under 13-years-old, so it makes sense that since the majority of the parents were most afraid of violence, Roblox seemed like a safe choice for their child to play.

Foul and inappropriate language was another concern of the participants and is definitely an issue with any online gaming that includes chat. Accounts under 13-years-old do have chat filters, both human and software moderation (Roblox, ND), but simple hacks such as using the

word "shex" instead of "sex" have by passed this security feature (Mourad, 2018). The parents who were most concerned about their children being exposed to swearing were either not aware that the chat functionality of the game existed at all, or they did not know the potential exposure their children had to strangers in less controlled environments.

Only one parent expressed any concern about sexually explicit content, or privacy concerns. Going through the icebreaker activity did show me that many of the parents were completely unaware of the level of information the game asks of the child, and their lack of concern with regards to sexual content leads me to believe that they are not aware of that particular risk within the game. In a game review on Common Sense Media, a parent shares her story where her son became heavily involved in Roblox and soon after his introduction to the game a strange man came to her door asking to see her son (Tirell, 2015). She explained how she was involved and helped her son sign up and set up the account, exhibiting how easy it is for a young child to share important information to strangers, despite their parents' best efforts in protecting and educating them against this.

Much like the lack of concern for sexually explicit content, there was almost no mention of any concern involving cyberbullying. One reason for this may be due to the age of the participant's children as they were mostly quite young. The lack of concern for this risk is important to note because as previously mentioned, the prevalence of cyberbullying is extremely high, and the consequences can be very serious.

Trust. All of the parents could be labeled as "responsive parents", as defined by Eastin, et al (2006). The authors found that parents who were warmer and more supportive in their approach, valuing self-regulation and self-assertion, were considered responsive. Parents who took a more disciplinarian approach, expecting the child to fall in line with the family, were

considered demanding in style. All seven participants in this study valued self-regulation and were pushing their kids to be more autonomous, which relies on a great deal of trust. They all fostered trust within their children in varying ways, but all with the same goal in mind. One indicator of trust, with regards to online activity, is the location of the devices being used. According to Nikken and Jansz's study (2014), survey respondents with more restrictive levels of mediation had all computers and mobile technology in the public spaces of the house such as the living room or kitchen. A child playing Roblox would have less opportunity to get into a vulnerable situation while in a more visible setting. Previous research also found that some parents used the number of computers in the household to strengthen supervision; fewer computers meant stricter supervision (Niken & Jansz, 2014). I found this to be consistent with what the participants' responses suggested. For instance, one mother has the only computer in the living room so she is able to easily monitor what her son is doing when he plays online games. The contradiction here is interesting in that her younger daughter is allowed to use the family tablet anywhere in the home. This begs the question of whether the perception of risk is greater depending on the device being used. What's interesting about this inconsistency of rule enforcement, is that the younger daughter stumbled across a YouTube video that showed people killing cats. This is highly disturbing content and something that appeared organically in the "suggested videos" menu during her daughter's online browsing. Since the incident, the child is only permitted to go on YouTube Kids, a far more curated and restricted version of the website, but the lax attitude of where the tablet can be used remains the same.

Benefits of online gaming. Despite the controversy that Roblox has earned, there are perceived benefits to the game, as well as online gaming in general. Roblox is considered educational within the subject of computer scripting. Other researchers agree that online gaming

can be beneficial for certain children. For instance, children with Asperger's Syndrome have used online gaming to develop friendships that would have otherwise been extremely difficult to form while in a face-to-face setting (Byron, 2008).

One interview participant admitted that she saw more benefits than detriments when it came to allowing her daughter to play online games. "She's learned how to type. She knows the spelling of the words now."

Other parents saw online gaming as a simple reward they could offer after their children completed homework and chores. Gaming was enticing enough that their children were more likely to finish what was expected of them, so they could earn this online access. In a way, online gaming made their parenting efforts easier.

Outside influence. Lack of control was another common issue that parents were struggling with in their decision making process, "The whole world is around them. If I'm parenting them or I have influence on them, I do not want others who I do not even know to have an influence on them, right?" One mother who I interviewed explained why she would not allow her 11-year-old to have his own phone, "[The phone offers] too much exposure to things they are not developmentally even ready to comprehend. There's enough time for that." These perspectives are important to note as again it shows a lack of awareness to just how much exposure to outside influence kids can have in online gaming.

One of the biggest influencers outside of the home is a child's school, a topic that came up organically in my first couple of interviews, and as a result became one of the main questions I asked parents in all subsequent conversations. Parents were somewhat aware of their children being taught online safety in their schools, but did not have any detail as to what those lessons entail. This struck me as a crucial finding as it shows a serious communication disconnect

between the schools and the parents. The lessons that teachers are providing need to be reinforced in the home as that is where the child will be doing the majority of their online activities. The other side of this is that parents are clearly not educated in very important aspects of online gaming, privacy controls, and various other security measures that come up when their child engages in games such as Roblox. Throughout my interviews parents were either completely oblivious to functionalities of online gaming, the risks, and the safeguards available to better moderate their child's activity. For instance, I explained to one father how he could access the chat log of his daughter's Roblox account. I later asked him whether he would check the chat log now that he knows this is available to him. He said, "I didn't know it existed, but yes, that'd be something I'd be interested to check out."

