

**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS**

ENTERTAINMENT SOFTWARE ASSOCIATION;	)	
VIDEO SOFTWARE DEALERS ASSOCIATION;	)	
ILLINOIS RETAIL MERCHANTS ASSOCIATION,	)	
	)	
Plaintiffs,	)	05 C 4265
	)	
vs.	)	Judge Kennelly
	)	
ROD BLAGOJEVICH, in his official capacity as	)	Magistrate Judge Denlow
Governor of the State of Illinois; LISA MADIGAN, in	)	
her official capacity as Attorney General of the State of	)	
Illinois; and RICHARD A. DEVINE, in his official	)	
capacity as State's Attorney of Cook County,	)	
	)	
Defendants.	)	

**DEFENDANT GOVERNOR ROD BLAGOJEVICH'S RESPONSE  
TO PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION**

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Defendant Governor Rod Blagojevich (“Defendant”), by his attorneys, files this Response to Plaintiffs’ Motion for Preliminary Injunction.<sup>1</sup>

## **BACKGROUND**

Responding to a public outcry over the proliferation of graphic video games to children throughout this State, Governor Rod Blagojevich and the Illinois General Assembly held hearings and considered the harm to children from exposure to these video games. After considering a mountain of evidence, including scientific reports and testimony, governmental reports, and other evidence, the General Assembly came to the following conclusions: (1) graphically violent video games are associated with a reduction in frontal-lobe activity in children’s brains that directly and negatively affects their behavior, such that these children’s brains resemble that of a child suffering from disruptive behavior disorder; (2) the video game industry has successfully targeted its most violent and mature (“M-rated”) video games to children; (3) the vast majority of children currently play these M-rated video games; and (4) the industry’s so-called “self-regulation” has been an abysmal failure at best, providing minors nearly free reign to purchase any and all M-rated video games.

In other words, scientific studies now show a demonstrable neurophysiological effect on the brains of children and, thus, on their behavioral development. Simply reviewing these ultra-violent video games shows that these games are becoming more realistic and more violently graphic. Statistical evidence shows that children are playing these games now more than ever,

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<sup>1</sup> This Response will discuss only the Violent Video Games Law, 720 ILCS 5/12A-1 *et seq.* Defendant has addressed the Sexually Explicit Video Games Law in his Motion for Summary Judgment. For the reasons stated therein, the Court should not only deny Plaintiffs a preliminary injunction but should enter judgment for Defendants as a matter of law. Additionally, Public Act 94-0315’s amendment of Section 11-21 of the Illinois Criminal Code is not challenged by Plaintiffs and, therefore, no preliminary injunction should issue against this unchallenged provision. *Pleasureland Museum, Inc. v. Beutter*, 288 F.3d 988, 1005 (7<sup>th</sup> Cir. 2002) (striking down portions of ordinance regulating sexually-oriented businesses but severing those portions from otherwise constitutional ordinance).

and the video game industry, while paying lip service to “self-regulation,” is profiting off the backs (and brains) of children more than ever before.

### **Violent Video Games**

The most popular video game, *Grand Theft Auto: San Andreas*, features frequent and brutal violence, including pistol-whipping and the murder of police officers. A player scores extra points, after sex with a prostitute, by beating her and taking back his money. (A copy of this game is filed as Group Exhibit 6 to this Response.)

*Manhunt* centers around the ambush-murders of victims. Weapons of choice include machetes, meat cleavers, and axes, which serve to disembowel, amputate, and murder the victims. Sniper rifles, when carefully aimed, can blow holes clean through the heads of victims; in other instances human heads explode. (See Group Exh. 6.)

*Hitman: Blood Money* features a variety of murders, including strangulation with a wire. *Gunslinger Girl* awards more points the more times a victim is shot; extra points are awarded for shooting the victims after they are dead. *Postal 2* contains extremely violent reactions to stress, including the decapitation of a person while waiting in line.

The evidence recited below regarding these games came before the Illinois General Assembly during the course of its hearings and inquiry into this urgent matter.<sup>2</sup>

### **Violent Video Games and Minors**

The Federal Trade Commission (the “FTC”) recently issued an alarming indictment of the video game industry, finding that the industry targets its M-rated video games to minors; minors have little difficulty purchasing these games from retailers; and an overwhelming

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<sup>2</sup> The legislative Record is attached to Defendant’s Local Rule 56.1 Statement, related to its Motion for Partial Summary Judgment on a different part of Public Act 94-0315, at Group Exhibit 4. To avoid duplication of a voluminous record, Defendant will simply cite to that exhibit as “L.R., Exh. D, at BL \_\_\_\_.” References to “BL ” refer to the bates-stamp designation on the relevant page(s).

percentage of minors play these M-rated games and count them among their favorites. *See* FTC Report, *Marketing Violent Entertainment to Children: A Fourth Follow-Up Review of Industry Practices in the Motion Picture, Music Recording & Electronic Game Industries*, at 20-28 (July, 2004) (L.R., Exh. D, at BL 134-169).

