



**11<sup>th</sup> Annual Video Game Report Card**  
**November 28, 2006**

**The National Institute on Media and the Family**

## **MediaWise® Video Game Report Card**

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This MediaWise Video Game Report Card is the eleventh issued by the National Institute on Media and the Family, an independent, non-partisan, non-sectarian, nonprofit organization. The MediaWise Video Game Report Card provides a snapshot of the interactive gaming industry with a focus on issues related to the welfare of children and teens. The full Report Card is available at [www.mediawise.org](http://www.mediawise.org).

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### **A Shifting Focus**

This year, as always, is marked by change in the world of video games. Video game consoles that take advantage of previously unthinkable technologies have been launched by Microsoft, Nintendo and Sony. A growing body of research continues to expand our understanding of the impact electronic games have on young people. Innovation in more technologically advanced countries provides a window into the problems looming for American families. In short, the relationship between families and video games is becoming ever more complex, making an overview of the issues even more vital than before.

For the past ten years, we have used this annual report card to challenge the video game industry to improve its record of attending to the welfare of younger players. More recently, we urged retailers to step up to their responsibility to keep adult games out of the hands of children and youth. This year we acknowledge the strides taken by both sectors of the industry. For example, the major retailers have made real progress in fulfilling their commitment to restrict the sale of mature-themed games.

Industry representatives have also been willing to participate in meaningful discussions, including a national summit we co-hosted this fall. Early next year we will release the findings from the summit which will lead to important next steps to ensure that youth derive the benefits from games while avoiding the harm.

While we will continue to pressure the industry to improve, this report card focuses less on the flaws of a complex industry and more on what all of us can do about the real risks posed by some types of video games. The fact is video games are here to stay. Increasingly, they play a large role in the lives of young people. Games and game systems are becoming more complex, allowing them to have a greater impact and unlocking new potentials as excellent teaching tools. If we want our children to benefit from technological innovations and to avoid the harm that some games pose, we parents need to roll up our sleeves and get to work.

This report suggests that the solutions to the problems presented by video games lie in eradicating ignorance on both the scientific-technical and the parental knowledge levels. Simply put, parents need to step up to the plate and the experts need to conduct more and better research. The research and anecdotal findings we already have portray a

growing health crisis on multiple levels, each of which shows an important link to video games. These findings confirm the critical need for increased understanding of video games' impact on kids as well as greater involvement in children's media use.

### **Parental Ignorance: No Longer Bliss**

As the world of video games continues to evolve, parents are falling behind. As we found last year, this year's parental survey uncovered an alarming gap between what kids say about the role of video games in their lives and what parents are willing to admit. For instance, while nearly two-thirds of surveyed parents said they had rules about how much time their children may spend playing video games, only one third of their children said they had such rules. Perhaps parents are reluctant to confess how little they attempt to control the amount of time their kids spend in front of the screen. This much is certain: too many of us do not seem to exercise enough control. The amount of time kids spend playing video games is on the rise.

First and foremost, parents need to pay attention to the relevant research and the industry needs to stop denying research-based conclusions.

- Who's playing? While the industry constantly reports that the average age of the player has risen to the late twenties, a new study has found almost half of all "heavy gamers," are six- to 17-years-old (NPD, 2006).
- Game time and physical health. Our own research this year found children who spend more time playing video games are heavier, and are more likely to be classified as overweight or obese. Furthermore, playing video games in the bedroom is an added risk factor for overweight and obesity.
- Screen time and school performance. We found the amount of time kids spend playing video games is correlated with poorer grades in school and attention problems.
- Violent video games and aggression. Scientific research shows that violent video game play increases aggression in young players in the short term. Additional studies show these effects last.

Once parents realize what is at stake, based on scientific research, they should start limiting game time and keeping M-rated games away from their children. Although the Entertainment Software Rating Board (ESRB) rating system seems to underrate some games, giving Teen ratings to games that deserve Mature ratings, all agree that the M-rated games are inappropriate for kids.

