

IN THE DISTRICT COURT OF THE UNITED STATES  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

ENTERTAINMENT SOFTWARE	)	
ASSOCIATION; VIDEO SOFTWARE	)	
DEALERS ASSOCIATION, and	)	
ILLINOIS RETAIL MERCHANTS	)	
ASSOCIATION,	)	
	)	
Plaintiffs,	)	
	)	
-vs-	)	
	)	
ROD BLAGOJEVICH, in his	)	No. 05 C 4265
official capacity as	)	
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.	)	

Deposition of DMITRI WILLIAMS, taken before  
DANA LARIMER, C.S.R., R.P.R., and Notary Public,  
pursuant to the Federal Rules of Civil Procedure for  
the United States Courts pertaining to the taking of  
depositions for the purpose of discovery, on the 6th  
Floor, 180 North Wacker Street, Chicago, Illinois,  
commencing at 10:00 a.m., on the 2nd day of November,  
2005.

1 There were present at the taking of this  
2 deposition the following counsel:  
3

4 JENNER & BLOCK LLC by  
5 MS. KATHERINE FALLOW  
6 MS. KATHLEEN R. HARTNETT  
7 601 thirteenth St. NW, Suite 1200 South  
8 Washington, D.C. 20005  
9 (202) 639-6000  
10 on behalf of the Plaintiffs;

11 HOGAN MARREN, LTD.  
12 MS. LIMO T. CHERIAN  
13 180 N. Wacker Dr., Suite 600  
14 Chicago, Illinois 60606  
15 (312) 946-1800  
16 on behalf of Rob Blagojevich.

17 OFFICE OF THE ATTORNEY GENERAL  
18 MS. ELLECIA L. PARSELL,  
19 100 W. Randolph St.  
20 Chicago, IL 60601  
21 (312)814-3374  
22 on behalf of Lisa Madigan, in her official  
23 capacity as Attorney General of the State  
24 of Illinois.

1 DEPOSITION OF  
2 DMITRI WILLIAMS

3  
4 EXAMINATION BY PAGE  
5 by Ms. Cherian 4  
6 by Ms. Fallow 247  
7 by Ms. Cherian 249

8 EXHIBITS

9  
10  
11 Exhibit No. 1 9  
12 Exhibit No. 3 65  
13 Exhibit No. 4 66  
14 Exhibit No. 5 96  
15 Exhibit No. 6 100  
16 Exhibit No. 7 110  
17 Exhibit No. 8 129  
18 Exhibit No. 9 224  
19 Exhibit No. 10 225  
20 Exhibit No. 11 227  
21 Exhibit No. 12 236  
22 Exhibit No. 13 239  
23 Exhibit No. 14 241  
24 Exhibit No. 15 242

1 DMITRI WILLIAMS,  
2 called as a witness herein, having been first duly  
3 sworn, was examined upon oral interrogatories and  
4 testified as follows:

5 EXAMINATION

6 by Ms. Cherian:

7 BY MS. CHERIAN:

8 Q Dr. Williams, would you please state your  
9 name and spell your first name for the record?

10 A Dmitri Williams, D-M-I-T-R-I.

11 Q Dr. Williams, my name is Limo Cherian. I'll  
12 be asking you questions over the course of the day.  
13 First of all, have you been deposed before?

14 A No.

15 Q Let's go over some ground rules. I'll be  
16 asking you a series of questions, which you will be  
17 answering under oath. The court reporter is here to  
18 take down both my questions and your answers. So in  
19 order for that to turn out well in the transcript,  
20 there are a couple of things that we need to keep in  
21 mind.

22 First of all, if you could wait until I am  
23 finished with the question before you begin your  
24 answer, I likewise will wait until you finish with

1 your answer before I begin a question. It is  
2 difficult for the court reporter to take down things  
3 at the same time. I know often in conversation  
4 people anticipate the end of the question and jump  
5 in, if you can wait and I'll do the same.

6 Do you understand that?

7 A I do.

8 Q One other rule, you so far have been doing  
9 great, is to answer every question with an audible  
10 response, words. Uh-huh and uh-uh do not turn out so  
11 well. There is no way to take down nods. If you can  
12 answer each question orally.

13 A Okay.

14 Q Finally, if at any point during the  
15 deposition I ask you a question which you do not  
16 understand, please let me know and I'll do my best to  
17 clarify that. Do you understand that?

18 A I do.

19 Q If you ever need a break, let me know. It's  
20 not a test of endurance. Any time that you need a  
21 break, we can take one. All right?

22 A Okay.

23 Q Dr. Williams, you have been retained by the  
24 plaintiffs in the matter of ESA versus Blagojevich,

<p style="text-align: right;">Page 6</p> <p>1 is that correct?</p> <p>2 A Yes.</p> <p>3 Q When were you retained?</p> <p>4 A Official retained as in signed the letter?</p> <p>5 Q When were you first contacted?</p> <p>6 A In this case I was contacted, I think about a</p> <p>7 month, month and a half ago.</p> <p>8 Q That would be probably mid October?</p> <p>9 A Yes.</p> <p>10 Q How were you contacted --</p> <p>11 MS FALLOW: A month or month a half ago may be</p> <p>12 earlier than mid October.</p> <p>13 BY MS. CHERIAN:</p> <p>14 Q Sometime in early October of 2005?</p> <p>15 A Could have been late September, I don't</p> <p>16 remember the date.</p> <p>17 Q Do you remember who you were contacted by?</p> <p>18 A Ms. Hartnett.</p> <p>19 Q What did Ms. Hartnett explain to you at that</p> <p>20 point?</p> <p>21 A Explained to me that they were interested in</p> <p>22 seeking my expert witness testimony to rebut the</p> <p>23 statement by Professor Anderson.</p> <p>24 Q At that point had you seen the statement from</p>	<p style="text-align: right;">Page 8</p> <p>1 A No.</p> <p>2 Q Were you ever give a copy of Professor</p> <p>3 Anderson's expert report in this case?</p> <p>4 A Yes.</p> <p>5 Q Were all of these materials provided to you</p> <p>6 before or after you did your expert, your first draft</p> <p>7 of your report?</p> <p>8 A Some materials before, some after.</p> <p>9 Q Have you ever reviewed Dr. Goldstein's report</p> <p>10 or declaration in this matter?</p> <p>11 A Yes.</p> <p>12 Q Were you given any draft versions of Dr.</p> <p>13 Goldstein's report or declaration?</p> <p>14 A No.</p> <p>15 Q Dr. Williams, have you ever been an expert</p> <p>16 witness before?</p> <p>17 A No.</p> <p>18 Q Are you charging a fee for your services in</p> <p>19 this matter?</p> <p>20 A Yes.</p> <p>21 Q What is your fee?</p> <p>22 A \$200 an hour.</p> <p>23 Q Have you ever sent any invoices regarding the</p> <p>24 time that you have spent on this matter already?</p>
<p style="text-align: right;">Page 7</p> <p>1 Professor Anderson, were you given one?</p> <p>2 A Not at that point.</p> <p>3 Q Were any materials sent to you initially when</p> <p>4 you first were contacted by Ms. Hartnett?</p> <p>5 A I can't remember if I was sent materials</p> <p>6 after the first conversation or after the initial</p> <p>7 series of e-mails, but shortly thereafter I was sent</p> <p>8 material.</p> <p>9 Q Do you recall what materials you were sent?</p> <p>10 A Early in my involvement I was sent Anderson's</p> <p>11 declaration and also materials from the similar</p> <p>12 Washington case.</p> <p>13 Q When you say similar materials from the</p> <p>14 Washington case, do you remember specifically what</p> <p>15 materials?</p> <p>16 A The Goldstein deposition transcript, the</p> <p>17 expert witness statements from that case. I think</p> <p>18 that's it.</p> <p>19 Q When you say expert witness statements, do</p> <p>20 you remember what expert witness statements from the</p> <p>21 Washington case?</p> <p>22 A Professor Anderson's and Dr. Goldstein's.</p> <p>23 Q Were you given a copy of Professor Anderson's</p> <p>24 deposition from that case?</p>	<p style="text-align: right;">Page 9</p> <p>1 A I have not.</p> <p>2 Q Do you have an estimate of how much time you</p> <p>3 spent on it?</p> <p>4 A Somewhere in the neighborhood of 50 hours</p> <p>5 right now, maybe more, maybe less.</p> <p>6 Q I am going to start off having marked as</p> <p>7 Exhibit No. 1.</p> <p>8 (Exhibit No. 1 was marked for</p> <p>9 identification.)</p> <p>10 BY MS. CHERIAN:</p> <p>11 Q Dr. Williams, is this the declaration that</p> <p>12 you signed and prepared in the case of Entertainment</p> <p>13 Software Association versus Blagojevich?</p> <p>14 A It is.</p> <p>15 Q Is this the statement of the opinions and</p> <p>16 conclusions that you have reached in reviewing this</p> <p>17 matter?</p> <p>18 A Yes.</p> <p>19 Q We are going to be going through this fairly</p> <p>20 often through the course of today, so if you can hold</p> <p>21 onto this one. Your current CV is attached as</p> <p>22 Exhibit A, is that correct?</p> <p>23 A That's correct.</p> <p>24 Q Are there any additions or changes to that</p>

<p style="text-align: right;">Page 10</p> <p>1 since you signed the declaration?  2 A No.  3 Q You received your Ph.D. in communication  4 studies, is that correct?  5 A Yes.  6 Q From where?  7 A University of Michigan.  8 Q If I were to ask you to describe generally  9 what communication studies is, what would you tell  10 me?  11 A The broad umbrella of communication refers to  12 people communicating with each other both  13 individually and in mass, although my specialty is  14 the media segment of that broader umbrella.  15 Q If you could turn your attention to the  16 second paragraph of your declaration, the second  17 sentence you state, I consider myself a social  18 psychology experimentalists. Can you explain what a  19 social psychology experimentalists is?  20 A It means that I use the methodologies  21 practiced by social psychologists and also a good  22 portion of the theory base as well.  23 Q Do you have any training in social  24 psychology?</p>	<p style="text-align: right;">Page 12</p> <p>1 think those are important things to consider in  2 research.  3 Q In all research regarding media?  4 A Whenever possible.  5 Q If you turn your attention to page two in  6 paragraph four of your declaration, in the first  7 sentence of that paragraph you state; this document  8 will outline the case of the research on video games  9 and violence has not yet met the basic conditions for  10 strong causal claims.  11 Are you referring specifically to any  12 specific strong causal claims?  13 A I am referring to the general statements and  14 some of the specific statements in Professor  15 Anderson's published work and in his declaration and  16 additionally to some of the general and specific  17 statements in Dr. Rich's statement.  18 Q When you use the adjective strong causal  19 claims, what do you mean by that?  20 A When the writer implies a degree of certainty  21 between a relationship between two variables, I would  22 describe that as a strong claim.  23 Q Any degree of certainty?  24 A The degree of certainty that the writer</p>
<p style="text-align: right;">Page 11</p> <p>1 A Yes.  2 Q What sort of training is that?  3 A Theory and method training at the Ph.D.  4 level.  5 Q Does that include statistics training?  6 A It does.  7 Q You also go on in the same sentence in  8 paragraph two to say, but also believe in the  9 importance of understanding the social context of my  10 subjects. What do you mean by the social context of  11 your subjects?  12 A I mean that it is important to me to  13 understand the way in which interpersonal settings  14 modify perception and uses of media. And that by  15 having a better, deeper understanding of the  16 background of the people under study and the way in  17 which they use things, helps to frame and set up the  18 research in a much deeper way than black boxing those  19 simple media reception processes.  20 Q When you say black boxing, I just don't  21 understand that term?  22 A Some media research doesn't pay a lot of  23 attention to the background of the individuals  24 involved or the settings in which they use media. I</p>	<p style="text-align: right;">Page 13</p> <p>1 expresses is usually a factor of the adjective  2 surrounding it, the content of what else they said in  3 the paragraph and conclusions they are drawing from  4 their methodology.  5 Q Would you disagree with, well, would you draw  6 a -- would you distinguish between strong causal  7 claims and any causal claims?  8 A One is a subset of the other.  9 Q When you say one is a subset of the another,  10 any is -- strong is a subset of any, would that be  11 right?  12 A That's right.  13 Q You go on to say in paragraph four that you  14 agree with much of what Professor Anderson suggests  15 about the television literature, is that correct?  16 A Yes.  17 Q Then you go on to explain that you disagree  18 with importing that approach to video games, is that  19 right?  20 A That's correct.  21 Q What is it that makes video games different  22 than television?  23 A The answer to that is as much a statement  24 about what we don't know as what we might predict</p>

1 would be different. There are any number of possible  
2 differences in regards to both the content, the use  
3 and the reception, by which I mean the cognitive  
4 processes that are going on between those two media.

