RATED M FOR MONKEY: AN ETHNOGRAPHIC STUDY OF PARENTAL INFORMATION BEHAVIOR

WHEN ASSESSING VIDEO GAME CONTENT FOR THEIR CHILDREN

Diana Harrelson, M. S.

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

May 2016

APPROVED:

Shawne D. Miksa, Major Professor
William Moen, Committee Member
Christina Wasson, Committee Member
Suliman Hawamdeh, Chair of the Department of Library and Information Sciences
Costas Tsatsoulis, Dean of the Toulouse Graduate School

Following the decision by the Supreme Court of the United States in *Brown v. Entertainment Merchants Association* (2011), which struck down the state of California’s appeal to restrict the sale of games deemed to have “deviant violence” to those 18 or older and the court’s recommendation that parents use the ESRB Ratings System instead, this ethnographic study sought to better understand what parents thought of laws on video games and how they used the recommended ratings system. A total of 30 interviews using semi-structured open-ended questions were conducted and analyzed to reveal what parents thought of laws on video games, how they used the ESRB Ratings System to assess video game content, and what other methods they used for video game content assessment in addition to the ratings system. This research utilized Dervin and Nilan's (1986) sense-making methodology as a way to learn how parents bridged their knowledge gap when it came to learning about video game content and how they made sense of the knowledge gained to determine the content appropriateness for their children. Analyses of the collected data provided the foundation for a model on the effects of the parent-child relationship on parental information behavior.
Copyright 2016

by

Diana Harrelson
ACKNOWLEDGEMENTS

Thanks go out to my committee, Shawne Miksa, Christina Wasson, and Bill Moen, without whom I would have never been able to successfully defend and complete this dissertation. Additional thanks go out to my family including my husband, SGT. Robert Hubbard, a soldier in the U.S. Army, and my twin sons, Robbie and Liam, who were born just before I started on the research. You all have been quite the inspiration and motivation to complete this work. Go Team Hubbard!

Appreciation is extended to the ESRB for their permission to reproduce the ESRB Ratings System in Appendix B.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>III</td>
</tr>
<tr>
<td><strong>Chapters</strong></td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION TO THE STUDY</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Background of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>5</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>6</td>
</tr>
<tr>
<td>On Parental Information Behavior and Its Interconnectedness with Parent-Child Interactions</td>
<td>9</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>10</td>
</tr>
<tr>
<td>Parents</td>
<td>11</td>
</tr>
<tr>
<td>Children</td>
<td>11</td>
</tr>
<tr>
<td>Households</td>
<td>11</td>
</tr>
<tr>
<td>Video Games</td>
<td>11</td>
</tr>
<tr>
<td>Console and Handheld Games</td>
<td>12</td>
</tr>
<tr>
<td>Computer Games</td>
<td>12</td>
</tr>
<tr>
<td>Mobile Games</td>
<td>13</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>13</td>
</tr>
</tbody>
</table>
2. LITERATURE REVIEW ................................................................. 18
   Introduction.................................................................................. 18
   Video Game Self-Regulation in the United States .................... 18
      Video Games and the Senate .................................................. 19
   Video Game Legislative Attempts in the United States ............. 20
      Courts of Appeals Rulings ...................................................... 20
      SCOTUS Hearing .................................................................. 30
      Pundits on the SCOTUS Ruling ............................................ 32
      SCOTUS Decision ................................................................. 34
   Use of Research in Court Cases on Video Game Legislation ....... 35
      Research in Appellate Cases ................................................ 35
      Research Presented to the SCOTUS .................................... 38
      Implications of the SCOTUS Use of Research ....................... 40
   Parents and Video Game Research .............................................. 43
      Parents' Needs and Media Ratings ....................................... 43
      Parent Focused Video Game Research Studies ..................... 45
A Brief Review of the Entertainment Software Ratings Board Ratings System ....67

Research Question 1.................................................................68

Question 1 ..............................................................................68

Part 1 .......................................................................................68

Part 2 .......................................................................................69

Research Question 2.................................................................70

Question 2 ..............................................................................70

Additional Analyses ...............................................................72

Video Games ...........................................................................72

Video Game Devices ...............................................................72

Video Game Spaces ...............................................................73

Parental Assessment ...............................................................73

Parental Involvement .............................................................73

Religion and Politics ...............................................................74

Chapter Summary ..................................................................74

5. DISCUSSION .......................................................................76

Introduction ...........................................................................76

Key Findings .........................................................................76

Discussion of Research Questions .........................................78

Question 1: Part 1 ....................................................................78

“Nonuser” Users .....................................................................79
Parents Reviewing Games Prior to Purchase.................................165
Parental Video Game Information Needs........................................165
Relation to Previous Research Conclusion .....................................168
A Model on Parental Information Behavior ....................................169
The Effect of Parent-Child Interaction on Parental Information Behavior ....170
Stage 1 .............................................................................................171
Stage 2 .............................................................................................174
Stage 3 .............................................................................................178
Stage 4 .............................................................................................184
Model Summary ...............................................................................188
Study Summation .............................................................................189
Recommendations for Further Research .........................................192
Conclusion .......................................................................................192
APPENDICES ..................................................................................194
REFERENCES ..................................................................................207
CHAPTER 1
INTRODUCTION TO THE STUDY

Introduction

When the case of Schwarzenegger v. Entertainment Merchants Association came before the Supreme Court of the United States (SCOTUS) in 2010, it was the first case of its kind to make it to the highest court of the land and was the last in a long line of video game-based appellate cases spanning nearly two decades. Its ruling would have implications, not only for the sale of video games, but also for the use of social science research in law proceedings.

In 1993, the United States Senate first held hearings concerning the marketing of violent video games to children. This prompted the industry’s move to self-regulation and the establishment of a video game ratings system (Kent, 2001), which resulted in the creation of the Entertainment Software Rating Board (ESRB). The establishment of this board, however, did not stop further attempts at legislation.

The case of American Amusement Machine Association v. Teri Kendrick (2001) was the first to use social science to bolster its argument that media violence can cause aggression in children (Anderson & Dill, 2000). This case followed a rash of high school shootings, most notably in 1999 in Columbine, Colorado, where the two students who perpetrated the shooting spree were quoted as saying, “It’s going to be a lot like […] Doom” (Kent, 2001, p. 545). Doom is the title of a first person shooter video game released in 1993. However, just two short years after the Columbine shootings, the courts concluded that “[t]he studies do not find that video
games have ever caused anyone to commit a violent act” (Am. Amusement Mach Ass’n, v. Kendrick, 2001, p. 578).

The outcome of the 2001 case was repeated in subsequent appellate cases. Each successive case that argued that video games cause violence in children was struck down for failing to provide scientific proof (Interactive Digital Software v. St. Louis County, 2003; Video Software Dealers Ass’n v. Maleng, 2004; Ent. Software Ass’n v. Granholm, 2006; Ent. Software Ass’n v. Blagojevich, 2006; Ent. Software Ass’n v. Hatch, 2006; Ent. Software Ass’n v. Foti, 2006; Ent. Merchs. Ass’n v. Henry, 2007; Video Software Dealers Ass’n v. Schwarzenegger, 2009). In 2010, the issue finally made it to the SCOTUS in the case of Schwarzenegger v. Entertainment Merchant’s Association (EMA) (2010). Although one might have expected counsel for the plaintiff to develop a new strategy, the state of California repeated the formula from the previous cases arguing:

The California Legislature was presented with substantial evidence that demonstrates that the interactive nature [...] of violent video games where the minor or the young adult is the aggressor, [...] is the individual acting out [...] this obscene level of violence, if you will, is especially harmful to minors. (pp. 5-6)

Once again the plaintiff lost the case. Two main factors contributed to the loss. One was the poor state of scientific research on the issue of whether video games cause aggression in youth. By the time Schwarzenegger v. EMA (2010) made it to the SCOTUS, this debate was a hot topic in social science research. However, according to Ferguson (2013), a breakdown of the scientific review process had taken place. Psychologists made “an increasing stream of statements that expressed high certitude, made spurious comparisons with medical research,
ignored disconfirmatory evidence and increasingly spoke beyond what the data could support” (Ferguson, 2013, p. 57).

The other factor contributing to the loss of the case was California’s argument that the state needed to “ensure that the parent can involve themselves in this important decision” (Schwarzenegger v. Ent. Merchs. Ass’n, 2010, p. 22). That important parental decision, California argued, is deciding age appropriateness of video game content for children. However, it did not have scientific evidence to support the statement that parents needed help to involve themselves. In the end, the SCOTUS decision, which was provided in Brown v. Entertainment Merchants Association (EMA) (2011), pointedly referred to this portion of California’s argument:

California also cannot show that the Act’s restrictions meet the alleged substantial need of parents who wish to restrict their children’s access to violent videos. The video-game industry’s voluntary ratings system already accomplishes that to a large extent. Moreover, as a means of assisting parents the Act is greatly overinclusive, since not all of the children who are prohibited from purchasing violent video games have parents who disapprove of their doing so. (p. 2)

Since there was little to no research on parents and their assessment of video game content appropriateness for their children, the court argued that the need was alleged rather than factual. Of the studies that do exist on parents and video games (Bushman & Cantor, 2003; Kutner, Olson, Warner, & Hertzog, 2008; Stroud & Chernin, 2008; Becker-Olsen & Norberg, 2010), none focus on the information needs of the parent and whether industry self-regulations or potential legislation meet those needs. This qualitative research study seeks to address this gap in the literature, and contributes to the development of rigorous social science on video games.
Background of the Study

Video games are as popular as ever—almost 60% of the population of the United States plays them, and the average household owns at least one dedicated game console, PC, or smartphone (Entertainment Software Association, 2014, p. 2). In 2013, the gaming industry as a whole (computer, console, and digital) sold a total of 15.39 billion dollars-worth of video games (p. 13). Another roughly 6.14 billion dollars was spent on video gaming hardware and accessories, giving the video gaming industry a total of over 21 billion dollars of net revenue for the year (p. 13). While the average video game player is 31 years old, 29% of all gamers are under the age of 18 (p. 3). Of those, 42% play with their parents on a weekly basis, and over half play video games with their parents on a monthly basis (p. 9). Of the games sold, over 65% of console games (20% shooter, 31.9% action, 6.9% adventure, 3.9% fighting, 3.4% strategy) and over 67% of computer games (7.1% shooter, 2.3% Action, 7.1% Adventure, 12.3% role playing, 38.4% strategy) included violence as a part of the game mechanics (p. 10).

Given their popularity and content, video games have become a prevalent focus among many advocacy groups calling for stricter laws governing those who have access to them. Over the last 21 years, a minimum of 10 acts of legislation regarding violent video games were brought before appellate courts across the country. These laws, originally passed by local municipalities as well as state legislatures, were appealed by various video game industry organizations. The crux of the argument made in these cases was: violent video games should not be accessible to minors and parents need the help of the law to enforce this restriction. Due to their potential violation of the First Amendment and their inability to satisfy the
requirements of strict scrutiny for content-based restrictions (Hall, Day, & Hall, 2011), the courts ruled all of these laws unconstitutional.

Statement of the Problem

While many of the plaintiffs in the aforementioned appellate cases relied on social science studies that correlated violent video games with violence in children (Anderson & Dill, 2000; Funk, Baldacci, Pasold, & Baumgardner, 2004; Gentile, Lynch, Linder, & Walsh, 2004), none of them cited any study concerning parents and their knowledge or use of video game content information in making decisions about the appropriateness of video games for their children. In fact, relatively few studies have been conducted on parents and video game content (Kutner, et al., 2008; Stroud & Chernin, 2008; Becker-Olsen & Norberg, 2010). Additionally, there have been few studies on parent information behavior, specifically their information needs. As Walker (2012) explained, “parents and parenting have received comparatively little attention from researchers specifically examining their information literacy needs” (Walker, 2012, p. 546). Exploring parental information behavior concerning video game content appropriateness for their children may provide crucial data that is important to ratings boards, legislatures, and others concerned with parents, their information needs, and the ways in which they seek to fulfill them.

Purpose of the Study

The purpose of this study is to better understand parental information behavior and to document what parents do to address their information needs when assessing video game content appropriateness. A second purpose of this study is to evaluate parental understanding
of the ESRB Ratings System as it stands today and to determine in what ways, if any, the system can be changed to serve parents better. The final purpose of this study is to better understand whether or not parents feel like they need video game legislation, as was argued in the SCOTUS case.

Significance of the Study

As of 2013, children composed 23.3% of the total population of the United States ("America’s Children," 2013). This means nearly a quarter of the population of the country has a caretaker, referred to as parent throughout this study, who may seek out information to fulfill this role. Unfortunately, there is relatively little research that focuses on parents with regard to this aspect of their lives (Walker, 2012).

In Brown v. Electronic Merchants Association (EMA) (2011), the SCOTUS ruled that the sale of video games was protected by the First Amendment, and thus, laws could not be enacted to restrict their sale to minors, as that constitutes censorship (Brown v. Ent. Merchs. Ass’n, 2011). As an alternative to sales restrictions, the SCOTUS stated the ESRB Ratings System "does much to ensure that minors cannot purchase seriously violent games on their own, and that parents who care about the matter can readily evaluate the games their children bring home" (p. 16). In the SCOTUS ruling, the only source of video game information mentioned for parents was the ESRB Ratings System.

The ESRB is “an industry-funded and governed body” (Funk, et al., 2013, p. 982). In addition to the staff, it consists of a panel of three members whose task it is to analyze games and rate their content. To do this, the raters review developer submitted questionnaires and
videos of gameplay. Randomly chosen games are played to ensure rating accuracy. A rating and accompanying descriptors are proposed based on the raters’ analysis. However, it is the staff members, not the raters, who make “the final decision” (p. 982).

While the evaluation and rating is voluntary, “some national retailers will not carry unrated games” (Funk, et al., 2013, p. 982), because they use the ESRB to determine to whom it is appropriate to sell video games. Though most retailers have their own rules and regulations against selling video games to underage children, they are not required to restrict the sale of video games by law. This has encouraged many local and state governments across the country to attempt to legislate the sale of video games.

In their 2014 annual report, the Entertainment Software Association (ESA), also known as the organization that created and funds the ESRB, stated 29% of gamers in 2013 were under 18 years of age (Entertainment Software Association, 2014, p. 3). Of the games rated in 2013, 46% were rated “E for Everyone” and 19% were rated “E10+” for everyone 10 and older. That accounts for 65% of video games rated as playable by children. Another 23% of video games were rated “T for Teen”. This left only 12% of video games as rated as “M for Mature”, which is recommended for players 17 or older (p. 7). Another way to describe this is: 88% of video games rated in 2013 were considered playable by those 16-years-old or younger. However, the top two games played on consoles, Grand Theft Auto V (GTVA5) and Call of Duty: Ghosts (COD:G), were rated M for Mature.

To put this in perspective, the number one game, Grand Theft Auto V (released September 17, 2013), sold 33 million units in its first 6 months (“Take-Two”, 2014). The number
two game, *Call of Duty: Ghosts* (released on November 5 2013), sold 14.5 million copies in its first 6 months ("Call of Duty", 2013). That is a total of nearly 50 million units sold of these M-rated games within half a year after their release. That number does not cover renting or reselling used versions of the games, which indicates a potentially higher number of players. Though there are no numbers provided for those under the age of 17 who play these games, with one out of every two homes owning approximately two gaming consoles, and 29% of all gamers aged 17 or younger (Entertainment Software Association, 2014), it is very possible a significant amount of players are younger than what is recommended.

According to the ESA (2014), parents were with their children 91% of the time, and 82% of the time children had “their parents’ permission before purchasing or renting a game” (Entertainment Software Association, 2014, p. 8). Of those parents surveyed, 95% claimed that, “they pay attention to the content of the games their children play” (p. 8), but only 85% of parents stated they were “aware of the ESRB Ratings System” (p. 7). That means at least 10% of parents are not aware of the ratings system, but use some other means to attain information about video games. While 85% were aware of the ESRB Ratings System, there is no research stating what percentage of those, if any, use other information sources. Additionally, nowhere is it mentioned how or where parents learned of the ESRB Ratings System, or if they actually understand all of the facets of a game rating and how to use it.

Considering that the ESRB Ratings System was the only source of information for parents mentioned by the SCOTUS, and the fact that it is an information system developed with parents as its target user base, research into parental knowledge, use, and understanding of it
is relevant to ratings system developers, lawmakers, and parents alike. This research gap also provides a unique opportunity to add to the limited amount of research available on the information behavior of parents.

On Parental Information Behavior and Its Interconnectedness with Parent-Child Interactions

In attempting to add to the research gaps surrounding the issue, this study began with the intention of identifying and understanding parental need or want for potential legislation of video game content. It then used the SCOTUS ruling *(Brown v. Ent. Merchs. Ass’n, 2011)*, which proposed focusing on parental use of the ESRB Ratings System rather than passing legislation, as a motive to explore parents’ use and understanding of the ratings system. It did this with a nod toward attempting to understand how parental information behavior helped parents bridge their knowledge gaps on video game content and make sense of the information gained to assess the games’ content appropriateness for their children.

As the study progressed specific parental information behaviors were uncovered. At the same time I discovered the unanticipated influence and interconnectedness of parent-child interactions on a multitude of parental behaviors concerning information, communication, decision-making, and more. I found that the parent-child relationship had a direct effect on parental information behavior as it concerned gaming decisions and caused the parents to modify their behavior over time to include specific interactions, communications, and decision-making strategies. In the process, the study revealed an interconnectedness between these
behaviors and relationships that is woven so tightly together that it was impossible to divorce one part from the other without missing large pieces of the ‘big picture’.

By this I mean how the parent-child relationship creates the initial need for parental information behavior while also modifying that need over time as communications and decisions for, and with, the child grow ever more complicated. These modifications happen as the child ages, and again with the addition of new children to the family unit. Both the information need and influence of the child is different for each child in the family. On the surface, the complexity of navigating these interdependencies as a parent seemed daunting, especially if the parents were to actually stop to think about all of the various pieces. Instead, the parents in this study simply did what was needed when it needed to be done as it suited the current requirements of their unique family information needs.

The key component is that these information needs are specific to the family, thus not universal, and that they change as the family changes with time being a constantly modifying force. These needs might have been different last month, and they will probably be different next year. The question is, what can be done externally to help parents move through these internal family changes as effortlessly as possible? The results of this revelation are presented in the creation of a model on the effects of the parent-child relationship on parental information behavior in the last chapter of this study.

Definition of Terms

To avoid confusion, the following definitions provide clarity for terms used throughout this study.
Children

In this research, anyone under the age of 18 is considered a child. In order to qualify for this research study, the family must have had a child between the ages of 4 and 17 who played video games. Depending on the source being cited, children may sometimes be referred to as minors.

Households

Households represent parents who participated alone as well as those who participated together (in the same interview or separately). This singular unit was created to avoid inflation of the numbers where two parents were talking about their shared children and home environments, as that would skew the numbers against those where only one parent participated. This is particularly relevant in terms of demographics so that the same demographic data was not counted multiple times.

Parents

For the purposes of this research, any person who is considered a primary caregiver is referred to as a parent. This can refer to, but is not limited to: mothers and fathers, single parents, stepparents, grandparents, extended family acting as parents, foster parents, adoptive parents, same-sex parents, and such.

Video Games

For this study, video games are defined as all interactive software intended for some form of entertainment or education that make use of human input and a screen, played on all
consumer devices, through all possible mediums, including, but not limited to: physical disks, cloud services, and digital downloads. Wolf and Perron (2003) further define video games as:

   everything from the ergodic (work) to the ludic (play); as narrative, simulation, performance, remediation, and art; a potential tool for education or an object of study for behavior psychology; as a playground for social interaction; and, of course, as a toy and a medium of entertainment. (Wolf & Perron, p. 2)

This work also makes reference to multiple classifications of video games including console and handheld games, computer games, and mobile games. The generic term of video games or simply games may be used interchangeably for these throughout this paper. For clarity, these types of games are defined as follows:

**Computer Games**

Computer games are those games that are developed to be played on computers including those running Macintosh, Windows, and Linux operating systems, as opposed to those that are released for gaming consoles. These games include physical disks and digital downloads, which include standalone games as well as extended DLC. Popular cloud services such as Steam, Battle.net, and Origin, etc., are distributors of digital games.

**Console and Handheld Games**

Console games are defined for use in this research as those games developed specifically for and played only on game consoles—devices specifically built for playing video games, as opposed to computers. These games include physical disks as well as digital downloads, which include standalone games as well as downloadable content (DLC). Also included in this category of games, for this study’s purposes, are those games available for
handheld console devices. The most recent television consoles are: Microsoft Xbox One (released November 22, 2013), Nintendo Wii U (November 18, 2012), and Sony PlayStation 4 (November 15, 2013). The most popular handheld consoles are: PlayStation Vida (February 22, 2012) and Nintendo 3DS (March, 2011).

Mobile Games

Mobile games are those that are developed to be played on mobile devices including phones, tablets, as well as other types of hardware that do not belong in the handheld console category mentioned above. The most popular operating systems on these devices are Apple iOS, Google Android, and Windows Phone. These games are available via download only.

Theoretical Framework

This study is approached through a social informatics (SI) epistemological framework. Social informatics is not delimited by particular theories or methods that describe it; rather, it is the research focus that defines it. To further explain, it is important to understand what social informatics is not including "a theory," "information without technology," "cognitive psychology," "economics," "direct effects (or tool) approach," or "punditry and futurizing" (Sawyer & Eschenfelder, 2002, pp. 433-435). In general, SI research examines the design, uses, and implications of information and communications technologies (ICTs) in ways that account for their interactions within institutional and cultural contexts (Kling, Rosenbaum, & Hert, 1998, p. 1047). SI bridges technology and society with a focus on ICTs from users' perspectives. It is a field that many disciplines have contributed to, including anthropology and information science. In essence, it is an interdisciplinary field that can "serve as a conceptual home for those
who are interested in contributing to studies of ICTs and social and organizational change" (p. 1048).

Dervin and Nilan’s (1986) sense-making model, which focuses on users and how they overcome, or bridge, information gaps, provided the methodology for this SI approach. Dervin described the model as consisting “of a set of conceptual and theoretical premises and a set of related methodologies for assessing how people make sense of their worlds and how they use information and other resources in the process” (Dervin & Nilan, 1986, p. 20). Others have described it as an approach “characterized by its focus on constructive, active users, subjective information, situationally, holistic views of experience, internal cognition, systematic individuality, and qualitative research” (Pettigrew, Fidel, & Bruce, 2001, p. 43).

Wilson (2000), in his paper on the study of information needs and behaviors, explained Dervin’s model as:

implemented in terms of four constituent elements - a *situation* in time and space, which defines the context in which information problems arise; a *gap*, which identifies the difference between the contextual situation and the desired situation [...]; an *outcome*, that is, the consequences of the sense-making process, and a *bridge*, that is some means of closing the gap between situation and outcome. (Wilson, 2000, p. 52)

With the focus of Dervin’s model on qualitative procedures such as interviews and neutral questioning (Dervin & Nilan, 1986, p. 20), grounded theory as an analogous methodological approach was chosen for this study. Strauss and Corbin (1994) defined grounded theory as “a general methodology for developing theory that is grounded in data systematically gathered and analyzed” (Strauss & Corbin, 1994, p. 273). It is unique from other methodologies in that it “evolves during the actual research, and it does this through
continuous interplay between analysis and data collection” (p. 273). To that end, the model developed for this study evolved with simultaneously conducted research and analysis.

Research Questions

Based on a review of the research available on parents, video game industry self-regulation, and video game legislation, there is evidence of multiple gaps in the research. Little research on parents and industry self-regulation, and almost no research on parents and video game legislation, exists. Additionally, no research exists on parental information behavior as it pertains to making decisions about age appropriate content when purchasing video games for their children.

To that end, this research study seeks to answer the following research questions:

1. When considering the appropriateness of video game content for their children:
   a. To what extent do parents utilize the ESRB Ratings System and how do they do so?
   b. What other information sources do parents consult, why do they consult them, and how do they use the information gathered?

2. To what extent do parents believe potential legislation of the video game industry would help them to fulfill their information needs in regards to assessing content appropriateness of video games for their children?

Research Methods

This research used chain-referral, utilizing an initial round of purposeful sampling, as the method of participant recruitment. The primary data collection method was semi-structured
open-ended interviews of parents and their children, if present and with permission, conducted either in the parents’ home or virtually. A secondary method consisted of taking photographs of gaming spaces throughout the home, making note of what the devices and games were and where they were used. For virtual interviews, the participants provided their own photographs and descriptions of the spaces. Qualitative analysis through coding, to organize the data, and mindmaps, to visualize the data, began early and was conducted throughout the data collection process in an attempt to identify themes, answer research questions, and to inform the study’s model.

Delimitations

The researcher utilized multiple delimitations to narrow the scope of this study to better understand the target users of the ESRB Ratings System, as well as that of the multiple legislative attempts across the United States.

The first delimitation was to narrow the research to parents within the United States, as these are the subjects who are most affected by the ESRB Ratings System and laws passed in this country. This was a specific boundary set not only in terms of research participants, but also in the literature reviewed. The second delimitation narrowed the sample of parents to those with one or more children who fell between the ages of 4 and 17. This age range was chosen to ensure the youngest would be able to actively participate in the interviews and that the oldest were still minors. The third delimitation was to completely avoid researching or defining ‘violent video games’ or ‘aggressive behavior’. The research presented here is not
about the games themselves; rather, it is about the parents who consume information about video games in order to assess the content appropriateness for their children.

Assumptions

The research presented here includes the following assumptions: (a) the parents interviewed answered truthfully and completely to the best of their ability, (b) the data collected provided enough information to make accurate interpretations of parental information needs, and (c) the interpretation of the data appropriately and conclusively characterized the viewpoint of the study participants.

Chapter Summary

This chapter provided an introduction to the research, including a short explanation of the background of the study, a statement of the research problem, as well as the purpose and significance of the study. It also provided a short list of operational definitions for the research, a look into the theoretical framework, the research questions, and the methods used for data collection. It concluded with the known limitations, delimitations, and assumptions. The following chapter will provide insight into the literature concerning this subject matter and how it pertains to this study.
CHAPTER 2
LITERATURE REVIEW

Introduction

This literature review is divided into six major sections: (1) video game self-regulation in the United States, (2) video game legislative attempts in the United States, (3) use of research in court cases on video game legislation, (4) parents and video game research, (5) parents and information behavior, and (6) research questions. These will provide context for the research conducted for this study.

Video Game Self-Regulation in the United States

Though the video game industry can trace its beginnings to the manufacture and distribution of Japanese playing cards as early as 1889 (Kent, 2001, p. XI), which was the start of what would become Nintendo, it did not feel the pressure to regulate itself until 1993. The sequence of events that led up to the industry’s self-regulation started, at least in part, due to Nintendo self-censoring the popular arcade game Mortal Kombat where it removed the game’s finishing moves (last hit on a character) and character death-sequences before they released it on their Super NES home gaming console. While this was a reflection of Nintendo’s own internal entertainment standards, it crippled their sales and gave the upper hand to Sega, their competitor, who released it as it was originally designed. This caused tension between the companies, and there is speculation that Nintendo urged the United States Senate to examine violence in video games as a way to attack Sega’s booming sales (Kent, 2001).
Video Games and the Senate

In late 1993, after the release of the video games *Mortal Kombat* and *Night Trap*, joint subcommittee hearings focused on whether video games were becoming too violent, and thus needed to be regulated by the government (Kent, 2001). Major video game console manufacturers at the time were prompted by the hearings to endorse creating their own ratings system (which later became the one created by the ESRB) rather than to succumb to government regulation. This endorsement, having been announced just prior to the start of the hearings, was considered "well timed, and several senators referred to it throughout the meetings" (Kent, 2001, p. 469).

The hearings consisted of testimony from experts in education and child psychology who explained that limited research had been conducted in this area. One of the recommendations to the committee was that “the federal government fund independent research projects into the effects of violent video games and that the results of the research, along with a game-ratings system strategy, be made available to parents" (Kent, 2001, p. 470). In addition to the endorsement of a ratings system, these hearings also prompted the video game industry to create two organizations. The first was the Interactive Digital Software Association (IDSA), which later became the Entertainment Software Association (ESA). The IDSA/ESA would be instrumental in many future legal proceedings on behalf of game developers. The second was the Entertainment Software Rating Board (ESRB) "an independent organization to rate games" (Kent, 2001, p. 80). The ESRB and its ratings system
is considered the standard in the United States, and is what gaming manufacturers voluntarily use today.

**Video Game Legislative Attempts in the United States**

This portion of the literature review establishes why research in this domain matters by evaluating legislation on video games in the United States up to and including the latest SCOTUS ruling. The section is divided into four subsections: (1) courts of appeals rulings, (2) SCOTUS hearing, (3) pundits on the SCOTUS ruling, and (4) SCOTUS decision.