The industry consistently placed advertisements for its M-rated games in magazines with “a sizeable readership among teens and older children” and on television shows “with large teen audiences.” *Id.* at BL 163. Additionally, “nearly all of the game companies placed ads for M-rated games on websites popular with teens.” *Id.*

Once they have piqued their interest, the video-game industry is more than happy to sell M-rated games to unsupervised children. In earlier undercover operations conducted by the FTC in 2000 and 2001, “unaccompanied children ages 13-16 were able to buy M-rated games 85% (2000) and 78% (2001) of the time.” *Id.* at BL 168. In its most recent report, the FTC found that 69 percent of children were able to buy M-rated games, broken down in age as follows:

**FTC Mystery Shop Results by Age—Electronic Games**

**Q. Was the shopper able to make the purchase?**

	<b>13 years old</b>	<b>14 years old</b>	<b>15 years old</b>	<b>16 years old</b>	<b>Total</b>
<b>Yes</b>	<b>56%</b>	<b>77%</b>	<b>66%</b>	<b>85%</b>	<b>69%</b>
# shoppers	68	47	62	48	225

*Id.* at BL 169. Similar results have been found specifically in Illinois. In 2000, the Illinois Attorney General conducted an undercover “secret shopper” operation and found that 32 out of 32 children, ranging in age from 13 to 15, were able to purchase M-rated games. (*See* Defendant’s Local Rule 56.1 Statement, Exhibit C.) In 2005, the Illinois State Crime Commission, in conjunction with a north-suburban state legislator, conducted an operation where a 15-year-old boy was able to buy M-rated games at 11 out of 15 retailers, a “success” rate of 73

percent. (L.R., Exh. 4, BL 268-270.)

This combination of targeted advertising to children and incredibly lax self-regulation produced entirely predictable, but no less shocking FTC findings:

- A staggering 87 percent of “tween” and teen boys (and 46 percent of girls) have played an M-rated game;
- Younger children (ages 13-15) are more likely to have played these games than older children (ages 16-17);
- According to industry data, nearly 40 percent of M-rated games purchased in 2002 were for children under 17; and
- 75 percent of boys 17 and under have played at least one of the *Grand Theft Auto* games, all of which are either M-rated or rated “AO” (adults only).

*Id.* at BL 169. The record before the General Assembly further showed that the violent video game market is booming:

- The video game industry sold approximately \$6.2 billion in video games in 2004, an 8% increase from the previous year. (L.R., Exh. 4, at BL 271-73.)
- Sales of M-rated games increased from 13% in 2003 to 16% in 2004. (*Id.*)
- In 2004, *Grand Theft Auto: San Andreas* was the highest selling game in the United States, selling 5.1 million copies, despite only being available for purchase for the last seven weeks of the year. (*Id.*)
- Games involving “shooting” are becoming more popular, increasing sales by 24.5% in 2004. (*Id.*)

The General Assembly also benefited from a great deal of scientific testimony and scholarship on the deleterious effects of violent video games on adolescents. Most notably, the legislature heard testimony regarding the neurological effects on adolescent brain functioning, including depression of front-lobe activity that results in asocial, aggressive behavior problems. (L.R., Exh. D.) This scientific testimony will be discussed below.



## ARGUMENT

### I. THE VIOLENT VIDEO GAMES LAW SATISFIES THE FIRST AMENDMENT BECAUSE THE STATE HAS A COMPELLING INTEREST IN PROTECTING CHILDREN

The Government may regulate the content of constitutionally protected speech in order to promote a compelling interest if it chooses the least restrictive means to further the articulated interest. *Sable Communic. of California, Inc. v. FCC*, 492 U.S. 115, 126 (1989). The Violent Video Games Law (“VVGL”), 720 ILCS 5/12A-1 *et seq.*, is constitutional because it is supported by compelling interests of the State and because it employs the least restrictive means to further those interests.

Plaintiffs are correct (Pl. Mem., p. 10) that, in order to sustain the State’s compelling interests, the Court need only conclude that the General Assembly has “drawn reasonable inferences based on substantial evidence.” *Turner Broadcasting Sys., Inc. v. FCC*, 512 U.S. 622, 666 (1994); *see also Interactive Digital Software Ass’n v. St. Louis County*, 329 F.3d 954, 959 (8<sup>th</sup> Cir. 2003) (applying “substantial evidence” standard to law regulating violent video games); *Video Software Dealers Ass’n v. Maleng*, 325 F.Supp.2d 1180, 1187 (W.D. Wash. 2004) (same). The question is not whether the State was correct; drawing two inconsistent conclusions from the evidence does not preclude a legislative finding that is supported by substantial evidence. *Turner Broadcasting Sys., Inc. v. FCC* (“*Turner II*”), 520 U.S. 180, 211 (1997).

Plaintiffs are wrong, however, in arguing that the previous decisions concerning the validity of video-game legislation compel a result in their favor. The evidence supporting the compelling interests of the State in this case is different, more developed, and far more substantial than the evidence considered in those other decisions.

As courts reviewing violent video-game laws noted, “[f]ederal courts have repeatedly

recognized that the state has a legitimate and compelling interest in safeguarding both the physical and psychological well-being of minors.” *Maleng*, 325 F.Supp.2d at 1186; *accord St. Louis County*, 329 F.3d at 958. The Supreme Court “has consistently recognized that the parents’ claim to authority in their own household to direct the rearing of their children is basic in the structure of our society,” *Ginsberg v. State of New York*, 390 U.S. 629, 639 (1968), but also acknowledged that “[t]he State also has an independent interest in the well-being of its youth.” *Id.* at 640. *See also FCC v. Pacifica Found.*, 438 U.S. 726, 749 (1978) (“The government’s interest in the well-being of its youth and in supporting parents’ claim to authority in their own household justif[y] the regulation of otherwise protected expression.”).