Parents should also take advantage of new technological tools to protect their kids. For instance, most new consoles include parental controls. Parents should learn how to use these devices and use them to set appropriate boundaries for their children. Additionally, some video game makers are focusing on kid-friendly games and technologies. The Nintendo DS, for example has gained a reputation as a "clean console" because of the vast number of E-rated games it supports, and Microsoft is said to be investing heavily in E and E 10+ games.

Parents also need to understand the changing purchasing patterns of their children. While the bricks-and-mortar retailers have made important improvements in keeping

Mature games out of the hands of kids, online sales now account for a growing number of total sales. That means any child with an Internet connection and a debit, credit or magnetic striped gift card could purchase a Mature- or Adults Only-rated game.

Finally, and most importantly, we encourage parents once again to be *MediaWise®* and to *Watch What Your Kids Watch*. Limits and boundaries are crucial, but simply laying down rules and hoping kids will follow them is not enough. Parents need to engage in an ongoing dialog with their children about what games they are playing and for how long. Watching what your kids watch might mean playing what your kids play. Creating a conversation about content and amount won't just protect kids – it will help parents reinforce meaningful communication with their children.

In summary, we recommend parents take the following steps:

1. Follow the ratings.
2. Use Parental Controls.
3. Put your kids on a media diet.
4. Set limits and be willing to say “no.”
5. Watch what your kids watch, play what your kids play.

### **A Public Health Crisis Continues to Grow**

The necessity of parental involvement becomes apparent when examining the diverse set of health problems linked to inappropriate video game play. The latest research and anecdotal reports link video games to health issues affecting the bodies and minds of an ever-widening population.

#### *Obesity*

A childhood obesity epidemic, as well as a corresponding increase in Type II Diabetes, is sweeping across the continent. Approximately 30.3% of children ages 6 to 11 are overweight and 15% are obese. For teens the rate is almost identical: 30.4% are overweight, and 16% are obese (American Obesity Association, 2006).

The link between obesity and media use has become increasingly clear with each new study. Children, ages 8 to 18, spend more time (44.5 hours per week) in front of computer, television, and game screens than they spend on any other activity in their lives except sleeping (Kaiser Family Foundation, 2005). The lack of physical activity that comes with all those stationary hours in front of the screen is a large contributor to the obesity problem. In fact, children who use a lot of media have a lower activity level, and lower activity is linked to a higher rate of obesity (Vandewater, 2004). In at least one study, a strong relationship was found between playing electronic video games and childhood obesity (Stettler, 2004). Our research finds that children who spend more time playing video games are heavier, and are more likely to be classified as overweight or obese. Furthermore, playing video games in the bedroom is also related to children's increased weight.

#### *Addiction*

Video game addiction is another alarming game-related health issue. Many of the symptoms of this type of addiction are largely the same as the symptoms of other addictions including obsessive behaviors, deceitful behavior, neglecting people and responsibilities, and increased isolation. Video game addiction has led some children to

fail out of school, alienate themselves from everyone in their lives, and in extreme cases to commit suicide. Some of the most popular online community games practically demand an obsessive and time-consuming approach to play. As with any addiction, once children are hooked, it is very difficult for them to quit.

South Korea has seen a recent explosion in cases of video game addiction. The South Korean government now supports more than 40 treatment programs to deal with video game and Internet addiction. If the situation in South Korea is any indication of what is to come here, we will be largely unprepared for the number and intensity of cases of such addiction.

### **The Need for Additional Research and Next Steps**

As the health crises besetting our children continue to grow, and as the industry continues to expand, the need for additional research becomes ever more apparent. Only by overcoming our ignorance and filling in the gaps of our understanding about the impact of video games on children will we be able to determine how to address the problems we already face and the ones we foresee.