5 In some cases researchers have good insights  
6 about the differences between the two media. In some  
7 cases there are variables and hypothesis which are  
8 just starting to be raised for the first time, which  
9 raise a distinction between the two.

10 Q If we could go through this one at a time.  
11 You said there is a difference between the content  
12 between television and video games. What do you mean  
13 by that?

14 MS FALLOW: Did you answer that question?

15 THE WITNESS: Yes.

16 BY MS. CHERIAN:

17 Q What do you mean by the content?

18 A The content of most broadcast media, that is  
19 television and movies tends to follow linear story  
20 lines. It also has an atypical constellation of  
21 characters. The content of video games sometimes,  
22 but not always follows a linear story line. And the  
23 actions that occur on the screen are usually directed  
24 by the player and don't always follow a set

1 prescribed path.

2 Additionally there are often genre  
3 differences, differences in duration, certainly  
4 differences in style and presentation and aesthetics.

5 Q When you say genre differences, what do you  
6 mean?

7 A Most people and most media researchers  
8 understand the basic set of genre on television.  
9 Most people understand with a reasonable degree of  
10 certainty what a sitcom is, what a drama is and news  
11 program is. The genres in video games are different  
12 than the genres on the television. They are also not  
13 as well cataloged and typologized.

14 Q Is there an accepted set of genres for video  
15 games?

16 A We have a working set of genres based on the  
17 industry specification scheme that many researchers  
18 have subscribed to, but we don't have a really good  
19 working taxonomy of content that would help us guide  
20 some kind of global theory or approach. This becomes  
21 particularly important when drawing conclusions,  
22 generalizable conclusions about what content there is  
23 overall and what content might lead to what processes  
24 or what effects.

1 Q What are the genres that are described by the  
2 industry?

3 A There is more than one system, but if I can  
4 conflate a few of them together, the rough categories  
5 tend to be puzzle based games, action based games,  
6 which is a pretty broad umbrella term, adventure  
7 games, role playing games, sports games.

8 Those are the bigger ones. And a more  
9 precise categorization system would probably break  
10 down two or three of those into more specific types.

11 Q With respect to the term first person  
12 shooter, what category would that fall into?

13 A Most likely action. But the term first  
14 person shooter is as much about the interface as it  
15 is about genre. There is a conflation of terminology  
16 there.

17 One could imagine a role playing game title  
18 featuring a first person shooter camera style and yet  
19 would not be what other people would describe as a  
20 first person shooter and the more well-known case of  
21 the game like Doom, where most people would look at  
22 that and say that's a first person shooter.

23 This is an indication that our typology  
24 system is not perfect, because one title can cross

1 genres. Genres might not be a perfectly accurate way  
2 to describe a single title in the first place.

3 Q You also spoke about the difference between  
4 television and video games that the use is different.  
5 What do you mean by that?

6 A People watch television shows and people play  
7 video games. The basic verb is different. They are  
8 used differently. It might be used for different  
9 reasons. They are certainly used in different  
10 context. They certainly have different interfaces.

11 And the use of games because it is often  
12 played, it is usually more of a social use. You can  
13 play a game with someone. And it's a different type  
14 of use than watching television with someone.

15 Q When you say play a game with someone, do you  
16 mean that you are both playing the game or you are  
17 both sitting in the room?

18 A Those are both possibilities. There are any  
19 number of play combinations that can happen with  
20 observer and participation. There are many games  
21 where people can play together with a large number of  
22 people, some with a small number of people.  
23 Different social settings are present and also  
24 different combinations of people playing remotely

<p style="text-align: right;">Page 18</p> <p>1 from one another.</p> <p>2 Q If one person is playing and the other person</p> <p>3 is watching, would you describe that as playing with</p> <p>4 someone?</p> <p>5 A I wouldn't describe that as playing with</p> <p>6 someone, but it might be some kind of other social</p> <p>7 interaction with that person.</p> <p>8 Q Is that different than watching television</p> <p>9 and having someone else also watch?</p> <p>10 A That would depend on the two people and the</p> <p>11 way in which they watch television. Some people</p> <p>12 watch television and don't interact much with one</p> <p>13 other, where other people have pretty lively side</p> <p>14 conversations as they are watching television.</p> <p>15 So it would be a mistake to say all people</p> <p>16 watch television the same way or in any situation</p> <p>17 where there are multiple people in the room, they are</p> <p>18 using television the same way. The same thing</p> <p>19 applies for video games. Only the interface and the</p> <p>20 settings and options within the games makes for a</p> <p>21 much more complex set of possibilities.</p> <p>22 Q If you can turn to paragraph five of your</p> <p>23 declaration, you in the middle of paragraph you say,</p> <p>24 that the research -- we are talking about television</p>	<p style="text-align: right;">Page 20</p> <p>1 untested area.</p> <p>2 Q We are going to go back to this, but you</p> <p>3 reminded me that I forgot to ask you about the</p> <p>4 reception difference between television and video</p> <p>5 games. If you can tell me what you see as the</p> <p>6 difference in terms of reception between television</p> <p>7 and video games?</p> <p>8 A Similarly to my other answer, this is a case</p> <p>9 where we don't know or understand the differences.</p> <p>10 And I want to be careful not to assume that the</p> <p>11 processes are the same when there are reasons to</p> <p>12 believe that they might be different.</p> <p>13 Q What are the reasons to believe that they</p> <p>14 might be different?</p> <p>15 A People play games in a more active sense on</p> <p>16 average than they watch television or movies. This</p> <p>17 might imply that there is a more active level of</p> <p>18 cognition going on. A person is more actively</p> <p>19 consuming, interacting and using the media. That</p> <p>20 might imply a different level of awareness.</p> <p>21 In most psychological models we talk about</p> <p>22 two forms of processing; central route processing and</p> <p>23 peripheral route processing. In layman's terms this</p> <p>24 is how much you are concentrating on a given item.</p>
<p style="text-align: right;">Page 19</p> <p>1 effects, generally points to the susceptibility of</p> <p>2 children to experience effect at a greater rate than</p> <p>3 adults when watching television.</p> <p>4 Do you see that?</p> <p>5 A Yes.</p> <p>6 Q Do you agree with that research?</p> <p>7 A There are certainly problems with the</p> <p>8 television research, but I don't have a problem with</p> <p>9 the statement that younger minds are going to have</p> <p>10 different processes than older minds.</p> <p>11 And that if we are worried about effects or</p> <p>12 thinking about what effects are more likely with what</p> <p>13 populations or what demographic groups, certainly</p> <p>14 there is reason to think that based on the television</p> <p>15 literature that effects with television might occur</p> <p>16 at a greater rate among children than among adults.</p> <p>17 Q Do you believe that also holds true for video</p> <p>18 games?</p> <p>19 A It's not that I do or don't believe it. It</p> <p>20 is that I haven't seen research to say one way or the</p> <p>21 other. I'm agnostic about the issue. I'll allow for</p> <p>22 the possibility, but I have a hard time accepting the</p> <p>23 probability because the reception processes and use</p> <p>24 patterns are fundamentally different. This is an</p>	<p style="text-align: right;">Page 21</p> <p>1 The center route processing, you are thinking very</p> <p>2 hard about something and you are more likely to</p> <p>3 remember it.</p> <p>4 The peripheral route processing, there is,</p> <p>5 the items are more tangential. Those two processes</p> <p>6 in the psychological literature and in the media</p> <p>7 literature, more specifically, have led to a</p> <p>8 different series of outcomes based on the attention</p> <p>9 and retention from the experience.</p> <p>10 So when I say that video games might have</p> <p>11 different reception patterns, I am trying to</p> <p>12 highlight that we don't know what cognitive processes</p> <p>13 are going on for playing games versus television.</p> <p>14 And it doesn't make sense to assume a priori that a</p> <p>15 certain mental model is working without testing it.</p> <p>16 Q With respect to video games, you spoke about</p> <p>17 the center route versus the peripheral route.</p> <p>18 Because you are playing, would it make more sense</p> <p>19 that it would be through the central route?</p> <p>20 MS FALLOW: Objection, route is that the --</p> <p>21 MS. CHERIAN: I believe that is the word that you</p> <p>22 used.</p> <p>23 THE WITNESS: It is.</p> <p>24 MS FALLOW: Sorry, the pronunciation of route and</p>

1 route. Thank you.

2 THE WITNESS: Could you repeat the question?

3 MS. CHERIAN: I don't know that I can. Can you  
4 read it back to him?

5 (Record read.)

6 THE WITNESS: Not necessarily, it's possible.  
7 This is the sort of thing that is a testable  
8 hypothesis that ought to be studied, that we would  
9 like to see studied. But it's not a for sure thing.

10 There is a fairly active body of literature  
11 in media psychology in communication research known  
12 as selective exposure, which is a subset of the uses  
13 and gratification literature. And the central issue  
14 in that literature is whether people pick media to  
15 satisfy moods or needs. Most people are familiar  
16 with the idea of going home and vegging out in front  
17 of the television set.

18 After a particular hard day when someone  
19 doesn't want to think, they will often watch a  
20 television show which requires less cognitive effort.  
21 That's what we mean by becoming a couch potato or  
22 vegging out. Whereas the same person when they feel  
23 a stronger need for challenge, might pick, I'll be  
24 stereotypical here, watching NOVA on PBS to have a

1 stronger mental challenge. People selectively choose  
2 their media to match the kind of cognitive load they  
3 want to process.

4 In addition to help match the mood that they  
5 are in, some people who are depressed will often  
6 listen to upbeat music to raise their spirit. There  
7 is an active role there. I think it's a reasonable  
8 hypothesis that people would select video games in  
9 the same manner. For example, someone who doesn't  
10 want to think would pick a video game or part of a  
11 video game that they would find less challenging, so  
12 for example, a game they have mastered. That person  
13 might replay it because they don't want to think very  
14 much.

15 On the other hand, because video games do  
16 tend to be about problem solving and involve a fair  
17 amount of thinking, it's more likely that a person  
18 choosing a video game over watching television would  
19 have a relatively higher cognitive load; that is, be  
20 more likely to centrally process the information as  
21 compared to television. But I have talked with many  
22 video games players who are doing the equivalent of  
23 vegging out while they play, so the proportion of  
24 that is unknown.

1 Q When you say that you have spoken to video  
2 game players who were talking about vegging out when  
3 they were playing, would those be experienced players  
4 or players that have played the game a number of  
5 times?

6 A Yes, because the first time someone plays a  
7 game, they are more likely to experience the  
8 challenge of solving the basic structure and/or  
9 frustration from not being able to surmount that  
10 challenge. So it would be rare for a person who was  
11 inexperienced to the game to attempt a game as a way  
12 of having a low cognitive load.