Just within its last term, the Court has recognized that developmental differences exist between adults and minors. *See Roper v. Simmons*, \_\_\_ U.S. \_\_\_, 125 S.Ct. 1183, 1195 (2005) (noting that juveniles “lack maturity and responsibility and are more reckless than adults” and that “personality traits of juveniles are more transitory, less fixed.”). Previously, the Court had differentiated minors from adults by reasoning that “juveniles are more vulnerable or susceptible to negative influences and outside pressures, including peer pressure.” *Id.* *See also Eddings v. Oklahoma*, 455 U.S. 104, 115-116 (1982) (“[Y]outh is more than a chronological fact. It is a time and condition of life when a person may be most susceptible to influence and to psychological damage”).

**A. The General Assembly Drew Reasonable Inferences from Substantial Evidence Regarding the Harm to Children from Media Violence.**

1. The Legislative Findings

The General Assembly determined, in its legislative findings, that minors who play violent video games suffer three separate and negative injuries: (1) they are more likely to engage in violent, asocial or aggressive behavior; (2) they are more likely to experience feelings

of aggression; and (3) they are more likely to experience a reduction of activity in the frontal lobes of the brain. 720 ILCS 5/12A-5. In reaching its conclusion, the General Assembly considered no fewer than 17 separate scientific research and scholarship studies (in addition to numerous other materials) from the leading scientists in the field.

## 2. The Researchers the General Assembly Relied Upon

Dr. William Kronenberger's research indicates, through the use of functional magnetic resonance imaging (fMRI), that children with high exposure to video game and other media violence demonstrate depressed activity in the frontal lobe area of the brain and heightened activity in the posterior cingulate and amygdala areas of the brain, both of which are also present in children suffering from Disruptive Behavior Disorders. Dr. Kronenberger's research expands upon pioneering research performed by Dr. John Murray, who previously reached similar conclusions while performing fMRIs on children while they were watching violent film images.

Dr. Craig Anderson has spent years studying the effect of violent video games on children and has, through a wide variety of studies, determined that exposure to violent video games increases aggressive behavior, thinking, and emotions and negative physiological arousal, while simultaneously decreasing prosocial behavior. Through his surveys of existing research and scholarship, Dr. Michael Rich, a pediatrician who teaches at Harvard Medical School, has determined that Dr. Anderson's conclusions are well supported by other research in this field.

These researchers' conclusions are widely accepted in the medical and scientific communities. The American Medical Association, the American Pediatric Association and the American Psychological Association have all adopted positions reflecting the negative impact of violent video games on minors. See Amer. Acad. of Pediatrics, *With Violent and Sexy Video Games Selling Fast, When Should Parents Pull the Plug*, Sacramento Bee (August 8, 2002) (finding in all but 18 of 3500 studies a connection between media violence exposure and

aggressive or violent behavior). (*See also* Anderson Dec. ¶ 10; Rich Dec. ¶¶ 34, 35).

While critics in the video game industry challenge these overwhelming findings by criticizing the methodology of these studies, none of these critics have disproved the results from this vast body behavioral and physiological research. Moreover, none of the critics have challenged the evidence of the neurophysiological evidence presented to the General Assembly.

**B. Effects of Video Game Violence on Child Brain Activity and Development.**

Through the use of fMRI, researchers can visualize the activity in areas of the brain associated with cognitive and emotional processing and observe how changes in brain activity may impact behavior. (Kronenberger Dec. ¶¶ 13-18). In their fMRI studies, Dr. Kronenberger and his team (and Dr. Murray before them) reviewed the brain activity of adolescents during tasks involving specific types of mental processing, such as concentration, impulse control, and response to fear or other emotionally provocative stimuli. (Kronenberger Dec. ¶¶ 19-23).

1. Neurological Development Differences Between Children and Adults

Childhood experiences have a profound and lasting impact on a person's behavioral patterns because of the rapid and extensive neurological and psychological development occurring in those phases of life. (Kronenberger Dec. ¶¶ 14-15; Rich Dec. ¶ 17). Studies focusing on the adolescent brain have consistently demonstrated that the adolescent brain does not typically mature into its adult form until after the age of 20. (Rich Dec. ¶ 15). Moreover, adolescents rely more heavily on certain regions of the brain, such as the amygdala region, that are associated with primitive impulses of memory, emotion and fear than adults do. Likewise, the prefrontal cortex (located in the frontal lobe), the area activated in executive functions such as attention, problem solving and impulse control, does not fully develop in a person until the early 20s. (Rich Dec. ¶¶ 15-16).

The childhood and adolescent neurological maturation process is demonstrated by: (i) the rapid growth in the white matter (myelinated axonal tracts and related supportive structures) of the brain; and (ii) thinning, or “pruning,” of the excess neural connections between the gray matter (nerve cells in the brain). (Kronenberger Dec. ¶ 15; Rich Dec. ¶ 15). Because of this rapid brain development, the neurophysiological influences on an adolescent brain are far more profound than the same influences on a fully developed adult brain. (Rich Dec. ¶ 17, 19). For example, in comparison with adults, studies show that adolescents, on average, are “less responsible, more myopic, and less temperate than the average adult,” and are less likely to consider alternative courses of action, understand the perspective of others, or restrain impulses. Cauffman E. & Steinberg L., *(Im)maturity and Judgment in Adolescence: Why Adolescents May be Less Culpable Than Adults*, 18 Behav. Sci. & L. 741, 756-757 (2000).

## 2. Neurophysiological Basis For Aggression, Fear, and Self-Control

Scientists studying brain activity have long found a consistently strong relationship between the neurophysiological processes of the brain and the behavioral triggers for aggression, fear and self-control. As the National Research Council Panel on the Understanding and Control of Violent Behavior, concluded:

All human behavior, including aggression and violence, is the outcome of complex processes in the brain. Violent behaviors may result from relatively permanent conditions or from temporary states. . . . Biological research on aggressive and violent behavior has given particular attention to the following in recent years: . . . neurophysiological (i.e., brain wave) abnormalities, particularly in the temporal lobe of the brain; brain dysfunctions that interfere with language processing or cognition.