**Courts of Appeals Rulings**

The purpose of this brief review of the court of appeals rulings around the United States is to show how each decision built upon the previous cases, and how these cases led to the SCOTUS ruling. It is also provided here to point out the use, if any, of social science research studies and their influence, or lack thereof, in a court of law. The ways in which social science research studies were used is discussed in a subsequent section of this literature review. The rulings reviewed here are the last step of each case that was brought before the courts. This means that the cases may have started years earlier, but their final ruling was not passed until the dates listed below. To show how each of these rulings builds upon the previous, the formally referenced case law is listed in each case review. This is to provide a clearer understanding to the reader of how these cases work together up to and including the SCOTUS decision.
### Courts of Appeals Cases on Video Games

<table>
<thead>
<tr>
<th>Case</th>
<th>Year</th>
<th>Location</th>
<th>Court</th>
<th>Judgment</th>
<th>Cited:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>1992</td>
<td>Missouri</td>
<td>United States Court of Appeals, Eight Circuit</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>2001</td>
<td>Indiana</td>
<td>United States Court of Appeals, Seventh Circuit</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>2003</td>
<td>Missouri</td>
<td>United States Court of Appeals, Eighth Circuit</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(b)</td>
</tr>
<tr>
<td>(d)</td>
<td>2004</td>
<td>Washington</td>
<td>United States District Court, Western District of</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Washington, at Seattle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(a), (b), (c)</td>
</tr>
<tr>
<td>(e)</td>
<td>2006</td>
<td>Michigan</td>
<td>United States District Court, Eastern District of</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Michigan, Southern Division</td>
<td></td>
<td>(b), (c), (d)</td>
</tr>
<tr>
<td>(f)</td>
<td>2006</td>
<td>Illinois</td>
<td>United States Court of Appeals, Seventh Circuit</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(b), (e)</td>
</tr>
<tr>
<td>(g)</td>
<td>2006</td>
<td>Minnesota</td>
<td>United States District Court, for the District of</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minnesota</td>
<td></td>
<td>(c), (d)</td>
</tr>
<tr>
<td>(h)</td>
<td>2006</td>
<td>Louisiana</td>
<td>United States District Court, for the Middle</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>District of Louisiana</td>
<td></td>
<td>(b), (c), (d), (e), (f)</td>
</tr>
<tr>
<td>(i)</td>
<td>2007</td>
<td>Oklahoma</td>
<td>United States District Court for the Western</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>District of Oklahoma</td>
<td></td>
<td>(b), (c), (d), (e), (f), (g), (h)</td>
</tr>
<tr>
<td>(j)</td>
<td>2009</td>
<td>California</td>
<td>United States Court of Appeals, Ninth Circuit</td>
<td>Unconstitutional</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(a), (b), (c), (d), (e), (f), (g), (h)</td>
</tr>
</tbody>
</table>

**California case taken to the SCOTUS**

Each of the cases reviewed here were on laws that sought to prohibit the sale of violent video games to children. Video game organizations appealed all of them claiming that restricting the sale of video games was a violation of the First Amendment. Though the cases
were heard all over the United States, the courts were unanimous in their decisions that such laws were unconstitutional.

*Video Software Dealers Association v. William L. Webster* (1992) is the earliest case where a law was written with the primary purpose of protecting children from violence in media was challenged in court. The United States Court of Appeals, Eighth Circuit struck it down, stating, "the statute is not narrowly tailored to promote a compelling state interest" (*Video Software Dealers Ass’n v. Webster*, 1992, p. 4). A ‘compelling state interest’ is what is necessary to pass the strict scrutiny prerequisite required to determine the constitutionality of a law (“Strict Scrutiny”). Thus, the Missouri law was found unconstitutional, and the courts ruled on behalf of the plaintiffs. For brevity, this paper refers to this case as *VSDA v. Webster* in subsequent references.

In *American Amusement Machine Association v. Teri Kendrick* (2001) the United States Court of Appeals, Seventh Circuit struck down an Indiana law that sought to limit violent video game access to minors by fining businesses that allowed minors to play such games without the supervision of their parents. The court stated that video games should be thought of as literature, and in that respect, their graphic violence was no worse than the violence in *Odysseus* or the *Divine Comedy*. The court’s ruling argued that, "to shield children right up to the age of 18 from exposure to violent descriptions and images would not only be quixotic, but deforming; it would leave them unequipped to cope with the world as we know it" (*Am. Amusement Mach. Ass’n v. Kendrick*, 2001, p. 5).
Additionally, it found that "the ordinance curtails freedom of expression significantly and, on this record, without any offsetting justification, 'compelling' or otherwise" (p. 7). The court pointed out the lack of evidence from research to support the idea that graphic violence is harmful to children. Therefore, the Indiana law was deemed unconstitutional and the courts ruled on behalf of the plaintiffs. For brevity, this paper refers to this case as *AAMA v. Kendrick* in subsequent references.

In *Interactive Digital Software Association v. St. Louis County* (2003) the United States Court of Appeals, Eighth Circuit struck down a Missouri law that made it illegal to allow minors access to violent video games without consent of their parents. The ruling cited the decision in *AAMA v Kendrick* (2001). Though St. Louis County tried to claim this law was to assist "parents to be the guardians of their children's well-being" and that "parents and guardians should have the power to control the types of games their children play and to control their exposure to violent and sexual materials" (*Interactive Digital Software v. St. Louis County*, 2003, p. 6), the court did not find that compelling enough.

It stated that “[w]e merely hold that the government cannot silence protected speech by wrapping itself in the cloak of parental authority” (*Interactive Digital Software v. St. Louis County*, 2003, p. 6). It found the law did not meet the standards of strict scrutiny, stating, "a content-based restriction on speech is presumptively invalid, and the County therefore bears the burden of demonstrating that the ordinance is necessary to serve a compelling state interest and that it is narrowly tailored to achieve that end" (p. 5). The court did not believe the County successfully did this, affirming, “to accept the County's broadly-drawn interest as a
compelling one would be to invite legislatures to undermine the First Amendment rights of minors willy-nilly under the guise of promoting parental authority” (p. 6). Thus, the court found the Missouri law unconstitutional and ruled on behalf of the plaintiffs. For brevity, this paper refers to this case as IDSA v. St. Louis in subsequent references.

In Video Software Dealers Association v. Maleng (2004) the United States District Court, Western District of Washington, at Seattle struck down a Washington law that sought to penalize entities that distributed violent video games to minors. The ruling cited VSDA v. Webster (1992), AAMA v. Kendrick (2001), and IDSA v. St. Louis (2003). It stated, "communications designed to entertain the listener, rather than to impart information or debate public affairs, are eligible for constitutional protections" (Video Software Dealers Ass’n v. Maleng, 2004, p. 5). In this case, both sides of the argument provided social science research studies to support their positions. As to the studies supplied by the defense, the court found "the Legislature's belief that video games cause violence, particularly violence against law enforcement officers, is not based on reasonable inferences drawn from substantial evidence" (p. 8). The ruling found that the First Amendment applies to video games; thus, the Washington law was found unconstitutional and the ruling was on behalf of the plaintiffs. For brevity, this paper refers to this case as VSDA v. Maleng in subsequent references.

science perspectives, the court found "the position taken in the joint statement of the medical associations is not based on any scientific study, but appears to represent the policy or political views of their governing bodies" (Ent. Software Ass’n v. Granholm, 2006, p. 653). The court found the state of Michigan "failed to consider less restrictive ways of achieving their interests" (p. 654) such as providing support for increasing awareness of the ESRB.

Michigan argued the ESRB is a "voluntary system that is not enforced by retailers but is rather an imperfect means of informing parents of a video game's contents, and therefore does not help the State's purported interests" (Ent. Software Ass’n v. Granholm, 2006, p. 654). The court retorted: "There are reasonable alternatives using the existing ESRB system, such as undertaking an advertising campaign to inform parents of the ratings system and what to watch out for when purchasing games for their children" (p. 654). The court ruled on behalf of the plaintiffs, finding that the law in question was unconstitutional. For brevity, this paper refers to this case as ESA v. Granholm in subsequent references.

In Entertainment Software Association v. Blagojevich (2006) the United States Court of Appeals, Seventh Circuit struck down an Illinois law making the sale of sexually explicit video games to children illegal. The state argued that the law's purpose was to assist "parents in protecting their children from that material" (Ent. Software Ass’n v. Blagojevich, 2006, p. 7). The ruling cited AAMA v. Kendrick (2001) and ESA v. Granholm (2006). For its ruling, the court relied on research that said "parents are involved in eighty-three percent of video game purchases for minors" (Ent. Software Ass’n v. Blagojevich, 2006, p. 10). They continued; "If Illinois passed
legislation which increased awareness of the ESRB system, perhaps through a wide media campaign, the already-high rate of parental involvement could only rise" (p. 10).

As a result the court ruled the law "overbroad, [...] not narrowly tailored, and it cannot survive strict scrutiny" (Ent. Software Ass’n v. Blagojevich, 2006, p. 10). Additionally, the court stated that adding a sticker to such games was also an issue, asserting, "we cannot say that the '18' sticker is narrowly tailored to the State's goal of ensuring that parents are informed of the sexually explicit content in games" (p. 11). This was in no small part because "the '18' sticker literally fails to be narrowly tailored—the sticker covers a substantial portion of the box" (p. 11). To provide some perspective, the label in question was to cover a 50.8mm x 50.8mm space on a standard 190mm x 135mm keep case (DVD case). Therefore, the Illinois law was found unconstitutional, and the ruling sided with the plaintiffs. For brevity, this paper refers to this case as ESA v. Blagojevich in subsequent references.

In Entertainment Software Association v. Hatch (2006) the United States District Court, for the District of Minnesota struck down a Minnesota law that would fine anyone 17 or younger for "renting or purchasing certain video games" (Ent. Software Ass’n v. Hatch, 2006, p. 3). The ruling cited IDSA v. St. Louis (2003) and VSDA v. Maleng (2004). Social science studies were a focal point of this ruling. The court reviewed Anderson's 2004 (Anderson, 2004) meta-analysis and found that a "review of the article reveals it to be completely insufficient to demonstrate an empirical, causal link between video games and violence in minors" (Ent. Software Ass’n v. Hatch, 2006, p. 5).
Unlike previous attempts, this law endeavored to use the already present ESRB Ratings System instead of creating their own. This, however, was also struck down because:

The State offers no insight as to whether there are objective standards which are applied by the specially ‘trained' individuals in reaching their M or AO ratings [thus] lacking a clear delineation of the standards used to determine a video game's rating, the State cannot rest legal implications upon them. (Ent. Software Ass’n v. Hatch, 2006, p. 5)

Therefore, the court found that the law was unconstitutional and in violation of the First Amendment. For brevity, this paper refers to this case as ESA v. Hatch in subsequent references.

In Entertainment Software Association v. Foti (2006) the United States District Court, for the Middle District of Louisiana struck down a Louisiana law that prohibited and criminalized "the sale, lease, or rental of video or computer games that appeal to a minor's morbid interest in violence" (Ent. Software Ass’n v. Foti, 2006, p. 5). The ruling cited AAMA v. Kendrick (2001), IDSA v. St. Louis (2003), VSDA v. Maleng (2004), ESA v. Blagojevich (2006), and ESA v. Granholm (2006). The court in this case claimed "the fact that the Statute applies to video games that 'depict violence' makes no difference as a matter of First Amendment scrutiny" and that "[d]epictions of violence are entitled to full constitutional protection" (Ent. Software Ass’n v. Foti, 2006, p. 9). As to the use of social science studies, the court found "much of the same evidence has been considered by numerous courts and in each case the connection was found to be tenuous and speculative" (p. 11).

The court came to the same conclusion as the previous two courts. It found there were less restrictive means to achieving the same end, including "encouraging awareness of the
voluntary ESRB video game ratings system (which provides guidance to parents and other consumers), and the availability of parental controls that allow each household to determine which games their children can play" (Ent. Software Ass’n v. Foti, 2006, p. 11). This Louisiana law was found unconstitutional and the case was ruled on behalf of the plaintiffs. For brevity, this paper refers to this case as ESA v. Foti in subsequent references.


The state of Oklahoma argued the law was to support "parents' claim of authority" (Ent. Merchs. Ass’n v. Henry, 2007, p. 15); however, the court retorted that broadness of the law defeated that purpose, as parents and other adults could be fined for disseminating these games to minors. The court ruled on behalf of the plaintiffs, finding that the law in question was
unconstitutional, as it violated the First Amendment. For brevity, this paper refers to this case as *EMA v. Henry* in subsequent references.


This case was brought before the court over the constitutionality of a law passed in California that sought to ban the sale of deviant violent video games to people under the age of 18. Specifically, the wording of the law was challenged because of its vagueness in defining deviant violence in video games, as well as the issues of censorship in deciding how to define deviant violence, and who would decide which game titles would fall into this category. As with the other cases, the court found the social science research and findings presented to be lacking.

The court’s ruling was in line with those in *ESA v. Foti* (2006) and *ESA v. Blagojevich* (2006), where the court felt that the state failed to "acknowledge the possibility that an enhanced education campaign about the ESRB Ratings System directed at retailers and parents would help achieve government interests" (*Video Software Dealers Ass’n v. Schwarzenegger*, 2009, p. 13). In its ruling statement, the court found "the Act is not narrowly tailored to prevent that harm and there remain less-restrictive means of forwarding the State's purported interests, such as the improved ESRB Ratings System, enhanced educational campaigns, and
parental controls” (p. 14). Thus, the court ruled on behalf of the plaintiffs and the California law was found unconstitutional. California was not satisfied with this ruling and consequently appealed to the SCOTUS in Schwarzenegger v. Entertainment Merchants Association (2010).

The purpose of this section was to show how each of these rulings led to the next, and thus, together paved the road to the case heard before the SCOTUS. Hall, Day, and Hall (2011) explained, "'violent material' has always been seen as protected speech because of its potential political and societal impact" (Hall, Day, & Hall, 2011, p. 315). Though all of these rulings were found unconstitutional at this level, it was not federal. California taking their case to the SCOTUS would force the federal government to make a decision on "whether violent speech can be restricted under certain circumstances" (p. 315).

**SCOTUS Hearing**

On November 2, 2010 the case of Schwarzenegger v. Entertainment Merchants Association (2010) was heard before the SCOTUS. Though the appellate court struck down this law because it was found to violate the First Amendment, California felt the state’s compelling interest on behalf of parents and children was enough to present it at the federal level. For brevity, this paper refers to this case as Schwarzenegger v. EMA in subsequent references.

California argued before the SCOTUS that parents require more information than is provided in order to make informed decisions as to the appropriateness of video games for their children. The state claimed: “It's important to the State of California [...] that we ensure that the parent can involve themselves in this important decision" (Schwarzenegger v. Ent. Merchs. Ass’n, 2010, p. 22). To which Judge Scalia replied, "So -- so that's basically all this is, is a
-- a law to help parents; is that right?” (p. 22). California confirmed: “It's one of the two fundamental interests that are served by this law, yes, ensuring that parents can involve themselves in the front end” (p. 22). However, while California provided scientific studies concerning video games and aggression, they did not cite studies that showed parents need help or how the law would help them. As a way to show that the primary fundamental interest of protecting children from these games could be easily thwarted, Judge Scalia pointed out that parents could still buy the games for their children; thus, children would be exposed to the material anyway.

Judge Ginsberg then questioned California on the censorship issue, asking:

Does California have any kind of an advisory opinion, an office that will view these videos and say, yes, this belongs in [...] deviant violence, and this one is just violent but not deviant? Is there [...] any kind of opinion [...] that the seller can get to know which games can be sold to minors and which ones can’t? (Schwarzenegger v. Ent. Merchs. Ass’n, 2010, pp. 23-24)

California replied there was no such office, to which Judge Scalia retorted:

You should consider creating such a thing. You might call it the California office of censorship. It would [...] judge each of these videos one by one. That would be very nice. (Schwarzenegger v. Ent. Merchs. Ass’n, 2010, p. 24)

The EMA representative summed up the issue before the court, stating:

The question before this Court is whether you’re going to create an entirely new exception under the First Amendment, whether parents need to have such a new exception created, and whether or not, if you’re going to do it, you could possibly figure out what the scope of that exception is. (Schwarzenegger v. Ent. Merchs. Ass’n, 2010, p. 33)

The issue here is the vagueness of the law and the inability for anyone to follow it successfully, because there is no way violence can be defined objectively. As to the laws
labeling requirement, the EMA pointed out “these ratings that the State wants us to impose are going to conflict with the ratings that are already on the packaging which are being used by parents every day to make these judgments. So [...] the prospect of it would interfere with the information already on the packaging” (p. 56).

It is important to note that, although both sides of the argument point to parent information needs and parental use of information that is already provided, neither side provided research that supported their arguments regarding parental information need, use, or understanding in regards to video game content.

Pundits on the SCOTUS Ruling

Almost nine months after the initial hearing in the case of Schwarzenegger v. EMA (2010), the SCOTUS gave its ruling in Brown v. Entertainment Merchants Association (2011), Brown having replaced Schwarzenegger as governor of California in 2011. During the nine months between the hearing and the ruling, many pundits on both sides provided opinions concerning what the outcome would mean for both First Amendment rights and the video game industry. Interestingly, none of these pundits commented on what it might mean for the people it was supposed to directly effect, parents.

Pundit Opinions

Kierkegaard, a law professor in China and the UK, reviewed the history of video game legislation around the world leading up to the SCOTUS ruling. She proclaimed, “the lives of children are in the hands of the court” thus there “is a vital compelling need for the court to scrutinize its reasoning so that the correct verdict is handed down” (Kierkegaard, 2011, p. 290).
She concluded that the decision “is an opportunity for the Court to clarify the minor’s constitutional rights and the regulation of violent expression” (p. 290).

Zhang (2011) stated the court faced a conundrum of whether to “wade into unknown territory by taking unprecedented steps to protect minors, or [...] stick with the Court’s tradition of affording wide protection for forms of speech” (Zhang, 2011, p. 276). She opined “the Act would have an incredibly difficult time surviving strict scrutiny analysis”, and that to side with California it would have to “create an entirely new categorical exception either for violent content or violent video games as to minors” (p. 276). Zhang concluded that would likely not happen, as “the Court has been very skeptical and hesitant to create new categories which fall outside First Amendment protection” (p. 276).

Hahn (2011) provided her opinion, stating, “this case is unlikely to create a new variable standard with regard to violent content” (Hahn, 2011, p. 122). This implies that just because the content is violent does not mean it is not protected under the First Amendment. She reasoned that the “Roberts Court likely will not apply a softened standard of review to a content-based speech regulation of any medium” (p. 125), because the “Court will likely strike down the Act for failing strict scrutiny” (p. 124). Finally, Hahn concluded that this case “may settle the debate of depictions of violence that would otherwise arise repeatedly with the development of new media and vehicles of expression” (p. 125), referencing the long history of cases over the years including the introduction of mediums such as dime store novels, movies, comic books, television, and now video games.
Others determined that “[t]he debate over how much violence is appropriate for children and whose role it is to decide will not end with the Schwarzenegger case” (Day & Hall, 2010, p. 452). They posited that the reason why is: “This controversy pits parents against government and courts against legislatures in deciding what limitations are appropriate and who imposes them” (p. 452). They concluded, “parties on both sides of the debate will need the support of social science research to bolster their positions” (p. 452).

**SCOTUS Decision**

At the 2010 hearing, California made its argument that video games are different due to their interactivity, and thus should be considered a special case for government regulation. In its ruling, the court disagreed, stating: "California’s claim that ‘interactive' video games present special problems, in that the player participates in the violent action on screen and determines its outcome, is unpersuasive" (Brown v. Ent. Merchs. Ass’n, 2011, p. 2). Regarding California’s claim that parents need government regulation to help restrict their children’s access to violent video game content, the Supreme Court found that "California cannot show that the Act’s restrictions meet a substantial need of parents who wish to restrict their children’s access to violent video games but cannot do so” (p. 15). The court continued, stating, the ESRB Ratings System "does much to ensure that minors cannot purchase seriously violent games on their own, and that parents who care about the matter can readily evaluate the games their children bring home" (p. 16). Thus, the court found California’s law was "not the narrow tailoring to 'assisting parents' that restriction of First Amendment rights requires" (pp. 16-17).
In conclusion, though there were dissenters, the majority agreed in a 7-2 judgment that the California law was unconstitutional, so the appellate court's ruling was upheld. In the ruling, the court affirmed the California law violated the First Amendment, stating that "a legislature cannot create new categories of unprotected speech simply by weighing the value of a particular category against its social costs and then punishing it if it fails the test" (Brown v. Ent. Merchs. Ass’n, 2011, p. 1). While there was evidence that this was a First Amendment violation, California might have had a chance if they could prove a compelling interest in respect to protecting children and helping parents. Though it tried to do this by providing social science research as evidence, this research did not hold up in court. The following section will provide further details as to the use of video game research in court rulings and a few reasons why, thus far, it has not held up to legislative review.

Use of Research in Court Cases on Video Game Legislation

Though video game research started to gain momentum in the mid 1980s (McClure & Mears, 1984; Graybill, 1985), it was overlooked in the early court cases. More recent cases have relied on contemporary research; however, this research has not been found sufficient. Explanations as to why are found in the following subsections: (1) research in appellate cases, (2) research presented to the SCOTUS, and (3) implications the SCOTUS use of research.

Research in Appellate Cases

In AAMA v. Kendrick (2001), the court found the social science evidence used by the city (Anderson & Dill, 2000) lacking, stating: “The studies do not find that video games have ever caused anyone to commit a violent act, as opposed to feeling aggressive, or have caused the
average level of violence to increase anywhere” (Am. Amusement Mach. Ass’n v. Kendrick, 2001, p. 6). Also, "they do not suggest that it is the interactive character of the games, as opposed to the violence of the images in them, that is the cause of the aggressive feelings” (p. 6). In IDSA v. St. Louis County (2003) the court specifically mentioned the lack of sufficient research, stating: “The County's conclusion that there is a strong likelihood that minors who play violent video games will suffer a deleterious effect on their psychological health is simply unsupported in the record” (Interactive Digital Software v. St. Louis County, 2003, p. 6). In VSDA v. Maleng (2004) the court found the research provided could not "support the legislative determinations that underlie the Act” because: “Most of the studies on which defendants rely have nothing to do with video games” (Video Software Dealers Ass’n v. Maleng, 2004, p. 6). They concluded the research was not enough because it was "not based on reasonable inferences drawn from substantial evidence" (p. 6).

In ESA v. Granholm (2006), the court found the research lacking, stating: “The research conducted by the State has failed to prove that video games have ever caused anyone to commit a violent act, let alone present a danger of imminent violence” (Ent. Software Ass’n v. Granholm,, 2006, p. 652). In this case, the court specifically called out the researcher and his methods, stating: “Despite this claim, Dr. Anderson’s studies have not provided any evidence that the relationship between violent video games and aggressive behavior exists” (p. 653).

The case of ESA v. Blagojevich (2006) was another that made its claim on behalf of parents, identifying its purpose as “shielding children from indecent sexual material and in assisting parents in protecting their children from that material” (Ent. Software Ass’n v.
In this case, the court pointed out that Illinois provided no evidence to counter the research provided by the ESA, which that claimed that "parents are involved in eighty-three percent of video game purchases for minors” (p. 10), and thus, the law was unable to survive strict scrutiny.

In ESA v. Hatch (2006), Dr. Anderson’s 2004 meta-analysis research was again specifically called into question by the court. The court found it was "completely insufficient to demonstrate an empirical, causal link between video games and violence in minors” (Ent. Software Ass’n v. Hatch, 2006, p. 4). The court pointed out:

The State itself acknowledges, both in its submissions and during its counsel's oral argument, that it is entirely incapable of showing a causal link between the playing of video games and any deleterious effect on the psychological, moral, or ethical wellbeing of minors. (Ent. Software Ass’n v. Hatch, 2006, p. 5)

The court explained: “It is impossible to determine from the data presented whether violent video games cause violence, or whether violent individuals are attracted to violent video games” (Ent. Software Ass’n v. Hatch, 2006, p. 5).

In VSDA v. Schwarzenegger (2009), social science research comprised a large amount of the materials presented by the state. As to these materials, the court remarked, "Dr. Craig Anderson, whose work is central to the State's arguments in this case, is listed as an author of roughly half of the works included in the bibliography” (Video Software Dealers Ass’n v. Schwarzenegger, 2009, p. 6). Considering the three other studies that were mentioned (Funk, Baldacci, Pasold, & Baumgardner, 2004; Gentile, Lynch, Linder, & Walsh, 2004; Mathews & Kronenberger, 2002), the court found that: “None of the research establishes or suggests a causal link between minors playing violent video games and actual psychological or neurological
harm, and inferences to that effect would not be reasonable” (Video Software Dealers Ass’n v. Schwarzenegger, 2009, p. 6).

Research Presented to the SCOTUS

When the Schwarzenegger v. EMA (2010) case was heard before the SCOTUS, several studies were mentioned in the hearing including the previously mentioned Anderson study (2004), as well as a study by Gentile and Gentile (2008), and a study by Christopher J. Ferguson of Texas A&M, to which there was no specific reference other than it differed in opinion to the Anderson study. Many Amicus Curiae briefs were presented to the court and are included in the court documents. Two of note, are discussed below.

The Gruel Brief (Schwarzenegger v. Ent. Merchs. Ass’n, 2010), on behalf of California, included statements by the Californian Chapter of the American Academy of Pediatrics and the California Psychological Association, both of which claimed video games harm children. The Millet Brief (Schwarzenegger v. Ent. Merchs. Ass’n, 2010), on behalf of the EMA, included statements by social scientists who claimed there was not enough evidence in any research study on video game violence to establish causation, and, in fact, many studies showed the opposite effect. To that point, Justice Breyer stated, “I have to admit that if I'm supposed to be a sociological expert, I can't choose between them” (Schwarzenegger v. Ent. Merchs. Ass’n, 2010, p. 29).

After reviewing the research provided in Schwarzenegger v. EMA (2010) the decision that was handed down in Brown v. EMA (2011) stated: “The State’s evidence is not compelling” (Brown v. Ent. Merchs. Ass’n, 2011, p. 12). It went on to explain:
California relies primarily on the research of Dr. Craig Anderson and a few other research psychologists whose studies purport to show a connection between exposure to violent video games and harmful effects on children. [...] These studies have been rejected by every court to consider them, and with good reason: They do not prove that violent video games cause minors to act aggressively (which would at least be a beginning). (Brown v. Ent. Merchs. Ass’n, 2011, pp. 12-13)

Justice Breyer was one of the two dissenters. In his dissent, he specifically cited Anderson’s study, which he claimed found “causal evidence that playing these games results in harm” (Brown v. Entm’t Merchs. Ass’n, 2011, Breyer, J., dissenting, p. 12). Though Breyer proceeded to conduct a thorough review on the relevant literature (Brown v Entm’t Merchs. Ass’n, 2011, Breyer, J., dissenting, pp. 20-35), he admitted, “I, like most judges, lack the social science expertise to say definitively who is right” (p. 15).

He followed that up by deferring to the opinions of the American Academy of Family Physicians, the American Psychiatric Association, the American Psychological Association, and the American Academy of Pediatrics. Referring to his research review and the opinions of these professional associations, he stated he "would find sufficient grounds in these studies and expert opinions for this Court to defer to an elected legislature’s conclusion that the video games in question are particularly likely to harm children" (Brown v. Entm’t Merchs. Ass’n, 2011, Breyer, J., dissenting, pp. 16-17).

The purpose of this section was to show how the courts viewed social science in accordance with the law. Specifically, it was to show that, while several research studies are mentioned above, none focused on video games and parental information needs. This seems lacking given many of the cases refer to parents’ needs as their “compelling interest” used to draft laws, all of which were successfully appealed because this compelling interest was not
supported. As illustrated in the review, while the laws have focused on providing a benefit to parents, the research efforts provided to support the laws have all been fixated on children. These two user groups, though related, are not the same. Another issue to consider is the effect this decision has had on the use of social science research in legislation. The following section will provide more detail on this point.

**Implications of the SCOTUS Use of Research**

Social science research was used in many of the aforementioned cases to help bolster the arguments of both sides of the courtroom. Most of the research on violent video games today falls into two different arguments. These include: “[V]iolent video games increase violence because they teach players how to be violent and reinforce violent tendencies” and conversely, “[V]ideo games have a neutral or possibly beneficial effect because they provide a socially acceptable, physically nondestructive outlet for the release of aggression and thereby promote better mental health” (Hall, Day, & Hall, 2011, p. 315). The most cited research in the previously discussed court proceedings, including the SCOTUS case, contributes to the violent video games increases violence argument. This is particularly evident in the abundant use of Anderson’s 2004 meta-analysis.

After reviewing the provided research, the SCOTUS stated in its ruling: "California [...] acknowledges that it cannot show a direct causal link between violent video games and harm to minors" (Brown v. Entm’t Merchs. Ass’n, 2011, Scalia, A., p. 12). This inability to prove causation meant that the laws brought before the court could not pass the strict scrutiny required for content-based restrictions in First Amendment challenges. This strict scrutiny was extended to
video games, even with their interactive nature, because "a government entity seeking regulation must jump a high hurdle of justification—presumptive invalidity—to treat video games differently than other media" (O’Holleran, 2010, p. 593). Due to this high hurdle, existing video game violence research "has limited value to aid in both public policy creation and legal decision-making" (Day & Hall, 2010, p. 451).