13 Q So in terms of the cognitive process for  
14 someone who is not experienced in the game, would  
15 that more likely be more active in a video game than  
16 watching television?

17 A I think that's a reasonable hypothesis. Even  
18 though it hasn't been tested, I would expect to find  
19 that. I wouldn't say that I know that since we  
20 haven't tested it.

21 Q I am going to go back to paragraph five now.  
22 Specifically going back to your answer that you said  
23 that -- we were talking about the television research  
24 and the video game research. Is there any specific

1 basis for you to assume that the television research  
2 in terms of the susceptibility of children rather  
3 than an adult or greater susceptibility of children.

4 Is there any reason for you to suspect that  
5 that does not hold true for video games?

6 A Again, it's the unknown. Because we don't  
7 even understand the cognitive process, it's hard to  
8 even make hypothesis how one would be different than  
9 the other. One person, it depends on the mechanism  
10 that the theory predicts about how effects would  
11 occur.

12 There are any number of mechanisms out  
13 there. Professor Anderson's is one. There are two  
14 or three others that are equally viable. They might  
15 predict different things in terms of how processing  
16 route might generate different effects with  
17 television versus video games, but again this hasn't  
18 been tested directly.

19 Q I guess what I'm trying to ask is, do you  
20 know of any theories or models that would say that  
21 children were less susceptible to experience effects  
22 at a greater rate than adults while playing video  
23 games?

24 A There is literature about how children play

1 and create separate rule sets for the play  
2 experience. How old do children have to be to make  
3 the separation from fantasy media to reality media  
4 and when they are being affected by it, if they are  
5 being affected by it. Are this enacting fantasy  
6 rules or are they actually engaging in actual  
7 aggression. That's the crux of this issue.

8 There is a fair amount of research and  
9 contention out there to suggest that children are not  
10 being affected in the way that Anderson's GAM model  
11 would predict.

12 As to the second part of the question, are  
13 they experiencing this at a differential rate than  
14 adults. I don't know of literature that predicts  
15 more or less central versus peripheral route  
16 processing based by age. In video games this is  
17 particularly confusing because of findings around age  
18 are very mixed.

19 We would expect, if we believe the GAM  
20 findings for television violence, the kind of work  
21 that has been done by Professor Huesmann and Aaron  
22 and others. We would expect to find that children  
23 would be more affected. But there is some research,  
24 including a finding of my own studies, that showed

1 adults were more affected than children.

2 So since this defies predictions, this is  
3 confusing to myself and other researchers, who then  
4 go back, look at the original theory and model and  
5 think maybe we are missing something about how things  
6 work or maybe there is a different process and maybe  
7 it is one of these other models rather than the GAM,  
8 which is a better explainer of the phenomenon.

9 Q When you spoke in the first part of your  
10 answer about research related to children and the  
11 play experience, what were you referring to?

12 A I was referring to what I had read in  
13 Professor Goldstein's work in his book chapter in the  
14 handbook of computer game studies, in the arguments I  
15 had seen him present in the deposition I was given  
16 and in his expert statement.

17 I am not an expert on children at play. But  
18 I did find many of his ideas provocative in the way  
19 that they suggest what processes are occurring inside  
20 of children's minds as they interpret and whether or  
21 not those should be construed as effects.

22 Q Have you reviewed any actual studies on the  
23 issue of children at play related to video games?

24 A I reviewed studies where the sample was a

1 youth sample. The measures were measures of play. I  
2 have not reviewed the citation from Professor  
3 Goldstein's statement that is specifically about how  
4 children are or aren't playing. I actually wasn't  
5 able to track it down. I looked for it.

6 But there isn't a wealth of literature on  
7 this issue.

8 Q When you refer to the citation of Professor  
9 Goldstein's report, are you talking about the Holm  
10 Sorensen and Jessen study?

11 A Yes.

12 Q You were not able to review that?

13 A No.

14 Q If you can turn to paragraph 33 of your  
15 declaration perhaps that will refresh your  
16 recollection.

17 A Yes.

18 Q Is that the citation that you were talking  
19 about from Dr. Goldstein?

20 A Yes. This speaks to the level of processing  
21 that is going on. One would expect that children who  
22 are aware of the difference between fantasy and  
23 reality who are engaging in central route processing  
24 that were being active, it would be a reasonable

1 hypothesis for them because they are aware and active  
2 to be more likely to make that separation between  
3 fantasy and reality than if they were engaging in a  
4 more peripheral route.

5 So the argument is often made that video  
6 games might be more aggressive and violence inducing  
7 because of the active state from practicing and  
8 repeating scripts. That is not tested or confirmed,  
9 neither is this. This alternative hypothesis is that  
10 that level of activity makes them less likely to  
11 experience effects because they are more aware of the  
12 difference between fantasy and reality.

13 The contention by Goldstein based on this  
14 work is that the play that is taking place is just  
15 that, it's play. It doesn't meet the definition of  
16 aggression, which is the intention to commit  
17 violence, to harm another person willing who is  
18 trying to avoid that harm.

19 Q Your understanding of the Holm Sorensen and  
20 Jessen is from Dr. Goldstein and not from an  
21 independent review?

22 A That's correct. The test here is whether or  
23 not it's worth generating a hypothesis from the  
24 study. Even if there had been a study, I had been

<p style="text-align: right;">Page 30</p> <p>1 convinced it was well conducted, a single study 2 usually isn't enough to confirm or deny much of 3 anything. 4 So this is merely raising a plausible 5 alternative hypothesis. It's not a test of whether 6 the study was well down. It is a test of whether the 7 hypothesis is reasonable. And it meets that test 8 easily. 9 Q You go on in paragraph five to discuss a mean 10 world effect. I am trying to make sure that I 11 understand when you say a mean world, is that 12 different than hostile attribution bias? 13 A Anderson's use of hostile attribution bias 14 comes directly from the mean world effect literature. 15 This is known as the cultivation literature. It's 16 based on work by Gerbner, Morgan, Gross &amp; Signorielli 17 in the '70s. 18 Anderson use is that he is borrowing from 19 the cultivation approach, which is at best highly 20 disputed in communication and media psychology 21 circles. The way that he is using it is problematic 22 in and of itself and also in particular with respect 23 to video games, based on my understanding of how 24 cultivation operates and based on a specific finding</p>	<p style="text-align: right;">Page 32</p> <p>1 a short cut. The research has been almost entirely 2 discredited in its original conception. Researchers 3 have since shown that the same effects would be 4 better predicted by the astrological sign of the 5 people in the study rather than by how much media 6 they consumed, which in the research circles I move 7 in, we call a relatively devastating attack on the 8 original idea. 9 And yet because it makes intuitive sense, 10 the idea behind cultivation theory persist in the 11 academy. Others have made refinements of the theory 12 in such a way that it, in such a way that causes 13 great discomfort to the original modelers of it. The 14 people have adapted their theory to work in a more 15 specific and precise way in later tests. 16 At the ICA, that's International 17 Communication Association meeting in New Orleans a 18 year and a half ago, I sat in on a cultivation panel. 19 And one of the original authors, Larry Gross was in 20 the audience and was taking issue with some more 21 recent findings that were labeled as cultivation, 22 because he said that's not what we meant in the first 23 place. And the panelists said yes, but this actually 24 works.</p>
<p style="text-align: right;">Page 31</p> <p>1 that I found in my own work for an article that is in 2 press. 3 Q We are going to talk about that, but I'm 4 trying to get an understanding of the terminology. 5 When you say mean world, what do you mean? 6 A The mean world hypothesis is the idea that 7 when one watches a lot of television, one starts to 8 think that the world is like the television world. 9 If we assume, I think that is a very suspect 10 assumption, if we assume that television is a 11 relatively uniform set of symbols and messages and 12 that it communicates the message to us that the world 13 is a scary and violent place, cultivation theory says 14 that we will then think that our own neighborhoods 15 are scary and violent places. 16 So the classic test of cultivation theory is 17 to show that people who have watched more television 18 are more likely to think that a violent act, specific 19 criminal violent acts will be more likely to occur in 20 their real world neighborhoods. This approach makes 21 a lot of intuitive sense in that we would expect 22 people to be affected by what they watch in a general 23 way. 24 Unfortunately, it's a little bit too easy of</p>	<p style="text-align: right;">Page 33</p> <p>1 And the audience was left to decide whether 2 they wanted to go with the original conception, which 3 has never been supported or this new conception which 4 seems to work. I am sure we are going to get to this 5 when you want to talk about my own cultivation 6 finding. 7 Q Yes, but before I do that, specifically with 8 respect to hostile attribution bias, do you know if 9 Dr. Anderson used that to mean an interpretation of 10 an ambiguous stimulus as opposed to a higher 11 likelihood that ones sees the word as a scary and 12 violent place? 13 MS FALLOW: I object to that since you are asking 14 him about what Dr. Anderson is thinking or means. 15 THE WITNESS: Professor Anderson is using the 16 broader original Gerbnerian sense of cultivation in 17 that there is spreading activation, that one 18 construct would spread to related constructs in the 19 mind and that the person wouldn't be aware of this 20 happening. 21 I think that is what he is thinking based on 22 the way that he has tested and the measures that he 23 has used. Because he has used tests of specific to 24 school instance for hostile attribution, which</p>

<p style="text-align: right;">Page 34</p> <p>1 clearly haven't been featured in the video games 2 themselves. In order for anyone to make that link 3 and use those measures, it implies that the model at 4 hand is a spreading activation model in the original 5 sense rather than a more specific or narrowly 6 tailored model, which is the one favored by myself 7 and most other media researchers. 8 Q Can you give me an example of one of the 9 instances which Dr. Anderson used a measure? 10 A In the longitudinal study which we received a 11 week or two weeks ago when I was in the middle of 12 writing my declaration, one of the measures that was 13 given was something like; you pass another child in 14 the hallway and they are laughing, are they laughing 15 at you or are they laughing at something else. 16 This sort of open-ended question which would 17 test whether the person had become more suspicious; 18 that is, would they attribute hostility toward 19 another person in a situation where there might 20 actually not be any hostility. There were, I think 21 two examples of that question type given in the 22 study, but I can't recall the precise wording. 23 Q You would describe those as mean world or 24 spreading cultivation type of measures?</p>	<p style="text-align: right;">Page 36</p> <p>1 BY MS. CHERIAN: 2 Q Back on the record. Dr. Williams, in 3 paragraph five when you referred to your in press 4 publication, is this a copy of a draft version of 5 that? 6 A This is a copy of the conference version, 7 which is identical to the in press version in any 8 substantive way. 9 Q When you say specifically that you think this 10 effect is more likely to occur in games, why is it 11 that you say that? 12 MS FALLOW: Objection, what effect? Are you 13 talking about the mean world effect? 14 MS. CHERIAN: I am quoting here. 15 Q I think earlier you said this effect meant 16 the mean world effect, correct? 17 A That's correct. 18 Q You said in your declaration, I think that 19 this effect, the mean world effect is more likely to 20 occur in games. Is that what you said in the 21 declaration? 22 A That's correct. 23 Q What do you mean by that? 24 A The cultivation effect is most likely to</p>
<p style="text-align: right;">Page 35</p> <p>1 A I would. Especially because he cites Gerbner 2 in other articles when making this point. 3 Q But that's not a measure of whether you 4 believe you are more likely to be the victim of a 5 violent crime? 6 A It's the same process and the same theory 7 that they are using, yes. They are using a different 8 set of measures to make more sense to third, fourth 9 and fifth graders, but it's the same theory and same 10 test. 11 Q You go on to say that you think that this 12 effect, by this effect I assume you mean the mean 13 world effect is more likely to occur in games. Do 14 you see that in paragraph five? 15 A I do. 16 Q Then you talk about the effects are specific 17 and do not yield the kind of priming based spreading 18 activation that lies at the heart of the hostile 19 attribution approach. 20 The 2006 study that you refer to, do you 21 remember the title of that? 22 A Virtual cultivation. 23 MS FALLOW: Off the record. 24 (Discussion had off the record.)</p>	<p style="text-align: right;">Page 37</p> <p>1 occur when the system of symbols and images is 2 consistent and repetitive. So the question isn't one 3 necessarily of interface or cognitive load or 4 processing strategy, but of how often ones sees this 5 event. 6 Video games tend to be more repetitive with 7 the type of event than television. This is a 8 generality. There are certainly pieces of television 9 content which are very repetitive. But when it comes 10 to specific actions, jumping for example, a video 11 games is going to have more of that kind of incident 12 or action per hour than television programming would. 13 This also assumes that the person is playing 14 games in direct proportion to how much they are 15 watching television in order to make that comparison, 16 which may or may not be a valid assumption. So when 17 I say it's more likely to occur in video games, this 18 isn't because of the interface or any of those 19 cognitive issues, but simply because of content 20 reputation patterns. 21 For example, in my study the actions that 22 occurred, occurred many, many times per minute, 23 sometimes hundreds of times per hour in a very 24 repetitive fashion. So the exposure was much more</p>