Reiss, A. and Roth, J. Ed. 1993. National Academy of Sciences / National Research Council, *Understanding and Preventing Violence*, National Academy Press.

Specifically, the neural circuit including parts of the frontal cortex, amygdala, and temporal lobes has been implicated in behavior associated with increased propensity for

impulsive aggression, violence, fear and self-control. (Rich Dec. ¶ 18; Murray Dec. ¶¶ 22-24). Dr. Kronenberger's research has indicated that these same areas of adolescents' brains are impacted by exposure to video game and other media violence.

3. Studies Demonstrating the Relationship Between Media Violence and Functioning in Regions of the Brain

(a) Reduced Activity in Frontal Lobe

The frontal lobe (one of the last parts of the brain to reach maturity) plays a critical role in the executive functions of the brain. Activation of this region of the brain is triggered during processes involving impulse control, self-regulation, choice, attention, and concentration. (Kronenberger Dec. ¶ 16). Likewise, reduced activation of the frontal lobe has been associated with greater impulsivity, difficulties in concentration, attention, and self-monitoring, and impairments in decision-making. (Kronenberger Dec. ¶ 17). *See also* Damasio, A.R. et al., *The Frontal Lobes*, Clinical Neuropsychology (2003) (A "hallmark of frontal lobe dysfunction is difficulty in making decisions that are in the long-term best interests of the individual").

(b) The Relationship Between Aggressive Behavior and Reduced Activity in the Frontal Lobe

Studies of the neurological underpinnings of aggressive behavior indicate that a neural circuit that includes parts of the prefrontal cortex (in the frontal lobe) and amygdala is important in emotional regulation and violence. (Kronenberger Dec. ¶ 24; Rich Dec. ¶ 18). Adolescents with greater amounts of aggressive behavior, such as those diagnosed with disruptive behavior disorders ("DBD") have been found to have reduced activity in their frontal lobes areas and increased activity in parts of the amygdala. (Kronenberger Dec. ¶¶ 24, 32). Research suggests that this reduced frontal lobe activity level may reflect impairment in the neural circuitry involved in emotional regulation, which predisposes the DBD adolescents to aggressive behavior. (Kronenberger Dec. ¶¶ 32, 38).

Dr. Kronenberger's studies involved comparing adolescents with higher media violence exposure to those who had lower media violence exposure. He found that adolescents with higher exposure performed worse on neurocognitive tasks requiring attention and concentration; they were also reported to be inattentive, disorganized and hyperactive. (Kronenberger Dec. ¶ 32). Dr. Kronenberger's research also demonstrated that, when tested, the DBD adolescents and adolescents who report past high media violence exposure groups both show reduced activity in regions of the frontal lobes of the brain. *Id.* Even adolescents with no prior history of aggressive or violent behavior, but who had high media violence exposure, showed a pattern of impaired frontal lobe functioning similar to that of DBD adolescents. *Id.*

In short, Dr. Kronenberger concluded that increased media violence exposure was linked with reduced levels of brain functioning of the adolescent's frontal lobes. His research demonstrated that the frontal lobe activity of adolescents with high exposure to violent video games and other media violence is similar to and consistent with the brain activity of adolescents diagnosed with behavioral disorders. (Kronenberger Dec. ¶¶ 32-33). Conversely, the frontal lobes of adolescents with low violence exposure did not show similarly reduced activation levels. (Kronenberger Dec. ¶ 43). Furthermore, studies demonstrated that the greater the exposure to media violence, the worse the adolescent performed on tests of self-control and concentration (compared to adolescents with low media violence exposure). (Kronenberger Dec. ¶¶ 32, 43).

(c) Increased Activity in the Amygdala Region

Research concerning neurological brain patterns has also included observation of the amygdala region of the brain, which is associated with an individual's "threat recognition" system. (Kronenberger Dec. ¶ 34-39). The amygdala area is involved in an individual's emotional arousal and the processing of threat-arousal stimuli — essentially sensing "danger" in the environment and preparing the body for "fight or flight." (Kronenberger Dec. ¶¶ 37-39).

Along with the decreased activity in the frontal lobe areas associated with self-control and concentration, Dr. Kronenberger found during his research that increased media violence exposure in adolescents was also linked to increased activation of brain regions associated with threat arousal. (Kronenberger Dec. ¶¶ 38-39). His study results further indicated that this increased activity in the amygdala area (in addition to the reduced levels of frontal lobe activity) is also reflected in the brain activity levels of DBD adolescents who exhibit aggressive or violent behavior. (Kronenberger Dec. ¶¶ 24, 38). This finding was consistent with a previous pilot study conducted by Dr. Murray that had demonstrated the activation of the amygdala region *during* the viewing of televised media violence. (Murray Dec. ¶¶ 27, 37, 46).

(d) Children Exposed to Media Violence Develop Violent and Aggressive Memory "Scripts"

Research has also suggested that viewing video violence selectively activates the posterior cingulate areas of the brain, a region that is typically associated with detection of threat, episodic memory encoding and retrieval, and motor programming. (Murray Dec. ¶31). A recent pilot study confirmed the suspicion that violent clips (from a PG-rated "Rocky" movie) shown to preteens aged 8 to 12 would activate the amygdala, the brain's danger sensor and area responsible for fear responses. (Murray, Dec ¶¶ 37-38). However, surprisingly, these scans also revealed activation in the posterior cingulate region of the brain, an area devoted to long-term memory storage for significant or traumatic events. (Murray Dec. ¶ 38). Tests performed on veterans



with severe post-traumatic stress disorder also show activity in this area. (Murray Dec. ¶¶ 43-44).