The SCOTUS ruling, in addition to its stance on video games, also had potential "implications for how scientific evidence is viewed and weighed by the Court, especially when it comes to the question of restricting constitutional rights" (Hall, Day, & Hall, 2011, p. 315). Justice Breyer, in particular, took special consideration of the science presented in the case. In his dissenting opinion, he expressed concern over the ability to fully understand the science. Thus, he deferred his understanding to many professional organizations such as the American Psychological Association and the American Academy of Pediatrics, who issued blanket statements condemning video game violence over the last decade (Brown v. Ent. Merchs. Ass’n, 2011, Breyer, J., dissenting, p. 15-16).

Ferguson (2013) argued that the professional organization statements “came to exist in such a state without accurately describing the state of the science” (Ferguson, 2013, p. 64), because “the policy statements were often incorrect even on basic details, and for areas in which there was scholarly controversy [...] these controversies were not reported” (p. 64). He further explained, “disconfirmatory evidence was not reported or cited, studies finding inconclusive results were reported as if their results were conclusive, and difficulties adequately measuring aggression were unmentioned” (p. 64). This, in turn, shows “the research on video
games as more conclusive than it is and simply fails to cite any research that would raise doubts” (p. 65). It should also be mentioned that Anderson, a prominent scholar on video game violence, has had ties to both of the previously mentioned organizations that issued such statements (p. 66). These statements have also been used to in his own research to bolster its credibility (Pollard-Sacks, Bushman, & Anderson, 2011).

Another issue with such statements is the focus on advocacy rather than the science. One specific example is the APA’s (2005) resolution which repudiated “the ESRB Ratings System without evidence that it was ineffective” and called for the “development of a new system” (Ferguson, 2013, p. 66). Ferguson concluded with a warning on the alignment of science and advocacy, stating that “it may be best for scientists to remain committed to the production of objective information,” because “[d]eciding how such information ‘should’ be used arguably strays into advocacy and becomes problematic” (p. 66).

It could be argued that the SCOTUS’s dismissal of social science research, such as the oft-cited Anderson (2004) meta-analysis, has set a precedent. This precedent could make the case for future courts to disregard scientific research since so few studies can be as exacting to the level the Supreme Court standards have set, requiring causation to be explicit, and because the researchers themselves have been less than forthcoming in their own research pursuits. In order to make research useful, accessible, and able to stand up in court, Hall et al., (2011) proclaimed: “It is important that we […] accurately report our scientific literature, its implications, and limitations; otherwise, we will see our testimony discounted as was the testimony of Dr. Anderson” (Hall, Day, & Hall, 2011, p. 321).
This review has shown that though social science research was used, it was determined to be inconclusive in every single court case it was meant to help bolster. Additionally, of all of the research that was referenced, none of it focused on the crux of many of the cases—parents’ wants and needs when it comes to making decisions on video game content appropriateness for their children. This may be because there is little relevant research on this subject to reference. The relevant research that does exist is the focus of the next section.

Parents and Video Game Research

California’s stated primary focus was “parents’ ability to make choices and exercise authority in their children’s upbringing” (Hahn, 2011, p. 117). The state expounded, “parents are entitled to support from the State to guide their children’s choices” (p. 117). California claimed their proposed law was “to bolster parents’ authority over their children’s upbringing, and to help parents protect their children when unsupervised,” as well as to “place authority back in the hands of the parents excluded from their children’s choices of media and entertainment” (p. 123). Nevertheless, none of the research mentioned in the court proceedings focused on parents or their needs. The next section reviews the small amount of research available on parents and video games as it pertains to their information seeking and behavior. It is divided into the following subsections: (1) parents’ needs and media ratings and (2) parent-focused video game research studies.

Parents’ Needs and Media Ratings

Bushman and Cantor (2003) conducted a meta-analysis on media rating research, which included ratings for movies, television, music, and video games. In their analysis, they found
parents were split between whether it would be better to have one system for all media (40%) or to continue with multiple systems (38%) (Bushman & Cantor, 2003, p. 134). A few parents (17%) stated a single system would actually be worse (p. 134). Their study also asked which type of ratings system, evaluative (age-based) or descriptive (content-based), parents preferred. Of the two, they found that “parents strongly prefer content-based ratings and find them more useful than age-based ratings” (p. 135).

As to why parents have this preference, the authors suggested “many parents have different ideas about the degree of harm produced by exposure to violence versus sex versus coarse language and so forth” (Bushman & Cantor, 2003, p. 139). They claimed that, “although creating a ratings system that works well for parents is not an easy task, it is clear that the preferences of parents have not often prevailed” (p. 139). The authors concluded, “although media ratings can be helpful to parents, more work needs to be done to ensure that parents know about them, understand them, and can use them effectively” (p. 139).

ESRB Ratings

The ESRB uses a hybrid ratings system that “has both descriptive and evaluative elements” (Bushman and Cantor, 2003, p. 133). It utilizes “six age-based ratings used in conjunction with 30 content descriptors” (Coombs & Holladay 2011, p. 502). Together, these are provided to try to accurately convey content information to video game retailers and parents who “count on the ESRB to appropriately rate video games and clearly note where questionable content exists” (Becker-Olsen & Norberg, 2010, p. 83). Today, the ESRB is “the method most commonly used by video game producers in the United States to inform people
about the content and age-appropriateness of video games” (Stroud & Chernin, 2008, p. 1). It is for this reason the research presented here is focused specifically on the ESRB.

Parent Focused Video Game Research Studies

Kutner et al. (2008), stated in their study on parents’ and sons’ perspectives on video game play that: “Little is known about parents’ specific concerns about video games in general and violent or sexual game content in particular or how parents are attempting to address these concerns” (p. 78). Stroud and Chernin (2008), in their research on parental beliefs about the ESRB found that “little research has been conducted with regard to parental knowledge and use of the ESRB Ratings System” (p. 2).

These concerns were echoed in the Becker-Olsen and Norberg (2010) study which found sixteen years after the ESRB was established, that “little research has emerged regarding parental perceptions and cognitive processing related to the ratings system” (p. 84). Though quantitative research on parental use of the ESRB Ratings System does exist in other studies (Gentile & Walsh, 2002; Funk, Brouwer, Curtiss, & McBroom, 2009; Entertainment Software Association, 2014) the focus of those studies was not on parental perceptions or cognitive processing. Therefore, they are unable to “provide detailed or theoretically grounded information about the factors that influence parental use of the ESRB,” and they are unable to “provide insight into how these factors could be used to craft messages intended to increase ESRB use” (Stroud & Chernin, 2008, p. 2).

The Kutner et al. (2008) qualitative study used focus groups of 21 parents and 21 sons (total of 42 participants) to better understand parental concerns about and perceptions of
video games. The purpose of their study was to “see whether these are consistent with the focus of proposed legislation and other public policy efforts” (p. 76). The authors found that the parents’ “primary concern is that games not interfere with their children’s schoolwork, social skills, and exercise” (p. 76), and that while they do “worry about exposure to violent content [...] definitions of and opinions about what is harmful vary and may not match proposed public policies” (p. 76). They concluded:

More study is needed regarding specific information parents would like to receive to make judgments about appropriate games for their children, where they would like to receive this information (e.g., at point of sale, on the Internet), and whom they view as credible sources of information. (Kutner, et al., p. 93)

Stroud and Chernin (2008) used a mixed-methods approach, utilizing a qualitative open-ended elicitation survey of 17 parents, which was then analyzed and used to craft a quantitative survey that was returned by 135 parents. Through their study, they found that even though parents use or intend to use the ESRB, “many parents lacked crucial information about the system’s structure and content [and] 45 percent of parents did not know that the ESRB system is composed of both ratings and content descriptors” (p. 7). Additionally, while less than half of parents agreed or strongly agreed that the system was accurate, their study found only 18% viewed games prior to purchasing them and only 19% read reviews (pp. 7-8).

The Becker-Olsen and Norberg (2010) study had similar results. They found “parents are still relatively uninformed about and miscomprehending of both the ratings system’s age breakdowns and more recent content descriptors” (p. 84). In their study they focused on the packaging of video games with the perspective that “just as traditional advertising and packaging provide product information to help consumers make informed choices, ratings
systems provide similar cues and information” (p. 83). Thus, this information “should help parents understand what kind of content is contained in the video game before they allow the purchase and play of the game” (p. 83). The authors suggested the focus of future research needs to:

[S]hift from awareness and intended usage to understanding actual usage, parental processing of the ratings information, and the system’s ability to adequately inform parents [as] one of the key roles of the ESRB is to help parents manage their children’s video game consumption via ratings. (Becker-Olsen & Norberg, 2010, p. 84)

They concluded: "[I]t is important that parents do not miscomprehend these ratings. Thus the need for research on parental processing and understanding of the ratings system is further warranted” (Becker-Olsen & Norberg, 2010, p. 84).

The Entertainment Software Association provides yearly research reports on the ESRB, including usage statistics gathered via surveys; however, they do not provide the survey questions or any additional data to describe how or why it is used. According to their 2014 survey, “85% of parents are aware of the ESRB Ratings System” (Entertainment Software Association, 2014, p. 7) and "88% of parents feel the ESRB Ratings System is either helpful or somewhat helpful in choosing games for their children” (p. 7). Though this is not necessarily contradictory to the previous research stated here, its quantitative nature and lack of additional data to explain it provides plenty of opportunity for further, more in-depth research.

While video game self-regulation and potential legislation both propose intent to benefit parents and their children, there is little research to support these intended benefits. This exposes a gap in the literature that this dissertation seeks to help fill. An additional cause
for consideration is research on parents and information behavior, which is discussed in the following section.

Parents and Information Behavior

This section provides context and background for the study of information behavior. It then reviews two studies that have been conducted on parental information behavior, to show examples of existing literature in this area. Finally, it concludes with how an information behavior study can provide a better understanding of parents and their information needs regarding video game self-regulation and potential legislation. It is separated into the following subsections: (1) information behavior and (2) studies on parental information behavior.

Information Behavior

Information behavior is a large and varied topic of research within information science. This section reviews applicable definitions, methods, and uses contributed by researchers in this field. It is provided here to give clarity to the review on parental information studies.

Wilson (2000) authored multiple definitions of information behavior that have been condensed for use here. These are as follows: information behavior is the totality of behavior related to active and passive information seeking and use; information seeking behavior is what is conducted in order to satisfy an information need to achieve a goal; information searching behavior is the technical, cognitive, and judging interactions by the user as the user interacts with all kinds of information systems; and information use behavior is the act of incorporating knowledge obtained through physical or mental acts (Wilson, 2000). Fisher and Julien (2009) describe information behavior as a focus “on people’s information needs; on
how they seek, manage, give, and use information both purposefully and passively, in the varied roles that comprise their everyday lives” (Fisher & Julien, 2009, p. 7-1).

Wilson defined information need as “a secondary order need, which arose out of the desire to satisfy the primary needs” (Wilson, 2000, p. 51). The primary needs he discussed are basic human needs such as physiological, affective, and cognitive ones (Wilson, 2006. p. 63). To that end, he suggested information needs would best be referred to as “information seeking towards the satisfaction of needs” (Wilson, 2006, p. 63).

Dervin and Nilan (1986) described information needs as “when [a user’s] internal sense runs out” (p. 17). Or, in other words, when a user cannot make sense of her situation without access to external information. This is the point where the user senses she has an information need that must to be fulfilled so she can continue on, and she cannot fulfill this need alone. To that end, Dervin and Nilan surmised that information needs for users are different than they are for systems, and so, when studying users the focus should be “on what is missing for users” rather than “on what the system possesses” (p. 17). This perspective is embodied in Dervin’s sense-making methodology, which researchers use to assess “how people make sense of their worlds and how they use information and other resources in the process” (p. 20). This qualitative approach asks ‘how’ and ‘why’ rather than ‘what,’ and “has been used to describe information needs and uses of people in diverse contexts” (p. 20). The purpose is to “yield data that are directly useful for information and communication practices” (p. 21).

Dervin and Dewdney (1986) posited “information-seeking and information-using occur when individuals find themselves unable to progress through a particular situation without
forming some kind of new ‘sense’ about something” (p. 507). As described above, this is when the user’s sense has run out. The emphasis here is that these information needs are unique and “situationally bound” (p. 507). They proposed that while the information needs are all unique, there are universal generalities, which can be isolated and understood better through research. In this paradigm, information is not considered a commodity, or an “autonomous object that can be stored, accessed, and transferred” (p. 507). Instead, they suggest it “does not have an independent existence but is rather a construct of the user” (p. 508). Considering this perspective, an all-encompassing self-regulatory information system, such as the ESRB attempts to be, may never be able to meet the needs of parents independently.

Given Wilson’s (2006) conclusion that secondary information needs are required to meet primary basic human needs, and the focus of Dervin’s studies (Dervin & Nilan, 1986; Dervin & Dewdney, 1986) on understanding user needs, it becomes clear that it is important to understand what parents’ needs are and how they fulfill them, rather than to research the current system in place as if it is adequate enough to do so. As Dervin and Dewdney (1986) explained, information is not a commodity; it is a construct of the user. What needs to be understood is what the user is trying to construct rather than what the systems of today, be they self-regulatory or potential legislation, are trying to construct for them.

**Studies on Parental Information Behavior**

Relatively few studies have been conducted that specifically focus on parental information behavior. As Walker (2012) pointed out, “parents and parenting have received comparatively little attention from researchers specifically examining their information literacy
needs” (Walker, 2012, p. 546). This is reflected in the lack of literature found on the topic. The two articles briefly reviewed below were the most recent and most relevant to the research conducted for this study, as they used similar qualitative methods and their concern was specifically with parents and their information needs.

Using exploratory semi-structured interviews of five nurses and five neonatologists, De Rouck and Leys (2011) researched the information behavior of parents with children in neonatal intensive care units. Though they did not interview the parents themselves (this would have been considered insensitive), they did find relevant themes that emerged through the analysis of the conversations with the doctors and nurses. The authors found that parents used both active and passive methods to receive information through mixed channels including oral, written/printed, electronic, and audiovisual.

Walker (2012) conducted research on the information world of parents through qualitative semi-structured interviews. The purpose of his research was to discover “how parents look for, access, assess, and use information” (Walker, 2012, p. 548). His research didn’t focus on any specific information need; rather, it focused on parents and their relationship with information. The main themes that surfaced in his grounded theory approach were being a parent (core category), connectivity, trust, picture of self, and weighing (p. 549).

De Rouck and Leys (2011) classified parent information seeking methods as being either formal—planned and organized moments of gathering information, or informal—information gained on an ad-hoc basis. Similarly, Walker (2012) found parents had formal, or specific information seeking needs, and non-formal, or needs that are fulfilled through everyday life
interactions. This classification draws on Wilson’s (1999) description of his model of information behavior where he stated people make “demands upon formal or informal sources or services” (Wilson, 1999, p. 251). In the context of this dissertation, this is similar to the potential of parents informally finding out information about video games with no intent or need, or parents formally searching out information on a specific game due to a specific need.

Both of these studies used qualitative methods involving semi-structured interviews. They provide two different approaches on studying parents: questioning those who work with parents on very specific behaviors concerning very specific subject matter and questioning the parents themselves on generalities. The purpose of this dissertation is not necessarily to build on these previous studies; rather, it is to add another perspective on parental information behavior. The research for this study will question parents on specific behaviors about specific subject matter with the intent to provide substantive data to further the study of parental information behavior through both theory and practice.

Chapter Summary

The intent of this literature review was to provide background and context for this dissertation. It did so by discussing video game legislative attempts and research on parents and self-regulation, as well as a short review of previous research focused on parental information behavior. Here is a brief overview of the stated findings.

This review evaluated attempted legislation on video games in the United States up to and including the Brown v. EMA (2011) SCOTUS ruling. It demonstrated how each of the appellate court rulings led to the next, and thus, together paved the road to the SCOTUS
decision. Next, it illustrated how social science research was found lacking by the courts both because of the inability for the research to show direct causation and because of the lack of research that supported the statement that parents need the government’s help. This last point demonstrated a gap in the literature in terms of understanding parental information needs and showed how research could potentially impact possible future legislative attempts.

This review also provided background on previous research studies concerning parents and video game self-regulation. While each of the studies found parental use and understanding of the ESRB Ratings System lacking, they suggested further research needed to be done to find out why. Lastly, this review showed how the area of parental information behavior research could benefit from further study due to the relatively few studies that focus on this area.

The following chapter outlines the research design for this study. It describes the methods of participant recruitment, data collection, and data analysis used. It also provides reasoning as to why the researcher chose these methods and how they benefited the study.
CHAPTER 3
RESEARCH DESIGN

Introduction

The purpose of this research on parental information behavior was to collect data right from the source through qualitative methods including observation of the environment and semi-structured open-ended interviews. A qualitative approach was chosen to not only gain knowledge about what parents do, but to also learn how and why they do so. The collected data were qualitatively analyzed to understand the reasoning behind parental actions or inactions and to learn how that shaped and fulfilled their information needs. This analysis provided an understanding of what parents’ needs are, why they are needs, what parents do about them, and what, if anything, can be done to assist them.

This methodology was used to answer the following research questions, as stated initially in Chapter 1:

1. When considering the appropriateness of video game content for their children:
   a. To what extent do parents utilize the ESRB Ratings System and how do they do so?
   b. What other information sources do parents consult, why do they consult them, and how do they use the information gathered?

2. To what extent do parents believe potential legislation of the video game industry would help them to fulfill their information needs in regards to assessing content appropriateness of video games for their children?
Below is the outline of how this study was conducted. It is broken down into the following sections: (1) selection of participants, (2) data collection, (3) ethical considerations, and (4) data analysis.

Selection of Participants

This study was conducted with parents in the United States who had children between the ages of 4 and 17 who played video games. The lower age of 4 was chosen to ensure the youngest child participants would be able to understand the questions, and thus be able to participate in the interviews. The upper age of 17 was chosen because children 17 and over can purchase violent video games today without parental supervision and those over 18 have no restrictions on purchasable content.

Every effort was made to include members from all genders, as well as a variety of ethnic backgrounds and socio-economic statuses. These efforts included attempts to enlist the help of gaming and family focused locations such as stores that sold video games, schools, and neighborhood community centers, to assist in recruitment by allowing the posting of recruitment flyers. Only one location participated in this way, the rest turned the opportunity down. To compensate for this, an electronic version of the flyer was posted online and in various local social media communities that were either family or video game oriented. In total, there were 30 interviews with 25 in-home and 5 virtual. Virtual interviews followed the same structure as the in-home interviews through the use of instant messaging and email. Further details are provided in throughout the rest of the chapter.
Chain-Referral

Chain-referral, or snowball sampling, was used as the method of participant recruitment. The first stage of the chain-referral consisted of purposeful sampling, where the first few interviews were requested of people who were known to meet the qualifications required of the study participants. This methodology was chosen because it “yields a study sample through referrals made among people who share or know of others who possess some characteristics that are of research interest” (Biernacki & Waldorf, 1981, p. 141). This results in referred respondents that already meet the basic study qualifications. If those referrals do not meet all of the criteria deemed necessary due to the changing research requirements, they may refer others. If additional respondents are required and none are referred, supplementary purposeful sampling can take place, which starts the chain over again.

Additional recruiting was conducted using a recruitment flyer pre-approved by the Institutional Review Board. Though various attempts to post this in physical places were made, only one local game store authorized the flyer. Multiple copies were made and handed out during their games marathon night. Thus, the majority of the chain-referral occurred as a result of the online flyer being shared amongst willing members social media communities. This is how the majority of the respondents were recruited. As experienced in this research study, this methodology resulted in a homogenous research sample. Rather than considering this a setback, this study looks at this initial set of research data as a place to start and an initial sample to test against. Considerations for further research are discussed further throughout the rest of this study.
Data Collection

Of the 30 interviews conducted, 25 were conducted via semi-structured, open-ended in-home interviews. These interviews lasted from 20 minutes (only three were under 30 minutes) to 91 minutes with an average length of 43 minutes. Upon entering the participants’ homes, each of them, including all participating children and adults, read (or were read to), agreed to, and signed consent forms before any data collection, including audio recording, began. In order to conduct textual analysis of the interview data, audio recordings were imported into Express Scribe and then transcribed.

In addition to the audio recording, photographs were taken of game spaces. Game spaces are defined here as those places where gaming related items such as different types of devices and games are utilized throughout the home. The interviews were conducted first, and then the participants afforded a tour of their homes to provide opportunities to photograph game spaces throughout. While examining game spaces, other observations were recorded such as other types of media available in the same space and whether or not such media contrasted or complemented the parents’ views on game content appropriateness for their children. The collection of other forms of data “such as observations, documents, and audiovisual materials” (Creswell, 2012, Chapter 4, Section 3, Subsection 4, para. 4), were gathered to further inform the research categories that were surfaced during the concurrent analysis.

Respondents for the last five interviews answered, via instant messaging and email, the same semi-structured, open-ended interview questions as the in-home participants. Video
conferencing, though originally considered, was not an option due to time difference. These participants were emailed consent forms, and after returning a scanned signed copy, the interviews were conducted using whatever means was easiest for them and sometimes included a combination of multiple methods. At the conclusion of the interviews, these participants emailed photographs of their gaming-related items and game spaces for analysis.

**Crafting Questions for Data Collection**

The semi-structured interview questions focused on survey answers provided by the ESRB, legal issues presented in the legislative arguments from across the United States, and previous studies that focused on parental understanding of the ESRB. They were left open-ended to allow participant-led deviation and surfacing of unknowns.

In addition to standard open-ended interview questions, Dervin and Dewdney’s (1986) neutral questioning model (Dervin & Dewdney, 1986) was used as a way of aligning the interviewing process with Dervin’s sense-making approach. This model was adopted because, while the questions are “open in form, they guide the conversation along dimensions that are relevant to all information-seeking situations” (p. 4). This allows the interviewer “to learn from the user the nature of the underlying situation, the gaps faced, and the expected uses” (p. 4).

To further explain, the interview is based on a semi-structured framework constructed with the specific intent to learn more about the respondents’ thoughts, behaviors, attitudes, and beliefs concerning video game self-regulation and potential legislation as it pertains to them in the role of parents who purchase games for their children. Though specific questions are asked, other topics can be explored freely based on the responses provided. A neutral-
question approach offers gives the respondent the ability to answer as openly as possible while, also allowing the interviewer to draw out the process the respondent goes through to assess the situation, gap, and uses needed to complete the action in question. An example of this is asking a parent to describe the last time he or she purchased a game and then probing further to learn about his or her exact process in more detail. See Appendix A for the semi-structured, open-ended questions used as a basis for the interviews.

**Ethical Considerations**

Prior to beginning the qualitative research process, an Institutional Review Board (IRB) application was submitted for approval to the UNT IRB office. This application included the informed consent form, the investigator’s National Institute of Health (NIH) completion certificate, and list of semi-structured, open-ended interview questions. The IRB approved research on both parents and children with individual consent forms to be signed by each participant.

There were no foreseeable risks to participants in this study. This study is of benefit to parents who had little to no experience in learning about video game content by introducing them to new concepts and methods throughout the course of interviews. Though this study is not expected to be of any direct benefit to parents, the goal was to learn more about parents and their understanding, thoughts, and opinions on video game content, which may benefit organizations seeking to make accessing information on video games easier for parents.
Confidentiality

All participants were assigned generic alphanumeric codes and pseudonyms to classify the data. All identifying information, including contact information and consent forms, were filed separately from the data. All subject-identifying electronic data were protected via password both when in use and when archived. Additionally, no subject identifying visual documentation will be used in any subsequent publications resulting from this study.

Data Analysis

The transcribed semi-structured interviews were analyzed through analytic memos and solo-coding in Atlas.ti. An analytic memo is “somewhat comparable to researcher journal entries or blogs” as in a “place to dump your brain” (Saldana, 2013, p. 41). It allows the coder the ability to write “about the participants, phenomenon, or process under investigation by thinking and thus writing and thus thinking even more about them” (p. 41). This is accomplished alongside coding as they, “are concurrent qualitative data analytic activities” (p. 42).

Four different coding methods were used as a part of the grounded theory methodology, including Descriptive for the first cycle and a mixture of Pattern, Focused, and Theoretical for the second cycle. First cycle methods are “coding processes for the beginning stages of data analyses that fracture or split the data into individually coded segments” (Saldana, 2013, p. 51). An example would be classifying different types of information behavior separately. Second cycle coding methods are for coding processes for the latter stages of data analysis that both literally and metaphorically constantly compare, reorganize, or ‘focus’ the codes into categories,
prioritize them to develop ‘axis’ categories around which others revolve, and synthesize them to formulate a central or core category that becomes the foundation for explication of a grounded theory. (Saldana, 2013, pp. 51-52)

Visual data was analyzed in Atlas.ti through “repeated viewings and analytic memo writing” (Saldana, 2013, p. 53). These are considered “more appropriate approaches to qualitative inquiry because they permit detailed, yet selective attention to the elements, nuances, and complexities of visual imagery, and a broader interpretation of the compositional totality of the work” (pp. 53-54). To that end, they were analyzed both in context of the specific interview they were gathered from, as well as from a holistic perspective as a visual narrative of the entire study.

After the data analysis, the findings were member-checked by select participants to ensure accuracy. These study participants were consulted “as a way of validating the findings” (Saldana, 2013, p. 36). By consulting with participants (i.e. member checking) the researcher can “assess the trustworthiness of his or her account” (p. 36). Microsoft Excel was then used to reassess the coded data as binary values for each of the research questions in order to expose what percentages of the interviewees were influenced by industry self-regulation or potential legislation. This methodology was also used for additional themes that surfaced throughout the multiple analyses.

Research Participants

There were 46 total participants in 30 interviews representing 26 households. As defined in Chapter One, a household represents parents who participated alone as well as those who participated together (in the same interview or separately). This singular unit was
created to avoid inflation of the numbers where two parents were talking about their shared children and home environments, as that would skew the numbers against those where only one parent participated. Of the participants, 11 were children and 35 were parents. The 35 parents represented 39 qualifying children in total including the 11 who contributed. Of the 35 participating parents, 18 were mothers and 17 were fathers. The parents spanned in ages from 25 to 55. The youngest child participant was 4 and the oldest was 16.

Demographics

The research recorded various demographics during the course of the interviews. They are provided here to give a clearer picture of the participants of the study in order to afford context to the results presented throughout the rest of the chapter, as well as the discussion throughout the rest of the paper. All study participants lived in Texas and all but one lived in various cities in and around the Dallas/Fort Worth Metroplex. It should be noted that due to the homogeny of the respondents as presented in the following sections, the data collected for this study may be biased. Please see recommendations for further study in Chapter Six for further discussion.
Parent and Household Demographics

Table 2

<table>
<thead>
<tr>
<th>Numbers by Parent (n=35)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Interviewed Parents</td>
<td>35</td>
</tr>
<tr>
<td>Mothers</td>
<td>18</td>
</tr>
<tr>
<td>Fathers</td>
<td>17</td>
</tr>
<tr>
<td>Age Range</td>
<td>25-55</td>
</tr>
<tr>
<td>Over 35</td>
<td>80%</td>
</tr>
<tr>
<td>Ethnicity: White/Caucasian</td>
<td>93%</td>
</tr>
<tr>
<td>Bachelors Degree or Higher</td>
<td>60%</td>
</tr>
<tr>
<td>Some Experience Playing Video Games</td>
<td>100%</td>
</tr>
<tr>
<td>Consider Themselves Gamers Today</td>
<td>83%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers by Household (n=26)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Households</td>
<td>26</td>
</tr>
<tr>
<td>Yearly Income over $75,000</td>
<td>53%</td>
</tr>
<tr>
<td>Two Parent Homes</td>
<td>81%</td>
</tr>
<tr>
<td>Currently or Previously Divorced</td>
<td>50%</td>
</tr>
<tr>
<td>Children from Previous Relationships</td>
<td>50%</td>
</tr>
<tr>
<td>Single Child Homes</td>
<td>31%</td>
</tr>
<tr>
<td>Two Children Homes</td>
<td>50%</td>
</tr>
<tr>
<td>Three or More Children Homes</td>
<td>19%</td>
</tr>
<tr>
<td>At least One Parent Employed in IT</td>
<td>65%</td>
</tr>
<tr>
<td>At least One Parent K-12 Teacher</td>
<td>19%</td>
</tr>
<tr>
<td>At least One Parent in Gaming Industry</td>
<td>12%</td>
</tr>
</tbody>
</table>

Most of the 35 parents identified as white (93%) and were over the age of 35 (80%).

Over half of the 35 parents (60%) held a Bachelors degree or higher, and a little over half of the 26 households (53%) made over $75,000 a year. While parents did provide religious and political affiliations, there was no majority within either. Discussion of religious and political implications is presented in Chapter Five.