<p style="text-align: right;">Page 38</p> <p>1 uniform and consistent than the kind of variety that 2 we see in television programming.</p> <p>3 Q So I am trying to get to understand this. So 4 if for instance there is a game where there are car 5 crashes or car accidents, they regularly happen, that 6 would be something that someone would think is more 7 likely to occur in real life?</p> <p>8 A That's what the theory would predict. If 9 someone was watching a television show and there were 10 two car crashes in an hour, that effect would be 11 smaller than if they watch a television show where 12 there were 30 car crashes in an hour. The same thing 13 would hold true in the video games.</p> <p>14 When I compare the two media together, it is 15 with the assumption that the action is more likely to 16 occur more often in a game than on television. If 17 it's a specific action, then that kind of cultivation 18 effect is more likely to happen rather than there are 19 traffic incidents or some related construct separate 20 than something as specific as there are car crashes.</p> <p>21 Q When you say the repetition, is that the 22 repetition within the game or also the repetition of 23 playing the game more than once?</p> <p>24 A The game I studied doesn't have an end point</p>	<p style="text-align: right;">Page 40</p> <p>1 that approach probably doesn't make sense.</p> <p>2 You are correct to say that seeing a 3 repetitive act or carrying out a repetitive act in a 4 game makes a person more likely to experience -- 5 sorry, not experience, to predict the likelihood of 6 that happening in real word. I don't have a measure, 7 I don't have a grasp on whether the person carrying 8 out that act or being acted upon or witnessing that 9 act in any way is a moderating variable. The study 10 is not that precise.</p> <p>11 One hopes that future research might be able 12 to tease out if it makes a difference if the person 13 is carrying out the act, viewing the act or being 14 acted upon. Those things would have different 15 amounts of cultivation outcomes. I don't know. And 16 nobody else knows.</p> <p>17 Q Specifically in your study which was a game 18 called Asheron's Call 2, people encountered robberies 19 during the course of the, depictions of robberies 20 during the course of the game?</p> <p>21 A No, what they encountered was a series of 22 violent interactions with monsters. The monsters 23 always had weapons. A character would run into a 24 troll and the troll would have a giant mallet or a</p>
<p style="text-align: right;">Page 39</p> <p>1 so it's different than the typical model that a lot 2 of researchers assume there is a game with a finite 3 starting and stopping point. Most on-line games have 4 a begin but have no end. They are played 5 indefinitely. No one ever wins or reaches a 6 particular goal. There is always another goal after 7 it.</p> <p>8 So instead of thinking about in terms of do 9 they get to level X or slaying the dragon or insert 10 the game objective here, it is a question of what are 11 they doing during the intervening hours on the way to 12 these endless unreachable goals. It is those actions 13 that are the items of interest here.</p> <p>14 Q Particularly in your study, I'm going to 15 paraphrase -- obviously you should feel free to 16 correct me if I paraphrasing wrong. You found that 17 the if it was action they specifically encountered in 18 the course of the game, they were more likely to find 19 that that might occur to them in real life?</p> <p>20 A That's correct. It did not spread to related 21 constructs, which is the important distinction 22 between my way of modelling this and what I found 23 than in Anderson's spreading activation based hostile 24 attribution bias approach. My approach shows that</p>	<p style="text-align: right;">Page 41</p> <p>1 sword or bow and arrow, something like that.</p> <p>2 In the game there are not instance of 3 robbery. There are no instance of murder. There is 4 no rape. That was the test for spreading activation 5 was if cultivation really does work in the mean world 6 sense, if it really will spread to related 7 constructs, then even though in the game there was 8 only this one correlate between the real world and 9 the game; that is, violence with weapons, if there is 10 spreading activation, people will be more likely to 11 predict a rise in other relating constructs even if 12 it didn't occur in the game. That is what mean world 13 theory suggests that is not specific.</p> <p>14 If you see car crashes, you will spread to 15 other related constructs. The test was will somebody 16 who is observing attacks with a weapon think that 17 armed robbery was more likely in the real world. And 18 it wasn't. So what did go up was the attacks of 19 weapons, which shows that there is a specific and 20 precise cultivation approach. That playing the game 21 really did impact the person's perceptions of reality 22 in the sense that it increased the likelihood that 23 they thought these crimes would occur, but it didn't 24 spread to related but different crimes.</p>

<p style="text-align: right;">Page 42</p> <p>1 Q If you can turn to page 17 of Exhibit 2 in 2 the second paragraph under results there is a 3 sentence that start off; after playing the game the 4 participants in the treatment condition were more 5 likely than those in the control group to say that 6 people would experience robbery with weapons in the 7 real world. This finding was substantively very 8 large, more than ten points on 100 point scale and 9 significantly powerful. 10 Do you see that? 11 A I do. 12 Q I'm confused. Did you say they did or did 13 not experience robbery in the actual game? 14 A The act of robbery, no. The assault with 15 weapons, yes. That's the link is the weapon based 16 part of it. 17 Q So you would not say there is a spreading 18 from an attack with a weapon to robbery with a 19 weapon? 20 A I don't think that is a stretch because when 21 people die in the game they lose items. When they 22 kill an monster or another person in some games, they 23 take things from them. So it actually is akin to 24 actually a robbery.</p>	<p style="text-align: right;">Page 44</p> <p>1 occurrences. Again, we don't know which mechanism 2 applies. But yes, that is a reasonable test. 3 Q When you say it does not yield the priming 4 based spreading activation, what you are saying in 5 this paragraph is it doesn't transfer to other types 6 of action that are not the specific sequence that you 7 are experiencing in the game? 8 A That's correct. There should be an series of 9 related constructs in the mind all based on the idea 10 of crime. When one thinks that crime is likely to 11 increase in one specific instance, other studies have 12 shown that there can be this thing called spreading 13 activation. You can prime related constructs which 14 weren't directly spoken about or mentioned in the 15 original test and you have the spreading effect. 16 The question has always been does this 17 happen in cultivation theory. In this case does it 18 happen in games and the answer is no. 19 Q Based on your study? 20 A Based on my study of this game for one month. 21 That is to say I am not saying this effect would 22 occur or would not occur with other games or that it 23 would occur more or less after a month because I 24 don't have data to test that.</p>
<p style="text-align: right;">Page 43</p> <p>1 Q But your study did find that people then 2 after playing the game did predict that people would 3 experience robbery in a higher, on a higher level 4 than people that did not play the game? 5 A That's correct. They were ten points higher 6 on that scale more like to say that this event would 7 occur in the real world than someone who didn't play 8 the game. It raised their level of concern about 9 this action purely by play. 10 Q Given your finding here, would you expect 11 that if somebody did play a game that did have a 12 beginning and an end that played it over and over 13 again, that that same construct would hold true? 14 A Possibly, I would say it's a reasonable 15 hypothesis to study. But having not studied it, I 16 really don't want to speculate. 17 Q If you are talking about a number of 18 incidents per minute, if it's a high number of 19 incidents, and you play the game over and over again, 20 that as a hypothesis you would be thinking it was 21 worth studying if that would have had a higher effect 22 on their prediction of those same -- 23 A It's a reasonable hypothesis based on the 24 repetitive set of actions, yes, for a set of</p>	<p style="text-align: right;">Page 45</p> <p>1 However, because I am testing something with 2 a very consistent set of images, it offers a 3 relatively powerful test of the phenomenon because 4 there are so many hours of exposure to the same 5 thing. The question would be would there be another 6 game that people would play this many hours straight 7 through and play nothing else. That would be the 8 sort of prerequisite for replication and an extension 9 of this to see if it applies to other games. 10 That was one of the reasons to study an 11 on-line game like this in the first place because it 12 does offer such prolonged exposure which makes it 13 easier to test many of these hypothesis compared to 14 shorter term, stand-alone games that you play on 15 consoles. That's why I picked this in the first 16 place. 17 Q Have there been or do you know of studies 18 that deal with looking at the spreading based 19 activation for shorter exposure for console games? 20 A No, I am not aware of any studies that do 21 that. Cultivation theory as a rule does not get much 22 attention because of the discrediting that I 23 mentioned earlier. I know of only one other study 24 which is cited in the references in this virtual</p>

1 cultivation paper that mentioned the possibility of  
2 it but hadn't tested it. As far as I know my is the  
3 first actual test of it.

4 Q Now you referred earlier to Dr. Anderson, one  
5 of Dr. Anderson's measures in terms of the  
6 longitudinal study regarding asking a child about  
7 someone laughing at them. Would that be a test of  
8 the spreading activation?

9 A The way that he has it set up it could be the  
10 test of the spreading activation if you knew what the  
11 original stimulus was. If you knew what the original  
12 incident in the game was, you could make a case that  
13 this was a related construct. The problem there is  
14 we have the entire universe of every video game that  
15 has ever been played. It's hard to know what  
16 constructs occurred in those games with what level of  
17 systematic effect that may or may not be related to  
18 those particular kind of measurements that he used in  
19 a school hallway specific measure.

20 Q So if the games had people laughing at you in  
21 a school hallway, that would not be spreading. But  
22 if the game did not have people laughing at you in  
23 the school hallway, that would be spreading?

24 A That's correct.

1 Q Thanks for paying attention to that because  
2 that was a little tricky. I don't know if I asked  
3 that question correctly.

4 Dr. Williams, have you actually, did your  
5 study include a study of children?

6 A Which study?

7 Q Your study in regard to Asheron's Call, did  
8 you include children as participants?

9 A The youngest subject was 14.

10 Q How much participants were under 18?

11 A Off the top of my head I don't know. I would  
12 hazard a guess that it would be 30 to 50, maybe more.  
13 There is usually a bump around the college age level  
14 for games of this type, which means there is probably  
15 not a perfectly normal distribution around the mean  
16 for the sample size.

17 There is probably some kind of bump around  
18 the ages of 16 to 21 to 22, was my guess. So there  
19 would be some overlap in the under 18 in additional  
20 to the 14 and 15 year olds who were also in the  
21 study.

22 Q Do you know how many would have been under  
23 16?

24 A No.

1 Q If you can turn to paragraph eight of your  
2 declaration, Exhibit No. 1.

3 A Yes.

4 Q Specifically you cite John Stuart Mill  
5 regarding the three conditions for proving causality.  
6 Are you also familiar with Mill's methods of  
7 induction?

8 A Loosely, it's been a while since I read Mill  
9 via Cook and Campbell and Popper. If you could be  
10 more specific?