Discovery of increased activity in the posterior cingulate region during the child's exposure to violent media is considered significant because it suggests the viewer's long-term storage of the violence portrayed in the images. (Murray Dec. ¶¶ 38-45). This storing process allows a child to retrieve "automatic" behavioral patterns in response to arousal and threat, or to "encode" such behavioral memory. (Murray Dec. ¶ 48). "Each time people play violent video games, they rehearse aggressive scripts that teach and reinforce vigilance for enemies. . . , aggressive action against others, expectations that others will behave aggressively, positive attitudes toward the use of violence and beliefs that violent solutions are effective and appropriate." Anderson and Dill, *Video Games and Aggressive Thoughts, Feelings, and Aggressive Behavior in the Laboratory and in Life*, 78 *Journal of Personality and Social Psychology* 772, 774 (2000). Such scripts or patterns are likely to serve as guides for the child's future behavior in conflict situations. (Rich Dec. ¶ 46). Video games, more than other media, are likely to teach children and adolescents to develop these aggressive response scripts. (Murray Dec. ¶¶ 46-52). The interactive nature of video game playing, compared to the more passive nature of viewing television, supports the hypothesis that video game violence exposure may be more strongly related to aggressive behavior than television violence exposure. (Rich Dec. ¶45).

Thus, violent video games impact a child's brain in at least three significant ways. First, the reduced activity in the frontal lobe and increased arousal of the amygdala region in children with increased video game violence exposure is consistent with the brain activity of children with behavioral disorders. Second, the reduced frontal lobe activity and increased amygdala activity is associated with impairment of brain functions involving concentration, impulse control, decision-making, and emotional response to threat detection. Third, exposure to violent

video games will likely cause children to develop more aggressive and violent response scripts. Additionally, there is no current peer-reviewed scholarship disputing this research on the relationship between violent video games and brain functioning in adolescents. Accordingly, the General Assembly's decision was supported by substantial evidence.

### **C. The Effect of Violent Video Games on Aggression.**

In passing the VVGL, the General assembly found that “minors who play violent video games are more likely to exhibit violent, asocial, or aggressive behavior and experience feelings of aggression.” 720 ILCS 5/12 A-5. Craig Anderson, Ph.D., one of the leading researchers on the effect of violent video games on children, has concluded to a reasonable degree of psychological/scientific certainty, these two findings of the General Assembly “are well supported by existing theory and data.” (Anderson Dec. ¶ 52). The wide array of research, which is largely uncontested in the scientific community, fully supports the General Assembly's findings regarding the harmful effects that video games have on children and adolescents.

#### **1. Research on the Relationship between Video Game Violence and Aggressive Feelings and Behavior.**

Experimental and correlational studies of video game violence exposure have shown a significant positive relationship with aggression in children and adolescents. Research in the media violence field uses experimental studies, cross-sectional correlational studies and longitudinal studies to test theoretical models regarding causation. (Anderson Dec. ¶ 20). Experimental studies of media violence exposure have shown short-term increases in aggressive behavior, and correlational studies have demonstrated a longer-term increase in aggressive behavior. (Anderson Dec. ¶ 29). Furthermore, new longitudinal research continues to support the association between violent video games and aggression. (Anderson Dec. ¶ 34). Finally, researchers have also engaged in meta-analysis, a common statistical procedure used to

summarize results of original empirical studies. All four methods are standard practices widely accepted in the social, behavioral, and medical sciences. (Anderson Dec. ¶ 20).

(a) Experimental Studies

Experimental studies allow researchers to manipulate one variable to see how it affects another. (Anderson Dec. ¶ 21). These studies allow stronger conclusions about whether the hypothesized causal variable (e.g., violent video games exposure) actually causes changes in the measured outcome variable (e.g., aggressive behavior, thoughts, feelings). (Anderson Dec. ¶ 22).

Experimental studies have shown that violent video game exposure can increase aggressive behavior, thoughts and feelings, and decrease prosocial behavior and sensitivity to violence. (Anderson Dec. ¶ 23). See Irwin and Gross, *Cognitive Tempo, Violent Video Games and Aggressive Behavior in Young Boys*, 10 *Journal of Family Violence* 337-350 (1995) (participants who had just played a violent video game were more aggressive (e.g. hitting, shoving during free play) than those who played a nonviolent video game. (Anderson Dec. ¶ 23). Similar experimental studies demonstrating the causal connection between violent video games and aggressive cognition, including hostile attribution bias, desensitization to violence, and physiological arousal, are well documented in the research literature. (Anderson Dec. ¶ 36; Rich Dec ¶ 49; Kronenberger Dec. ¶ 12).

(b) Cross-Section Correlational Studies

Cross-section correlational studies examine how strongly two variables are related at one point in time without manipulating either variable. (Anderson Dec. ¶ 26). In a correlational study, participants typically complete surveys measuring past violent video game exposure as well as other potentially relevant variables (e.g., aggressive behavior, delinquency, attitudes towards violence, attitudes towards authority). (Anderson Dec. ¶ 26). Data may also be collected from other sources such as parents, teachers, or medical records. Researchers analyze

the information to determine whether and to what degree violent video game experience is connected to any of the variables of interest. These studies are useful in the development and testing of theoretical models because: (i) they provide an opportunity for basic aspects of the model to be disconfirmed, and (ii) they provide an opportunity to test alternative explanations of the media violence exposure-aggression link. (Anderson Dec. ¶ 27).