Two-parent homes made up over three-fourths (81%) of the 26 households, and the remaining (19%) were those of divorced single parents. Almost a third (31%) of the 26 households had parents who were previously divorced and half (50%) of them had children from previous relationships. The families were of various sizes, with households of two children
making up half (50% of the 26 households), followed by households of single children at almost a third (31%), and households with three or more children making up the minority at less than a fifth (19%).

Parents held a variety of different jobs; however, only three positions were tracked according to household. Almost two-thirds (65% of 26 households) had at least 1 parent who held jobs in IT, few (19%) had at least 1 parent who taught in K-12 schools, and very few (12%) had at least 1 parent who either studied (programming and design) or worked (hardware) in the gaming industry. All of the parents in the study had some experience playing games themselves, and saw games in a neutral to positive light with most (83% of the 35 parents) considering themselves gamers today.

Child Demographics

The study included 39 qualifying children who met the age requirements of 4 to 17, out of a total of 50 belonging to the parents who participated. Parents provided data on all 39 qualifying children, and 11 of them were able to represent themselves in the study. Over half of the 39 children were male (59%). The average age of all 39 children was 11, with almost half (46%) falling between 4 and 9 years old; a little less than a quarter (23%) were between 10 and 12 years old; and almost a third (31%) were between 13 and 16. The average age they started gaming was 3.5. The majority of the 39 children (88%) attended public school, and most (88%) participated in some sort of extracurricular activities including band, swimming, baseball, scouting, and more.
Chapter Summary

This chapter provided details about the research methodology used in this study. These methods are reiterated here. First, the selection of participants was conducted through an initial purposeful sample, and then chain-referral due to its use of multiple referrers, the pre-vetting of referrals, and the potential use of discriminant sampling if needed. Second, this study utilized qualitative methods in the form of semi-structured, open-ended interviews with a neutral-questioning approach. Third, the research was conducted ethically and the personal data of the research subjects was kept confidential. Lastly, analysis of textual and multimedia data was conducted using analytic memos and multiple coding methods utilizing Atlas.ti in conjunction with a binary assessment of coded statements completed in Microsoft Excel.
CHAPTER 4
DATA RESULTS AND ANALYSES

Introduction

The intent of this study was to better understand parental information behavior concerning the methods parents use to ascertain the appropriateness of video game content for their children. It was also to ascertain whether they felt the industry self-regulation helped or potential legislation would help them do this. In other words, the intent was to get a sense of information as a construct of the parent rather than simply trying to understand what industry self-regulation or potential legislation were trying to construct for them.

To assist in this understanding, parents shared their thoughts, beliefs, attitudes, and behaviors via semi-structured, open-ended interviews both in-home and virtually. This chapter will provide the results of the analysis via a brief overview of demographic data, a review of supporting data for both of the previously stated research questions, as well as additional analysis of a few key data points that emerged during the study.

Research Questions

The next section will outline the data that answers each of the research questions. The collected qualitative data endured multiple rounds of coding and analysis in Atlas.ti and Microsoft Excel. In total, there were 512 first round codes and 8 resulting categories. [All of the data presented here is by household unless otherwise stated.] Discussion of the results can be found in Chapter Five.
A Brief Review of the Entertainment Software Ratings Board Ratings System

Following is a brief overview of the Entertainment Software Ratings Board (ESRB) Ratings System. This is presented in order to help provide context for the research questions and results. A full listing of ratings and content descriptors can be found in Appendix B.

As of 2015, the ESRB Ratings System consists of three parts, including: the letter rating denoting the appropriate age, descriptors providing context to the content of the game in the form of short phrases, and icons denoting interactive elements. There are six ratings today, including EC (Early Childhood) for preschool aged children and younger, E for Everyone, E10+ for 10 and over, T for 13 and older, M for Mature for 17 and older, and AO (Adults Only) for 18 and older (Entertainment Software Rating Board, 2015). There is also a temporary rating, RP (Rating Pending), used when the board is assessing a game.

There are 30 different descriptors that explicate content such as “Blood and Gore,” “Comic Mischief,” “Crude Humor,” “Language,” “Sexual Content,” and various forms of violence (Entertainment Software Rating Board, 2015). The interactive element icons tell the parent whether or not there are online interactions, and, if so, the kind of interactions. These include things such as sharing information about the user, being able to interact with other users, ability to purchase content, or ability to access the Internet (Entertainment Software Rating Board, 2015). Further information about the ESRB, including its history and ratings process, was presented within the first three chapters of this study.

At present, there is no active legislation concerning video games in the United States. There are no laws in place to determine how games should be rated or to whom they can be
sold. The industry is self-regulated, and both game developers and retailers voluntarily participate.

Research Question 1

The first research question is in two parts. Each part will be answered separately below.

Question 1

When considering the appropriateness of video game content for their children:

   a. To what extent do parents utilize the ESRB Ratings System and how do they do so?

   b. What other information sources do parents consult, why do they consult them, and how do they use the information gathered?

Part 1

To what extent do parents utilize the ESRB Ratings System and how do they do so?

   When asked directly, almost three-quarters of all 26 households (73%) said they used the letter ratings, the content descriptors, or a combination of the two, leaving a little more than a quarter (27%) who stated they did not use it at all. While the majority claimed they used it, only about a third (38% of 26 households) considered the ratings, themselves, useful. Less than half (46% of 26 households) stated they used the letter ratings, and a little over half (58% of 26 households) stated they either preferred the content descriptors or used them exclusively. There was no mention of the interactive icons. Those being a recent introduction to the system, this was to be expected.
On average, parents could only name three (E, T, M) of the six letter ratings. That said, it is important to note that in such a system where the label is readily available on every game, recall is not as important as recognition. However, considering lack of recall in addition to two-thirds (67% of the 26 households) of the participants having little to no understanding of the process games to through to be rated, meant most of the interviewed parents knew relatively little to nothing about the ratings system. Additionally, few of the interviewed parents (12% of 26 households) completely agreed with the ratings system and a little over a third (38%) felt it was too strict, meaning they believed it rated games higher than they needed to be rated. 

Half of the 26 households (50%) compared the video game ratings system to the movie ratings system. Additionally, half (50%) considered video game ratings only a suggestion or a guideline. Very few (4%) of the 26 households considered a game rating an endorsement. While over a quarter (27%) of the 26 households stated they did not use it at all, more than three-quarters (88%) of them claimed they used the information presented to assess whether or not they needed to conduct further research. This resulted in a higher usage rate than self-reported.

Part 2

What other information sources do parents consult, why do they consult them, and how do they use the information gathered?

Parents consulted a variety of different sources to research game content. About half of the 26 households (54%) stated they consulted their friends and a little over a third (38%) said they preferred to play the game first. Of those who looked up information, most of the 26 households (92%) conducted a general Internet search to find community reviews (81%),
professional reviews (42%), or video of gameplay (62%). The most common search engine used was Google (92%).

Half of the 26 households (50%) stated they went to specific websites, the most popular of which was CommonSenseMedia.org (community reviews), followed by IGN.com (professional reviews). Game marketing including packaging, websites, posters, and commercials was cited by half of the 26 households (50%) as an additional source of information. A little less than a third of the 26 households (31%) stated they used a rating other than the ESRB. These ratings included star ratings, found on mobile app stores as well as many community sites, and meta-ratings, which are an amalgamation of ratings across several sources.

When asked what made a source trustworthy or valuable, almost two-thirds (65%) of the 26 households stated they looked for peer reviews, citations, and verification of sources. Knowledge of the source, its popularity, or longevity was also important to the 26 households (27%). A discussion of why and how they used these sources can be found in Chapter Five.

Research Question 2

Question 2

To what extent do parents believe potential legislation of the video game industry would help them to fulfill their information needs in regards to assessing content appropriateness of video games for their children?

Considering the proposition by the state of California in the drafting of their law on video games, which was subsequently struck down by the SCOTUS, parents were asked what they thought of a law that would label and restrict the sale of mature-themed video games to
anyone under 18. A little over a quarter (27%) of the 26 households were completely in favor of a law. Others, who were classified as neutral (15% of the 26 households), did not have an issue with a law but saw enforcement issues, or they contradicted themselves during the interview, changing their mind back and forth throughout the discussion.

Of those who were either for or neutral about a law (42% of the 26 households), little more than half (23%) of them felt it would be helpful to them as parents. Almost two-thirds of the 26 households (65%) didn’t realize that it is industry self-regulation and store policy, and not legislation, which restricts the sale of M-rated games to anyone under the age of 17. The majority of the 26 households (57%) were completely against any laws regulating video game content. When asked directly if, as parents, they felt they needed legislation to help them, the majority of the 26 households (77%) stated they did not. It should be noted that when this is broken down by parent rather than by household, less than a third of parents were for or neutral to legislation (31% of 35 parents compared to 42% of 26 households) as all of the neutral households were two parent households where one parent was neutral to the law and one parent was against it.

Throughout the discussion, parents were also asked how they felt about censorship. A small amount of the 26 households (12%) stated they were in favor of censorship and almost a fifth (19%) stated they were in favor of limited censorship when it came to content for their children. The majority of the 26 households (69%) were not in favor of censorship of any kind. The interviewer did not formally define censorship within the context of the interviews, so the definitions used by the participants were their own.
Additional Analyses

This study afforded opportunities for additional analyses, given the rich qualitative data collected throughout the interviews. Each section below provides this additional information as a way to give context to the research participants and better understand their relationship with video games.

**Video Games**

Over 200 games were mentioned throughout the course of the interviews, not including the various versions of multiple game franchises. The top three most mentioned games were *Minecraft* (85% of households), followed by *Grand Theft Auto* (65%), and then *World of Warcraft* (42%). Almost two-thirds (64%) of the 39 children played M-rated games and over three-quarters (77%) played T-rated games. None of the children in the study were old enough to purchase M-rated games and only 31% of the 39 children were old enough to purchase T-rated games.

**Video Game Devices**

Participants played console, computer, and mobile/tablet games equally (88%). Handheld games (58%), followed by web-based (38%), and then educational (35%) rounded out the list. Over three quarters of all 26 households (77%) used some sort of cloud gaming services such as Steam, Origin, Xbox Live, or PlayStation Network. All households downloaded games digitally, whereas only about three-quarters (77%) still bought physical game media.
Video Game Spaces

The majority of game spaces (58%) were publicly shared spaces with the family. Very few (8% of all households) had completely private spaces where stationary devices such as computer towers or consoles were located in children’s rooms. The remaining households (35%) had mixed game spaces due to the use of portable electronics such as laptops, handhelds, and mobile/tablet devices. The majority of households (69%) had some sort of time restrictions placed on video game play; however, less than half of them (39%) considered them to be strict rules.

Parental Assessment

An overwhelming majority of the 26 households (92%) performed some sort of assessment on video games before their children were allowed to play them. Almost all of the 26 households (92%) discussed video game content with their children, and most (85%) stated they knew their children to self-regulate and/or they trusted their children to only play the games of which they knew their parents approved.

Parental Involvement

Almost three-quarters of the 26 households (73%) watched their children play video games and many (69%) played video games with their children. Over half (54%) of the 26 households allowed their children access to the Internet to either play online video games such as massively multiplayer online role playing games (MMORPG i.e., World of Warcraft) which can only be played online, or to play standard multiplayer video games with others online.
Religion and Politics

Questions were asked concerning the demographics of religion and politics, however, there was no majority among the respondents for either. Also, there was not any particular leaning that would predict whether or not parents identified as using the ESRB or claimed they would be for a law. Respondents stated they held political beliefs across the spectrum including socialist, libertarian, green, centrist/moderate, liberal, conservative, democrat and none at all. A little over a third (38%) of the 26 households claimed to either be Christian or Unitarian Universalists (UU). The rest had no majority amongst them and claimed either various other religions or none at all. Note that this diversity within religion and politics could be a result of the bias of the sample rather than being completely reflective of the general populace and these things should be considered when conducting further research.

Chapter Summary

This chapter provided the results of the analysis conducted on the qualitative data collected via semi-structured, open-ended interviews with parents of children who were between the ages of 4 and 17 and played video games. Additional analyses afforded further data to better understand the participants and their relationship with video games.

In using the data to answer the research questions, two interesting situations arose. Firstly, there was a discrepancy in the households who said they do not use any part of the ESRB Ratings System (27%) and the households who said that either the rating, descriptors, or both, factor into whether or not they decide to do further research (88%). Secondly, although nearly half of the 26 households (42%) were either in favor or neutral about video game
legislation, over three-quarters (77%) said a law would not be helpful to them. A discussion as to why these contradictory statements exist, as well as a discussion of the other findings, is presented in the following chapter.
CHAPTER 5

DISCUSSION

Introduction

This chapter provides discussion on the research questions with key findings and examples from the interviews to support these them. The examples are given separate headings to make the discussion easier to follow and pseudonyms have been given to the respondents to protect their anonymity. As each family is introduced in the narrative, a short description of the family and a corresponding photograph of their gaming space(s) will be provided to give a more in-depth glimpse into their home environment.

Not every supporting example or family description is listed in cases where the majority of households contributed information; however, all raw data are available if needed. Rather, examples are provided based on their ability to succinctly support the finding or because they provide specific or unique illustrations that are relevant to the discussion.

Key Findings

The following key findings will be discussed in more detail throughout the chapter. This summary is provided here in order to provide context and ease of reference for the rest of the chapter.

• While not every interviewed parent used the ESRB Ratings System in the same way, most did use it even if they claimed not to. This was one of the methods used to bridge their knowledge gap, but they often needed more information to make sense of it all.
• There were no parents in the study who were able to definitively name all of the parts of the ESRB Ratings System or all six ratings and over two-thirds did not know what process games went through to get rated. This resulted in the majority of interviewed parents knowing little to nothing about the ratings system even if they claimed they used it.

• Interviewed parents had very specific criteria they used to judge video game appropriateness against and once any of those lines were crossed, the game was considered unsuitable. Though violence was a concern for interviewed parents, perceptions of violence were far more nuanced than the ESRB Rating System descriptors were able to convey, thus many had to do further research to properly assess the game and make sense of the content. Sexual content, however, was of a far higher concern than violence even for those interviewed parents who considered themselves very liberal in the types of games they allowed their children to play.

• Interviewed parents with special needs children considered the needs of their child and the ability for a game to help him or her as more important than staying within content that was age appropriate.

• Based on the interviews, every family’s and child’s needs are different, including children within the same family. Therefore, a single information system, such as the ESRB Ratings System, may never be able to completely fulfill all of a parent’s information needs as they attempt to bridge their knowledge gap. As long as it provides a place to start, that may be all it needs to do.
• Relevant to the previous finding, interviewed parents attempted to bridge their knowledge gaps in multiple ways in order to assess game content and make sense of it. These included using the ESRB Ratings System, Internet searches (including specific sites as well as more general results) to find game reviews (both community and professional), game marketing (including websites, packaging, and commercials), and Let’s Plays (video game play-throughs).

• Credibility of the gaming information source was very important to interviewed parents. They cited both the source of the documentation as well as the reputation of the reporting source to be important factors in establishing credibility.

• Though a few interviewed parents were in favor of a law, most were not. Those in favor cited it as an extra level of protection or as something they thought was already in place. Those not in favor cited issues with enforcement, the inability for laws to really assist them, as well as a general dislike of having the government interfere with their role as parents.

Discussion of Research Questions

The following section will provide discussion for each of the research questions with supporting examples from the interviews.

**Question 1: Part 1**

To what extent do parents utilize the ESRB Ratings System and how do they do so?

When asked directly, nearly three-quarters (73%) of all of the 26 households said they used at least one part of the ESRB Ratings System. This left a little over a quarter of households
(27%) who said they didn't use any of it, and that it was not helpful to them in any way.

However, additional probing revealed that 88% of households used the letter rating and/or descriptors to determine if they needed to assess the content further. The following section will explain why this discrepancy exists based on how parents feel about the ratings system, how they makes sense of it, and understand their use of it.

“Nonuser” Users

A few parents (15% of 26 households) believed the ESRB Ratings System was inadequate and unable to meet their needs. These parents considered it only a guideline or starting place if the letter or descriptor alerted them to something they might not be comfortable with their children playing. Thus, in their minds they were not using it, because they did not let it alone determine what their kids could or could not play. In other words, they did not consider it a method with which they bridged their knowledge gap or made sense of the content. Rather, it helped alert them to a gap that they would find other ways to bridge. The following examples show how parents dealt with this new gap.

Example 1: Horde Family

The “Horde” family was one of the first to volunteer to be interviewed after seeing the online recruitment flyer. The entire family including the mother, “Aggra”, who devotes her time to volunteering, father, “Durotan”, who works in IT, and their 10-year-old son, “Goel”, wanted to be interviewed together. Their single-story home sat right across from a green park with playgrounds and sporting areas. Inside the house was spacious, well kept, and organized. They
chose to be interviewed in the computer room, down the hall to the left of the entryway, where they do the majority of their gaming.

Though they may not play the same games, they make it a point to share the same space while gaming. While he was given some leeway in the games he was able to play, his parents also had very firm considerations of what they believed was appropriate. As you can see in the example, what they considered appropriate did not always line up with what the ESRB Ratings System stated.

In the picture below, we see the game space where the parents and their son play computer games. It is situated in such a way so that the parents can see what is on their son’s screen as they pass it to get to their computers, as they walk by the room since it faces the door, and they can push back on their chairs to roll over to him if needed. Conversely, there is no need for the son to ever walk past his parents’ systems to see what they are playing, so he cannot easily view their screens. This setup allows the parents to supervise their son and to share the same space while gaming in order to be able to play together even when they are not playing the same games.
Interviewer: What do you think of the ESRB Ratings System?

Aggra [Mother]: [laughter] Ridiculous.

Interviewer: Can you explain?

Aggra: Well, they have things that are rated E10 that I see no reason why they couldn't be, say, E7.

Durotan [Father]: We don't always agree with their ratings because they are giving ratings based on wide sociological patterns, instead of how does this rating apply to your child.

Interviewer: Can you explain?
Durotan: Well, it's a matter of an individual child's development. If that individual child is not ready for any type of violence in their videogames, then those type of children should stick to logic puzzles and scrollers that don't require violence to complete the game.

Aggra: By the same token, a game that has cursing in it is suddenly rated T for teen, when that may be the only problem with it, and when you get into ages, there's no hard age for, ‘Okay, at 10, this is okay. At 13, this is okay.’ There's age ranges, and I think that it doesn't reflect that reality of life.

Durotan: And you have—say you have language inside of a T13 type of game, but that same language is perfectly acceptable on public TV or public radio, so it's a matter of the parent interacting positively with the child, saying, ‘This is one of those words you shouldn't use in public. This is something that, if it comes up, it needs to come up in a controlled home environment, not in public, not around your friends. This is something we need to work on with your development internally.’ (HH12)

After further probing, this same family revealed that they did look at the ESRB descriptors, and that they then would go to the community-based rating website CommonSenseMedia.org, where they can access a wide variety of information.

Example 1: Continued

Durotan: If we see something that is ‘mischievous content’ [ESRB descriptor] or like this one, that says it's 12 years old [Common Sense Media age recommendation], we're not going to prevent him [son, age 10] from getting to the game because he may not have
the capabilities of playing it. If he never has any challenges and anything to fail at, he'll never learn to overcome those things, so we don't mind him getting access to super-challenging things early, provided that there's no objectionable content—drug use, violence, stuff like that. (HH12)

Other parents also fell into a similar pattern of denying usage or claiming they disagree with the ESRB Ratings System, but still using it to some degree using it to assess content even if it only pointed out their knowledge gap.

Example 2: Fallout Family

Someone who knew of their gaming habits and thought they would be willing to participate referred the “Fallout” family to the study after seeing the recruitment flyer online. The home was a sprawling single-story with several entertainment areas, a pool, and a large privacy fence. The media room, which was immediately to the left as you entered the home, consisted of bookshelves full floor to ceiling on one side and windows facing the front yard across from them. Looking into the room from the entry way provided a view of a flat screen TV mounted on the wall surrounded by framed works on either side of it and media devices below. Arriving late in the day, the room already darkened was lit only by the screen showing a recently viewed zombie flick and a single upward facing lamp.

The father, “Pip”, who works in IT, was very liberal with the material his daughter, from a previous relationship, was allowed to play in his home. So much so that he claimed he did not review any game before she was allowed to play it. If she showed any interest in the games he or his current wife (who also works in IT) played, then she was allowed to do so as well.
Pip [Father]: Oh yeah! They have the tags for violence [ESRB descriptors]. They are pretty self-explanatory. I don't really care much about the ratings system. In the end, if my daughter [age 14] comes to me and says she wants to play a game and it’s rated ‘M for mature’, for, you know, violence and, what was it, ‘explicit sex’—I saw that rated on the *Mass Effect* game.

Interviewer: ‘Explicit sex’? Is that what it really said?

Pip: It didn’t say ‘explicit sex’, but it said ‘sexual content and violence’ [ESRB descriptors]. I looked into it and I saw that, yeah, that sexual content was people being naked, which I have a fairly liberal view about as far as what my daughter gets to see. And violence, it had nothing in there whatsoever that she hadn’t already seen worse a
thousand times in just her favorite horror movies. [...] I disagree with most ratings systems, anyway. I’m very anti-censorship, and I believe that if a parent doesn’t want their kids playing mature games, they should teach the kid not to buy them and to respect their decision for that child not to play those games. I do not believe the retailers in any way should be held responsible for that. Or the game companies. Or anyone in that chain of purchase. (HH05)

**Strict Adherence to the Ratings System**

The previous examples show that, though these parents stated they felt the ratings system was ridiculous or they did not agree with it, they did use it as it suited their needs, even if they didn’t classify themselves as users, because they felt they did not use it as they thought it was intended. In contrast, a few parents were very strict about following the ratings system and they let it, alone, determine the games they allowed their children to play. Thus, these strict users used it in such a way that it completely bridged their gap for them without need for any other information sources to supplement their sense-making experience.

**Example 3: Tomb Raider Family**

A mutual acquaintance recommended the “Tomb Raider” family be asked to be interviewed after hearing about the study online. The father “Mick”, a recent law school graduate and army veteran, and his wife “Lara”, a schoolteacher from the United Kingdom and new stay-at-home mum, were interviewed together in the company of their infant daughter. The interview took place in their small apartment. Mick’s 9-year-old son, from his previous marriage, was at his mother’s house for the weekend.
The entire apartment, other than the bedrooms, could be seen from the front door. It was cluttered with baby gear, infant toys, and gates to keep the little one contained. On more than one occasion, the interview was interrupted to care for the infant. This family was the most conservative family interviewed. They made it well known that they held deeply Christian beliefs and thought rules should be followed. As the home was small in size, there was no private game space. The picture below shows the only television and attached Xbox, located in the main room, with baby gear littered around it.

![Figure 3. Tomb raider family game space](image)

Interviewer: What other kinds of restrictions, as far as content goes, do you have?

Lara [Stepmother]: We care about what it’s rated as.
Interviewer: Ok.

Lara: ...and if it’s rated above where he’s at [son, age 9], then we...we just have that line, that we go with what they’ve said. [...] If there is a guidance or a rule, then they need to be observed. Always respect the rules. And it’s not a case of rules, laws, people in authority making decisions, and I can’t take and leave them depending on what I like. I think that, as parents, we need to be seen to maintain that. Otherwise that could be a take-or-leave-it, depending on what he feels like... (HH10)

In this example, the mother does not research the game further. She reads the packaging, sees the rating, and if it is rated for an age older than her step-son, she feels he should not be able to play it.

Middle Ground

While the two previous types of users are at opposite ends of the spectrum, most parents interviewed fell into a middle ground where they found the ratings system useful, but did not consider it the only method they used to bridge their knowledge gap. This is important when, as Example Four shows, a game is given a high rating due to technical capabilities rather than the content. In this case, the game was rated T for Teen because it allowed Internet access, but the father realized the content was otherwise suitable for younger audiences after playing it himself. His solution was to allow his child to play it on a disconnected device, as the Internet connection was not required to play the game.
Example 4: Kerbal Family

The “Kerbal” family was one of the few that were asked to participate as part of the purposeful sampling process. “Kerman”, the father, studies gaming full time in graduate school. He lives with his wife and two children in a neat and orderly medium sized single-story home at the end of a cul-de-sac. The media room, where the interview was held, was at the back of the house. It was bordered by the kitchen to one side and a sliding glass door that looked into the back yard at the back of the room. Although the entire family was there at the time of the interview, only the father and his 9-year-old son “Kerbonaut” participated in it.

Though he had liberal views on games and gaming and understood why games were assigned certain ratings, he was still somewhat restrictive on the games he allowed his children to play. This restriction was based on graphic content contained within the games as well as his children’s ability to understand the context. That said, if he felt a game was on par with a movie he would allow his children to watch, even if it was rated above their age level, he would allow them to play it.

The picture below shows the family game space with both an Xbox and a Wii connected to the television. The kitchen and dining area is immediately to the left of this space. Of note, there are three Xbox controllers visible showing the ability for a parent to play with the two children. On the opposite wall of this is the family computer where the son is allowed to play computer games. When the children play on their Android tablets or their Nintendo DS handhelds, they normally sit in this room on the couch to do so.
Interviewer: What do you think of it [the ESRB Ratings System]?

Kerman [Father]: I like it. I think it’s one of those things—there’s a small learning curve to it.

Interviewer: Can you explain?

Kerman: Understanding how the ratings are derived, that when I explain to parents what some of the specific descriptors mean under the rating, gives them a better sense and gives everyone a better sense of how the rating is actually determined. I’ve had discussions with some parents that they’ll see a T rating on a game [and not let their children play it], but will let their child watch something like Pacific Rim or even Star Wars. And I explain to them if you’re willing to let them watch Star Wars, there are T-
rated science fiction and action games with that same level of violence. And so they’re like, ‘Oh! Really?’ It kind of catches them off guard because I think that they think that T-rating is like a PG-13 movie, when a PG-13 movie would almost borderline on being a M-rated game.

Interviewer: So would you say that you strictly follow the ratings system for the ages of your children?

Kerman: No.

Interviewer: Why?

Kerman: I typically play the games first or I do research on them. A great example is *Burnout Paradise City*. I believe has a T-rating. But, I let [my son] play it, because having played it...

Kerbonaut [son – age 9]: It doesn’t have any violence in it.

Kerman: Well it doesn’t have any cursing or any foul language, and there is no blood or guts or anything like that. And I think that the T-rating was there, based on my experience, because there’s online interactivity. And they wanted to make sure a certain age limit was using that service. (HH17)

This father was able to assess the content based on the rating, decided to play the game itself to make sure it was suitable, and then allowed his 9-year-old access to the game without the age-limiting factor. He also explained that because he understands how games are rated, he is able to successfully navigate the system based on the other media types he has previously determined are appropriate for his children.
These three types of uses show variations in how families in this study utilized the ESRB Ratings System. The first type of use demonstrated how some of the interviewed parents who believed they did not use the ratings system, due to the fact it introduced a knowledge gap rather than bridging one, did use it in their own way. The second type of use showed how some of the interviewed parents strictly followed it, allowing it to completely bridge their knowledge gap, without any further investigation. Finally, the last type of use showed how other interviewed parents fell into a middle ground, using it along with their own methods to bridge their knowledge gaps and make sense of game content appropriateness.

In summary, these examples demonstrated how parents utilize the ESRB Ratings System in different ways. Those parents who actively utilize it along with additional methods as a part of their sense-making process are more likely to bridge their knowledge gaps faster, easier, and more completely than those who strictly follow it, or those who claim they do not use it at all.

Question 1: Part 2
What other information sources do parents consult, why do they consult them, and how do they use the information gathered?

As stated in the previous chapter, parents in this study used a variety of methods to help bridge their knowledge gaps in order to make sense of video game content to ascertain its appropriateness for their children. Quite unsurprisingly, the majority of interviewed parents who assessed video game content claimed they used the Internet to bridge their knowledge gap and they did this in three ways. The first was through formal or planned learning about video game content by searching for information to fulfill a specific need. The second was through informal or ad-hoc learning about game content as they happened to come upon it in
their daily activities. Informal in this sense means they did not have to go out and formally look up information because they already had knowledge of the games in question due to their ongoing interest in the hobby, which kept them informed.

The third was through using a combination of the previous two where parents may have heard of a particular game and knew something about it without having to conduct a search, but they did so anyway to verify their knowledge or to learn what other people thought about it. Parents utilized these methods through multiple channels including community reviews, professional reviews, let’s plays and more. This pattern is similar to the two studies mentioned in the literature review where parents either sought out information formally, or they came by it informally and they did both through multiple methods. The next few sections will provide further information on these channels of information as well as examples from the interviews to support the idea behind the formal and informal methods parents employed to bridge their knowledge gaps.