In all seven interviews, the parents described different ideas of what their children were learning in school. Topics ranged from online privacy, the digital tattoo, and cyberbullying. There was no mention of online gaming and safety. The limitation here is that all of the parents were extremely uncertain as to what details were covered and likely missed a lot of what the lesson entailed. Many researchers support the idea that schools need to play a larger role in developing a child's digital literacy (Alexander, 2016; Lim, 2016; Bilici, 2014; Gold, 2014). But I would argue that there is an equal, if not greater need for schools to work with the entire family to develop the parent's digital literacy. There is an important opportunity here for schools to get parents more involved in digital literacy training through avenues such as informative handouts, brochures, or parent-nights.

Limitations

Within my research plan I anticipated the challenge of social desirability bias, which refers to instances of people reporting inaccurately on sensitive topics in order to present themselves in the best possible light (Fisher, 1993). I definitely encountered this in a few stated examples but suspect that it was more prevalent than I can prove. Some parents were not as verbose, so they did not contradict themselves, but that does not mean they were self-reporting completely truthfully. Self-reported data runs great risk of this social desirability problem (Podsakoff & Organ, 1986), and without the other parent or children present in the interview, it is difficult to verify the participant's answers. There is a lot of societal pressure on parents to make the best choices that benefit their children, and I certainly saw instances where the parent was providing what they likely perceived to be the correct response which differed later in the interview where they unknowingly admitted what they actually did. A study on domesticating online games and the effects they have on family life provided a unique perspective into parental mediation. According to Willet's 2017 research, parents draw on their personal values when developing the rules for screen time and game play. Because of this, a child's online gaming can be seen as a reflection on the family. The gaming is a public display of parenting practices and the family's identity (Willett, 2017). "Online gaming can be seen as one way of publicly displaying parenting practices and family identity" (Willett, 2017, p. 158). This insight helps us understand the motivations behind that participant's errors in their self-reported data.

Some unexpected challenges occurred within the interview process. In one instance there was a language barrier. The mother was an immigrant to Canada, and therefore we had occurrences of breakdown in understanding that required more care and attention to ensure that she properly

understood my question. There was a situation where she claimed to have a solid understanding of the game, but then was surprised by some of my questions involving details in the game. It is difficult to label this instance as social desirability bias because there could have been a misunderstanding between us initially.

With the introduction of the icebreaker activity, there came new challenges that I did not originally consider. For instance, I had planned to ask the parent to download Roblox onto their own phone, and then have them navigate the settings using their own device. This quickly felt very burdensome and intrusive as I was asking them to sign up for something that required personal information, the potential for follow up emails and advertisements, and the monopolization of storage space on their phone. Roblox can obviously be deleted quite easily, but I was not comfortable asking them to perform this task after they had already graciously volunteered their time to talk with me. So, my solution was to have them navigate the settings on my phone, where I had downloaded the game prior to the interview.

Another technological challenge was due to the fact that I was audio recording the interview with my personal smartphone. This only became a challenge once when a mother was holding my phone during the icebreaker activity, and covered the mic with her body, as she held the phone against her stomach during the activity. This resulted in very poor audio quality for that short segment of the interview. Future research should consider this and provide an alternative form of audio recording, outside of the device used in the research.

Finally, the interviews, interpretation and analysis were all done by a single interpreter. Due to this fact, it is more difficult to control bias and subjectivity.

Conclusion

Within this study, I set out to understand the decision making process parents go through when allowing their children to play online games. By using Roblox as a case study, I was able to explore various factors as well as gaps in knowledge that play an important part in that process. After interviewing seven parents who each had very unique parenting styles, it is clear that there was never a clearly defined process with regards to deciding how best to monitor and mediate their child's online gaming activity. There was a huge range in the level of digital literacies among the interview participants, but despite this they shared similar challenges such as knowledge gaps, communication breakdowns, and a general lack of involvement.

Based on my research I can state that there is a great deal of false confidence in parents when it comes to the mentorship in deciding which games are safe, abdicating responsibility for managing the set up and monitoring of the games, and understanding the level of accountability of their own children while participating in these games. Each interview had only one parent participating, leaving the door open for abdicating responsibility to the absent parent. There needs to be a better understanding of whether that is an effective method, or whether it widens the knowledge gap, leaving the child more vulnerable.

This study focused on one point in time. A more longitudinal study could provide insight into how the decision-making process evolved 1) with the information they learned through the interview and 2) as the children age. A child's digital and social media literacy will need to adapt to their changing situations as they grow and mature, and as a result so should the parental mediation strategies of the parents. For instance, a study discovered how younger children are concerned with risks of strangers online who may steal their photos or other personal information. As the children grow older, the concerns morph to a threat from within rather than

beyond the peer group, focusing more on bullying and online harassment from classmates (Livingstone, 2014). This maturation in online concerns will require more sophisticated mentorship from all guardians involved.