Cross-section correlational studies have borne out the link between violent video games and aggression, including serious aggressive behavior. One study demonstrated that violent video game exposure was positively related to self-reported aggression that would be considered criminal if known to the police. (Anderson Dec. ¶ 28). This association remained significant even when time spent playing any type of video game was statistically controlled. There are numerous other studies of this type linking violent video game exposure to aggression and violence. (Anderson Dec. ¶ 28; Kronenberger Dec. ¶ 12).

### (c) Longitudinal Studies

In a longitudinal study, information is collected about participants over the course of time, at least two points in time. Currently, there are no published longitudinal studies examining the effects of violent video game exposure. However, a soon-to-be-published longitudinal study supports the causal connection between aggression and violent video games. (Anderson Dec. ¶ 34). This study examined whether habitual media violence exposure (for 3<sup>rd</sup> to 5<sup>th</sup> grade students) at one point in time (e.g., beginning of a school year) was associated with aggression levels measured at a later point in time, while statistically controlling for aggression level at the earlier point in time. (Anderson Dec. ¶ 31). The results show that students who played more violent video games early in the school year became more verbally aggressive, more physically aggressive, and less prosocial later in the school year. (Anderson Dec. ¶ 34).

(d) Meta-Analyses

A meta-analysis involves calculating effect sizes (which measure how large an effect a variable has on determining another variable) for each relevant sample of numerous empirical studies and finding an average effect size across the studies. This process utilizes a larger sample size than any one study, thereby giving a more accurate estimate of the average effect size. (Anderson Dec. ¶ 35). The first meta-analysis regarding violent video games and aggression was published in 2001 and statistically confirmed empirical research showing that violent video game exposure increases aggressive behavior, thoughts and feelings. (Anderson Dec. ¶ 36). The analysis also concluded that violent video game exposure decreases prosocial behavior. (Anderson Dec. ¶ 36).

2. All Research Methodologies Establish a Relationship Between Video Game Violence and Aggressive Feelings and Behavior

The conclusions from this wide variety of research are clear and uncontradicted. Exposure to violent video games: (i) increases aggressive behavior; (ii) increases aggressive thinking; (iii) increases aggressive emotions; (iv) increases physiological arousal; and (v) increases prosocial (or helping) behavior. (Anderson Dec. ¶ 18). Based upon these conclusions and the significance of the effect size on the relationship between video game and other media violence and aggression, the General Assembly's findings and actions are well supported by substantial evidence. The "effect size" refers to how many standard deviations the variable of interest (e.g., violent video game exposure) influences the other variable of interest (e.g., aggression). Previous meta-analyses found this effect size to be around the .2 range. (Anderson Dec. ¶ 38). In comparison, this effect size is larger than the effect of asbestos exposure on contracting laryngeal cancer, calcium consumption on increased bone mass, or second hand tobacco smoke effects on lung cancer. (Anderson Dec. ¶ 38).

**D. Criticism of Research Regarding the Violence Exposure-Aggression Link**

## 1. Criticisms of the Methodologies

A number of misconceptions have occurred when reviewing the scientific research regarding the effect of violent video games on aggression. For instance, both the video game industry and courts that have previously considered this issue have stated there are no studies linking video games to serious, real-life aggression. It is true that there are currently no published *experimental* studies in which researchers have intentionally allowed a group of children to be severely harmed or severely harm each other after playing video games.<sup>3</sup> In fact, such practices would be a breach of scientific ethics. (Anderson Dec. ¶ 46). No experimental study should place participants in a situation that subjects them to potential severe harm (e.g., giving children cigarettes to determine if smoking causes cancer in kids).

Another criticism of the violent video game research is that characteristics other than violence (e.g., frustration) are often responsible for causing increases in aggression. While a frustrating game may increase a player's aggression, several studies have demonstrated that when frustration (or other characteristic) is controlled, violent video game exposure still increases aggression. (Anderson Dec. ¶ 47).

Hired experts of the video game industry have argued that when a participant plays a violent video game in an experimental study, that gameplay and exposure is different than exposure outside the laboratory. However, participants are still playing a violent video game as they would in their own home, albeit they do not play for as long as they would outside of the laboratory (in most studies participants only play from 10 to 20 minutes). (Anderson Dec. ¶ 49). Because they are in a more public setting, they might be more restrained in their excitement or frustrations while playing. Regardless, these facts would, if anything, *underestimate* the violent video game effect for laboratory studies. (Anderson Dec. ¶ 49).

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<sup>3</sup> As stated previously, correlational studies have demonstrated the link between violent video games and serious real life aggression.

The video game industry is also fond of dismissing the manner in which aggression is measured in a laboratory setting. However, several laboratory paradigms have been created over the past 50 years that satisfy the definition of aggression. (Anderson Dec. ¶ 50). Numerous studies validate these clinically-accepted aggression measures. Moreover, they are commonly accepted by experts in the relevant research community, as evidenced by the frequent publication of such studies in the top peer-reviewed journals. (Anderson Dec. ¶ 50).

## 2. Comparisons of the Effect of Video Games to Other Media

The video game industry has often raised comparisons to other media violence in challenging restrictions on video games to minors. Currently, the only published study directly testing whether violent video game exposure is more detrimental than violent movie or television exposure found that high exposure to violent video games was associated with lower levels of empathy and more positive attitudes towards violence. In contrast, television violence did not independently contribute to either empathy or attitudes towards violence. Movie violence was significantly associated only with attitudes towards violence. (Anderson Dec. ¶ 39).