Community Reviews

The most popular community-based review site mentioned was CommonSenseMedia.org. Though many of the interviewed parents knew about it, only a few completely understood how it worked and considered it their primary source of information. Those who considered it a primary source used it for multiple media types, not just video games.
**Example 5: Horde Family**

Interviewer: Say he comes up with a game, and then it's not on Steam. It's a game that you'd have to go purchase for a console, and you've never heard of it before. What process do you go through to learn more about it?

Durotan [Father]: Do you know the name of the site we go to?

Goel [Son – age 10]: No.

Aggra [Mother]: Common...

Goel: Common Sense Media.

Interviewer: Okay. And what does that site do for you?

Durotan: Common Sense Media—go ahead.

Goel: Common Sense Media is basically a website, like, which has basically, like, ratings, like what rating is it, like E10.

Interviewer: So, the ESRB ratings?

Durotan: Mm-hmm.

Goel: Yeah, ESRB ratings.

Durotan: As well as?

Goel: And then there's just like the age rating.

Interviewer: Is it a separate rating from the ESRB?

Durotan: There are four different ratings on that site.

Aggra: For each.
Durotan: They have the ESRB rating, so that the parents know what the manufacturer wants out on it. Then there is a parental rating.

Interviewer: And how is that?

Durotan: It is arbitrarily decided by the parents.

Aggra: By parents, for parents. It's crowdsourced, essentially.

Goel: And then there's also the same thing for the parents, but with the kids.

Durotan: So the kids can give a separate rating, and then there is the last rating [...] the site amalgamates all that information, and they give back what they feel is an appropriate age, real age based on the parents' and the children's input.

Interviewer: So, a meta-rating based on all the other ratings?

Durotan: Yes.

Goel: One time, I actually found on Common Sense Media a game that the children thought that [...] the age should be higher than what the parents said.

Interviewer: Oh, yeah? What game was that? Do you remember?

Goel: No.

Durotan: No, but it was probably one of the Lego games that we were at the time not okay with yet, but that was just because of the content, of having to explain the concept of all the villains in Batman, and why they existed, and so forth.

Aggra: There were some pretty intense puzzles, too.

Interviewer: So a couple of difficulties.
Durotan: But Common Sense Media doesn’t have just games. It has board games. It has card games, electronic games, books, comics, movies, TV shows.

Aggra: Videos.

Durotan: Videos. It is for all media, period.

Interviewer: Is that your first place that you go to when you’re looking at something new?

Aggra: Just about always. (HH12)

In the example above, both the parents and their 10-year-old son knew about the site, what it consisted of, and how to use it. They used the site because it provided detailed information about the media it reviewed, reviewed many types of media, and it provided reviews by different groups including parents and children. Those parents who used the information provided on this site did so by assessing the ratings from the different groups, the breakdown of the content, and a summary of the plot and gameplay style in order to determine game appropriateness. This is considered a formal method parents used to bridge their knowledge gap.

In addition to the example above, there were other parents who knew about the site. However, while they may have used it for other types of media, they did not necessarily use it for video games, as is demonstrated below.

Example 6: Mario Bros Family

The Mario Bros family volunteered to be interviewed after seeing the recruitment flyer online. “Peach”, the mother, her husband, their 4-year-old son, and her 8-year-old son from a
previous marriage, live in a large upstairs two-bedroom apartment tucked away in a sprawling apartment complex. The home was well organized, cared for, and although two children lived there, there were no toys to be seen and there was no clutter on any of the surfaces.

Peach is a write-at-home mom working on her masters in creative writing (she writes horror stories). Her husband works in IT and plays in a band in his spare time. She is very protective of her children and the content with which she allows them to interact. Part of her issue is the sibling age-gap. She believes her eldest to be gifted and mature beyond his years, so she allows him some leeway in his content, within limits. However, some of the games he is allowed to play are heavily restricted from his brother who is just now being allowed to play games with heavy supervision. Though today she does not play many games herself, she grew up playing Nintendo games including Super Mario Bros and can easily be convinced by her children to play a game of Minecraft or one of the various Lego games.

In the picture below, the only TV in the house is in the family room with the kitchen behind it. It sits atop a low television stand so the boys can easily play sitting on the floor. The single console, a PlayStation 4, is plugged in and the youngest has paused his game of Minecraft so the picture can be taken. Peach’s work area is directly to the left of this, which means she can easily see what her sons are doing as they play.
Interviewer: Do you prefer professional reviews or community-sourced reviews?

Peach [Mother]: Probably community, oh you know, what is that site? You know I have no idea if they—Common Sense Media—they seem kind of Christian-y you know, but I just kind of take that part with a grain of salt. I actually have no idea if they review games.

Interviewer: Have you used it for other things?

Peach: Yeah, films. (HH16)

In this example, though the mother knows the site exists, what it does, and she has used it before for other media, she has not used it for video games. This is a great example where site popularity and parental knowledge of it does not necessarily determine use. In her
particular case, she conducted general Internet searches via Google to find video game content information rather than going directly to a specific site.

Most of the interviewed parents who preferred community reviews to professional ones cited their issue with the fact that professional reviewers are paid to do the review. They felt this might, in some cases, bias the reviewer. Thus, the review might not be as objective as they would prefer.

**Example 7: Halo Family**

The Halo family volunteered to be interviewed after seeing the recruitment flyer online. “Master Chief” is a single father to his 12-year-old son from a previous marriage. They live in a small, but organized, apartment on the outskirts of town. He works full time outside the home and enjoys video games as a stress reliever and a fun hobby to share with his son, which is a big part of their shared experiences together. He was excited to discuss his son and how happy his son is to be turning 13 soon so he can play more T rated titles. The Xbox and the television are the center of the living area of the apartment that opens up to the kitchen, and dining area. They also enjoy playing games together on their tablets and computers. While they do not have much, they happily make do with what they do have. The picture below shows their Xbox with a custom Transformers façade above a stack of Xbox games, most notably Halo, sitting beside a small portion of the family’s anime collection.
Master Chief [Father]: I would probably look at it more if it was a community review than if it was—because the ones from, like, IGN, they’re paid to review it, but a community review is going to give you somebody who’s played it. So I kind of take a balance of all of them and then make my decision. I’d rather have somebody who’s played it before to let me know, because they’re not getting paid to play it and review it for a company. (HH03)

**Example 8: Sega Family**

The Sega family volunteered to be interviewed after seeing the recruitment flyer online. Though both parents participated, they were interviewed separately. “Amy Rose” was interviewed in the family’s two-story home on the outskirts of a college town. A grade school
teacher by trade, she was on maternity leave. The media room was immediately to the left of
the entry way and down a couple of steps. Baby toys littered the floor, but it was otherwise
kept orderly. Her husband, “Sonic”, who works in IT, was at work and her 14-year-old daughter,
from a previous marriage, was at school. Since Sonic could not be there in person for the
interview, he chose to participate virtually via email.

Amy Rose reminisced about playing video games when she was younger and pointed
out she and her husband still played on their old Sega Genesis, a gaming console from the early
1990s. The computer her daughter played on was up stairs. When her daughter wanted to play,
she had to ask for permission as her games were installed on a special profile her parents had
to log into, which did not have access to the Internet. Additionally, it was on a timer that
prevented her from playing longer than the time allotted. Her favorite games were *The Sims*,
which her mother had a slight issue with due to the potential sexual nature of the relationships
that could form in the game.

This picture shows the families working Sega Genesis they play retro games on sitting
right beside a Nintendo Wii. The family also has a PlayStation connected to the same television
all of which resides in the family room downstairs. The computer the daughter plays on resides
in an office area at the top of the stairs. Though she is not always physically supervised while
playing on the computer, her parents often spot check on her to make sure she is following the
rules they set forth around game playing.
Amy Rose: I suppose there isn't anything wrong with professional reviews, but being able to use something like a forum or bulletin board makes me feel like I get a broad spectrum of opinions from a diverse group. It's the same kind of thing as wine tasting—I'm more inclined to give weight to the opinions of regular folks and/or my friends/family than I would from a professional sommelier or wine review site. Unless, I suppose, I'm looking specifically for the services of a professional. (HH06)

In summary, community reviews were preferred due to the fact the interviewed parents felt they are trustworthy as it is other parents or players providing the content and not professionals. However, knowing about a community review site and using it for other types of media does not necessarily mean a parent will use it for video games.
Professional Reviews

While the majority of the interviewed parents who researched game content preferred community reviews, a few stated their preference for professional ones. Parents who preferred professional reviews to community reviews generally did so because they felt that professional reviewers were more critical and less biased.

Example 9: Kerbal Family

Interviewer: Do you prefer a professional review or a community-sourced review?
Kerbal [Father]: I typically fall on the professional side.
Interviewer: Ok, why?
Kerbal: Because community reviews, in my experience, tend to bias toward the positive. They tend to look at it a little less critically than a professional reviewer would. And I tend to go to Metacritic to find those things and try to get a better feel for the aggregate score. You know, rather than myself parsing 5 or 6 professional sites. It’s easier to there, and they have a link directly [to each of the other sites] if I really want to read the review. (HH17)

Though a variety of professional sites were mentioned, many more than community, the most commonly mentioned professional site was IGN.com. An observation worth mentioning is the fact that all of the parents who mentioned professional review sites considered themselves to be very knowledgeable about video games. In other words, the use of professional sites and a self-professed deep knowledge of video games tended to go hand in hand.
Example 10: Witcher Family

The “Witcher” family volunteered to be interviewed after seeing the recruitment flyer online. The father, “Geralt”, works out of the family’s spacious two-story home as a developer. He also takes care of the children, two sons, ages 11 and 9, and a daughter age 6, before and after school. His wife, a teacher, works for the local school district. The home is overall clean and organized, but it is easy to see kids live there. The interview was held in his office up stairs, which even in the middle of the day was dark. In Geralt’s spare time, he composes music and plays video games, a hobby he shares with his children. All three of the family’s children play video games, including M-rated titles.

While Geralt is fairly liberal with the types of games he allows his children to play, and he is one of the few parents that allows his sons to have a console in their room, he does have issue when it comes to content that has more adult themes. Though he does not allow his children to play those types of games in his home, he understands his eldest son has had the opportunity to do so with friends. While he does not stop him from playing with them, he makes sure his son knows he can talk to Geralt if needed. Geralt finds the drive to his son’s piano lessons is when his son tends to bring up such topics.

In the picture below a piano can be seen to the left of a flat screen television with an Xbox attached, its motion sensor device above it, a stack of games below it, and Disney Infinity game figures littered along the front of it. This space is completely owned by the children of the house, but it is a public space. Though the boys have a PlayStation 4 in their room, they often occupy this space even if it is to play on their laptops or tablets rather than the console.
Interviewer: So, say your children come to you and they want to buy a game you’ve never heard of—what’s the first thing you do?

Geralt [Father]: It’s pretty uncommon that I haven’t heard of games, to be honest, just because my life is online, so yeah. But if it’s something I haven’t heard of, the first thing I usually go do is look it up.

Interviewer: How do you do that?

Father: Like I said, IGN, Game Spot, places like that online. [Professional Review Sites]

Interviewer: So you just go to specific sites to see if it is there? Or, a general search?

Geralt: Well, those are the sites that tend to have everything, so I usually go to them first before I google. Certain games I will also do—I guess it’s parental content searches.
There’s a few sites that do it, and I never know which ones they are, so I just google that to see exactly what’s included in it—things like *Witcher*, yeah the kids would love that game or *Dragon Age Inquisition* the kids would love that game, but there’s content in there they can’t have. (HH15)

In summary, those interviewed parents who used professional review sites did so because they appreciated the reviewer’s expertise. Additionally, the interviewed parents who believed they had a deep knowledge of video games were the same ones who visited professional gaming sites, which might influence their opinion of professional versus community reviews.

**Combination of Reviews and Let's Plays**

A third subset of interviewed parents used both community and professional reviews as well as video play-throughs, or "Let's Plays," of the games to determine their appropriateness. Let’s Plays are generally prerecorded, but sometimes live broadcasts, of people playing video games. There does not have to be a purpose to the play-through beyond broadcasters showing themselves playing the game. Some broadcasters discuss the game and what they are doing while others may create a drama out of the events in the game or even discuss things completely irrelevant to the game itself. Some of the more popular broadcasters have garnered large followings on their broadcasting sites as the last example discusses.

**Example 11: Little Inferno Family**

The Little Inferno family was recruited on a chance encounter after the father, “Weather Man”, overheard a description of the study in person. He explained that he and his daughters,
ages 9 and 5, loved to play video games and he thought it would be fun for them to participate in the study with him. The interview was planned for a weekday evening right after summer break started. The family’s very large two-story home was extremely nice and well maintained from the outside. While the inside common areas, including the one the family was interviewed in, were very tidy, the areas where the family spent the most of their time were made obvious by the discarded toys and left over snacks strewn about.

Just before the interview began, the children arrived with their nanny. It was almost dinnertime, but their mother was still at work. The nanny fixed them a quick microwave meal while the interview began. Though the family had a Wii U, the daughters mostly played on their Apple iPads or on their dad’s computer when he was not using it. When he used it for gaming, he played games they were not allowed to play or observe. Due to this, they knew not to enter the office when the door was closed. That said, the father took the time to observe them while they played or played with them when he could. He also took great pleasure in finding games he knew they would enjoy like Little Inferno, Don’t Starve, or even a throwback to when he was a child, Zelda on the Wii U.

The picture below shows the daughters’ tablets in the dining area surrounded by snacks, drinks, and homework. The portability of the tablets mean they can be used in any space around the home, but in this home, it is always a public space where they can be observed by their parents or nanny. Additionally, they cannot download anything to these tablets without the father’s password, which he hinted was an obscure reference to an obscure character in a well-known science-fiction novel.
Figure 9. Little Inferno family game space

Weather Man [Father]: So this would be pretty common for us, like if they’re playing a game that we didn’t select, we’ll just observe, and if something like that happens then we’ll ask them not to do it again. Oh sorry, the third method is CommonSenseMedia.org, which I found is a great website. I first checked it by looking at movies and games I had already played, and seeing what they said and, in general, they kind of agreed with me. And so I thought, okay, on new stuff, I’ll use it as a judge. And it was pretty good.

Interviewer: So, let’s say your daughters [ages 9 and 5] come to you and they heard about a game at school, and you’ve never heard of it. What’s the first thing you do?
Weather Man: I would probably not go to CommonSenseMedia.org. I’d probably just google it. Or, I’d go to—IGN is a review site I like—so I’d go to IGN, but mostly because I’d be shocked they had a game that I had never heard of. More than that I would want to know whether or not it was age appropriate. I could probably figure out pretty quickly that it wasn’t.

Interviewer: So you google and you have a list of results—How do you tell or how do you make the judgment as to what results would be acceptable or not?

Weather Man: Video content, the actual video of the game. I’m probably wrong about this—I am probably over-confident in that I’ve played so many games that I think within 5 minutes I could judge from random video content whether the game was eventually going to be inappropriate.

Interviewer: Where do you see this video content?

Weather Man: YouTube, Let’s Plays. Or, I guess IGN does have those two or three minute reviews that are sometimes video. But really, I’d honestly rather read the review.

Interviewer: So IGN is a professional review site—Do you value professional reviews or community-sourced reviews? Or, a mixture of the two?

Weather Man: To make the decision about whether it should be played? I don’t think I’d value community reviews. I’d value community Let’s Plays. But, if there was some community website, well, I guess that’s Common Sense Media—Is that what you would call community? Okay, yeah, then I’d value that more. CommonSenseMedia.org more
than the other. I guess it depends on the community. You have to kind of gauge the community, whether they agree with you. (HH23)

In the example above, the father mentioned a combination of Common Sense Media, IGN, and Let's Plays. He stated he liked Common Sense Media, because he evaluated it first by reviewing ratings for things he had already watched and, as they synced with his own opinion, it was deemed a valuable resource. While he mentioned sites he considered valuable resources, he felt he could make a better judgment quicker by watching a play-through of the video game. Other parents had similar opinions.

Example 12: Alliance Family

The “Alliance” family volunteered to participate after seeing the recruitment flyer online. The entire family was interviewed including the mother “Jaina” who works in IT as a consultant, the father “Arthas” who works in IT as a problem solver, and their 12-year-old son “Uther”. Their house was an expansive single-story home on the far outskirts of a small town. The sparsely populated housing division was surrounded by fields and there was only one road in and out. The room in which the interview took place had several bookshelves with old books surrounded by nice furniture. One could tell it was not a room they used very often. While it and the kitchen were uncluttered, it was easy to observe the family spent most of their time in their computer room and the media room due to the occasional soda can or used plate left in those spaces.

Though their son was not yet 13, they had an agreement with him that if he could make a solid case for a game, and it passed their review, he would be allowed to play it. This included
both T and M-rated titles. Though they did not necessarily play the same games, they all played games in the same room and the child’s desk was positioned so that his father could look over his own computer and talk to him and his mother could turn her chair, which was diagonally behind him, and see his screen.

![Figure 10. Alliance family game space](image)

Jaina [Mother]: I find myself going to YouTube a lot and watching Play with Mes.

Arthas [Father]: Let's Plays.

Jaina: Let's Plays, because I find that I can do ten minutes and get a really pretty accurate representation of how the mechanics of the game work and if it's something that I think is problematic, just pick a Let's Play that's a later chapter or a middle chapter or whatever, and go, ‘Oh, yeah. No, this is nightmare fuel. Absolutely not.’ (HH14)
Example 13: Collector Family

The Collector family volunteered to be interviewed after seeing the recruitment flyer posted within a local gaming group. From the outside, the small apartment did not look like much and it was hard to believe that it housed all seven family members including both parents and their five children. However, upon walking inside, it revealed an extremely large retro video game collection that would be the envy of most diehard gamers. This family was the largest family in the study and though they self-reported the lowest household income, they had the largest collection of gaming devices, games, and peripherals out of all 26 interviewed families. Galaga, the mother, was interviewed in the family room surrounded by her collection with her 1-year-old in a playpen just within reach. The rest of the family was out for the day at school and work.

Gaming in this household was a family affair, even if the youngest children were just observers. All seven of the consoles that were actively played were connected to a single television in the family room. Though the younger children did not play games and were restricted from observing those with more adult themes, Galaga considered herself very liberal when it came to the types of games she allowed her 11-year-old daughter to play, including M-rated titles. Collecting gaming related items was Galaga’s hobby and keeping up with gaming news and new releases was her pastime. She was exceptionally knowledgeable on all things video game related and as a result, her interview was the longest interview out of all 25 that were conducted in person, topping out at just over an hour and a half. This picture only shows a small portion of her extensive collection.
Interviewer: You said you wait and see what other people say. Are you more interested in what the professional sites say or what community reviews are?

Galaga [Mother]: A little bit of both. I'm 50/50 on that. I'm real split and the quote/unquote, ‘professional community’ anymore these days, tends to be the everyday Joe. You'll see the gaming conventions where you actually go to huge events. There's Retropalooza is going on in Arlington in September, a big gaming convention. All video game-based and everything, but all the guests are YouTubers.

Interviewer: And these are people who play the game on YouTube and let you see it, and/or talk about the games on YouTube?
Galaga: Yeah. It's like the most popular guy on YouTube right now is PewDiePie, and PewDiePie is just everyday Joe that decided, ‘Hey, I'm gonna play this video game and I'm gonna do this little comedy skit about it.’ And now he's like eight or nine million or billion people in.

It's ridiculous the amount of people that sit here and watch. I'm sorry, the ratings—the number of views that some folks get on YouTube—there's higher ratings on that than there are on CNN. And that tells you that the media in today's day and age is changing away from polished journalism and anchors on the news and people doing reports in newspapers. It's not as accessible as a video or podcast or a live stream of this, that, or the other. And it tends to be watched by the teenage crowd to the 20s and 30-something crowd. And those are the people that are gonna be playing these games anyways, so why not use it as a platform for conversation about it? 'Cause you turn on the regular news, you're not gonna see information about, ‘Hey, the latest game just came out on Xbox. Here's what we think about it.’ G4 isn't a channel anymore. They took it off the air, so there's not much in the way of professional besides like if you were to go to Nintendo's website or Sony's website or Microsoft's website. (HH11)

**Parents’ Concerns with Children Watching Let’s Plays**

Though watching videos of video game content was mentioned by over half of the households as a method they employed to assess content, some parents felt they had to monitor their children when their children watched them due to content issues with those providing the video play-through.
Example 14: Witcher Family

Interviewer: So you’re okay with him [son age 11] communicating online?

Geralt [Father]: With him, yes I am. I’m very lenient with different levels for the 
different kids. But with all of them really, violence is fine—with the older two, language 
is fine—unfortunately, they got exposed to it a couple of years ago through *Minecraft*.

[laughter]

Interviewer: Language?

Geralt: No, it’s not in *Minecraft*, it’s all the YouTube Videos, the *Minecraft* videos. They 
started doing that. Then that led to everything else, and suddenly they have a full 
education. (HH15)

Example 15: Horde Family

Durotan [Father]: He’s a real big fan of Jacksepticeye.

Goel [Son – age 10]: Also Markiplier. Yeah, basically all those really popular YouTubers.

Aggra [Mother]: And Cupquake

Durotan: They do evaluations of different games, of different mods for games, and we—
as he has gone through his YouTube experience, we have identified the individuals and 
said, ‘We don't mind you watching that individual's reviews,’ whereas other individuals, 
we will say, ‘We don't like anything by that person, regardless of the content.’ (HH12)

Example 16: Mario Kart Family

The “Mario Kart” family volunteered to be interviewed after seeing the recruitment 
flyer online. “Yoshi” a stay at home mom of two sons, homeschools them during the day while
her husband travels for his work in IT for weeks at a time. The family lives in a small single-story home. The front door opens right into the living area on the left, which is full of organized clutter, and a kitchen to the right behind a hall closet. Two dogs were held behind a gate that separated the front of the house from the back where the bedrooms and bathrooms are located.

Yoshi considers herself a gamer and grew up playing games. Though it is a hobby she likes to share with her sons, they have strict restrictions both on the types of games they are allowed to play and when they are allowed to play them. This includes no gaming allowed during the school week, which was a relatively recent development that occurred after she realized that gaming affected their attitudes to such a degree during the week that both their homework and chores suffered. Now they are only allowed access to their devices for gaming between the end of school on Friday and 5pm on Sunday. However, games are considered a privilege not a right and that privilege is often taken away for misbehaviors during the week.

This picture is of the television in the family room, which is immediately visible when you enter the home. To the left of this is the family computer the mother games on. Her two sons game on their laptops, which she does allow in their room over the weekends. Her biggest complaint about allowing them to play on the Wii connected to this television is that though the gaming session may start out friendly, it rarely ends that way.
Yoshi: [My oldest son (age 12)] has now got caught in bed after being, like, lights out, on a tablet or on a phone he found or something that connects that he will be watching *Minecraft* videos on YouTube. Unfortunately, with YouTube it goes off on to other things, and you have no idea what’s going to pop up, and we’ve gone back through the history sometimes and found some not-so-appropriate stuff that he shouldn’t be watching. So, he’s lost electronics currently. We’re in week 2 of that and that is, like, more of a punishment on me at this point. He’s reading a whole bunch more library books, so, you know, there’s that. (HH21)
Example 17: Dragon Age Family

The “Dragon Age” family was a purposeful sample being asked to participate as the mother “Morrigan” was known to have a son who played video games. She, a recently divorced mother who works in graphic design, lives with her son in a medium sized single-story home nestled within a greenbelt. The house opened to a long hall that revealed the kitchen, dining area, and living room to the left and ahead with bedrooms and other common areas that were closed off on the right. The backyard featured a koi pond and ample room for their multiple dogs. The interview was held sitting around the table in the dining area. Though she has never considered herself a serious gamer, she has been convinced by her son to play games with him on occasion. That said, she admitted playing video games with him could be frustrating for her because they have two very different approaches to gaming.

This picture shows the television in the family room with the white Xbox resting on a shelf below it. What is unique about this setup is that this entertainment center can be closed when not in use, thus it is not a distraction when tasks need to be completed. Those tasks include her son using his laptop for what is supposed to be homework, including a site for math games. However, as his mother found out recently when checking on him, he also uses it for watching let’s plays and cartoons on YouTube.
Morrigan [Mother]: For the most part, I trust him. I trust him more with his game play than I trust him watching YouTube. He doesn’t watch shows on the TV very much—he’ll just watch on his laptop through YouTube. There’s currently no parental settings on his laptop. He mainly just watches cartoons like *Tom and Jerry* and that kind of stuff, but there has [sic] been some instances of lots of *Minecraft* gamers, and there was one or two of them where he watched it and he was like ‘This, I don’t like this—it doesn’t make me happy.’ And I watched it and, like, it will be in a series and most of the ones in a series are fine, but this one—there was one about a *Minecraft* pickaxe. *The Life of a Minecraft Pickaxe* or something like that, and I watched it, and I was like, ‘Oh my god, this is sad and depressing.’
Interviewer: So it was a YouTube video of Minecraft where someone told a story through the game?

Morrigan: Yeah someone had done—they recorded the characters moving around in Minecraft, and then they made it into a video with, like, voiceover—it might have just been words and sad music. Apparently pickaxes have it really hard in Minecraft. (HH09)

Although many parents (62% of the 26 households) found value in watching video reviews or play-throughs of video games to assess content, some felt that their children might be exposed to inappropriate material when viewing them. As shown in the examples above, parents put restrictions on which personalities they allowed their children to watch, while others decided their children watching them without parental permission was a groundable offense. Then there were those parents who found that, while the content may not necessarily be inappropriate, their children may not be emotionally prepared to deal with it.

**What are Parents Looking for?**

So far this study has clarified where and why parents perform information seeking behaviors to learn how to bridge their knowledge gaps and make sense of video game content appropriateness for their children. However, it is just as important to understand what parents are looking for when performing these sense-making behaviors as it is to know where they go and why they go there. Most parents have a definite set of criteria they use to determine if a game is inappropriate for their children. When they search for information, they are specifically looking to see whether or not the game in question crosses that predetermined content line. The next few examples explore where those content lines exist for different families and why.
Interviewer: So I see you have M-rated games here. Has he ever watched you play an M-rated game?

Master Chief [Father]: I’m trying to think. I think the only M-rated ones I have are, like, *Halo*, and for me, it’s shooting aliens compared to shooting people.

Interviewer: So you draw a line at the realistic aspects of the game?

Master Chief: Well, the violence is also in there. When we’re playing—even when he started playing his mage on *World of Warcraft*—he’s like, ‘Dad, I’m killing him with fire.’ I explained, ‘You’re using fire in the game. It’s not real.’ So I try to keep him from doing that. But yes, the realistic aspect of it does come in to play.

Interviewer: Where else do you draw the line?

Master Chief: It depends on language. I mean they hear it, but you want to limit the amount that they see how graphically/gory/sexual whatever is involved. Because even in *Halo* when they shoot there is no blood spray or anything really—the alien falls down. I guess it also depends on how intense the game is. Because even zombies aren’t real, but some zombie games that they have here that are out, are really intense compared to others. (HH03)

Example 19: *Dragon Age* Family

Interviewer: In talking about violence, how would you rate it as extreme or not?

Morrigan [Mother]: Well, obviously there’s [sic] a lot of games out there that you’re interacting and there’s combat. Just combat where you’re using swords or something
like that and there’s minimum blood. That’s okay, but when it’s excessive blood or it shows excessive gore, or the content of the reason why you’re killing stuff does not have an appropriate means to an end—if the game is based on: we’re just going to run around killing people because it’s fun, that’s inappropriate. If it’s: we’re killing the bad guys so that we can, you know, further our quest or whatnot, that’s obviously more on the appropriate side. (HH09)

In the two examples above, simply seeing the descriptor of "violence" on a video game, including the limited variations the ESRB has (extreme violence, cartoon violence, etc.), would not be enough information for them to make sense of the content appropriateness, as they have very specific ideas of what kind of violence is suitable for their children, from level of intensity, to types of adversaries, to plot lines, etc. These examples demonstrate how the information parents look for varies even when their concerns are similar and it indicates their perceptions of violence are far more nuanced than a simple descriptor may convey. They also show why, though parents may use the ESRB Ratings System, they feel like they need to do additional research to bridge their video game content knowledge gap.

**Special Needs**

The content line is different for every parent and every family situation. Some families had unique needs they felt were met by video games, so they assessed their need and use of them differently than other families might. In the examples below, parents allowed their children to play video games rated much higher than their age because the video games served a purpose beyond the content itself.
Example 20: Mario Kart Family

Yoshi [Mother]: He [son, age 12] actually started, he has—and I don’t know if this is going to be relevant to you or not—he has Asperger’s and ADHS and SPD, which is Sensory Processing Disorder, and for him we had the hardest time potty training, and so at 4 years old, we were letting him play the Wii as an enticement. Like, if you went potty correctly in the bathroom you got to play a Lego game with Dad. Lego Star Wars. That helped, it really helped a bunch. And then some of the other games like Dora or Diego, I think not only just the TV shows themselves, but then some of the games, would help him with his speech because he was also speech delayed. And so, sitting there and watching a bunch of TV or watching a bunch of games that were talking to him—instead of having the opposite effect of TV and electronics are harmful to your child—it was actually helpful to my child, because he would actually start to speak and respond back.