Last year we said that every child who plays video games is undertaking a powerful, developmental experiment – the results of which we don't understand. This is truer now than ever before. We need more research on the ways interactive entertainment affects child health and development. We must focus not only on aggression and violence, but also on health, behavior, school performance, and work skills as well as the positive effects and uses of video games.

Time is of the essence. With new technological innovations, the ways in which interactive entertainment affects our kids become more complex and difficult to manage. Increasingly, we can take games with us and play them wherever we are. Personal gaming devices continue to evolve, and are becoming widely available in stand-alone devices or integrated into other technologies like mobile phones. Other remarkable innovations are available to the dedicated, stay-at-home gamers in the form of downloadable content, episodic games, and online multiplayer games. We can now play games everywhere, all the time, and in a multiplicity of ways. The implication and the need for research are the same: the role of games in the lives of young people will continue to grow. If we expect parents to manage this, we must give them the information and the tools to do so.

### *A Hopeful Collaboration*

Last year, we promised to bring people from diverse backgrounds and interests together in order to discuss these issues. This year, we convened the first National Summit on Video Games, Youth and Public Policy, a two-day conference sponsored by the National Institute on Media and Family and Iowa State University. For the first time ever, the Summit gathered together academic scholars, public health officials, child health advocates and representatives from the video game industry.

As a show of concern and dedication to addressing the challenges posed by video games the Summit was a resounding success. One of the many positive outcomes of the Summit was a pledge by the ESRB to put more funds into ratings education for parents. We applaud this step not only as a show of good faith but as a meaningful

contribution to the effort to provide parents with the tools they need to keep their kids healthy and safe.

Many of the participants were experts on the effects of media or video games. After consideration of the research, participants signed an historic joint statement that read: "Behavioral science research demonstrates that playing violent video games can increase the likelihood of aggressive behavior in children and youth."

In the coming weeks, the Summit participants will release a ten-year plan, which will outline benchmarks and creative solutions addressing children's access to violent and sexually explicit video games. One component of the plan calls for ongoing summits to continue this important dialogue.

## **2006 Survey Results**

### **Surveys Covered in 2006 Report Card**

- Student Survey
- Parent Survey
- Retailer Ratings Education Survey
- Retailer Ratings Enforcement Survey

Data for this year's Parent and Student Surveys were gleaned from an ongoing study of Switch®, a new program created by the National Institute on Media and the Family. The Switch program is designed to promote healthy lifestyles as well as measure behavior relating to fitness levels, nutritional choices, and screen time usage. Our longitudinal study with 1,430 third-, fourth-, and fifth-grade students and their parents is currently ongoing. Although this program does not target video games, we took the opportunity to collect some information about video game use from families. The resulting data provide a rich look at several aspects of the effects of screen time.

### **Student Survey Results**

The American Academy of Pediatrics recommends no more than one to two hours of screen time per day, including time spent on video games, television, videos/DVDs, and computer use. However, our data shows that:

- Forty-two percent of children play for at least one hour per day, with 22% reporting they play for two or more. This is on top of the three hours a day the average child spends in front of the television.
- Fifteen percent of children state they feel they spend too much time playing video games. Interestingly, 26% say they play too little, suggesting what a large role games now play in young people's lives.
- One in ten (9%) admit they play so much that it sometimes hurts their homework. This finding is particularly surprising, because third-, fourth- and fifth-graders do not typically have a lot of homework.
- Over half (55%) say they sometimes try to stop playing video games so much. Children who play video games in their bedrooms play five hours more per week than children who do not play in their bedrooms.

Total amount of game play is not, however, the only issue that matters - the *content* of the games played matters greatly too.

- We found that playing a large amount of violent video games increased children’s risk of physical aggression in school by 42% over children who do not play violent video games.
- These findings held true even when the following other factors remained constant: sex, violent television exposure, parent involvement, and prior history of fights (Gentile, Eisenmann, Walsh, & Callahan, 2006).