11 Q Are you familiar with the concept of methods  
12 of difference?

13 A That doesn't ring a bell.

14 Q Just in terms of ruling out plausible  
15 alternative hypothesis, do you know if Mill has set  
16 forth specific methods to do that including methods  
17 of difference?

18 A I don't know what Mill's methods of ruling  
19 out plausible alternative hypothesis are. But I  
20 would be more comfortable in taking the modern  
21 versions of it probably regardless.

22 Q I am asking because you cited Mill.

23 A The thinking and the theory makes a lot of  
24 sense. But science and methodology has advanced in

1 the last 150 years where you might be able to rule  
2 out hypothesis in a better and newer and more  
3 affective ways. But we still take the original  
4 spirit of what he said to heart.

5 Q But in terms of elimination of plausible  
6 alternative hypothesis, Mill had some -- well, I am  
7 not going to if you are not familiar with the  
8 difference. I guess I should ask you the rest.

9 Are you familiar with Mill's methods of  
10 agreement?

11 A No.

12 Q Methods of joint and agreement and  
13 difference?

14 A These all sound vaguely familiar as in I  
15 probably read them late at night about a decade ago.  
16 I couldn't recall them now to discuss them in detail.

17 Q There are methods of concomitant variation?

18 A That is synonymous with correlation, yes, I  
19 am familiar with that one.

20 Q Methods of residue?

21 A No. His isn't the language that we use in  
22 modern social science anymore.

23 Q In terms of testing or the elimination of  
24 alternative plausible hypothesis, you actually talk

1 in paragraph nine that you agree that the literature  
2 regarding video games satisfies the first two  
3 conditions.

4 Do you see that in paragraph nine?

5 A I see that.

6 Q You go on to say it does not satisfy the  
7 third condition. There are a range of plausible and  
8 even some likely explanations for other causal models  
9 to be at work in the realm of video game violence.

10 Can you tell me what you believe are the  
11 range of plausible or -- let's say plausible or  
12 likely and you can tell me which one you are talking  
13 about, explanations?

14 A There are two main ones. One would be the  
15 arousal confound. And the second would be a problem  
16 with theoretical model as it relates to the kind of  
17 cognitive processing that is taking place. That is  
18 something that we touched on a little bit earlier.

19 Q Can you explain what you mean by the arousal  
20 confound?

21 A The confound is when an outcome can be  
22 explained by some other interfering variable that the  
23 experimenter didn't account for. In this case the  
24 alternative hypothesis is that the effects that were

1 detected were an artifact of the testing; in that,  
2 the person was excited or pumped up rather than was  
3 violent.

4 A similar idea is that the person might be  
5 frustrated. And that all of the same mechanisms  
6 would lead to a matching outcome and could be  
7 interpreted to be the same even though they weren't.  
8 That's the confound part of it.

9 Q The second one in terms of a plausible  
10 alternative hypothesis, you said there is a problem  
11 with the theoretical model. We talked about that  
12 earlier. I just want to find out what the  
13 alternative plausible hypothesis is?

14 A There are a few possible ways to go here. A  
15 few possible variations of this. The one that we  
16 talked about earlier was the extent to which the  
17 person was actively processing. And whether that  
18 active processing might mean they were making a  
19 stronger delineation between acceptable and  
20 nonacceptable rather than a weaker one, which is the  
21 assumption that Anderson makes. The person is being  
22 acted upon, that the person is acquiring a script for  
23 behavior.

24 For example, when someone plays a game, they

1 may encounter a violent act that they have never seen  
2 before. This is now a script in their head that this  
3 is a possible action. Likewise before September 11  
4 for many people there wasn't a script for flying  
5 planes into buildings.

6 You can now make the statement that it is  
7 more likely for that person to carry out that action  
8 than it was before purely because they didn't know it  
9 was possible before. But the more important  
10 distinction is whether they are more likely to carry  
11 out that script based on whether they think that  
12 script is acceptable or makes sense in a given  
13 context.

14 Here is where Anderson's assumptions and my  
15 way of thinking tend to part ways. I think that it  
16 is equally plausible that an active level of  
17 cognition makes the person aware of the script in the  
18 way that I described, but doesn't predict that they  
19 are more likely to carry out that script because they  
20 do understand this is a play, game space. This is  
21 not acceptable behavior in daily life.

22 Compared to someone who was observing more  
23 passively, one might make the argument they are less  
24 likely to make that distinction. So in essence the

1 active participation argument that I see from people  
2 saying the effects will be stronger, I think can also  
3 show that the effects for some people might actually  
4 be weaker and non-existence.

5 Q What about specifically for minors?

6 A Specifically how?

7 Q When you are talking about that for some  
8 people it might be more likely that their active,  
9 that their awareness would make it less likely they  
10 would carry out the script. Is there any distinction  
11 based on the age of the person for that based on your  
12 research?

13 A I think this is unknown. I think that if we  
14 were to take the television literature and import it  
15 directly; that is, assume that it would work  
16 perfectly, we would assume that younger people would  
17 be less likely to make this distinction.

18 Because of the reasons that I outlined  
19 earlier how the two media are different, I am not  
20 comfortable importing that model, also because of the  
21 level of cognitive processing. Additionally, some of  
22 work that Professor Goldstein cites, demonstrates  
23 that very young children are aware of this difference  
24 of play.

1 For example, when I play with my three-year  
2 old daughter, she is only three and she understands  
3 that there are play rules and there are real rules.  
4 Is she more likely to blur that than she will be at  
5 age 15, I think she is. But she is already starting  
6 to understand that. And it looks to me that in the  
7 next year or two, she will have that down pretty  
8 well.

9 This is what that Swedish study implied that  
10 very young children acquire these play rules very  
11 early. That the play is a function of our more  
12 evolutionary biology based rules about survival and  
13 flight and fight.

14 So that when I chase my daughter around the  
15 house, we are practicing life and death behaviors but  
16 it is clear that she is not about to die or going to  
17 kill me. She is only three and understand this. Is  
18 she more likely to experience this problem than  
19 someone who is 20, yes. But at age three, she  
20 already has a pretty good grasp of it.

21 It's still a fair open, empirical question  
22 about at what age these effects are more likely or  
23 less likely to occur especially in the realm of video  
24 game violence where we have so much less literature.

1 So I think that it's a perfectly fine thing to  
2 investigate. I would like to see more studies of  
3 younger people rather than college sophomores. In  
4 the study of younger people, if there is a range of  
5 age, it would be nice to see if the effects show any  
6 kind of slope up or down based on age.

7 If we could find the age when these effects  
8 or the risk of the effects exists at all or are  
9 particularly high, I would think that would help  
10 policy makers perhaps draft legislation that fit  
11 actual use patterns rather than guessing, which is  
12 what we are doing now. We are making assumptions  
13 based on literature from an another field, which I  
14 don't think imports well.

15 Q Other than the Swedish study that we referred  
16 to earlier from, that was cited by Dr. Goldstein, do  
17 you know of other studies that deal with this issue  
18 for minors?

19 A I am aware of a fairly large body of  
20 literature about play and what it means, but I am not  
21 the aware of literature specifically studying the  
22 play context for aggressive effects for small  
23 children. Other than that I know that there is a lot  
24 of observation of play in the measurement outcomes

1 for some of video game violence literature.

2 And that Professor Goldstein's critique is  
3 these people are not acting in an aggressive way  
4 because they are not trying to cause harm. To be  
5 honest, before reading Professor Goldstein's  
6 declaration that is something that I hadn't strongly  
7 considered and something that I am thinking through  
8 whether or not that should be categorized as  
9 aggression if, in fact, they as not causing harm, not  
10 intending to cause harm.

11 Q So in terms of, say an example, of a study  
12 where small children are observed pushing each other  
13 after playing video games, are you saying that you do  
14 not think that's an appropriate measure of  
15 aggression?

16 A It depends upon their intention to cause  
17 harm. Because children push and shove each other all  
18 the time in a roughhouse way that they are basically  
19 playing in the same way that the animals in the  
20 animal kingdom play with each other.

21 We see our cats and dogs rolling around in  
22 the carpet. They are not trying to cause harm. They  
23 are learning and practicing behavior which they need  
24 as essential life and survival skills later on.

1 The same thing happens with human animals  
2 which is why we don't think it is creepy when we play  
3 catch with small children. We are practicing life  
4 and death scenarios with them. So the question is  
5 what is going on in those children's minds. Are they  
6 trying to cause harm or is this the roughhouse play.

7 And Professor Goldstein's contention is that  
8 it is definitely this is roughhouse play. I am not  
9 willing to say that is definitely that. But I would  
10 like to know is that you see some transparency of  
11 methodology. I would like to see something more in  
12 the method section about how they measured that play  
13 in the playground. Whether or not they took into  
14 account the intent to cause harm.

15 That is something that current aggression  
16 literature on video games doesn't address. We can't  
17 make that distinction. It's merely unknown rather  
18 than I know what they did and I disagree with it. I  
19 can't tell based on the way they have written up  
20 their findings.

21 Q You don't think that when somebody pushes  
22 somebody else you can presume the intent to cause  
23 them harm?

24 A It depends on how they push and how much more

1 they are pushing after playing the game versus the  
2 other. It the contextual key here that is missing.  
3 I'm not saying there weren't or there aren't or there  
4 never will be aggression effects on the playground,  
5 observation isn't an okay way to test it, but that I  
6 can't tell based on the current write-ups about the  
7 intent of the person. I wouldn't want to make the  
8 assumption one way or the other without the data.

9 So I am agnostic about that measure in a way  
10 that I wasn't before reading Professor Goldstein's  
11 declaration. Before that I took that measure out of  
12 hand.

13 Q What about hitting, if children are observed  
14 hitting each other.

15 A Lots of children hit each other. The  
16 question is whether they hit each other more or less  
17 than they did before and with the intent to harm.  
18 Again, I watch my three-year old daughter and  
19 three-year old boys hit and push and shove each  
20 other. It's not clear whether they are literally  
21 trying to hurt each other or not versus whether they  
22 are roughhousing.

23 Q Do you think that matters in terms of policy,  
24 in terms of whether they are hitting each other with

1 the intent to hurt each other or whether they are  
2 hitting each other, children?

3 MS FALLOW: Object to the form of the question.  
4 BY MS. CHERIAN:

5 Q Do you understand what I'm saying?

6 A Can you rephrase it or restate it?

7 Q Certainly. We are talking about whether  
8 pushing or specifically about playing and that there  
9 are some differences between, I guess play aggression  
10 and real aggression. Would you say that for purposes  
11 of policy that there should be a distinction between  
12 play aggression and intentional aggression? If you  
13 are hitting another children, aren't you just hitting  
14 another child?

15 A The practical outcome effect is going to be  
16 much likely different. When somebody is intending to  
17 cause harm, they are much more likely to cause harm  
18 than when they are not intending to. Children  
19 pulling punches versus actually trying to harm each  
20 other is a world of difference in intentionality.

21 I am not a lawyer, but you asked me to  
22 comment on a policy matter. It seems to me that  
23 intent is something that matters a great deal.

24 Q But in terms of looking at the measure, are

1 you saying that hitting, looking at children hitting  
2 each other is not an appropriate measure for  
3 aggression?

4 A No, that's not what I'm saying. I am saying  
5 it would be good to combine it with some type of  
6 measure of intentionality which would let you know  
7 which of those acts were aggression and which were  
8 play, to make that distinction. It could be possible  
9 that it really is true aggression and those children  
10 are trying to cause and it really is as a result of  
11 playing a game.

12 I allow for that as a possibility. I'm not  
13 trying to stick my head in the sand about this.  
14 Nevertheless, that measure isn't taken or reported so  
15 someone who is trying to be open minded about the  
16 findings, doesn't know how to interpret them.