So, [he started gaming] as early as 4. (HH21)

Example 21: Street Fighter Family

The Street Fighter family volunteered to be interviewed after seeing the recruitment flyer online. Both parents were interviewed, though they participated separately. “Cammy”, the mother, works in graphic design while her husband, “Ryu”, works in the insurance industry. They live with their three sons ages 15, 12, and 9 in a two-story home that, with the level of toys, books, papers, and various other items strewn about, does not try to hide the fact that three lively and active boys live there. Upon first walking into the home, the often used game room was to the right, which had a doorway toward the back corner that opened into the
kitchen. Straight ahead was a short hallway, which was bordered by the stairs on the left and led to the dining area towards the back of the house. The dining area sat between the kitchen on the left and the living room on the right and overlooked the backyard through a sliding glass door. This is where both interviews took place.

The mother interviewed first so she could leave in time to pick up the youngest from school. Her husband came down as her interview ended and his began shortly after she walked out the front door. Though the entire family games now, that was not always the case as is illustrated by the excerpt from the mother’s interview below. In this picture is a wall mounted flat screen television with an Xbox attached and the Xbox motion sensor bar resting atop of it.

*Figure 14. Street Fighter family game space*
Cammy [Mother]: Well, [my middle son (age 12)] wasn’t interested in video games at all. He was diagnosed with Delayed Coordination Disorder. And that involves delay in hand-eye coordination. So, he would just get really really frustrated, and had no desire for video games until he started therapy and his therapist wanted him to start playing video games. So, we really encouraged him to reach out. And so, my husband was playing this very violent video game at the time. I can’t even remember the name of it. We were in Chicago. He was like, he would ride on these rail cars and kill people, and then get back on the cars and it was really a very fantastic, you know, spectacular kind of game. And he [son] got into that game. He was watching his dad do it, and he wanted to mimic him. So, thinking with the therapist in our heads about that he needed to start using his hands more and doing more things with that, we let him play this violent game. And, oh my gosh, he was 3rd grade—I think so.

Interviewer: And do you remember the game [he] started playing?

Cammy: [Asks her husband] It was Infamous on the PS3. That was so [laughs]...I remember being really conflicted about that. He’s playing violent video games!

[laughter]

Interviewer: So, why were you conflicted about it?

Cammy: Because I got a lot of, I believe at the time, a lot of the news, and everything was really bombarding me with how violent video games were bad for young kids. And then I started, I don’t remember who I reached out to, I reached out to a couple of friends and actually started reading some articles. I was like, so, okay the news media
doesn’t have this right. And, re-educated myself at that point. I felt I needed to for my own peace of mind.

Interviewer: How did you find the articles you looked into?

Cammy: I think I just started with Google and then just expanded out from there.

Interviewer: Do you remember what you looked for?

Cammy: Video games, violent video games with young kids, just different plays on words with that just to find, because it really did bother me. Even my preteen at the time was starting to get the games he was interested in were, like, war games. You know, like, the re-enactments from the Assassin’s games and stuff. I was just like OKAY OKAY! So, I needed to educate myself and see what was really out there.

Interviewer: How did you qualify a resource as to whether it was credible or not?

Cammy: Anything that was from a university I tended to pay more attention to.

Anything that was written for entertainment magazine, I kind of was like—Where’d you get your sources? (HH02)

Other parents allowed their children to play violent video games because they felt sheltering their children from violence would be inappropriate given their perspective of violence being commonplace in the real world. Considering Galaga’s family of seven living in a small apartment on the cheaper side of town, it may be easier to see her perspective of violence being common place and an everyday occurrence as she describes here. However, even given this perspective, she puts a lot of onus on the parents to interact with and teach
their children right from wrong and what is expected of them in the real world versus a game
world.

Example 22: Collector Family

Galaga: Content, I am a little particular on, but not too restrictive. I'm one of those
people that she's old enough to realize, okay, sex is a thing. Violence is a thing. Murder
and guns are things. But it's one of those things where if you protect a child from
witnessing this, that, and the other, what's gonna happen when they sit down and
watch the nightly news? What's gonna happen if they happened to turn on midday TV
and hop across a soap opera? They're pretty much the same stuff.
And even if you sit here and you shelter 'em day in and day out, up until the age of 18,
when they hit the world at 18, it's gonna be culture shock. You can't do anything about
that 'cause once they turn 18, if they [...] experienced that culture shock, they're not
gonna know how to deal with society that is full of sex, that is full of violence, that is full
of guns, drugs, and whatnot and the other. It's better to expose it to 'em now and
explain it to them and say, 'Hey, this is what this is. This is what it's used for.'
This is—these video games are just fantasy entertainment. If you're frustrated, go play
some *Mortal Kombat* or something like that. Beat somebody up on the video game
screen. It doesn’t mean they are gonna go out and beat up little Bobby now the street,
or something like that. It's not real. It's purely fantasy.
I know there's been a lot of media in saying, 'Oh, my God. People can't separate reality
from fantasy in a lotta these games. This person was playing this video game forever
and then they went ahead and shot up their school,’ or whatever. But in that, it's not the video game's fault, because that kid went and shot up the school. That's poor parenting. That's a parent that's not sitting there monitoring, [...] explaining these things to their kid. They're not telling little Bobby or little Suzie, ‘Hey, just because you're mowing down this field of people on the battlefield here in Call of Duty, you don't go and do that to your classmates, our neighbors, or whatnot.’

Okay, yeah, I just sat down and played Saints Row. It doesn't mean I'm gonna walk down the street and smack somebody with a dildo. (HH11)

Though she would allow her children to play games with violence, she believed that involved parenting and interacting with her children make the difference concerning how they act and react to the content of video games and consequently, real life.

**Sexual Content**

The only consistently mentioned line, though it had varying degrees at which they felt their children could cross it, was sexual content. Almost every parent who mentioned they had a specific set of criteria they looked for when assessing video games stated that the level of sexual content from innuendo, to relationships, and beyond was something they were concerned about. This was the case no matter how liberal or conservative on content restrictions the parent claimed to be. Most parents were a lot more comfortable with violence, even graphic violence, than they were with any sexual content.
Example 23: Witcher Family

Geralt: I am. I’m very lenient with different levels for the different kids [sons, ages 11 and 9; daughter, age 6]. But with all of them really, violence is fine. [...] Drugs—typically we won’t let them play games that include drugs and games that include sex—especially things like Grand Theft Auto being so degrading towards women. Things like that, that’s just not something they need to be exposed to. (HH15)

Example 24: Collector Family

Galaga: I do still kind of restrict a few things. Like, she [daughter, age 11] has played Grand Theft Auto. Not that big of a deal. I haven't let her play Saints Row yet because there is a little bit more sexuality and a lot more innuendo to that, and she's kind of at that funny age there where she's still trying to figure out the sexuality part still. She's preteen. I figure once she gets a grasp on what's going on with her own life and her own body and everything like that, and how things are, then once she goes and she plays on that game, she'll be like, ‘Oh, that's what that is. Okay, never mind. I already know what that is.’

Interviewer: So would you restrict more on sexual content than violence?

Mother: Yeah. On that, yeah, I would. The main reason is because sexuality in video games and life in general is not necessarily going to be an everyday thing for her at this age. It's a matter of, okay, yeah. She might have taken a sex ed class at school, but it's not talked about on a daily topic. She's not gonna see it on the TV every single day.

Violence, you're not gonna get away from that. Kids experience bullying and there's
constant fear of guns and bombs and everything—Columbine. They see it on the news. People talk about it in school. They learn about historically [sic], and there's talk of this war, that war, this battle all sorts of this, that, and the other with violence. And that's just the reality of life. [...] Well, like I said a minute a go, it's like with Saints Row and Grand Theft Auto they're both rated M for mature. Call of Duty, Assassin's Creed New York, Halo—rated M for mature. Mature on the ESRB ratings can be listed for blood, gore, violence, sex—any number of reasons. But it's gotta be looked at as individualized for each one because, okay, say, like, one of the Mortal Kombat games is rated M for Mature, strictly based off of punching and fighting and a little bit of blood, and maybe somebody's smoking a cigarette or something like that.

You see that walking down the street in Dallas for God's sakes. It’s not so much a worry on that one as it is with say, for example, the Witcher 3 that just came out. They're having sex on top of a stuffed unicorn. That—let's hold off on that for a bit. (HH11)

Example 25: Mario Kart Family

Yoshi: Oh my gosh yes, hello! They will never play The Sims in my life. And if they are, I won’t know it. [...] We’ve had ‘the talk’ with [my oldest son, age 12] this past year. I managed to push it off this long. And, thankfully, I made it until he was, like, in online school so you know there is, like—He didn’t get the playground version of everything. [...] We took him through one of the scientifically—medically—this is what stuff is, and did get to the point where he’s like, ‘Ewww, that’s gross.’ Yes! Always think that. So, yeah, we try to keep that away from him. (HH21)
Example 26: Sega Family

Amy Rose: I don’t have any problem with my kids playing video games. I do try to pay attention to—like, I’ve had to limit some of her time playing Sims, because there’s some kind of overtly sexual content. I try to avoid anything like that. We ran into that problem with the God of War games also, which we really were enjoying—but there was some graphic, you know, some nudity and sexual content. If it’s excessively violent then, like, with God of War, you could change the settings to where it’s less bloody. Things like that, measures like that we’ll take, but right now she’s more into things like The Sims.

(HH06)

Example 27: My Little Pony Family

The My Little Pony (MLP) family volunteered to be interviewed after seeing the recruitment flyer online. Though only the mother, “Celestia”, was scheduled to be interviewed, the father, “Chaos”, happened to be unexpectedly home at the time and happily offered his thoughts and opinions as well. They and their two daughters, ages 11 and 2, live in an older single-story home that was well lived in. The front door opened into a hall straight ahead with bedrooms along the left wall. The living room, which was immediately to the right of the entryway, opened into the kitchen and dining area at the back of the house where the father’s desk was located. The interview as held on the couch in the living room.

The parents were gamers in their own right, but were cautious about letting their daughter play. Though they had a console, they had not connected it to their TV as it was a recent purchase and they did not yet own any games. Instead, the family gamed on their
laptops. Chaos gushed about getting his daughter interested in the flight simulator he enjoyed playing and talked about how she now helps design skins for planes to be used in the game. He and his wife used every opportunity possible in video games to teach their daughter how to relate to experiences in the real world. This included everything from how lava could light wood on fire in and burn your house down *Minecraft*, to how thoroughly checking items off in the right order was necessary in the flight sim or the plane would crash. The picture below is of Chaos’s computer complete with flight sim on screen and flying yoke in place.

*Figure 15. MLP family game space*

Celestia: I draw my line mostly towards the sexual or adult innuendo if it’s something that I feel that she [daughter, age 11] might understand and not be comfortable with.
Swearing, she doesn’t have a problem with. We’ve had swearing around the household. She knows what words not to say. She knows that other people do swear.

Interviewer: What about violence—How do you feel about that?

Celestia: Violence is fine as long as it does not involve overt blood, gratuitous gore, gratuitous death—She’s really not comfortable with death. (HH07)

While the previous examples point out sexual content as an issue. Not all interviewed parents felt the same way.

Example 28: Final Fantasy Family

The Alliance family referred the Final Fantasy family to participate in the study. “Barret”, a father who works in IT, arranged for the interview to occur over his lunch break in order to work it into his busy schedule. He lived in a nice, well decorated, and well-kept small single-story home with his 16-year-old daughter, current wife, and 14-year-old stepdaughter.

Barret was one of the few parents in the study who did not assess video game content before he allowed his daughter to play. Though he did not review it first, he did often to speak with her about the games she played and enjoyed watching her play them. During the interview, he recalled one of the times he watched her and her older brother (now over 17 and no longer living at home) play a game he found disturbing. He used this experience to point out the juxtaposition of how American parents take issue with sexual content more so than violence, which is something that would be inverse in Europe as well as many other countries.

The picture below shows the television in his daughter’s room with the Xbox connected and multiple games on the shelf below it. Though it is in her room today, her father explained
this was a recent development and he has no issue removing it when her grades start to slip. Of note, he does allow her to play Grand Theft Auto, an M-rated game, even though she is under 17. When asked how she acquired the game, he revealed it was her older brother that bought it for her. He went on to explain that he watched her play the game and while she was going through the missions they talked about how absurd the game was. Although she agreed with him, she still found it enjoyable.

![Image](image_url)

*Figure 16. Final Fantasy family game space*

Interviewer: Is there anything that we haven’t covered that you think would be interesting to discuss concerning video game content appropriateness?

Barret: Sure—sexuality versus violence.

Interviewer: Okay yeah—let’s talk about that.
Barret: There is far more violence in video games—far more absolutely unexplained violence in video games—than sexuality. While we have a knee-jerk reaction towards sexuality, we do not have that reaction towards violence. For instance—this was a while ago. This was 2008—the kids were playing a video game in which you played a group of teenagers who had to go fight these trials and difficulties, and the manner in which they summoned their major power, and I’m not kidding you, [was] to take a gun and blow their head out. Not even kidding you.

Interviewer: This was a console game?

Barret: Yes, it was an Xbox game where you shoot yourself in the head to unlock your major power. And I’m like, what in the world are you watching? Please, let’s discuss the hell out of this. So, yeah, GTA is one thing [a M-rated game with sexual content he had no problems with his daughter playing]. Hey, I’m going to unlock my power is another.

[laughter]

Interviewer: So what kind of discussions did you have about that?

Barret: It’s been a while ago, but we talked about the sanity of that. We talked about just suicide in general, and, you know, I made them give me a very good accounting for what the heck was going on in this game. It was the weirdest damn thing I have ever seen. Topped out, like, the weirdo gamer shit. (HH08)

In summary, the interviewed parents had specific types of content they looked for when trying to bridge their knowledge gaps in order to make sense of video game content appropriateness for their children, and though the ESRB Ratings System attempts to cover
several of these, many interviewed parents determined it was not detailed enough to suffice as their only source of information. Additionally, while understanding varying degrees of violent content was important to the interviewed parents, it was not as important as assessing sexual content.

Research Question 1: Conclusion

In conclusion, interviewed parents used the ESRB Ratings System to varying degrees to help bridge their knowledge gaps, and many do so even when they state they do not use it at all. Additionally, parents use both formal and informal methods when using information sources beyond the ESRB to help them make sense of content appropriateness. The most common forms of information parents look for are community reviews, professional reviews, and video play-throughs or "Let's Plays". The majority of interviewed parents preferred community reviews because they offered a wide variety of perspectives from other parents as well as actual players, both of which seemed to meet their various needs more so than professional reviewers. Some interviewed parents preferred professional reviews because they respected the perspective of a critical reviewer, and because it is through those review sites they stay knowledgeable about the gaming industry. Other interviewed parents used a combination of reviews and Let's Plays, noting that even a small amount of time watching a video play-through of a video game would be helpful in quickly making sense of content appropriateness.

In addition to ESRB Ratings System usage, and the ways in which other information sources were used and why parents used them, this study found that understanding the
specifics of what parents were looking for is highly important. The reason many parents go beyond the ratings system is because, though they might find it useful, it is limited in the information it provides, and thus, is incapable of delving into the details they are specifically interested in when trying to make sense of video game content appropriateness. Lastly, though knowledge of the types of violence in a video game was important to parents, sexual content was far more of a concern.

Of note, parents of children ages 9 to 14 seemed most concerned with sexual content. Those who assessed games for children 8 and under simply went for titles geared toward a younger crowd; thus, they felt they rarely needed to use the ratings system or to assess that level of content though they did intend to do so as their children aged. Those with children 15 and older, such as the Final Fantasy Family, had few to no restrictions on the types of games those children played, and therefore found no need to assess them. This observation is further examined in Chapter Six.

Research Question 2

To what extent do parents believe potential legislation of the video game industry would help them to fulfill their information needs in regards to assessing content appropriateness of video games for their children?

When interviewing the parents about legislation, the questions were very simple and completely open. They asked parents to tell what they knew of laws on video games and no up front description was given for any specific law since multiple laws were passed and then appealed across the country. Rather, it was an exploratory question to ascertain what parents knew of video game legislation, how they felt about laws on video games, and whether they
thought a law would change the way they assessed games or what games they allowed their children to play. The questioning was purposefully phrased in this way to avoid biasing their answers.

If parents asked about legislation, the interviewer shared overall facts on video game legislation. This included how multiple laws had been passed around the country, but all had been successfully appealed and overturned, including the case that made it to the SCOTUS, on the grounds of censorship and first amendment rights. This information was only revealed after the interviewee provided their opinion on the matter. In some situations this prompted more discussion. One interviewee went back and forth on his original statement saying he was unsure what to think and that it was a lot to consider given the possible implications he now had to consider were such a law to pass. Due to this, he was considered neutral to potential legislation.

The last chapter revealed that less than half of all of the 26 households (42%) were in favor of or were neutral toward a law restricting video game sales based on game content and little more than half of those (23%) felt it would help them parent effectively. Those who were either for or were neutral toward a law saw it as an extra layer of protection that the ESRB Ratings System did not necessarily provide. Others had no idea the ESRB Ratings System was not already government-mandated. One parent even suggested that because the industry was profit-motivated it could never be ethically self-regulated. Of note, it was revealed throughout the interviews that none of the interviewed parents who felt a law would be useful were
familiar with what exactly the ESRB does, how it rates games, or how stores follow the ESRB regulations.

Extra Layer of Protection – Example 29: Tomb Raider Family

Lara [Stepmother]: I think that would be very useful.

Interviewer: Why?

Lara: We’d like to think that when we give our children freedom, that they make correct choices, but they don’t always do so. So, it’s nice to have laws in place to help protect them. (HH09)

Extra Layer of Protection – Example 30: Mario Bros Family

Peach [Mother]: [I am in favor] because, you know [my sons (ages 8 and 4)], they’re really affected, I’ve noticed, by specifically visual media. So, if they see something scary, or whatever, they seem to be quite a bit more affected. When my boys are older and out in the world, but not yet adults, then I would appreciate age restrictions. (HH16)

Extra Layer of Protection – Example 31: Skyrim Family

The Assassin’s Creed family referred the Skyrim family to participate in the study.

Ysolda, an artist, lives in a single story home with her husband who works in IT and their 14-year-old daughter. They also have a son, but he was too old to qualify for the study. The small home had a hall that lead from the entry way to the dining area attached to the kitchen. This is where the interview took place. The computer room, where the family spent most of their time, was immediately to the right of the entryway and had an opening in the far left back corner
that led to the kitchen and dining area. Though the kitchen was tidy, the computer room was not.

The family did not have a console; rather, they all played on their computers. Though Ysolda plays a few games, she readily admits her husband and daughter play more frequently than she does. The daughter’s computer was not equipped enough to allow her play her current game of choice, Skyrim. So, when she wanted to play, she had to log into her user account on her father’s system. Though they allowed their daughter to play an M-rated game at 14, they still had to pre-approve any other games she wanted to play. Additionally, because she had to log into her father’s computer to play the games, it was a privilege that could be easily taken away. The picture below shows the father’s computer area where the daughter plays Skyrim. Behind it are the daughter’s and mother’s desks making it so that they can all share the same public space when they are on their computers even if they are working on other things.
Ysolda [Mother]: Like I said, there are things out there that I do not want my daughter [age 14], especially when she was 8, to have access to. Like Grand Theft Auto—I mean there’s just that whole prostitution and things—that’s just not something I feel is appropriate for a young girl to deal with.

Interviewer: How would it help you?

Ysolda: It would give me the ability to choose whether or not she had that game. If I still felt it was okay for her, I could choose to purchase it for her.

Interviewer: Do you think a law would be more useful than using the ratings system as it exists?
Ysolda: I’m uncomfortable with an 8-year-old being able to go in and purchase *Grand Theft Auto*. I mean that’s my... And, you know, we don’t allow children to go in and purchase porn, and I’m not sure that it’s much different. I don’t want it off the market. I feel that there is a place for it. I just don’t feel that allowing an 8-year-old or 10-year-old access to it is acceptable. (HH19)

Extra Layer of Protection – Example 32: Mario Kart Family

Yoshi [Mother]: Yes, [I am in favor] because there would be no chance in hell that my children [sons, 12 and 8] would be able to access that, if for some reason they were with like a friend and buying something and I wasn’t there. Or, they were somehow buying it without me there or their father. It would mean that there was a much better chance that they wouldn’t get something in their hands that they weren’t supposed to. (HH21)

Assumption of Current Federal Regulation – Example 33: Defias Family

The Defias family was purposefully sampled, as the father was known to have a daughter that played video games. “Van Cleef”, a divorced father who works in IT from home, lives with his 12-year-old daughter, “Vanessa”, in an exceptionally clean apartment in a nice gated complex. Though you can see the entire apartment from the front door, it was spacious and well furnished. The dining area was immediately inside with the kitchen behind it, the living room to the left of it, and the bedrooms and bathrooms fanned out behind the kitchen. Though a cat lived there, it was not immediately noticeable upon entering the home.

Both the father and his daughter participated in the interview, which they used to poke at each other back and forth in a playfully sarcastic manner. The family had owned multiple
consoles, however, they recently sold everything but the Wii. The daughter plays games on her Nintendo DS handheld (pictured below), her tablet (pictured below), her phone, and occasionally the Wii, while her father plays on his computer. Though she wants to play World of Warcraft with her father, he is sticking to the T rating and not allowing her access to it until she turns 13.

Figure 18. Defias family game space

Interviewer: So how do you feel about the government regulating video games?

Van Cleef [Father]: When it comes to video games, I don’t see problem with putting an 18+ sticker on mature video games since your average person is probably going to assume that’s what it means anyway. As much technical knowledge as I have, I didn’t know it wasn’t an official thing. (HH18)
Question of Ethics – Example 34: Metal Gear Solid Family

The Metal Gear Solid (MGS) family was part of the purposeful sample as they were known to have a child that played video games. They live in a nice single-story home. The front door leads into a short hall that opens into the living areas including the kitchen, dining room, and living room. Off of the living room is another hall that leads to the bedrooms and bathrooms. Though the living spaces appear tidy and organized, the eldest son’s room looks to be that of a typical 16-year-old, disheveled and scattered with random and equipment strewn about in a half hazard manner. The interview took place in the living room while the youngest son was allowed to play on his brother’s computer in his brother’s room. The mother, “Eva”, and her 16-year-old son from a previous marriage, “Snake”, participated in the interview.

Eva is a stay-at-home mother of two sons who have a ten-year age gap between them. Her husband, and second son’s father, works full time outside of the home. Eva has a love-hate relationship with games. She does not play video games today and credits many of her past failed relationships to their video game addictions. She was very hesitant to allow her children to play video games, but with her first son living between two households when he was younger, she did not have a lot of choice in the matter. She finally gave in to allowing him to play games in her home so she could retain some control over the games he played. Now that he is 16 and lives with her full time, he does not have any restrictions on the types of games he is allowed to play and plays on a console and computer in his room. However, he is not permitted to play any adult themed games in front of his little brother.
The picture below shows the eldest son’s laptop as well as an Xbox version of Grand Theft Auto (GTA). He is allowed both his computer and his console in his room and he is not supervised during his game play. Though his mother bought GTA for him and knows it has an M-rating, she admitted she did not mind him playing it.

Figure 19: MGS family game space

Eva: I don’t believe the companies can be trusted to regulate themselves. When your motivation is financial, the intent can never be pure. (HH22)

Enforcement Issues

Regarding legislation, parents mentioned enforcement issues as one of their primary concerns. As a result, many, including those who were for or neutral to a law as well as those who were against it, felt it would not be useful to the government or themselves, because it
would be impossible to enforce. This is especially relevant to the research participants, because all of the households purchased games digitally. This meant they were aware that, as long as the transaction can be paid for with any electronic means (this could be a card tied to the account but not needed at the time of the transaction, online store credit such as prepaid cards specific to, PayPal, etc.), no parent has to be present. Several examples are provided here because they all have a different reason why they see enforcement as a problem.

**Enforcement Issues – Example 35: Street Fighter Family**

Ryu [Father]: The idea of the law is great. The fact that it probably will have little to no enforcement means it’s a waste of paper, so having a law that never gets enforced and really has no—gives you no assurance that the law is going to be upheld—doesn’t really matter to me. I don’t know if it would really impact too much for our family. If it made a retailer stop and think, ‘Is it really a good thing to give this kid this game?’ maybe? So, I don’t know. Again that’s more the parent’s job than the retailers, but I guess a backup system is not a bad idea. (HH02)

**Enforcement Issues – Example 36: StarCraft Family**

The StarCraft family volunteered to be interviewed after seeing the recruitment flyer online. The recently divorced single mother and her two sons live in a two-story home that is nicely decorated and clutter free. “Kerrigan”, the mother, works from home as a product manager most days and can often be found playing a game or two after her workday is complete. Her sons, 15 and 10, play on the computers in their rooms, or on their iPads. The youngest also has a console in his room. Kerrigan loves sharing her
gaming hobby with her sons even if she does not always agree with the types of games they want to play. While the youngest is restricted on his game time and content, he has been allowed to play some M-rated games including Assassin’s Creed. The oldest has a lot more leeway and even convinced his mother to allow him to play Grand Theft Auto. When asked about it, she states she dislikes the game, but she is not going to stop him from playing it if that is what he wants to do. That is unless his grades suffer or he has attitude problems. The picture below shows her youngest son’s room with his gaming tower.

![Figure 20. StarCraft family game space](image)

Kerrigan [Mother]: I—it seems so goofy to me to say that you can or can’t buy this because some arbitrary group of people said it’s not okay. I mean, I can understand—I
don’t know. It’s a weird fine line. You want to try to protect children, but honestly, at
the end of the day, does that protection do any good? Because, as a parent or an older
sibling or a friend—anybody can go in and buy it. It’s, you know, it’s like restricting
buying alcohol. While it’s there in place for a reason, at the end of the day, does it really
stop it from getting into the kids’ hands? I don’t get it. That I get a little bit more, right. I
don’t want to compare the two completely. But with video games, it’s an arbitrary panel
of people that say that this is or isn’t okay for children. (HH04)

Enforcement Issues – Example 37: Fallout Family

Pip [Father]: It wouldn’t be helpful whatsoever. Especially with torrenting [illegal
downloading] going on, if the kids can’t get it one way, they’ll get it another. (HH05)

Enforcement Issues – Example 38: Sega Family

Sonic [Stepfather]: No, that seems awfully heavy-handed and troublesome or costly to
enforce. A parent should be the party that is responsible for regulating the content to
which their child is exposed. (HH06)

Enforcement Issues – Example 39: Tomb Raider Family

Mick [Father]: It might reduce the contact, but I don’t think it’s a big deal...Kids smoke
underage all the time, so it’s not like it’s a...If you’re going to do it, you’re going to do it
anyways. It wouldn’t help me make a decision, because I’m actually more restrictive
than the government, in this case, would be. And I don’t think it would actually deter
people much.
Lara [Stepmother]: Sometimes it can almost have the opposite effect. If they know that they’re not [going to] be watching it, it makes it more desirable.

Mick: Nobody drank as much as during Prohibition, right? (HH10)

Enforcement Issues – Example 40: Alliance Family

Arthas: I doubt poorly enforced, poorly defined laws would [help]. (HH13)

Enforcement Issues – Example 41: Little Inferno Family

Weather Man: I mean, like, we don’t go into gaming stores anymore. Oh right, if I don’t, then probably a lot of people don’t. So, I don’t even know how Steam would validate that. Every once in a while, to watch videos, it asks me for my birthday. Which, obviously, I’m old enough, but it’s such a frustration to type my birthday. I just drop down the drop-down box and scroll my mouse down until it hits some age that seems old enough, and it’s always like January 1st, 1927 is my birthday. So if I do that, then surely kids are manipulating the system, too. (HH23)

Enforcement Issues – Example 42: Zelda Family

The Zelda family participated virtually. They volunteered to be interviewed after overhearing the details of the study in person, but were unable to schedule an in-person interview. The family consists of “Link”, father of two who works in IT, and his wife, “Zelda”, is a speech pathologist. Although they both participated, they were interviewed separately. Their chosen interview method was via email where they were each sent separate emails and responded individually. They were initially sent the consent forms, and upon receipt of signed
copies, they were then sent the questions. They were sent individual follow-up questions based on their initial answers.

Both of them made it well known that they evaluate every game their children are allowed to play and all games are played in the family room, thus there are no private game spaces in the home. Their two children, a 16-year-old daughter and a 13-year-old son, had different restrictions based on their ability to handle content and the ability to play video games responsibility. While the youngest has both content and time restrictions, the oldest has been able to state her case for M-rated games. The picture below shows 3 consoles, various games, and various controllers all located within the entertainment center located in the family’s public game space.