In short, the research demonstrates that both the *amount* and *content* of games matter. The ones who spend more time playing video games are heavier, and are more likely to be classified as overweight or obese. And confirming the results of several other studies, our survey found that the amount of time a child plays video games is correlated with receiving poorer grades in school, as reported by both parents and teachers. In addition, the amount of time spent playing video games is correlated with teacher-reported attention problems in school, also corresponding to other research which finds a link between heavy screen use and attention problems.

### Parent Survey Results

The ESRB has promoted research suggesting that 74% of parents regularly use the video game ratings and 94% find them helpful in choosing games for their children (ESRB, 2006). Other research, including ours, does not paint quite such a rosy picture. In our sample of 1,430 third-, fourth-, and fifth-grade children and their parents, we find that parents and children have very different perceptions of how involved parents are. For example, most (73%) parents say they “always” help decide what games their children may buy or rent. However, only 30% of children say their parents do. On the opposite side, only 1% of parents say they “never” help decide, in contrast to 25% of children. This pattern of parents giving much more socially acceptable answers is consistent across several aspects, including responses to the following questions:

	Parent reports <u>“Never”</u>	Child reports <u>“Never”</u>
How often does a parent/do you:		
• play computer or video games with you/your child?	26%	42%
• talk to you about the video games you play?	5%	51%
• help decide what video games you may buy/rent?	1%	25%
• have to ask permission before playing video games?	10%	39%
	Parent reports <u>“Yes”</u>	Child reports <u>“Yes”</u>
Does your family have rules about how much you may play?	62%	36%
Does your family have rules about when you may play video games?	68%	36%

This pattern appears in several other places in our study. For example, when measuring the amount of time children play video games each week, parents report an average of five hours per week. When their children are asked, they report an average of nine hours per week (13 hours for boys, 6 for girls). These findings, and the gap between them, are basically identical to the national averages found in other studies. This suggests that parents may provide overly optimistic responses about their awareness of children's video game habits and their use of the ratings.

This parental optimism is very unfortunate, because parents are in an extremely powerful position to make a difference in their children's outcomes. Parents who are actively involved in their children's media habits have children who spend less time playing video games each week, get better grades in school, are less likely to be overweight, are less aggressive, are more prosocial, and have fewer attention problems in school. Active parental monitoring of children's media use appears to be a clear protective factor for children.

### **Retailer Ratings Education Survey Results**

We conducted our surveys in September and October 2006, surveying by telephone 52 video game rental or retail stores in 12 states: Colorado, Indiana, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, Nevada, North Carolina, Oregon, and Tennessee. We surveyed stores in both large cities and small towns within these states. Of the 52 stores, 25 stores primarily sell video games and 27 primarily rent. Forty-six of the stores surveyed are part of a chain.

#### *Public Education*

Eighty-six percent of the stores *claimed* to educate the public about the ESRB rating system. This number is up from 71% in 2005. However, when these education plans were examined, the number dropped to 73%, meaning that over a quarter of the stores surveyed did not meaningfully educate the public. However, this percentage is up from 52% last year. The stores that did educate the public used pamphlets or posters in the stores, listings on the aisles, youth-restricted stickers on M-rated games, and video loops describing ratings. Similar to past years, only 25% of store employees were familiar with ESRB's "OK to Play" campaign (26% in 2005 and 22% in 2004).

#### *Employee Education*

An overwhelming majority (98%) of the individuals we surveyed say they personally understand the ESRB rating system. This is up from 97% in 2005 and 76% in 2004. Better yet, about three-quarters (73%) of the stores we surveyed say they have a policy for training their employees on the ESRB rating system (up from 52% in 2005). In these stores, training included word of mouth, reading material, computer classes, or during register training where registers are programmed to prompt ID checks for sales of M-rated games. This year, retail and rental stores were reported roughly equally in terms of understanding the ratings and training employees about the ratings.