17 It's not our job to find what we want to  
18 find or what we think might be there. It is our job  
19 to take as much data as possible and find what  
20 actually is there. It's often challenges our  
21 assumptions. It's a very difficult process. It's  
22 not about what we want or what we expect.

23 Q If we could turn to the next section of your  
24 declaration you discuss the three types of designs,

1 experimental design, cross-sectional designs and  
2 longitudinal designs for the study of video game and  
3 aggression. I am going to go through them sort of  
4 one of a time.

5 When you talk about experimental design, you  
6 talk about the fact they are the best tool for  
7 establishing causality because when designed well  
8 they automatically address the first two conditions.  
9 What does that mean? That Mill gave us, the first  
10 two conditions that Mill gave us.

11 A To clarify I say that's the best design we  
12 have short of controlled longitudinal designs at the  
13 end of the paragraph. They address the first two  
14 conditions for Mill in that experimental designs  
15 allow us to test for concomitant variation, to use  
16 your terminology, the correlation or movement at the  
17 same time.

18 And also allows us to test for time order  
19 because the person set ups the study and can place  
20 measurements before and after the administration of  
21 some stimulants compared to control groups that  
22 allows us to say that this thing preceded the other  
23 thing, therefore, we are more certain about the  
24 direction of the causal arrow. Where in a purely

1 correlation study, you don't know which way that  
2 arrow can face.

3 Q Can't you also test alternative hypothesis  
4 through an experimental study?

5 A Absolutely.

6 Q You could do this by saying these things were  
7 present and than the alternative hypothesis is  
8 controlled for in the experimental study?

9 A There are many alternative hypothesis that  
10 can be controlled in an experimental study.  
11 Sometimes all of them, sometimes not. It depends  
12 upon the theory and test of the hypothesis that is  
13 involved. I don't want to make the mistake of saying  
14 that any experimental design can pull out for all  
15 plausible alternative hypothesis.

16 But certainly the experimenter tries to  
17 control for as many as he or she can come up with  
18 ahead of time. That is one of the great advantages  
19 of it is that you try to rule things out. In fact  
20 the use of a control group is one of the greatest  
21 defenses against plausible alternative hypothesis.  
22 The most common alternative hypothesis are that it  
23 was the act of being tested itself which caused the  
24 outcome. It is an artifact of the design itself. So

1 simply having a control group is one of the first  
2 ways to do that.

3 Q Do you know of, when we talked about  
4 plausible alternative explanation, one of the ones  
5 that we talked about was you called it the arousal  
6 confound?

7 A Yes.

8 Q Do you know of experimental studies that  
9 attempted to or successfully controlled for that?

10 A The one that I cite in my study is the  
11 Anderson and Dill 2000 study. And I have cited this  
12 because it's the most well-known and influential and  
13 most cited piece in the literature. And yet I  
14 believe it is subject to this confound.

15 Q That was published in 2000, the one that you  
16 are referring to?

17 A Correct.

18 Q Do you know if since then Dr. Anderson has  
19 done other studies to control for arousal?

20 A I believe that he has subsequently tested  
21 with another set of video games. I haven't read that  
22 study recently. I think there is one that is a test  
23 of first person shooter in Glider Pro. I am not as  
24 familiar with that one as this, because this is the

1 one that everybody cites and the one that everyone  
2 reads.

3 This is sort of a foundational, if you will,  
4 study in this area for people to either agree with or  
5 take issue with. The one that gets the most play.  
6 So it seemed to make sense to talk about that one.

7 Q But in terms of the more recent study that  
8 Dr. Anderson has done regarding this issue, the study  
9 with Glider Pro, do you know if -- do you take issue  
10 with the results of that study in terms of  
11 controlling for arousal?

12 A I would have to see that study. If you have  
13 a copy, I will be happy to go through it, react to  
14 it.

15 One note about having a second stimulus test  
16 is that it's really complicated to find two games  
17 that match on the set of stimuli. There is a much  
18 cleaner way of testing that is that available to  
19 researchers, which they haven't taken advantage of  
20 for a large part, which is making original mods of  
21 things.

22 Q Do you know if Dr. Anderson has done that  
23 also?

24 A I don't.

1 MS. CHERIAN: If you can mark this as Exhibit  
2 No. 3.

3 (Exhibit No. 3 was marked for  
4 identification.)

5 BY MS. CHERIAN:

6 Q This is one of Dr. Anderson's in press papers  
7 available on his website. I am going to use this,  
8 but I don't know if I am actually going to --

9 MS FALLOW: Off the record.

10 (Discussion had off the record.)

11 MS FALLOW: On the record. We are not sure  
12 whether you provided this to us specifically but you  
13 also are not. You do not think that Dr. Anderson put  
14 this specific study in his report.

15 MS. CHERIAN: Hold on, let's clarify this because  
16 I have Dr. Anderson's report. I don't have the  
17 source list.

18 Q Dr. Williams, I am going to ask you if you  
19 have seen this at all?

20 A I haven't.

21 Q So do you just don't know whether Dr.  
22 Anderson has actually done other studies which  
23 successful controlled for arousal or excitement after  
24 the Anderson, Dill study in 2000?

<p style="text-align: right;">Page 66</p> <p>1 A Well, I am aware that Glider Pro study but I 2 couldn't tell you the year. But other than that I am 3 not aware of any and I haven't seen this paper 4 before. 5 Q Okay. 6 A This is in press? 7 Q Yes. 8 MS. CHERIAN: Mark this as Exhibit 4, please. 9 (Exhibit No. 4 was marked for 10 identification.) 11 BY MS. CHERIAN: 12 Q Dr. Williams is this the Glider Pro study 13 that you were referring to? 14 A It will take me a minute to scan through 15 this, if that's okay? 16 Q Sure, take your time. 17 A This is the right study. I am trying to 18 refamiliarize myself with it. 19 Q All right. I don't know if we got the answer 20 for the record. Is this the study that you have seen 21 before regarding the Glider Pro that Dr. Anderson has 22 done? 23 A Yes. 24 Q Before I go on, in your paragraph 13 you talk</p>	<p style="text-align: right;">Page 68</p> <p>1 one was the process by which the match games were 2 selected? 3 A I looked to refresh my memory of experiment 4 one, it's not clear to me whether this is, in fact, 5 three separate experiments or this is three models 6 and it's the same test. I cannot tell having not 7 read carefully through the opening if that is the 8 case of not. 9 If you want to talk about what is labeled as 10 experiment one, we can do that. 11 Q Let's talk specifically about experiment one. 12 On page 212 there is a table of comparison of games 13 on difficulty, enjoyment, action, frustration and 14 violence. Do you see that? 15 A I do. 16 Q That lists five nonviolent games and five 17 violent games. Do you see that? 18 A I do. 19 Q If you look on page 213, the following page 20 there is a section entitled selection of the matched 21 pair. In the last paragraph of that section it talks 22 about Glider Pro and Marathon 2 were well matched on 23 irrelevant dimensions and differed greatly on the 24 desired dimension of violence.</p>
<p style="text-align: right;">Page 67</p> <p>1 about the issue of pretesting games for arousal and 2 excitement. Do you consider pretesting an acceptable 3 way to match selected games? 4 A It can be. It is definitely something that 5 should be done. Whether it automatically satisfies 6 the criteria isn't always apparent based on the 7 Wolfenstein Myst pretesting problem. It is certainly 8 something that someone should do if they are going to 9 pick two different games in order to be able to 10 escape this confound problem. 11 Q Pretesting would be more reliable than say 12 picking games that one thinks would be equivalent? 13 A It's a prudent measure. 14 Q So in their test for Glider Pro, the matched 15 game Glider Pro was the nonviolent game in Dr. 16 Anderson's study in Exhibit 4 and the matching game 17 that was selected for the violent for experiment one 18 and two is Marathon 2, is that correct? 19 A That's correct. 20 MS FALLOW: I'll object to the extent that you 21 clarify with what is the nonviolent game, is that for 22 each experiment or experiment one? 23 BY MS. CHERIAN: 24 Q Let's go through each of them. In experiment</p>	<p style="text-align: right;">Page 69</p> <p>1 Do you see that? 2 A I do. 3 Q Do you in terms of this pretest, do you have 4 any issues with the way this pretest was done in 5 terms of choosing the games Glider Pro and 6 Marathon 2? 7 MS FALLOW: I'll object to the extent that it is 8 not clear this is the pretest. At the top it says -- 9 BY MS. CHERIAN: 10 Q Let's not use the word pretest. Based on 11 what you have seen in terms of the selection of 12 Glider Pro versus Marathon 2, do you take any issue 13 with the way these two games were selected? 14 A Can I write on it or can I have a copy of 15 that I can write on? 16 Q I can't have you write on that. 17 MS FALLOW: We don't want you to write on the 18 exhibit. 19 THE WITNESS: I want to be able to outline these 20 so I can look at them. 21 MS FALLOW: How about using a piece of paper. 22 THE WITNESS: Sure. 23 MS FALLOW: I also want to, I am not sure what 24 the question is. I object to the extent that you are</p>

1 asking him -- the document obviously speaks for  
2 itself as opposed to what Dr. Anderson did. I assume  
3 that you are asking him about his opinion about what  
4 he did.

5 MS. CHERIAN: I think that is what I have asked  
6 him.

7 MS FALLOW: I am not sure what the question was.

8 THE WITNESS: I have two reactions when I look at  
9 this, three. The first is that this is a prudent  
10 step to take. This is a good idea. It's good to  
11 pretest if one can't control more specifically the  
12 content of the game. If you have to go across genre,  
13 this is the best of a bad situation. So this is a  
14 good conservative thing for them to have done.

15 The second thing that I note is that with  
16 the exception of the action variable, it fulfills the  
17 criteria that they want. It's pretty well matched on  
18 most things except for violence. The action for  
19 Glider Pro is 2.3 and is 3.67. One wonders what the  
20 difference between difficulty action and violence is  
21 in the mind of the person completing the  
22 questionnaires. That is not entirely clear.

23 The reason that I bring this up is for point  
24 three which is that this is the same research team

1 that found that Wolfenstein and Myst were equivalent,  
2 which tells me that they are not able to detect sort  
3 of on the face of it obvious problems in applying  
4 these things. They would rather instead of mixing  
5 some backgrounds, of course this does or doesn't fit  
6 things, they would go with the statistical approach,  
7 which is good in the objective sense but is negative  
8 in the subjective sense in that some things are  
9 apparently mismatched.

10 What I am trying to say in a polite a way as  
11 possible, I am not sure that I trust their ability to  
12 select games that match from their own internal  
13 sensibilities. I am not entirely sure what action  
14 means versus difficulty and violence here.

15 We can proceed with questions on the  
16 assumption that everything here is fine and it  
17 remains a little bit of a question mark in my head  
18 not having seen these games. I have seen and played  
19 Wolfenstein 3D and Myst. I am comfortable talking  
20 about those. I have never seen or played Glider Pro  
21 so I'm not comfortable talking about whether to my  
22 satisfaction it is or isn't well scored and the  
23 equivalent on everything except other than violence,  
24 which is the variable in question.

1 Q What about Marathon 2, have you played that?

2 A I have seen it played. I haven't played it  
3 myself. It's kind of a rare game because it's on a  
4 Macintosh. During the game boom that was happening  
5 on PCs, not very many people played Marathon 1 or  
6 Marathon 2.

7 Q When you talk about the objection sense of  
8 determining these games, don't you think it's more  
9 appropriate measure to use some sort of objective  
10 pretesting than have the researcher say I think these  
11 two are equivalent?

12 A Certainly. We would like to think so. But  
13 it was the same objective test that called  
14 Wolfenstein and Myst equivalent in the first place.  
15 If that type of problem never happened, I would never  
16 bring up the possibility of the more subjective faith  
17 validity challenge of something. Normally I would  
18 just assume that everything was fine and would accept  
19 a pretest for a pretest.