Throughout this research journey, I came across several disconnects that affect a parent's ability to properly mediate their child's online activity. There would be value in further researching the following:

1. Does the quality of the mediation change depending on which parent is responsible for the task? My research suggests that moms default to having the father take care of mediating, but how effective is this strategy?
2. How large is the knowledge gap between parent and child with regards to online gaming? Every parent in this study learned about Roblox from their child and most relied on the child to also explain the game to them. What information was lost in delivery and how much of it was intentional?
3. Does a parent's level of rigidity change based on the device their child uses? In my research I saw inconsistencies in behavior from the parent based on what device their child uses. Is there a false confidence affixed to different technologies?
4. Does a parent's level of digital literacy have any impact on their level of strictness? My study did not find a correlation, but the sample was quite small, and it would be interesting to know how an education program aimed at parents might affect their mediation practices.
5. What information are schools teaching kids about online gaming safety and how are they involving the parents?

The greatest outcome of this research has been seeing the opportunity that exists within the school systems. It is obvious that the teachers and educators are making an effort to provide the tools necessary for kids to be safer, smarter online citizens. However, I saw no indication that the schools are involving the parents in any way. The parents need to be more engaged and more informed with regards to what benefits and opportunities are available online for their children, how to safely navigate those opportunities, and what risks exist that threaten the health and happiness of their children and family as a whole.

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Appendix A – Letter of Consent

Study Title: A Parent's Dilemma: What is the decision-making process that parents go through when deciding to let their children play online games?

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To Whom It May Concern:

You are being invited to participate in a research project studying families whose children play the massively popular online game Roblox. You have been selected as a potential interviewee because you have children who play Roblox and who fit the target age range of my research. As a parent of a Roblox enthusiast, I believe your experience and insights will provide an important perspective to this study.

Purpose of Study
The purpose of this study is to explore parent's participation in their children's online gaming activity.

The results of my research will contribute to the completion of my capstone project in my Master of Arts in Communication and Technology degree. The findings will contribute to the academic literature.

Methodology
Interviews will be a maximum of 60 minutes long and will be recorded with a digital audio recorder to ensure accuracy. Notes will also be taken for potential follow up questions or if the opportunity for further research presents itself during our conversation.

Confidentiality
You are under no obligation to participate in the interview nor are you required to answer every question that is asked. You have the right to opt out of the project at any time without penalty. There are no known risks for participating in the study, and should risks become apparent, you will be notified immediately.

All data collected will only be used for the purposes of this study and names of people and organizations will be left anonymous. All data will be stored for up to 5 years after the completion of the study at which time the data will be destroyed in a way that ensures your privacy. Access to the data will be password protected, accessible only to me and Dr. Fay Fletcher.

Please be advised that this research may be used for professional presentation at conferences or other speaking events and could also be published in relevant journals.

Benefits
By participating as an interviewee, you will have access to the final report. To obtain a copy of the final report, see contact details below.

There are no costs involved in being a participant in this research project, and no compensation or reimbursements will be provided. All participation is done on a voluntary basis.

Contact
If you have any questions or concerns during the study, please contact:
Researcher: K. Erika Nakatsui, knakatsu@ualberta.ca, 780-232-2841
Supervisor: Dr. Fay Fletcher, fay.fletcher@ualberta.ca, 780-492-2283

The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615. Please note, this office is independent of the researchers.

Participant Informed Consent
I acknowledge that the purpose of this research study has been explained to me and that my participation is voluntary. I understand that I will not be compensated through monetary means but will have access to the final report should I choose to obtain it. I understand that all of my information will be kept anonymous and should I have any questions during the study, or in the future, I can contact the researcher.

- ☐ I agree to be audio recorded during the interview

Date:

_____

Printed Name of Participant: Signature of Participant:

Appendix B – Information Letter

The following contact letter will be sent via email or Facebook Messenger, depending on how the initial introduction occurred.

Greetings, and thank you for your consideration of my research!

I am a grad student at the University of Alberta and as the final project for my master's in communications and technology degree I am studying parental digital literacy and mediation styles when it comes to their child's online gaming behavior. I am particularly interested in parents whose children play the popular online mobile game Roblox.

If you have a child between the ages of 8-12 who plays Roblox, and you live in Edmonton, Alberta, I would love to interview you. For your convenience, the interviews will be held at your home, at a time of your choosing. The interview will take 60 minutes and your participation, and all of your responses will be kept completely confidential. I will not ask any questions about your child, other than their age, and your knowledge of their online activity and you can withdraw from my interview at any time without question.

Your participation in this study will add to the body of research on children's online safety. With your help, we will be able to provide parents with the tools necessary to better mentor their own children to navigate the online world safely, and effectively.

If you are interested in participating in an interview or have additional questions that you would like answered prior to proceeding, please do not hesitate to email me at knakatsu@ualberta.ca.

I appreciate your time, and very much look forward to talking to you.

Kind regards,
Erika