![Figure 21. Zelda family game space](image)
Link: My feeling is that you generally cannot legislate morality. We have similar laws in place for selling tobacco and alcohol. They are generally not effective in preventing the spread of those ‘vices’ to underage youth. I do not see how a similar restriction on video games could be effective. (HH24)

Enforcement Issues – Example 43: Penny Arcade Family

The Penny Arcade family was referred by the Zelda family and also participated virtually. The father, “Tycho”, works for a manufacturer of gaming peripherals. He and his wife have two children, a 10-year-old daughter and a 6-year-old son. Tycho’s preferred method of participation was also via email and thus the processes mirrored that of the Zelda family.

When talking about games he wistfully recalled how he used to game more often than he does now, but he still finds time to do so when he can. It is a hobby he once shared with his wife, which he stated he missed doing. He enjoys sharing the hobby with his children, though they are restricted on the types of games they are allowed to play due to their young ages. The family games on multiple devices including all of the current and last generation consoles as well as tablets and the father’s computer. The picture below shows the family’s game space including a large flat screen television and speakers for surround sound. On the television is the pins screen for the logged in Xbox account.
Tycho [Father]: Who’s going to police all these stores/sites? In my humble opinion, it’s an enormous waste of resources. Not to mention the fact that they’d just buy it online or pirate it. (HH25)

**Enforcement Issues – Example 44: Bioshock Family**

The Bioshock family volunteered to participate after seeing the recruitment flyer online. The mother “Tenenbaum” was interviewed with her 9-year-old daughter “Elizabeth” in their upstairs apartment of a rambling apartment complex. The door to the apartment opened into the main living area with the television on the wall immediately to the right and a couch along the back wall facing it. The door to the master bedroom was to the right of the couch and the kitchen area was to the right of that. Though not seen upon first entering the home, it was easy to tell several pets lived there, which made sense after learning Elizabeth wanted to be a veterinarian when she grew up. This was also evident in many of the games she played that had
animal themes. Though several of the games seemed typical for a 9-year-old girl, she also enjoyed playing several M-rated titles and her parents had no issue with her doings so. The picture below shows the family game space with the Xbox in the living room. The Wii is in the daughter’s room and the PS4 is in the parent’s room, where she is allowed to go and play if she asks permission.

![Bioshock family game space](image)

*Figure 23. Bioshock family game space*

(Where the daughter bought a M-rated game digitally without her parents’ consent)

Tenenbaum [Mother]: Like, she bought *Saint’s Row* on the PS3.

Interviewer: How did that work out?

Tenenbaum: Well, my husband had already had it, played it, and beat it. Somebody thought that they could go to PSN [PlayStation Network] and download it, and I get a
notification on my phone— ‘Hey, money came out of your account.’ My husband gets an email— ‘Hey, thanks for downloading Saint’s Row 3.’ We go in there, and she’s like, ‘What?’ (HH20)

Other Anti-Law Reasons

The majority of interviewed parents were completely against a law. The reasons ranged from having issue with the government being involved in what should be a parent’s decision, to laws simply being unhelpful for effective parenting, to age being an arbitrary measurement of maturity.

Issue with Government Involvement – Example 45: Street Fighter Family

Cammy [Mother]: No I don’t think there needs [sic] to be laws that force me to parent differently. There’s enough of those laws already. [laughter] I have a different idea for many things, but we follow the law of the land on a lot of stuff.

Interviewer: So what would your opinion be then on government involvement in video game sales?

Cammy: Back off.

Interviewer: Yeah?

Cammy: Yeah. You don’t need your hand in that. You go manage a budget or get a senator somewhere, and let me worry about whether or not I’m going to buy a video game. (HH02)
Issue with Government Involvement – Example 46: Collector Family

Galaga [Mother]: The government should worry more about fixing political and financial issues more than trying to regulate something that should be protected under free speech and liberty. People in glass houses, or white houses for that matter, should not throw stones. [...] The government doesn't belong in my bedroom, my kitchen, my bathroom, or my classroom. The government should remain in its own halls. Yes, learn about it in school, discuss it, obey the laws of the land. But if I decide that little Johnny or little Suzy isn't mature enough for a puppy, that’s up to me. If I decide that little Johnny or little Suzy should have a puppy and the government says, ‘They are too young,’ I shouldn't have to deal with bureaucrats taking that decision away from me. If the power is taken away from parents, we might as well ship the children off to military boot camps. We should have the right to an informed choice, not legal barriers. (HH11)

Issue with Government Involvement – Example 47: Horde Family

Durotan [Father]: I think parents need to be more active in their evaluations and monitoring, and not rely on the government to regulate that, because that's just—that is a parent not wanting to take responsibility for what their child is into, so that later, that parent can blame somebody else for their failings.

Aggra [Mother]: Not that we're opinionated on that or anything. [...] It would take the decision of what I decide to let my son play out of my hands and give it to some arbitrary person who may or may not have children. (HH12)
Issue with Government Involvement – Example 48: StarCraft Family

Kerrigan [Mother]: I mean it’s nice to have guidelines to try to do that. But I think sometimes stuff is more guidelines than anything else. I don’t want other people telling me what my kids can and can’t play. I feel like between all of my friends that I have and other resources that are available online, it’s more my responsibility as a parent to keep track of what my kids are doing than to be told by the government [what they] should and shouldn’t be doing in a video game. (HH04)

Unhelpful to Parent – Example 49: Halo Family

Interviewer: Do you think such laws would be useful to you as a parent?

Master Chief [Father]: No. Because I would still have final say as to what my son plays in my house. (HH03)

Unhelpful to Parent – Example 50: Sega Family

Sonic [Stepfather]: No. If I need laws about video games to parent, then I don't think I'm doing a very good job as a parent. (HH06)

Age Arbitrary Measurement of Maturity – Example 51: MLP Family

Celestia [Mother]: I don’t think it’s necessary. I think that that would be overly restrictive because advisement is one thing. People vary in their level of maturity. There are 12-year-olds who I would trust with adult-rated things for violence or cussing, and there are 25-year-olds who I wouldn’t trust with anything adult. (HH07)
Age Arbitrary Measurement of Maturity – Example 52: Final Fantasy Family

Barret [Father]: Well, it wouldn’t be useful to me as a parent, because I work very hard to have an understanding of my children’s mental state, period. I know that my daughter’s level of maturity is much higher than the average bear. (HH08)

Age Arbitrary Measurement of Maturity – Example 53: Little Inferno Family

Weather Man [Father]: Yeah, their maturity and my belief that they have learned enough from us that they would make good choices—know that they aren’t going to play 40 hours of game play without us knowing anyways. But that I think I could trust them to make that initial choice, and maybe even want them to make the choice—I guess I never thought about that. Maybe wrong choices would be educational, as long as we caught it in time. (HH23)

Research Question 2: Conclusion

In conclusion, though there were interviewed parents who felt a law would be useful and helpful, those parents who did were also parents who were not familiar with the ESRB Ratings System beyond knowledge of its existence and knowing a few of the ratings. It might be possible if these parents had more knowledge of the ESRB Ratings System, how it worked, and how both retailers and developers used it, that they would feel more secure with the system in place rather than having a government organized one. Those interviewed parents who were neutral or did not feel it would be helpful saw enforcement issues, especially in the age of digital downloads, as a huge hurdle to any law being successful. Others wanted the government to stay out of their decision-making process, as these interviewed parents felt laws were
unneeded and that age was an arbitrary measurement of maturity. The overall consensus was that laws could not replace proper parenting, especially considering the needs of every family and even every child within each family were different.

Chapter Summary

This chapter discussed the study’s findings. Ethnographic descriptions of the participating families, along with quotes from their interviews, were provided to support them. The ethnographic details were also provided to show that though, statistically speaking, the study sample seems homogenous, they are actually quite varied in their family structures, lifestyles, approaches to parenting, and knowledge of gaming. The following chapter will provide discussion on how this study is able to add to the body of pre-existing parent-focused video game research, how it supported the creation of a model, as well as considerations for further research.
CHAPTER 6
CONCLUSION AND FUTURE RESEARCH

This Study in Relation to Previous Research

The next five sections will provide ways in which this study relates to research provided in the literature review. These sections are as follows: (1) parents and media ratings, (2) parental knowledge of the ESRB, (3) parental perceptions of the ESRB, (4) parents reviewing games prior to purchase, and (5) parental video game information needs.

Parents and Media Ratings

Bushman and Cantor's (2003) meta-analysis discussed which type of ratings system, evaluative or descriptive, parents preferred. Of the two, they found “parents strongly prefer content-based ratings and find them more useful than age-based ratings” (p. 135). The research for this study has confirmed these findings. Over half of the households reported that they used the descriptors over the letter rating when using the ESRB Ratings System. Some parents suggested that the letter ratings be done away with, and that the descriptors be made more prominent.

Example 1 – Street Fighter Family

Interviewer: Is there anything about the ratings system as it exists today, based on what you know of it, that you would change?

Ryu [Father]: Get rid of the [letter] rating. Just warn of violence, sexuality, gore, etc. [descriptors] without rating it and limiting access to the game. Warnings will inform
parents and allow for decisions to be made. Rating adds no real value to the decision (HH02)

Example 2 – Horde Family

Aggra [Mother]: I would like the descriptors more prominently displayed. Because T for Teen might be because of language—I'm okay with, cartoon violence—again okay with, smoking/drugs—not okay with, gore—not okay, adult situations—very subjective, or bloody violence—not okay. Could be any combination or all of them. (HH12)

Example 3 – Collector Family

Interviewer: How would you change it [the ratings system]?

Galaga [Mother]: More explanations of what content lies within. Most parents don’t care enough to look at what their kid is getting, and then find themselves surprised by the content later or just plainly never know, because they aren’t involved with games themselves. (HH11)

Though the original meta-analysis was conducted in 2003 on studies that occurred prior to that year, Bushman and Cantor’s (2003) conclusions still ring true over a decade later. While it is unlikely ratings systems will move away from letter ratings, this study recommends finding ways to make the letter ratings specifically content-based and not aged-based.

One way to do this would be to make the descriptors the most prominent part of the rating information on the marketing materials (including packaging, websites, and advertisements both print and digital) as it would likely be more beneficial to parents than the currently larger and more obvious age-based letter rating (see Appendix B for examples).
Another way to do so would be to explicitly state what the content has to entail in order to change from an E to a T or a T to an M rating.

This means if the difference between a T and an M rating is the percentage of expletives in the dialog, the length of time blood splatter is on the screen, or the ability to have romantic relationships in the game, then the ratings system should be transparent and specific about those things for the game in question rather than the general overview provided today. Giving the generic descriptions of a T rating stating it may “contain violence, suggestive themes, crude humor, minimal blood, simulated gambling and/or infrequent use of strong language” or an M rating saying it may “contain intense violence, blood and gore, sexual content and/or strong language” (Entertainment Software Rating Board, 2015) simply is not enough for parents to make an accurate decision on the content without doing further and sometimes extensive research. While the descriptors do help, knowing what exactly makes the difference between a T and an M, and why a game was rated one way rather than another, would go a long way toward instilling parental trust in the ratings system.

Parental Knowledge of the ESRB

In their research, Stroud and Chernin (2008) found, “many parents lacked crucial information about the system’s structure and content; 45 percent of parents did not know that the ESRB system is composed of both ratings and content descriptors” (p. 7). Similarly, research for this dissertation found that while all parents were aware the ratings system consisted of age ratings, and more than half (58%) were aware it had content descriptors, only a few were well-versed in either of them, and most had a hard time naming any. To clarify, an analysis of
household responses found, on average, parents could only name three of the six ratings. Only 27% of the 26 households could name four or more. No parent could name all six, including those parents who studied gaming or worked in the industry. As previously stated, this may not be an issue as every retail game has the rating listed on the box, so recognition, rather than recall may be more important in this case.

That said, this still shows there is a gap in the information the ESRB Ratings System provides and the knowledge parents actually have of it. Interestingly, several interviewed parents could name more descriptors than they could the actual ratings. This seems to show they naturally gravitate to the descriptive rather than the evaluative portion of the system as also demonstrated in the Parents and Media Ratings section above.

**Parental Perceptions of the ESRB**

Becker-Olsen and Norberg (2010) revealed in their study that “little research has emerged regarding parental perceptions and cognitive processing related to the ratings system” (p. 84). They suggested that future research should focus on "understanding actual usage, parental processing of the ratings information, and the system’s ability to adequately inform parents” (p. 84). While the purpose of this present study was not to ascertain cognitive processes regarding the ratings system, it did focus on understanding actual usage, as well as parental perception of it. Here are a few examples that provide context to parental usage and understanding.
Example 4 – Mario Kart Family

Yoshi [Mother]: [A]nything E is definitely okay. Sometimes it’s—what is it? E10? I can’t remember, but it’s, like, 10 is okay for [my oldest son (age 12)] to play, and actually [my youngest son (age 8)] does because I think most of the Lego ones are actually E10. E13 is where we start getting into stuff where I’m just like, I don’t understand why people let 13-year-olds play some of that stuff. So we won’t. We don’t usually let them play stuff above their level. Now the Star Wars Galactic Battle Grounds or Age of Mythology—one of those is a 13+, I think, but we started with him [oldest son]. He watched us play it for a while. Then we watched him play it for a while. (HH21)

Example 5 – StarCraft Family

Interviewer: What about game ratings?

Kerrigan [Mother]: Game ratings, I look at, but I don’t, I don’t know, sometimes I agree with the game ratings systems and sometimes I don’t agree with the game ratings systems.

Interviewer: Why is that?

Kerrigan: Because they’re kind of like movie ratings, and I feel like sometimes they get a little subjective. And what I think is okay for my kids [sons, ages 15 and 10] frequently tends to be different from what other people think is okay for their kids. My boys live with a lot more high fantasy [...] just based on movies and other things that we do, so I worry less. I know plenty of people who were flipping out that [my oldest] was playing World of Warcraft [at a young age] and, like, running around and killing things, and I’m
like—Well, he’s a giant cow [a playable race in the game called Tauren that resemble cows] and he’s killing things that look like Chocobos [reference to Final Fantasy animals that look like large birds], so I’ll worry about that later. I’m pretty sure we’re good.

[laughter] (HH04)

Example 6 – Bioshock Family

Interviewer: What do you know about the ratings system?

Tenenbaum [Mother]: That they want to give advisory to parents about what they believe is apparent for age levels.

Interviewer: Do you find it useful?

Tenenbaum: I don’t pay attention to it, as you can tell with what she [daughter, age 9] plays [several M-rated games]. We ask her, we tell her what it’s about, and if she goes into it and likes it, she can keep playing it. If she doesn’t like it, she’ll stop on her own.

(HH20)

Example 7 – Defias Family

Interviewer: Can you tell me what you know about the ratings system?

Van Cleef [Father]: I’m going to stumble through it. I’m aware of its basic purpose in order to keep appropriate content at appropriate age levels. Do I pay much attention to it? Not a chance.

Interviewer: Okay, why?

Van Cleef: It sort of varies by person, I think. [My daughter (age 12)] can handle some simulated violence and things like that that might fall into the more mature categories,
but at the same time, she thinks that Dr. Who is scary. [...] She’s in kind of a strange age bracket right now where she doesn’t really like the kiddie games, because they bore her, because they’re too immature, but the teen games are rated just outside of her age range. (HH18)

Example 8 – Penny Arcade Family

Interviewer: Concerning content, are you familiar with game ratings?

Tychus [Father]: Roughly. I think they’re in place for a reason. I don’t live my life by ‘em. I feel that playing the game with them or researching the game’s content is a better method. The labels help guide, I suppose. (HH26)

In summary, these examples show that most of the 26 households (88%) did not completely agree with the ratings given by the ESRB. Half of the 26 households stated they looked at them only as suggestions or guidelines. Most (88%) used the ratings system to assess the need for further research, indicating that it, alone, was not adequate enough to fulfill their information needs. The question is, does it need to be? If it prompts parents to do further research, and this study suggests it does, that may be enough, given the multitude of other sources available and used. Additionally, this research revealed that every family and child’s needs are different. Therefore, a single information system, such as the ESRB Ratings System, may never be able to completely fulfill all of them. If it provides a place to start, that may be all it needs to do. That said, the ESRB should strive to understand these are the ways parents use it, and then position itself as a place to start, which according to their website, seems to be the direction they are headed.
Parents Reviewing Games Prior to Purchase

Stroud and Chernin (2008) found that less than half of the 135 surveyed parents in their study agreed or strongly agreed that the system was accurate, only 18% viewed games prior to purchasing them, and only 19% read reviews (pp. 7-8). Though qualitative studies cannot be directly compared to quantitative studies, the research for this current study did assess the same types of behaviors.

In this current study, only 12% of the 26 households agreed with the ratings system, which is a lower percentage than Stroud and Chernin (2008) found. Additionally, this study revealed 92% of the 26 households reviewed games prior to purchasing them, 81% read community reviews, 42% read professional reviews, and 62% watched videos of gameplay, which are all much higher percentages than Stroud and Chernin (2008) found. That said, the differences in results may be due to the differences in methodologies between the two studies more than anything else.

Parental Video Game Information Needs

Kutner et al. (2008) suggested, that:

More study is needed regarding specific information parents would like to receive to make judgments about appropriate games for their children, where they would like to receive this information (e.g., at point of sale, on the Internet), and whom they view as credible sources of information. (Kutner et al., 2008, p. 93)

The previous chapter discussed the parameters parents use to assess content. In general, they have very specific criteria they are judging the content against. If it crosses any of those lines, which are different for every family and even children within the same family, they determine it is inappropriate.
The research for this current study also sought to learn what sources parents found credible or trustworthy and why. Nearly two-thirds specified information sources should be peer reviewed, documented, cited, fact-checked, or verified. A little over a quarter specifically talked about the source itself, including its reputation, its popularity, the personalities of the reporters who contribute to it, and the longevity of its existence as important to establishing credibility. The following examples provide context to these two different types of credibility.

**Documented Sources Examples**

- Cammy: Anything that was from a university I tended to pay more attention to. Anything that was written for entertainment magazine, I kind of was like—Where’d you get your sources? (HH02)

- Gaia: Peer review or publications/people that I trust. I need to know what experts in the field say about any topic—science, health, education, etc. (HH06)

- Celestia: The source must be known to fact-check and to vet information for credibility. I don’t want to waste time researching/tracking down/verifying most information in articles. (HH07)

- Barret: Documentation. When someone can point to sources of documentation that back up their information, they are more reliable. (HH08)
• Lydia: A well-researched documented source is more credible. Or the original source—first-hand information. Documented source means that I can follow up and double-check the information. (HH13)

• Jaina: Original sources, rather than second-hand reports, research, fact-checking, cites. (HH14)

• Kerbal: Credibility of sources, depth of research and cross-linking, peer reviewed if possible. I guess I am kinda old school. (HH17)

Source Reputation Examples

• Ryu: Research, reputation, logical argument, presentation. If I can cross-reference the source and it is laid out in an organized, logical way, I relate to it better. I also believe a source's reputation for accuracy adds credibility to the source. (HH02)

• Kerrigan: Length of existence and acceptance by others as a credible source. When things are from sources that are new—there's no history or track record for them being reliable or accurate—I am less likely to trust their information. I am also more likely to trust a source that my friends are using if I feel that they are knowledgeable about the topic. (HH04)

• Pip: Lack of monetary recompense for reviews. If a reviewer works for a magazine that is paid for ad space by the company making games, the chances are high that they will give favorable reviews. (HH05)
• Mick: History of good reporting where personalities on the sites are more than just bylines, and the reporters have actual identifiable personalities. This helps gauge the person's actual involvedness and whether their uses and preferences would be similar to mine. (HH10)

• Arthas: History, intuition, ‘tribal’ sentiment. [...] History—if a source has been providing information for some time, and I have found that information useful in the past, I am more likely to trust it. Intuition—I guess this could also be called experience...language and grammar usage cues, word choice cues, does the source ‘feel’ credible or similar to past sources that were credible? ‘Tribal’ Sentiment—do other people whose opinion I trust believe this source to be credible? (HH14)

• Tychus: The brand, generally. News brands generally have a track record of accuracy. (HH26)

In summary, many of the parents in this study do care about the credibility of the sources they use to ascertain video game content appropriateness for their children, though they may have different ways they consider something credible. The two main criteria are source documentation and reputation of sources and their contributors.

Relation to Previous Research Conclusion

In conclusion, though this study sought to answer specific research questions, it was also able to add to the current body of research concerning parents and video games with valuable new information or confirmation of previous findings. These contributions are as
follows: Interviewed parents in this study still preferred descriptive or content-based ratings to evaluative or age-based ratings. Even if interviewed parents claimed they used the ESRB, most knew relatively little about it or how it works. The majority of interviewed parents perceived the ESRB only as a starting place for content assessment, and thus, it was not the only method used to bridge their knowledge gaps. Lastly, credibility was important to interviewed parents and they based their assessment of information sources on their documentation, as well as reputation of the sources and their contributors.

A Model on Parental Information Behavior

Part of the purpose of this study was to use grounded theory methods to attempt to construct a new theory, or in this case, a model, based on the behavior, thoughts, feelings, and opinions expressed by the 35 parents interviewed. These parents provided detailed information on their children’s gaming history, current gaming habits, and the ways they as parents interacted with information on behalf of their children.

Several patterns surfaced in the interviews and concurrent analysis as to the ways a parent’s interaction with information changed as their children aged as well as with the addition of subsequent children. This model is built on these patterns. In addition to a discussion of the main components, this section provides a visual graphic of the model, examples to support it, and makes recommendations for further research to test it. Though this model is based on research concerning assessment of game content, it should not be considered limited to gaming information.
The Effect of Parent-Child Interaction on Parental Information Behavior

Figure 24. The effect of parent-child interaction on parental information behavior

The model above includes four separate pieces for consideration including a timeline, age-based stages, purpose of those stages, and how parents interact with information on behalf of their children during those stages. The horizontal line through the middle with ages 0, 4, 9, 14, and 18, represents the timeline. The four inner consecutive touching circles bridging the ages represent the stages. The outer intersecting circles encompassing the stages represent their purpose. The outer squares containing the entire model and dividing it in half represent how the parent interacts with information on behalf of their child. Each of these elements is discussed more in depth below.
Stage 1

Stage 1 represents the child from birth to age 4, and includes what the U.S. currently considers infant, toddler, and preschool years. Though this study focused on parents of children between the ages of 4 and 17, the interviewed parents discussed their children’s history, providing information for this stage. It is within this first stage that most children began playing video games with 3.5-years-old as the average age to start.

In this stage, the parent is interacting with information on behalf of their child in order to learn how to fulfill their child’s information needs. Due to the young age of the child, which influences reading level and comprehension of information, the parent does the majority of interaction with information for the child (outer square). When the child moves from infant to toddler and then to preschooler, teaching (intersecting outer circle) also becomes relevant as the child is first instructed, whether formally or informally, in identifying and interacting with his or her immediate world. The information interactions at this stage tend to have active parental monitoring and observation of the child and the child interacts on closed systems. Lastly, all decisions are firmly made by parent for the child with little to no discussion with the child.

In the example below, the mother allows her 4-year-old son to play a video game rated E10, which, according to the ESRB Ratings System, is meant for children 10 and older. Before downloading the game, she used the information provided by the PlayStation Network including content description and a preview of the game play to bridge her knowledge gap and
make sense of the content to ascertain its content appropriateness. She used this additional information as she felt the E10 ESRB Rating could not bridge her knowledge gap alone.

After making sense of the content and determining its appropriateness, she actively observed her child playing the game by also engaging in play. As they engaged in play together, the mother talked the child through his interactions in game instructing him how to interact with the game environment. She did this not just on an educational level on how to play the game, but also by discussing things like hitting innocent people versus hitting monsters. Further, she made sure to point out her youngest gets absolutely no choice in the type of game he is allowed to play by stating content such as “blood” is just “off the table for him”.

Additionally, this is a closed game so the child cannot access the Internet or other people outside his immediate environment while playing it.

Example 1 – Mario Bros Family

Peach [Mother]: It was that one, what is that one called that we just bought the other day with the germs

Interviewer: So you bought it on PSN [PlayStation Network]?

Peach: Yes

Interviewer: It was a downloaded game?

Peach: Yes, we don’t really buy physical games. Not really.

Interviewer: Did you know anything about the game before you bought it?

Peach: We looked at the information and we looked at the rating. You know we always do that. If they’ve got a little preview or whatever we’ll do that just to be sure.
Interviewer: And that’s all on PSN?

Peach: Yeah

Interviewer: So everything you’re looking at for the game is just what’s on there?

Peach: Yeah, just to make sure it’s not going to be inappropriate for him [youngest son – age 4]. And you know sometimes those ratings I think - well like Lego, I think it’s 10+.

Obviously we don’t always go by that.

Interviewer: So talk to me about that.

Peach: So we just we talk to him. You know like for example we’re playing Marvel [Lego] and I’m in one of the vehicles or whatever and driving and I’m like running over people and they’re falling down. So I’m like – ‘Oh I’m so sorry! We don’t run over people! That’s not nice!’ He’ll say ‘I want to punch this guy’, he’s using Hulk, and I’m like – ‘No! We don’t punch the innocent people. We only punch the monsters.’ So we have conversations about things. He doesn’t do anything. Obviously he doesn’t – I don’t allow anything that is blood, that is just off the table for him. Now [my oldest son – age 8] sometimes will play when [my youngest] isn’t around or I’ll have him go in their room because he has an iPad. [HH16]

The following will put this exchange in perspective of the model. First, the mother interacts with the information on the PlayStation Network to learn about the game in order to bridge her knowledge gap. Second, she actively observes her child’s interaction with the game using it to teach her child not only in how to play the game but also in how to interact with it and by proxy with others. Third, the game is a closed system in that it does not allow access to
the Internet and others outside the home are not able to join in the game. Fourth, while the mother initially communicated with the child to learn that he was interested in the game, which started this interaction behavior, the child had no direct influence on the decision made by the parent.

**Stage 2**

Stage 2 represents the child from ages 4 to 9, or the beginning of school until about third or fourth grade. The outer circle signifies the shift in focus of the second stage. It is this stage where there is a transferal from parent interacting with information solely to learn how to fulfill their child's information needs to also focusing on teaching their child how to fulfill their own information needs now that their child can learn to do so. Additionally, the content they allow their child to interact with becomes more open in that their child tends to start having direct access to the Internet and online based games or applications, usually due to school requirements.

This stage is where parents tend to move from active monitoring and observation to a combination of using active and passive methods. Parents do this by putting specific requirements on the content with which their children are allowed to interact. Then they either make sure the child only interacts with this content while being directly observed by their parents, only interacts with it in public spaces in peripheral view of their parents, or parents allow the child to interact with it in their own space, but check on the child’s interactions periodically to ensure the child is following the rules they set forth. Decisions are still made for
the child, but this stage may start to see limited discussion between parent and child concerning what decisions are being made and why.

What is particularly interesting about this stage, and the next, is how, or whether, the parent changes from the interaction with information “for child” to “with child” perspective. This change greatly influences both the parent’s and their child’s interaction with information, and, consequently, any restrictions placed on their child as a result. This is further explained in stage three. It is important to understand that, though this model presents clean breaks between the stages, the ages can easily deviate by a year or more in either direction depending on the needs of the child, the family structure, and his or her parents.

In the example below, the mother recollects allowing her oldest to play *World of Warcraft* with her and her husband while he was still young (between ages 6 and 9). She talks about how she was wary at first, but then enjoyed the interaction in game with her son. She then explains she used it as a teaching opportunity to teach him how to interact in the game with other players and how she has yet to be able to do this with her other two children (now ages 6 and 9). She explains she has to do that in order to teach them the etiquette of interacting online.

**Example 2 – Street Fighter Family**

Cammy [Mother]: [My oldest] even played *WoW* [World of Warcraft] with us for a little while. That was fun. I really enjoyed having [him play with us], I didn’t think I would, but having him along with us it became a family activity. To have all three of us [mother, father, and oldest son] playing *WoW* was so much fun. And we got to control and teach
him how to interact with the world. The other two [sons] haven’t been on the MMOGs yet. So, we’d have to go through that, you know. All the rules and what’s polite, what’s not. [HH02]

The following will outline how this works with the model. First, the parents had already bridged their knowledge gap of the game content and made sense of its appropriateness for their child by first being players themselves. Second, though the game in question was an online one, the parents actively monitored their child’s interaction with the game and he was only allowed to play the game with them. Third, the parents used the interactions within the game to teach the child how to interact with strangers online. Fourth, the child influenced his parents in asking if he could play the game with them and showing he could do so responsibly, thus it directly affected his parents’ decision to first allow him to play and then to continue to allow him to do so.

Lastly, this child’s younger brothers are now in Stage Two and Stage Three, as in the same age as he was or older than him when he started playing World of Warcraft. However, his brothers have not yet been able to experience the same interactions as his parents allowed him. Thus, they are not yet allowed to play online games even though their brother is and was allowed to when he was their age or younger. Even though the parents had a positive experience with their first son and saw great benefit to allowing him to learn through it, their second and third children have different abilities and needs, so they are granted different opportunities than their brother had.
For example, as discussed in Chapter 5 in the Special Needs section, the middle child in this family was allowed to play an M-rated game, much younger than his older brother was, due to its ability to help him with this hand-eye coordination disorder. This reinforces the idea laid out in Chapter 1 where different children have different information needs and different influences on their parents, even in the same family. It also supports the point made in Chapter 5 that a game rating system may never be able to completely meet the needs of all families or even all of the children in a single family as they can be very diverse.