#### *Policies about Ratings*

Most (92%) of stores say they have a policy preventing children younger than 17 renting or buying M-rated games. This is virtually the same as last year (94%) but up from 89% in 2004, and 83% in 2003. When the actual policies are examined, the percentage drops to 88% (encouragingly up from 80% in 2005). We did not count policies when

employees were not able to describe them. Retail stores appear just as likely as rental stores to have real policies preventing children younger than 17 from renting or buying M-rated games.

### **Retailer Ratings Enforcement Survey Results**

As in years past, we once again conducted a “sting” operation to determine if retailers are enforcing their ratings policies on M-rated games. Fourteen children between the ages of 10 and 16 (four female, 10 male) entered retail stores and attempted to purchase M-rated games without adult supervision. The sting operations took place between August and October 2006 at retail locations located in California, Illinois, Iowa, Maryland and Minnesota.

Of the 25 sting operations, eight resulted in successful purchases (32% success rate, down from 44% in 2005, 34% in 2004, and 55% in 2003).

Eight of the purchases were attempted by girls. Girls were much less likely to be able to purchase games than boys (13% girls, 41% boys). This is a large decrease from last year (46% girls, 42% boys), but is more typical of rates we’ve seen in past years where girls are less able to purchase than boys (8% girls, 50% boys in 2004).

Interestingly, we see a notable split among the big retailers and stores specializing in video games. Major retailers—Best Buy, Target and Wal-Mart—emerged with perfect scores, preventing underage customers from purchasing M-rated games on every attempt. We are very encouraged to see the big retailers stepping up and keeping their promise to enforce their own policies. Unfortunately, specialty stores seem more interested in making money than anything else. Despite years of scrutiny and repeated promises to clean up their act, it is still far too easy for kids to purchase inappropriate games at such stores.

### **MediaWise Video Game Report Card Summary and Highlights**

Parental Involvement.....	INCOMPLETE
Ratings Education .....	B
Retailer Policies .....	B
Retailer Enforcement	
Big Retailers .....	A
Specialty Stores .....	F
Console Manufacturers .....	A

### **Parental Involvement ..... INCOMPLETE**

Although the response of most parents to the challenge of raising kids in a world filled with video games is inadequate, it doesn’t seem fair to give parents a failing grade because parents are constantly subject to mixed messages from the video game industry. While representatives of the industry encourage parents to follow the ratings which warn certain age groups away from mature content, they simultaneously deny that video games have any impact on kids. Making matters worse, the rating system itself has flaws. Parents could be, and should be, doing a lot better, but at least part of their failure can be attributed to the confusion created by the game makers.

**Ratings Education.....B**

Our findings in the area of Ratings Education are nearly identical to those of last year. We are encouraged to see a visible effort by the ESRB to educate parents and retailers and a corresponding tendency on the part of retailers to educate employees and parents. Nevertheless, considering that we have found no significant progress from last year, we see room for improvement.

**Retailer Policies .....B**

Nearly every retailer we surveyed claimed to have a policy preventing children and teens from purchasing M-rated games, an improvement from last year. Perhaps more praiseworthy, most of the employees we surveyed could articulate the policy and its importance. Clearly, public pressure in recent years has put retailers on notice.

**Retailer Enforcement**

**Big Retailers.....A**

**Specialty Stores.....F**

Although it is encouraging to find that the retailers across the board present the public with a policy to prevent the sale of M-rated games to minors, we see a remarkable gap in the performance of retailers. The big retailers such as Best Buy, Target and Wal-Mart have kept their promise to keep M-rated games out of kids' hands. In our survey, no children were sold M-rated games at these stores. Stores specializing in video games seemed to be willing to let profits take priority over enforcing the policies they claim to uphold. In our survey, half of all attempts by minors to purchase M-rated games were successful at specialty stores.

**Console Manufacturers (Microsoft, Sony and Nintendo) .....A**

Every new console entering the market now includes parental controls. Considering that only a few years ago such parental controls were unthinkable, this is amazing progress. The manufacturers of video game systems deserve praise for their efforts to make it easier for parents to protect their kids.