20 Unfortunately, there is a precedent here  
21 where I am not sure that I trust their selection  
22 criteria based on the prior mistake. And the fact  
23 that it was accepted by peer reviewers probably  
24 re-enforced that it was okay. Nobody has really

1 challenged this kind of selection criteria.

2 Q But your basis for challenging the selection  
3 of Wolfenstein 3D and Myst is based on your playing  
4 them?

5 A Yes.

6 Q Not based on any sort of objective testing on  
7 those two games?

8 A I have not done a test of those two games.  
9 To me it's as obvious as watching Sopranos followed  
10 by the Little Mermaid and saying those two things are  
11 the same. I am comfortable saying that I don't need  
12 a pretest based on the faith validity challenge.

13 But yes, a pretest would be better than my  
14 subjective interpretation as an individual.

15 Q So given the fact that we have now -- the  
16 study that you are talking about from Anderson and  
17 Dill was published in 2000, is that correct? The  
18 original one with Wolfenstein and Myst.

19 A Yes.

20 Q This is four years later?

21 A Right.

22 Q So now we have a study where Dr. Anderson and  
23 colleagues have done a pretest involving ten games  
24 and chosen Glider Pro and Marathon 2. Is there

<p style="text-align: right;">Page 74</p> <p>1 anything based on your knowledge of those games that  2 would demonstrate to you that those are not  3 appropriate games in terms of being matched?  4 A That's what I just said. I am not familiar  5 with Glider Pro. I don't feel comfortable making  6 that statement. This might be an out there kind of  7 thing for a media researcher to say, maybe not. When  8 I do a study of a game, I play the game. I play it  9 extensively. I talk to other people that play the  10 game. I interview them and make sure that I know  11 what I am talking about.  12 When I am in a situation when someone asks  13 me about the nuances, I feel comfortable talking  14 about it. And framing the appropriate experimental  15 questions and design to test these very things. I am  16 a long way from that with these games.  17 Q You don't know whether Dr. Anderson or  18 anybody on his team is able to do the same thing for  19 these games?  20 A I have no idea what Dr. Anderson or his team  21 do for game play. The only inference that I have to  22 go on is Anderson's statement from his deposition in  23 this case where he talked about the content of  24 Asheron's Call 2 and made some assumptions and</p>	<p style="text-align: right;">Page 76</p> <p>1 Q If you could look at the bottom of page 225  2 and the top of 226, which talks about the video games  3 materials and design.  4 MS FALLOW: Are you referring to all of  5 Section 2?  6 MS. CHERIAN: Hold on just one second, I'm sorry.  7 Q Specifically Section 2A. Do you see that?  8 A I see it.  9 Q Now does that reflect a mod in the type as  10 you were referring to earlier?  11 A It similar in the sense that it's a  12 modification to the original software to alter the  13 code. Different in the sense that a mod is often  14 done by an outside group rather than a setting. I  15 can't tell if they were the ones that made the  16 modification. It's probably an irrelevant  17 distinction.  18 Q In your declaration where you talk about a  19 mod to allow the creation of games scenario with  20 control over the content, you go on to say these  21 tools could easily be adapted to perform a more  22 rigorous control test without delving into the  23 vagaries of titles across genres.  24 Do you have an opinion as to whether that</p>
<p style="text-align: right;">Page 75</p> <p>1 judgements of the content of that game, which told me  2 he was not familiar with the genre or title or the  3 mechanism of play.  4 Q Dr. Anderson did not study Asheron's Call 2,  5 did he?  6 A No, I am talking about his commentary about  7 it. You asked me if I had any way of judging his  8 criteria or how he and his team select games or how  9 much they know about them.  10 Of course, I can't know what they are doing.  11 All I have to go on is one small piece of commentary  12 which gives me concern.  13 Q You also talk about mod, to be able to, I  14 guess mod is short for modification, I am guessing?  15 A Yes.  16 Q Where you can change the game content and use  17 the same game?  18 A Yes.  19 Q If you can turn to page --  20 A The same study?  21 Q Yes. Page 224. Here I am referring to  22 experiment three in this same publication Exhibit  23 No. 4.  24 A Yes.</p>	<p style="text-align: right;">Page 77</p> <p>1 has been appropriately done in Dr. Anderson's study?  2 MS FALLOW: Are you referring to paragraph 14?  3 MS. CHERIAN: Paragraph 14.  4 MS FALLOW: Of your declaration.  5 THE WITNESS: Can you give me the question again?  6 BY MS. CHERIAN:  7 Q I am going to rephrase it. In paragraph 14  8 you talk about mod. In paragraph 14 of your  9 declaration. You said that you can use a mod to  10 perform a more rigorous control test without delving  11 into the vagaries of titles across genre.  12 What I'm asking you is if you believe that  13 Dr. Anderson and his team in Exhibit 4 experiment  14 three, performed that type of a mod?  15 A They definitely altered the game code and  16 created a mod in the sense that I suggested would be  17 an advancement. It looks like they have done that.  18 I think that is good thing.  19 The question is whether they have modded it  20 in a way they are still controlling for everything  21 but violence. When I read through the description  22 this is a case of in one version the player running  23 around the game word and shooting, in the other they  24 are trying to get to a point where there is a time</p>

1 element built into it and they will die if they don't  
2 reach it in time.

3 In a sense what they have done is controlled  
4 the setting environment. Which is great. That's the  
5 type of control that is welcomed in experimental  
6 design. That is the type of thing that they haven't  
7 done in previous research. I think that's an  
8 advancement.

9 The question is whether or not the explorer  
10 condition in this versus the human and alien  
11 condition and the violent condition are actually the  
12 same game. One case you are running around shooting  
13 and in the other there is a time pressure. There is  
14 a difference that one is about the time count down  
15 and one is about shooting without a time count down.

16 I don't know whether having a time count  
17 down would influence tension or pressure or  
18 frustration versus simply running and shooting and  
19 killing with no time outline. It's an improvement,  
20 but it's not equivalent on everything but violence  
21 because the mechanisms, the goals of the games are  
22 different.

23 Q If could you turn to page 291.

24 A It's still an nice step forward.

1 Q Specifically paragraph C on page 231. Do you  
2 see that paragraph? If you want to take a moment to  
3 read that paragraph on human versus alien targets.

4 A Please. I have read it. I can't say I am  
5 comfortable with it in the context of everything else  
6 having not read through what the TH effect and the  
7 experiment 2 and the CRT aggression findings are.

8 Q Okay. So I'm going to ask you just  
9 generally. You had some criticism of the Wolfenstein  
10 3D and Myst study that was done in 2000. Were your  
11 concerns regarding the selection of those games  
12 allayed in any way based on the study that is in  
13 Williams Exhibit No. 4?

14 A In some ways, yes. In some ways this is a  
15 definite advancement because they are controlling for  
16 a lot of the extraneous factors. The problems with  
17 frustration and time and speed and game play, which  
18 might be that kind of arousal confound. That is the  
19 kind of thing that we like to see addressed. It's  
20 not entirely clear from experiment one in the study  
21 if they have done that. I would like to see Glider  
22 Pro for myself to test it.

23 If you assume for the moment that is okay,  
24 we can let that go and concentrate on this mod task

1 here, which looks like they have done exactly that  
2 except for the time pressure. So the question is an  
3 open one whether or not time pressure would lead to  
4 seem kind of tension or frustration outcome or  
5 difference, whether they are equivalent. It's hard  
6 to say not having seen the stimuli.

7 If we give the benefit of the doubt to the  
8 research, which I am hesitant to do after the  
9 Wolfenstein and Myst problem. If we could do that,  
10 yes, it would address the problem.

11 Q To the extent that this particular study  
12 would have found effects --

13 A Which study?

14 Q Exhibit 4, specifically the experiment three  
15 that we were just talking about. You would find that  
16 to be more convincing?

17 A I would say it addresses one of the key  
18 criticisms, which is the problem between the control  
19 and experimental design. It doesn't address some of  
20 the other criticisms, but it goes a long way toward  
21 addressing the first criticism about game selection  
22 if the time pressure thing winds up being shaken out.

23 Q When you say it doesn't address other  
24 criticisms, which ones are we specifically talking

1 about?

2 A There are several outlined in my declaration.  
3 I want to make sure that I covered them all. The  
4 major ones are social context, the assumption that  
5 the laboratory setting doesn't create the main  
6 characteristics, intervention of testing, duration of  
7 the stimulus, durability of the finding. The latter  
8 part especially in light of Professor Sherry's  
9 meta-analytical findings.

10 Q When you say the latter part, you are talking  
11 about duration and durability?

12 A Yes.

13 Q Let talk about some of those things. The  
14 laboratory setting, in paragraph two, you talk about  
15 the artificial setting of the laboratory. You go on  
16 to say that the control group at least partially  
17 addresses this when done well.

18 A I'm sorry, paragraph two?

19 Q Paragraph 12, I apologize. So when you say  
20 the control group partially addresses this and you go  
21 on to say most well-trained researchers are careful  
22 to make the lab setting at least resemble a home  
23 environment. In terms of the laboratory setting do  
24 you think that is a reasonable criticism of do you

1 think that a well-trained researcher would be able to  
2 control for?

3 A Some researcher do this as a matter of  
4 course, others don't. I don't know what Professor  
5 Anderson does. If you would like to double check on  
6 that, we can go back to the document and see if he  
7 talks about naturalistic settings or not in the  
8 laboratory space. I have toured several  
9 communication research labs and some look very  
10 natural and some don't.

11 I was recently talking to a colleague from  
12 RPI, which is Rensselaer Polytechnic Institute in up  
13 state New York, which they created a video game lab  
14 space which looks like an Ikea showroom, this dream  
15 comfortable space that looks like the kind of space  
16 that you would want to be.

17 On the other hand I have toured facilities  
18 in my own university and at Ohio State University and  
19 at the University of Southern California and seen  
20 relatively Dilbert-like cube farm settings, which  
21 look like the last place anybody would go to play a  
22 video game. The question is whether you duplicate  
23 the setting in which the person would play the game  
24 in the first place.

1 I am uncomfortable enough for this with my  
2 own work to not do laboratory based setting. I would  
3 rather do setting in the field where this possible  
4 alternative hypothesis does not come up. But I would  
5 certainly acknowledge that there are many researchers  
6 who use naturalistic setting which at least mitigate  
7 against that possible alien discomfiture that people  
8 feel when they walk into a laboratory versus the feel  
9 in their own room or safe space playing something in  
10 the way they would normally play.

11 Q Do you know of any studies that measure the  
12 difference between a laboratory setting and home  
13 setting for the same game?

14 A Offhand I don't. I do know there are plenty  
15 of studies about how research is done. Hawthorne  
16 effects and testing effects and confound, there is  
17 pretty rich literature on that. But game specific  
18 for settings, no, I don't know of any studies that do  
19 that.

20 I do know of several other researchers who  
21 have raised this as a potential problem that we  
22 should be exploring the idea that if we find  
23 something in the lab, that it is not clear that this  
24 can be generalized outside of the lab. It doesn't

1 mean that it's wrong or that it won't. It just means  
2 that it is something that we would like to be tested  
3 so we can answer your question.

4 Q You don't know of any studies that show there  
5 is a difference between the lab setting and home  
6 setting with respect to video games?

7 A I don't know of any studies that do that. I  
8 don't know of any studies that say the opposite  
9 either. I certainly know of plenty of research,  
10 including some of my own nonlab work, which suggest  
11 that there probably is a difference especially for  
12 the social context problem.

13 Q I am trying to isolate specifically, not the  
14 social context problem, but the laboratory setting  
15 problem.

16 A They are intertwined, unfortunately.

17 Q Why do you say they are intertwined?

18 A Because people don't play games in a lab like  
19 they play games in real life. People often play  
20 games in real life together. And most laboratory  
21 conditions people play alone.