The next example shows how a single mother allows her son (age 9) to interact with an online educational game for his homework on his own and passively monitors his interactions by checking in on him as he is doing so. When she catches him doing things she does not approve of, she takes action and discusses those actions with him so he understands why.

**Example 3 – Dragon Age Family**

Morrigan [Mother]: [I] talk to him […] and get him to pay attention to his own feelings and wants and desires. There was this one time he, because the math lab is with games he plays on his computer – since it is on his computer, he can have another tab open where he’s watching a YouTube video of Tom and Jerry while he’s supposed to be doing his math homework.

This has happened. The first time I come in and I catch him doing it, I’m like you’re not supposed to be doing that. Go ahead and close that tab and get back to your math homework. Then the next time I come in and he’s doing it. I’m like ‘Well OK, I’m going to add another 5 minutes, because I know that you haven’t been paying attention.’ The
third time it’s like, ‘Alright, I’m going to sit here and watch you and you’re going to finish your math homework and then I’m taking your laptop away for 24 hours.’ And that was devastating to him, but I have not caught him doing that ever again. [...] I sat him down and was like ‘Honey, I know you’re upset [but] this is not an appropriate way to handle this.’ So we had a talk about that. [HH09]

To put this in perspective of the model, first the mother set the requirements for her son to be allowed to interact on the computer to complete his online math homework without her active observation. Second, she passively checked on her child to ensure he was following the rules she set forth. Third, she discussed with her child the consequences of his actions on his ability to interact with the system on his own without active supervision. Forth, once the child revealed through his subsequent interactions that he could not follow her requirements, she actively observed him until he completed the work he needed to do and then she took away his access to the system. Lastly, at each step the mother discussed with the son what he did and what the consequences of those actions were and how his interactions influenced her decision to ultimately take away his access.

Stage 3

Stage 3 represents the child from ages 9 to 14, or third or fourth grade until high school. This stage is significant for multiple reasons. First, it is the age range parents were most concerned with when it came to their child’s interactions with information because those interactions start to become more independent as the child now has a firm grasp on how to fulfill their own information needs and needs little to no help in doing so. This means children in
this stage generally came to their parents with content they wanted to interact with rather than
the other way around. Second, it is also during this stage that the child begins to have less
direct monitoring and observation and has more passive than active monitoring and
observation (if any at all).

Third, parents start to become more concerned with understanding how their child
interacts with information and how that information affects their child. Thus, there tends to be
more discussion with the child in this stage on how the child interacts with information and
how those interactions influence the parents’ decisions on what they allow their child to do.
Fourth, though in this stage the child can directly influence their parents’ decisions, and there is
discussion between the parents and child as to what decisions are being made and why,
parents tended to waver between making decisions for their child to making them with their child.

Throughout this study parents demonstrated the ability to cross over from the “for”
stages to the “with” stages (signified by the encompassing squares) at varying degrees. Those
interviewed parents who still interacted with information “for” their children in this age bracket
had higher levels of restrictions both in time and content than those who interacted “with”
their children. Additionally, those parents who interacted “with” their children expressed far
more understanding (outer circle) of how information affected their children than those who
interacted “for” them.

When making decisions on behalf of their children, interviewed parents who were able
to fully transition to the “with” child stages tended to more often than not include their
children in their decision-making processes. For example, they would bridge their knowledge gap of video games their children were interested in with their children and then make sense of the content with their children in order to determine their child’s level of comfort and thus the games appropriateness. Parents who had multiple children, and had already gone through this stage with older siblings, were more likely to move from the “for” stages to the “with” stages faster than those who were going through this process for the first time.

Second, this stage is important because it is when most children enter puberty. This is likely what influenced the parental concern around sexual content as demonstrated in Chapter Five. In this study, only those parents with children between the ages of 9 and 14 stated issue with sexual content. Those with their oldest children under the age of 9 claimed the games their children interacted with were rarely adult in nature (if they did play M-rated games, violence was the focus), and those with children 15 and over had few to no restrictions placed on them.

In example 4 below, the father uses remote means to passively monitor his daughter’s (age 12) interactions online and makes the decision for her on a T-rated game she was interested in playing. Though he tells her why he made the decision, she has little influence over it. This is in stark contrast to example five where the father made the decision with his son (age 12) to allow him to play an M-rated game, which gave his son more influence and less restrictions even though he is the same age.
Example 4 – Defias Family [Wavering between ‘for’ child and ‘with’ child]

Interviewer: Any specific game that you can think of off the top of your head that you would not allow her to play other than the games you've already mentioned?

Van Cleef [Father]: Oh I saw, what was the video you were watching the other day?

Vanessa [Daughter – Age 12]: Oh Life is Strange?

Van Cleef: Yeah that’s not going to happen.

Vanessa: I can’t watch it?

Interviewer: So what is that?

Van Cleef: Every single - it’s basically one of those games where you are presented with 3 choices and you choose one and what happens in the game is based on those choices. Every single choice just involves somebody belting out a string of expletives and insults.

Interviewer: So language and not just the words they’re using, but the content of what they’re saying?

Van Cleef: Yeah.

Vanessa: Can I still watch the YouTube videos?

Van Cleef: No you cannot.

Vanessa: [pouts]

Interviewer: How do you find out about the sites that she goes to and how do you ascertain their content?

Van Cleef: I walk by and stick my head in.

Interviewer: So how do you supervise her?
Van Cleef: That information is confidential while she is in the room.

Interviewer: Ok, no problem. So you are aware of the sites she goes to and you are aware of what she’s doing online and you are able to supervise her in some way?

Van Cleef: Yep

Vanessa: I understand you can see what I’m watching. You can tell her that.

Van Cleef: [to daughter] I work in IT and can snoop on what you do. Enough said.

Concerning the model, first the father passively remote monitors his daughter’s independent interactions online and his daughter is aware of this. Second, his daughter is interested in a video game and has been watching online videos of it to fulfill her information needs that he too has watched, thus helping him bridge his knowledge gap, which has influenced how he made sense of the game content and his opinion of it. Third, though not present in this text, he revealed he understands how such a game influences her behavior, especially in terms of the way she talks and interact with others. Fourth, though it is her having watched the videos on the game that influenced his decision, she does not have any further influence on the decision made for her by her father. This results in a restriction being placed on her not only not being allowed to play the game, but also not being allowed to watch the videos of the game.

In the following example, the son went to his father with a game he wanted to play and put forth a good argument as to why he should be able to play it. The father listened to the argument, bridged his knowledge gap of the game with this son, then made sense of the
content with his son to determine its appropriateness. The father eventually allowed his son to play it even though it was rated, according to the ESRB Ratings System, two levels higher than games his son should be allowed to play.

Example 5 – Alliance Family [Interacting ‘with’ child]

Arthas [Father]: On the being convinced thing, too, I think that because we've played games for so long and we've had our own slew of awful edutainment that we're not sucked into the edutainment games, but it easier for us to be convinced that regular games, so to speak, have a educational value. So like he talked us into Assassins Creed, because –

Uther [Son – age 12]: It has historical factors.

Arthas: It was a relatively historically accurate portrayal of –

Uther: The times.

Arthas: A version of Italy, I guess. I couldn't fact check any of it, but everything that I read after he [his son] said that it was semi-educational, that they did a pretty good job of researching the environment and the culture and what Italy was like at that time. And so like, ‘Okay, it's not Oregon Trail, but I can see where you might learn some things in passing.’ [HH14]

In context of the model, first the father listens to his son to understand why his son wants to play the game and why his son thinks he should be allowed to do so. Second, he and his son investigate the game to find out there is some historical accuracy to the game which was reportedly well researched by the game developer. Third, the father made sense of the
content with his son determining there could be some passive educational qualities to the game. Fourth, his son directly influenced the decision his father made and his father made the decision with him. Thus he had the restriction of the rating lifted and he was allowed to play it.

**Stage 4**

Stage 4 represents the child from ages 14 to 18, or for the majority (if not all) of their high school career. In this stage, children had the most solo interaction with minimal active or passive monitoring and observation. This meant parents had the least amount of influence or control over the information with which their children interacted and therefore their children made most of their information behavior decisions on their own. As a result, this group had fewer time or content restrictions.

This stage is also signified by the reduction of parents interacting with information to teach their children how to fulfill their own information needs (intersecting outer circle), and moving toward simply trying to understand (final outer circle) the ways their children interact with information and how that information affects them. The ability for the parent to transition to this stage effortlessly may allow for easier and more beneficial interactions with their children concerning their children’s information behavior. Though parents still made decisions concerning their children, most did so with their children and therefore children in this stage had the most amount of influence on those decisions.

Of note, even at this stage where interviewed parents had the least control, most found the barriers of video game cost (upwards of $70 for new games) and ability to buy video games (access to a credit card or transportation) were more burdensome to their children gaining
access to what they felt would be inappropriate for them than the industry self-regulated age restriction was or what any potential legislation might entail.

In the example below, the mother makes the decision with her 15-year-old son to allow him to play Grand Theft Auto, an M-rated game recommended to those 17 or older. Though she allows him to play it, she uses passive methods to monitor and observe his interactions with the game to understand how it affects him. When it gets to a point to where it is affecting him poorly, she makes the decision to restrict his time in game by removing his access to it.

Example 6 – StarCraft Family

Interviewer: Where would you draw the line for [your oldest]?

Kerrigan: That’s hard to say because he gets a really really long leash. I think, like I’ve walked in and I’ve caught him doing stuff sometimes and I’m like that’s not ok - you need to not be doing that. Or I’ll hear him, he curses a lot when he plays. And that’s a bigger problem because the boys share a wall between their bedrooms so a lot of times I go in and I’m just like - you’re done! Like you’ve got 30 seconds to get out of that game and then you have to hand me your wifi stick.

Interviewer: How does he usually react to that?

Kerrigan: Oh, he’s really pissed. It goes over like a lead brick.

Interviewer: What was the last game you purchased for the house?

Kerrigan: Ooo for the house?

Interviewer: Or a particular child.
Kerrigan: I think the last thing I bought was, well I just bought GTA [Grand Theft Auto] for [my oldest]. That’s the last game that I actually bought.

Interviewer: And he has that on the PC?

Kerrigan: Yes

Interviewer: And where did you buy that?

Kerrigan: We bought it online. SO, just downloadable content.

Interviewer: And that was just a gift since it just came out for PC?

Kerrigan: It was half and half. He had to pay for part of it. So he actually gave me money for part of it and then I paid for the rest of it.

Interviewer: What did you know about Grand Theft Auto before you bought it?

Kerrigan: That I think it’s a piece of junk and I absolutely hate it. [laughter]

Interviewer: But you’re ok with him playing it?

Kerrigan: Yeah [HH04]

To show how this works with the model, first the parent listens to her son’s request to play the game. Second, she has already bridged her knowledge gap of the game and made sense of its content and though she does not like it, she permitted her son to influence her decision to allow him to play it by him offering to pay for part of it. This addresses the aforementioned barrier to access, which made him work for it until he could afford it.

Third, while her son is allowed to play an M-rated game that she does not necessarily approve of and she readily admits he gets a long leash when interacting with information on his own, she still monitors his interactions with it even if she does so only passively. This
monitoring is not to grant or deny access on a content basis; rather, it allows her to understand when he gets to a point in his interaction with it that it is too much for him to deal with. This enables her with the ability to make the decision to place a time restriction on access to it until he can regain his composure and begin to interact with it again on a less emotional level.

Below, the final example shows how a father and daughter bridged their knowledge gap on a video game together, made sense of its content together, and then made the decision to get the game together. Though he did actively observe her playing it, it was not to restrict her interactions with it; rather, it was because he was interested in it after learning about it with her and he wanted to see the story play out.

Example 7 – Zelda Family

Link [Father]: For example, my daughter [age 16] heard about the storyline in The Last of Us and really wanted to play the game. We looked into it together, watched several videos of gameplay together and found out what made it an M. In the end we got the game and, for the most part I watched her play the game through... not because I was ‘supervising her’, but mostly because it's a really cool story. [HH24]

Following the model, first the father listened to his daughter’s request to play the game. Second, they learn about the game together and he makes the decision with her to allow her to play it. Third, his observation of her playing the game was not to monitor her interacting with it, but to enjoy her interactions with her.
Model Summary

This model was designed to show how interconnected parent-child interactions are with parental information behavior and the effects of this interconnectedness on it. To put it simply, parental information behavior cannot exist without this interconnectedness and it is because of this interconnectedness that it needs to exist as well as persist and change over time.

The examples were provided to show how parent-child interactions affect parental behavior on a multitude of levels including information, communication, and decision-making strategies. Additionally, they were to show how this behavior both changes and becomes more complex as children age. Thus, a ratings system that provides the same type of information for every level at every stage may lose the ability to successfully help the parent as their child ages and they reach the later stages, which is arguably when both parents and children need it most.

By understanding the model’s stages, when they occur, and the reasons for them, those providing information for parents may be able to find ways to help guide parents from one stage to another and may find ways to assist children in the process as well. Specifically concerning the ESRB Ratings System, this model hints that providing more detailed information for higher rated games would potentially benefit parents and their children more than what is currently in place today. If the ESRB is unable to provide additional in-depth information, then it is recommended that they should explain the limitations of their information system and make suggestions to both parents and children for further research.

The major take-away is that children can greatly affect how and why their parents interact with information and it goes well beyond age in the sense of restricting material based
on age alone, especially the age ratings that are in place today. Finding ways to educate and assist both parent and child, to provide information in such a way that both can interact with it, and each other, is key to successful family information behavior and any information system that wants to support it.

**Study Summation**

This study sought to learn more about parental information behavior regarding the ways parents assess content appropriateness of video games for their children. It started by looking at how laws meant to help parents protect their children from certain types of video games were struck down across the country up to and including the Supreme Court of the United States. It then used the recommendation by the SCOTUS for parents to use the ESRB Ratings System as a reason to investigate the ratings system further. In learning more about the ratings system, questions surfaced as to whether or not parents used it and if they did, what, if anything else, did they use and how did they do so?

This situated the study firmly in sense-making and trying to understand how parents bridge their knowledge gaps on video game content from a social informatics perspective. To that end, it sought to learn what parents were trying to construct rather than what the systems of today, be they self-regulatory or potential legislation, were trying to construct for them. Using qualitative methods to better understand and assess information behavior of parents directly from the source, the study progressed from what was initially an attempt to understand the effects of potential gaming legislation and video game self-regulation on
parents to learning how the interconnectedness of parent-child interactions directly affect parental information behavior.

To that end, this study found that parents do use the ESRB Ratings System, though most use it as a guideline to determine whether they should conduct more research, rather than as the only source upon which to make their decisions. It revealed that while a few of the interviewed parents may not have issue with a law concerning video games, most did and they felt it would fail due to enforcement issues. Additionally, many of the interviewed parents felt it was not something they needed and they strongly cautioned the government to leave the parenting to parents.

This research also added new information to address gaps in previous studies or confirmed their findings. These include the following. Few of the interviewed parents knew much about the ESRB Ratings System, including those who base all of their decisions on it. (However, this may not be as much of an issue as recognition of ratings may be more important than being able to recall them and this study did not test recognition, only recall.) Interviewed parents preferred a descriptive ratings system to an evaluative one, meaning they favored the descriptors to the age ratings. Most interviewed parents perceived the ESRB Ratings System as a guideline rather than a rule. The majority of interviewed parents performed some sort of assessment of game content prior to purchasing a game, even if it was only using the ratings system. When evaluating game content, interviewed parents had a specific set of criteria they judged against. Additionally, they had concerns as to the credibility of the information they used to judge the content, and had specific criteria they utilized to evaluate content sources,
including assessing documentation and reputation. Lastly, this study provided the basis for the creation of a model on the effect of parent-child interactions on parental information behavior. This model described how parents go through four different stages in the way they interact with information on behalf of their children as their children age. Following is the summation of these stages.

Stage 1 (child, age 0 to 4) the parent interacts with information on behalf of their children in order to learn how to fulfill their children’s information needs and how to teach their children about the world around them. They actively monitor and observe their children and they make decisions for their children with little to no input from them. In stage 2 (child, 4 to 9) the parent moves from learning how to fulfill their children’s information needs to teaching their children how to fulfill their own. They actively to passively monitor and observe their children’s interactions with information and make decisions for their children with some discussion with their children and but little input from them.

Stage 3 (child, 9 to 14) the parent moves from interacting with information for their children to fulfill their children’s information needs to understanding how their children interact with information and with which information they want to interact. They passively to remotely monitor and observe their children’s interactions with information. They make decisions with their children, have more discussion with them, and accept more input from them. Stage 4 (child, 14 to 18) the parent focuses on understanding what information their children want to independently interact with and how that interaction affects them. They make decisions with their children, discuss these decisions in depth with them, and allow their
children to make decisions they may not agree with, but have no problem with their children making them for themselves as they continue to monitor and observe their children in ways that work best for them.

Recommendations for Further Research

Due to the small pool of participants, their homogeneity, and the qualitative nature of the research, this study provides ample prospects for further research opportunities. These include first, extending the qualitative study to participants in different locations with different ethnic and economic backgrounds which would be beneficial for testing how these conditions affect parental information behavior. Second, conducting a quantitative study using a survey to assess a much larger, more distributed, and less homogenous, pool of participants would help generalize and test these findings. This study initially included the creation of a survey; however it was not used due to the nature of the qualitative portion.

Thirdly, the model presented in this study should be tested, built upon, and modified as data are gathered that either supports or contradicts it. Finally, people who design information systems, such as the ESRB Ratings System, can attempt to base their system development process on the model’s stages. As a part of the development and implementation, they can test whether it assists users in their adoption and understanding of newly designed information systems targeted to parents and their children as they both progress through the stages.

Conclusion

The rich data gathered in the semi-structured open-ended interviews conducted for this study allowed it to progress from a study about the effects of potential video game legislation
and video game industry self-regulation on parental information behavior to one on how the interconnectedness of parents and children can have huge effects on how they interact with information, each other, and the world around them. There is no doubt that the model created as a result of the analysis of this data set will not fit every type of family information behavior. If this study did anything, it pointed out that families vary wildly from one another and this variance even applies to children within the same family.

The hope is that the model can help provide those who want to assist parents in constructing their own ways of fulfilling their information needs with a place to start from and a method of doing so, while considering the influence and needs of children on their parents and the interconnectedness between these two groups. Altogether, this study shows it would be impossible to build a successful information system for parents without also considering the influence of their children and the interaction between the two of them, which changes as the children age.
APPENDIX A

SEMI-STRUCTURED INTERVIEW QUESTIONS
Intro

Describe the subject matter, interview process, provide informed consent, explain confidentiality, explain interview can be stopped at any time for any reason, explain a second interview may be requested and ask if that is okay. Ask if it is okay to audio and/or video record the interview.

1. Tell me about yourself and your household.

   Explore:
   
   • Demographics, including ages, relationships, genders, socio-economic status, work experiences, education levels, living situations (for example, in the case of split custody of children/stepchildren).

2. How would you define a video game?

   Explore:
   
   • What led the parent/s to this definition?
   
   • Ask about different types of games and what the parent/s thinks of them including poker, solitaire, Facebook games, flash games, console games, computer games, mobile games, handheld device games, learning games, etc.

3. Tell me about your experience with video games

   Explore:
   
   • What are the parent/s’ own gaming experiences including whether the parent plays games now and/or did as a child? When was the last time if ever they played a video game?
• What are the parent/s’ feelings toward video games in general and why?
• What is the parent’s preferred type of video games - if any and why?
• Does this experience in any way affect the games their children play today?

4. Tell me about your child(ren)’s experience with video games

   Explore:

   • How young was the child when he/she first started playing games?
   • What types of games did the child start with? How have those changed? Why did they change?
   • Does the parent play with the child(ren)?
   • Does the parent watch the child(ren) play?
   • Does the parent place any limits on the child(ren)’s gaming habits? If so - what are those limits and why were they imposed? If not, why not?
   • Does the parent let other child(ren) play games with their child(ren) in the home?
   • Does the parent have rules about what games their child(ren) can play at other people’s homes?
   • Does the parent/s trust their child(ren) to make their own decisions when choosing what video games to play? Why or why not?
   • If there are children of different ages in the home, does that affect what games are purchased/played on what devices and when they are played?

5. Describe the last time your child(ren) played a video game

   Explore:
• What was the game?
• What was it played on (i.e. console, mobile device, hand-held device, computer)?
• What time of day was it?
• What day of the week was it?
• Why was that game chosen over others?
• What does the parent know of the game and what are their opinions of it?
• How does the parent know what their child(ren) do in the game?
• When/where/how did the parent learn what they know?
• What does the parent think of that knowledge source? Do they feel it’s trustworthy?
• How did the parent learn of that knowledge source?
• Does the parent consult it regularly? Why or why not?

6. Tell me about the types of game devices used in your household

   Explore:
• Who plays on what devices and why those devices in particular?
• Where are those devices located?
• Why are they located there?
• Does any particular device belong to any specific family member? Why? How did that come about?
• Do you own gaming peripherals such as cameras, microphones, instruments, special controllers, special keyboards, mice, mouse pads, headphones, etc?
• Why or why not?
7. Tell me about the types of game services, if any, used in your household?

   Explore:

   • Playstation Online, Xbox Live, Steam, Origin, Gamefly

   • Why are these services used?

   • How often are they used?

   • Does the child(ren) use them? Why or why not?

   • If so, is there parental supervision? Why or why not?

   • If there is supervision, how is it implemented?

8. Describe the last time a game was purchased for your household

   Explore:

   • What game was it?

   • Who bought the game?

   • Why was it purchased (i.e. birthday, holiday, just because)?

   • Where it was purchased?

   • When it was purchased?

   • What were the circumstances of the purchase (i.e. was the child / were the children present? did that have an effect on the purchase process)?

   • What device was it purchased for?

   • What, if anything, was known about the game before it’s purchased?

   • When / where / how did they learn what they knew?

   • When will they be purchasing their next video game?
9. Tell me what you know of game ratings

   Explore:

   • How did the parent learn what they know of them?

   • Does the parent use them? If so, when was the last time the parent did? To what extent?

   • What does the parent think of them? Is there anything about them the parent would change if they could?

   • What does the parent know, if anything, of the process a game goes through to become rated?

   • What does the parent know, if anything, of the organization that provides the ratings?

   • Does the parent consider a rating an endorsement of the game?

   • Does the parent think it is illegal for a minor to purchase an adult rated video game?

10. Describe other sources, if any, you use to learn about video games

   Explore:

   • Does the parent use any other source to gather information on video games? Why or why not?

   • If so, what is the source?

   • How did they learn of it?

   • How do they use it / access it?

   • What do they think of it? Why?

   • Do they trust it—why or why not?
11. Tell me what you think of laws on video games

Explore:

• Does the parent feel the government should in any way have a say in what games can be made for, bought by, or sold to children? Why or why not?

• Does the parent think laws would make a difference in the video games their children play? Why or why not?

12. Is there anything you would like to add that maybe we didn’t cover or you would like to cover in more detail?

Explore:

• Anything the parent wishes to discuss

Exit

Ask for permission to photograph media centers / media libraries (including screen shots of digital libraries). Ask for permission contact again for a possible follow up interview.

Ask for possibility of observation why shopping for next video game if they answered that their next purchase would be within the research window. Ask if they know of anyone else that may be able to contribute to the study, including people who may know of other people. Ask if they would be willing to pass along my contact information and recruitment flyer/URL on to those people and have those people contact me if they are interested in participating.
APPENDIX B

ESRB LETTER RATINGS AND DESCRIPTORS

This content has been reproduced with written permission from the ESRB.

Entertainment Software Rating Board, 2015
Letter Ratings

EARLY CHILDHOOD
Content is intended for young children.

EVERYONE
Content is generally suitable for all ages. May contain minimal cartoon, fantasy or mild violence and/or infrequent use of mild language.

EVERYONE 10+
Content is generally suitable for ages 10 and up. May contain more cartoon, fantasy or mild violence, mild language and/or minimal suggestive themes.

TEEN
Content is generally suitable for ages 13 and up. May contain violence, suggestive themes, crude humor, minimal blood, simulated gambling and/or infrequent use of strong language.

MATURE
Content is generally suitable for ages 17 and up. May contain intense violence, blood and gore, sexual content and/or strong language.
ADULTS ONLY

Content suitable only for adults ages 18 and up. May include prolonged scenes of intense violence, graphic sexual content and/or gambling with real currency.

NOTE: Rating Category assignments can also be based upon a game or app's minimum age requirement.

Content Descriptors

• Alcohol Reference - Reference to and/or images of alcoholic beverages
• Animated Blood - Discolored and/or unrealistic depictions of blood
• Blood - Depictions of blood
• Blood and Gore - Depictions of blood or the mutilation of body parts
• Cartoon Violence - Violent actions involving cartoon-like situations and characters. May include violence where a character is unharmed after the action has been inflicted
• Comic Mischief - Depictions or dialogue involving slapstick or suggestive humor
• Crude Humor - Depictions or dialogue involving vulgar antics, including "bathroom" humor
• Drug Reference - Reference to and/or images of illegal drugs
• Fantasy Violence - Violent actions of a fantasy nature, involving human or non-human characters in situations easily distinguishable from real life
• Intense Violence - Graphic and realistic-looking depictions of physical conflict. May involve extreme and/or realistic blood, gore, weapons and depictions of human injury and death
• Language - Mild to moderate use of profanity
• Lyrics - Mild references to profanity, sexuality, violence, alcohol or drug use in music
• Mature Humor - Depictions or dialogue involving "adult" humor, including sexual references
• Nudity - Graphic or prolonged depictions of nudity
• Partial Nudity - Brief and/or mild depictions of nudity
• Real Gambling - Player can gamble, including betting or wagering real cash or currency
• Sexual Content - Non-explicit depictions of sexual behavior, possibly including partial nudity
• Sexual Themes - References to sex or sexuality
• Sexual Violence - Depictions of rape or other violent sexual acts
• Simulated Gambling - Player can gamble without betting or wagering real cash or currency
• Strong Language - Explicit and/or frequent use of profanity
• Strong Lyrics - Explicit and/or frequent references to profanity, sex, violence, alcohol or drug use in music
• Strong Sexual Content - Explicit and/or frequent depictions of sexual behavior, possibly including nudity
• Suggestive Themes - Mild provocative references or materials
• Tobacco Reference - Reference to and/or images of tobacco products
• Use of Alcohol - The consumption of alcoholic beverages
• Use of Drugs - The consumption or use of illegal drugs
• Use of Tobacco - The consumption of tobacco products
• Violence - Scenes involving aggressive conflict. May contain bloodless dismemberment
• Violent References - References to violent acts

NOTE: Content Descriptors are applied relative to the Rating Category assigned and are not intended to be a complete listing of content. When a Content Descriptor is preceded by the term "Mild" it is intended to convey low frequency, intensity or severity.

Interactive Elements
• Shares Info - Indicates that personal information provided by the user (e.g., e-mail address, phone number, credit card info, etc.) is shared with third parties
• Shares Location - Includes the ability to display the user's location to other users of the app
• Users Interact - Indicates possible exposure to unfiltered/uncensored user-generated content, including user-to-user communications and media sharing via social media and networks
• Digital Purchases - Enables purchases of digital goods completed directly from within the app (e.g., purchases of additional game content, levels, downloadable music, etc.)
• Unrestricted Internet - Product provides access to the internet
"Online Interactions Not Rated by the ESRB" - Warns those who intend to play the game online about possible exposure to chat (text, audio, video) or other types of user-generated content (e.g., maps, skins) that have not been considered in the ESRB rating assignment.

"Music Downloads Not Rated by the ESRB" - Warns that songs downloaded as add-ons for music-based games have not been rated and that their content has not been considered in the ESRB rating assignment.

NOTE: The "Shares Info," "Shares Location," "Users Interact," "Digital Purchases" and "Unrestricted Internet" notices are assigned to digitally delivered games and apps whereas the Online and Music notices typically apply only to online-enabled boxed video games.
REFERENCES


Am. Amusement Mach. Ass'n v. Kendrick, 244 F.3d 572 (7th Cir. 2001).


Entertainment Software Ass’n v. Blagojevich, 469 F.3d 641 (7th Cir. 2006).


*Interactive Digital Software v. St. Louis County*, 329 F.3d 954 (8th Cir. 2003).

Kent, S. L. (2001). The ultimate history of video games: From pong to Pokemon--the story behind the craze that touched our lives and changed the world, Rocklin, CA.: Prima Communications, Inc.


doi:10.1002/aris.1440360111


Video Software Dealers Association v. Schwarzenegger, 556 F.3d 950 (9th Cir. 2009).

Video Software Dealers Ass’n v. Webster, 968 F.2d 684 (8th Cir. 1992).