**Recommendations**

1. The industry should eliminate the double messages to parents and educate them about *why* it is important to monitor game play and observe the ratings.
2. Specialty game stores should follow the lead of the major retailers who have fulfilled their commitment not to sell M- or Adults Only-rated games to youth.
3. There should be a universal, independent rating system.
4. More attention should be paid to the emerging problem of video game addiction.
5. Kids' bedrooms should be media-free zones.
6. Parents need to supervise their children's game playing more closely.

Follow the ratings.

Use Parental Controls.

Put your kids on a media diet.

Set limits and be willing to say "no."

Watch what your kids watch, play what your kids play.

## 2006 Buying Guide for Parents

### Game Lists

### Ratings

#### ***Parent Alert! Games to Avoid for your Children and Teens***

- Gangs of London M
- The Sopranos M
- Grand Theft Auto: Vice City Stories M
- Reservoir Dogs M
- Mortal Kombat: Unchained M
- Scarface: The World is Yours M
- The Godfather: Mob Wars M
- Saints Row M
- Dead Rising M
- Just Cause M

#### ***MediaWise Recommended Games for Children and Teens***

- LEGO Star Wars II – The Original Trilogy E 10+
- Mario Hoops 3 on 3 E
- Super Monkey Ball: Banana Blitz E
- Roboblitz E 10+
- Madden Football '07 E
- LocoRoco E
- Dance Factory E
- Brain Age E
- Nancy Drew: Danger by Design E
- Mario vs. Donkey Kong 2: The March of the Minis E

### **Research Update**

This year's research update provides a brief look at some of the new research on video games, including some research that was discussed at the National Summit on Video Games, Youth and Public Policy in collaboration with Iowa State University. Much of the research discussed below will be used when Summit participants release reports, including recommendations for the future.

#### *Research on the Effects of Violent Games*

Although there has been little new published research in 2006, dozens of experimental and correlational studies now document that violent video game play is related to increases in aggressive thoughts, feelings, and behaviors. Carnagey, Anderson, & Bushman (2006) published a study in which 257 college students were randomly assigned to play one of eight violent or nonviolent video games for 20 minutes. After playing the game, the students were shown a 10-minute videotape of real-life violent acts (including shootings, stabbings, prison fights, etc.) while their heart rate and galvanic skin response (both measures of arousal and stress) were measured. Students who had played one of the violent video games showed lower levels of arousal to the violent scenes. That is, 20 minutes of playing a violent video game desensitized them to images of real-life violence in the short term.

Anderson, Gentile, & Buckley (2007) will release three new studies in January, including an experimental study, a correlational study, and the first true longitudinal study with children. In the experimental study, 161 nine- to 12-year-olds and 354 college students played either a violent or nonviolent video game. The primary finding was that even E-rated violent games increased children's and college students' aggressive behavior immediately after playing the game. In the correlational study, 189 high school students completed surveys about their media habits, their personalities, and their aggressive behaviors. The primary finding was that adolescents who play more violent video games engage in more real-life aggressive and violent behaviors. In the longitudinal study, 430 third-, fourth- and fifth-grade students, their peers, and teachers were surveyed early and late in a school year. The primary finding was that children who played more violent video games early in the school year had changed to become more aggressive later in the school year, as reported by their peers and teachers.

#### *Research on Video Game Ratings*

The research on the scientific reliability and validity of the video game ratings (and other media rating systems, such as TV and movie ratings) suggests that the ratings are not as reliable as parents might hope. Kim Thompson and her colleagues at Harvard have conducted several content analyses that demonstrate that a high percentage of video games have content that is not labeled on the boxes. This year, a new study of M-rated games was released, demonstrating that 81% of the games in their sample did not include some descriptor that seemed warranted (Thompson, Tepichin, & Haninger, 2006).

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