In addition to this one study, there are strong theoretical reasons to believe violent video games could have a stronger impact on the player than violent television or movie exposure. (Anderson Dec. ¶ 39). These factors include higher level of involvement when playing video games as opposed to watching television or movies, reinforcement of violent actions, and higher amounts of violence exposure in video games versus other media. (Anderson Dec. ¶¶ 40-43).

### **E. The Legislative Findings are Supported by Substantial Evidence of Harm to a Minor from Playing Violent Video Games**

Based upon the foregoing arguments, the State's findings of harm to adolescents from playing violent video games is a more than reasonable inference supported by substantial evidence. Plaintiffs strain to place the compelling interests in this case under the previous

decisions that struck down violent video-game legislation. Plaintiffs try to keep this Court's focus on the rationale of "preventing 'real-world' violence" (Pl. Mem., p. 10), so they can analogize this case to the Seventh Circuit's *Kendrick* decision. The city in *Kendrick* argued that it was trying to prevent violent crime. *American Amusement Machine Ass'n v. Kendrick*, 244 F.3d 572, 575 (7<sup>th</sup> Cir. 2001) ("Indianapolis is arguing that violent video games incite youthful players to breaches of the peace."). The court rejected that argument, but left open the door to a justification based on the welfare of the game-playing child: "The studies do not find that video games have ever caused anyone to commit a violent act, as opposed to feeling aggressive." *Id.* at 578-79. Elsewhere in the opinion, the court found a "hint" that the city was concerned with the child; the court recognized that one such concern would be the potential psychological harm to children of being exposed to violent images, which "would be unrelated to the broader societal concern with violence that was the primary motivation for the ordinance." *Id.* at 576. The Seventh Circuit in *Kendrick* did not address in any way the compelling interests advanced by the State in this case.

Nor did the court in *IDSA*, *supra*, consider the substantial evidence relating to depressed frontal-lobe activity in children, and its case-specific determination is therefore inapplicable. Likewise, *Maleng*, *supra*, does not assist Plaintiffs because the legislation there only concerned violence against "law enforcement officers" and because, unlike in this case, the government argued that video games caused violent behavior in adolescents against law enforcement officers. Notably, the court agreed that depictions of violence in video games had "some immediate and measurable effect on the level of aggression experienced" by the game players and noted their especially hazardous qualities:

the unique characteristics of video games, such as their interactive qualities, the first-person identification aspect, and the repetitive nature of the action, makes video games potentially more harmful to the psychological well-being of minors



than other forms of media.

*Id.* at 1188. Nevertheless, the court felt constrained to invalidate the law because there was no showing that playing this small subset of violent video games was “likely to lead to actual violence against [law enforcement] officers.” *Id.*

None of those cases concerned evidence that directly bears on the physiological and neurological harm to minors established in this case. None of those cases concerned research demonstrating real effects on frontal-lobe activity of children that results in impairment of the adolescent’s decisionmaking, reasoning, self-control and impulses. Those decisions involved case-specific determinations of evidence that was different, and far less developed, than the evidence before this Court and which was before the Illinois General Assembly.

## **II. THE VVGL IS NARROWLY TAILORED BECAUSE IT DOES NOT IMPACT THE RIGHTS OF ADULTS TO PURCHASE OR RENT THIS MATERIAL.**

The VVGL is narrowly tailored to support its compelling interests because the restriction on the sale or rental of violent video games is limited to children, without burdening adult access to the games in any way. Adults are free to buy these games and to share them with their children.

Legislation aimed at protecting minors from harmful material satisfies even the most rigorous scrutiny so long as it permits adults full access to that material. *See, e.g., Denver Area Educ. Telecommunic. Consortium, Inc. v. FCC*, 518 U.S. 727, 745 (1996) (upholding statute allowing the complete ban of material harmful to minors because adults could get the same or similar entertainment from tapes, theaters, or a satellite dish). Laws banning offensive material in sidewalk vending machines satisfied strict scrutiny because adults could get the same material from other distributors such as adult bookstores. *Crawford v. Lungren*, 96 F.3d 380, 388-89 (9<sup>th</sup> Cir. 1996); *State v. Evenson*, 33 P.3d 780, 788 (Ariz. App. 2001). Laws requiring vendors to cover up their displays of offensive material were narrowly tailored because adults could go to

adults-only stores to view them, or they could purchase them and view them at home. *Upper Midwest Booksellers Ass'n v. City of Minneapolis*, 780 F.2d 1389, 1395 (8<sup>th</sup> Cir. 1986); *M.S. News Co. v. Casado*, 721 F.2d 1281, 1288 (10<sup>th</sup> Cir. 1983).

The Supreme Court has upheld bans on material deemed objectionable to minors where the restriction was limited to minors, allowing adults full access to the material. *Ginsberg v. State of New York*, 390 U.S. 629, 634-35 (1968). The Court upheld a daytime ban on offensive speech because adults could view it at night, if offered as programming, or they could buy tapes or visit nightclubs to hear it. *FCC v. Pacifica Found.*, 438 U.S. 726, 750 and n.28 (1978).

Where the Court has struck down harmful-to-minors legislation as not narrowly tailored, it has done so because the rights of adults to access this material was significantly burdened or banned outright. *See, e.g., Sable Commun. of California, Inc.*, 492 U.S. at 131 (ban on indecent dial-a-porn prevented adult access); *U.S. v. Playboy Entertainment Group, Inc.*, 529 U.S. 803, 807 (2000) (16-hour-a-day ban on offensive television programming burdened adults); *Ashcroft v. ACLU*, 542 U.S. 656, 124 S.Ct 2783, 2792 (2004) (prohibition of offensive material on internet prevented adult access). Indeed, in both *Playboy* and *Ashcroft*, the Court suggested lesser restrictive alternatives that empowered parents to control whether the material should be accessible from the home. *Playboy*, 529 U.S. at 815 (“targeted blocking” allowed parents to block the programming in their household); *Ashcroft*, 124 S.Ct at 2792 (“filtering” technology allowed individual computers to block minor access to explicit websites, while allowing adults to access them). This, of course, is precisely the effect of the VVGL, allowing parents to buy these violent video games for themselves and their children and simply denying that right to unsupervised minors.

Plaintiffs suggest a lesser restrictive alternative would be to encourage awareness of the ESRB system. (Pl. Mem., p. 15.) The industry’s self-regulation, however, has been an abject

failure. As shown above, most retailers sell these video games to minors regardless of the ESRB. The point is that children will enter the store without their parents, and “[i]t borders on the absurd to say that a youngster would be deterred by an announcement” that a video game is intended for adults only. *Crawford*, 96 F.3d at 388.

The VVGL satisfies strict scrutiny. Plaintiff has no likelihood of succeeding on the merits. The motion for preliminary injunction should be denied.

### **III. THE VVGL SUFFICIENTLY DEFINES ITS TERMS.**

The Due Process Clause does not impose an “insuperable obstacle to legislation” requiring mathematical precision of terms. *U.S. v. Petrillo*, 332 U.S. 1, 7 (1947). Rather, a statute satisfies the Due Process Clause when it affords a “person of ordinary intelligence a reasonable opportunity to know what is prohibited, so that he may act accordingly.” *Grayned v. City of Rockford*, 408 U.S. 104, 108-09 (1972).

The VVGL is not unconstitutionally vague. The VVGL defines “violent” video games as those games that:

include depictions of or simulations of human-on-human violence in which the player kills or otherwise causes serious physical harm to another human. “Serious physical harm” includes depictions of death, dismemberment, amputation, decapitation, maiming, disfigurement, mutilation of body parts, or rape.

720 ILCS 5/12A-10(e). There is nothing “vague” about this definition whatsoever, and Plaintiffs direct the Court to no supporting case law. The notion that the word “human” is vague is preposterous. The word is not, as Plaintiffs claim, “ill-suited” to a medium that relies on animation—at least not according to their own ESRB ratings system’s definition of “intense violence:”

**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.

(ESRB Ratings System, [http://www.esrb.com/esrbratings\\_guide.asp#symbols](http://www.esrb.com/esrbratings_guide.asp#symbols).)

As the VVGL covers “depictions” or “simulations” of human violence, 720 ILCS 5/12A-10(e), any claim that the law refers to actual humans is absurd. Equally insincere is Plaintiffs’ wild hyperbole about what “human” could mean. (Pl. Mem., pp. 21-22.) A person of ordinary intelligence would understand that someone who dies and returns to life is not human; a “zombie” or “mutant with human characteristics” is not human; a character with “magical abilities” who “transform[s] into non-humanoid creatures” is not human; and a “part-animal” or “part-alien” is not human.

Indeed, while the Eight Circuit in *ISDA* expressly did not reach the vagueness question, *see ISDA*, 329 F.2d at 960, the lower court rejected a vagueness challenge to language very similar to that in the VVGL. In *Interactive Digital Software Ass’n v. St. Louis County*, 200 F.Supp.2d 1126 (E.D. Mo. 2002), *rev’d on other grounds*, 329 F.3d 954 (8<sup>th</sup> Cir. 2003), the court found it “incredulous” that plaintiffs claimed not to know the meaning of “human-like” when they put that phrase in their ratings system. *ISDA*, 200 F.Supp. 2d at 1140. The word “human” is clearly more definite than “human-like.”

Plaintiffs complain of the phrase “depictions of or simulations of” human-on-human violence but, as stated above, that phrase merely makes the point that these are not actual human beings in these video games. Everything in a video game is a “depiction” or “simulation.” It is for this very reason that the ESRB’s content descriptors in its ratings system uses some version of the word “depiction” in virtually every definition. *See generally* ESRB Ratings System, *supra*. The phrase is not remotely vague.

Plaintiffs’ passing reference to the definition of “serious physical harm” is without merit. The VVGL specifically identifies “depictions of death, dismemberment, amputation, decapitation, maiming, disfigurement, mutilation of body parts, or rape” in the definition. 720 ILCS 5/12A-10(e).

The VVGL could not be more specific. Plaintiff's vagueness claim fails as a matter of law.

Plaintiffs think so little of their equal protection and delegation-of-authority arguments (Counts III and IV, respectively) that they do not even press them in their Motion for Preliminary Injunction. Defendant has moved for summary judgment on Count III as it applies to the SEVGL. For the same reasons stated therein, Count III fails as a matter of law with regard to the VVGL, too. Defendant has already moved to dismiss Count IV. Neither Count III nor IV has any legal merit whatsoever.

### CONCLUSION

WHEREFORE, Defendant Governor Rod Blagojevich respectfully requests that Plaintiffs' Motion for a Preliminary Injunction be denied.

Defendant Rod Blagojevich,  
Governor of the State of Illinois

Dated: October 7, 2005

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