22 So if you find something in the laboratory  
23 and it happens there and yet that doesn't happen  
24 outside of the laboratory, it's not clear what the

1 usefulness of that is. I said in my declaration, and  
2 it's worth repeating, that's not a defense of nongame  
3 effect.

4 It's never been my claim. In fact I can  
5 imagine scenarios where playing with other people  
6 could lead to stronger or more negative effects.  
7 It's just that variable is not included in the lab  
8 work. You tend to bring people in an isolated  
9 situation. Let's assume it is in a safe natural  
10 space where they feel comfortable and then we have  
11 them play in a mode they wouldn't play outside of the  
12 lab.

13 It's simply the lack of information. It's  
14 another variable that ought to be in this model.

15 Q When you talk about the fact that having  
16 other people there could increase the effect, for  
17 instance, if other people were egging you on to do  
18 some of the actions, that would potentially increase  
19 the effect?

20 A It's a fair hypothesis. One could imagine  
21 that the presence of another person in the room and  
22 your relationship with them could modify the effect  
23 in either direction. I can imagine a scenario both  
24 ways.

1 I can imagine a scenario where people in a  
2 peer group or authority role would approve of the  
3 violent act on the screen and say that's great, you  
4 should do that. In fact, let's go out and do that  
5 outside of this room right now. That's going to have  
6 a stronger effect even than the game. It's the  
7 interaction with a social variable.

8 I can also imagine the person sitting in the  
9 room saying this game is great but those graphics are  
10 so fake, re-enforcing the cue that this is not real.  
11 Or the authority figure saying are you having fun,  
12 junior, that's great but remember this isn't what we  
13 actually do in real life.

14 So when you bring in social contextual  
15 variables you can find that the automatic effects  
16 that you would assume would happen on their own would  
17 be powerfully modified in the other direction. This  
18 is what we find in the longer term history of  
19 communication effects dating back all the way to the  
20 persuasion research in the first world war and the  
21 time after that we started with a very direct effects  
22 model and then we added in social variables and found  
23 out that they explained almost everything.

24 And in some literature that I have reviewed

1 recently with violent game effects, this seems to be  
2 more and more likely based on two papers that I have  
3 seen in the last week.

4 Q What papers are those?

5 A One is a paper that I saw on Professor Rich's  
6 database website. It's a paper by Williams 2002, no  
7 relation, that talks about social content of play  
8 whether the person is the target, the target of the  
9 violence was computer controlled or player  
10 controlled.

11 And the second is a paper that I reviewed  
12 for the Journal of Human Communication Research last  
13 week, which is not even to the in press stage. It  
14 was in the first journal round. It was a study of  
15 whether social context moderated these effects. Both  
16 of these studies are addressing just this sort of  
17 social variable and whether it might influence the  
18 process. Both concluded that it very strongly does.

19 In fact, in many cases can total overwhelm  
20 and out distance whatever remaining effect there are  
21 in the original study. Given the early work in  
22 communication and persuasion, the kind of work that  
23 has been done by political influence and opinion  
24 leaders in two-step flow and the movement from the

1 limited effects -- I'm sorry, from the direct effects  
2 model to the limited effects model, it's not  
3 surprising to think that we would reach a much more  
4 nuance level of specificity in our models as we added  
5 more or more variables to account for real word play  
6 situations.

7 Q In terms of real word play situations, I  
8 think that you have written that -- I don't remember  
9 specifically where, I am sure if I can find it if you  
10 don't remember, but with respect to the presence of  
11 computers in children's rooms, the multiple computers  
12 and larger house square footage.

13 A Yes.

14 Q Does that have an effect on whether authority  
15 figures would be present at all in video game play,  
16 during video game play?

17 A It suggests that it is becoming less and  
18 less likely as people are more and more segregated in  
19 homes. This is a trend that we see in all  
20 entertainment. That there is a dramatic increase in  
21 the number of video game consoles that are in  
22 children's homes and in their bedrooms specifically.

23 So it would do exactly what you are  
24 suggesting, it would suggest they are playing more by

1 themselves in more less supervised common areas than  
2 they were before. This is probably an indication,  
3 not necessarily a big problem, but a potential  
4 problem, because the literature suggests that the  
5 parental moderator is so important as an influence on  
6 effect processes.

7 If the parent is more involved, you are  
8 going to find much better outcomes, prosocial  
9 outcomes than if they are not involved. This also  
10 makes common sense in addition to being well  
11 established in the research. If the children are  
12 move into more segregated spaces in their rooms, it  
13 really ought to be the role of researchers, media  
14 literacy, educators and educational system to train  
15 parents to bring media back out in common spaces and  
16 to interact with their children.

17 I see this as largely independent of game  
18 content, but I think it's a crucial key part of  
19 understanding how children and parents should  
20 interact in a media environment together.

21 Q I guess what I am asking you is some way the  
22 social context in which games are played is changing  
23 in terms of children might be playing without parents  
24 present as much?

1 A It's very complicated. It's hard to make big  
2 claims other than to look at the physical space and  
3 assume that, yes, they are probably playing less  
4 often with parents. That is something that I find  
5 disturbing. At the same time because of generational  
6 cohort differences, we also find that more and more  
7 parents are starting to play games with their  
8 children.

9 I have seen data suggest this and had a  
10 number of antidotal experiences and interactions with  
11 players to see that there are a lot parents playing  
12 with children as a way to relate to their children,  
13 stay involved with their children's lives. It's much  
14 more common among Gen X parents because they grew up  
15 playing games compared to baby boomer parents who  
16 largely left game in the early '80s and are much less  
17 likely to be involved in game play.

18 We are seeing a bit of an up tick, I believe  
19 in families playing games together, which we had seen  
20 in the early '80s, but which died out in the mid '80s  
21 and possibly in the early '90s. I think that impulse  
22 and drive to play together in the family structure  
23 can only be a good thing. And the more parental  
24 moderation there is, I mean that moderation in the

1 statistical sense in addition to the common sense  
2 parenting sense, the more of that there is the  
3 better.

4 Q When you talk about social context of  
5 children playing with other children, do you know of  
6 any research that deals with which way that affects  
7 game play in terms of whether it makes it more  
8 affective or less affective?

9 A I believe there is some research that looks  
10 at the difference in effects between someone who is  
11 observing game play and somebody who is playing game  
12 play. But that's not the sort of social context that  
13 I am talking about.

14 I am talking about the very wide range of  
15 social interplay that can go on, where people are  
16 playing with each other, against each other, sitting  
17 in the same couch, being in a land tournament, being  
18 in the same office, being in different rooms in the  
19 same house, being in different rooms across the  
20 world. Those people might be peers, they might be  
21 from different generations, they might be different  
22 genders. There is such a wide variety of social  
23 context out there. We don't have a great handle on  
24 it.

1 It would be helpful to see if those things,  
2 all of those kind of varieties modify or moderate  
3 effects in the same way that the persuasion  
4 literature showed how important opinion leaders and  
5 in families were for basic communication processes  
6 going on almost a century ago in communication  
7 research.

8 Q Do you know of any studies that address  
9 whether that social context does, in fact, moderate  
10 the effects?

11 A In video games?

12 Q In video games.

13 A In video games, no. It's the kind of  
14 research I would like to carry out and in the process  
15 of carrying out in some way. I am doing a study  
16 right now, experimental design that does get in the  
17 social context and interface moderators. But I don't  
18 know of anyone who has done a study of how people  
19 play together in living rooms versus by themselves.  
20 It's a gap in the literature that many of us would  
21 like to see filled and addressed.

22 Q If you could turn to paragraph 15 of your  
23 declaration. This is the paragraph where you talk  
24 about the Ballard & Weist study and Hoffman study on

1 Mortal Kombat?

2 A Correct.

3 Q You referred to duration and durability  
4 earlier, is this related to that?

5 A Yes.

6 Q Can you explain to me what you mean by  
7 duration and durability?

8 A In some sense this is related to the confound  
9 of arousal. In some sense it's a much more long-term  
10 process. The common sense notion in my mind is that  
11 if I want to talk to long-term effects, I need to  
12 have long-term data.

13 When we have short-term data and we make  
14 extrapolations to long-term effects, we have to make  
15 assumptions about the processes involved and whether  
16 or not those effects will persist. This is a test of  
17 that idea that Sherry noticed in his meta-analysis.  
18 John Sherry, professor at Michigan State University  
19 is one of several people who has done a literature  
20 review or meta-analysis of game effects in addition  
21 to Professor Anderson and Bushman.

22 Professor Sherry when he looked at the data  
23 wasn't looking necessarily only at overall effects  
24 but how and when those effects might occur. He

1 noticed two interesting things in his study.  
2 One was that the more time people played,  
3 the less likely aggression was. This was  
4 counter-intuitive to folks who espoused the GAM  
5 approach. It's not a test that Anderson and Bushman  
6 had attempted in their meta-analysis. They looked at  
7 simply raw pool data.

8 The second thing that he looked at was  
9 testing for this confound of arousal. The idea that  
10 instead of showing the aggression effects which were  
11 actually showing were people being excited or  
12 frustrated or pumped up in some way from playing the  
13 game. So he noticed two studies, one of which is an  
14 unpublished dissertation, which is why I don't  
15 include it along with the published studies to date  
16 at 75 minutes.

17 He noticed two studies of the same game  
18 which allows for a meta-level test of this idea. In  
19 one study the players played the game for ten  
20 minutes. In the other study they kept playing for  
21 75 minutes. So we have two very similar conditions.

22 In one case the effects looks like it's very  
23 strong based on the ten-minute study. But when they  
24 kept measuring, they found that the effect goes away.

1 It wasn't durable. That is consistent with Sherry's  
2 overall thinking from the meta-analysis that effects  
3 if they occur short-term are going to dissipate.

4 In fact, it is a danger to interrupt them  
5 seeing as they are high and they are going to go  
6 down. If you accept the plausibility of them in the  
7 first place. The Mortal Kombat studies back this up  
8 in that after 75 minutes the effects completely went  
9 away.

10 So one would think if Ballard & Weist had  
11 tested for a longer time period and taken repeated  
12 interval measures, they would have seen the spike and  
13 drop off down to nothing. Which can either be  
14 explained with the game being boring or the  
15 frustration going away or the arousal confound. It's  
16 not clear which of those three explanations that it  
17 might be.

18 Q Did you look at the Ballard & Weist study and  
19 the Hoffman study?

20 A Not in a long time. Most of my analysis  
21 comes from Sherry's read of the same data. He was  
22 the one that found this idea.

23 MS. CHERIAN: I am going to mark this as Exhibit  
24 No. 5.

1 (Exhibit No. 5 was marked for  
2 identification.)

3 BY MS. CHERIAN:

4 Q Dr. Williams, is this the study by Dr. Sherry  
5 or Professor Sherry that you referred to?

6 A It is.

7 Q Dr. Sherry's discussion of the two Mortal  
8 Kombat studies are on page 424 and 425, I believe.

9 A Yes.

10 Q When you wrote this paragraph, was this based  
11 on Dr. Sherry's analysis or based on prior review of  
12 those articles by Ballard & Weist and Hoffman?

13 A I don't know that I ever read the Hoffman  
14 piece, so it's not on my own read of that. As I  
15 mentioned a moment ago the idea is Sherry's. I think  
16 I have read the Ballard & Weist. I think that a  
17 moment ago I implied that I read the Hoffman and I  
18 haven't. It's a dissertation.

19 Q Do you know what the control game was in the  
20 Ballard & Weist study?

21 A I don't. I don't know if there was one.

22 Q Do you know what the control game was in the  
23 Hoffman study?

24 A Also I don't know if there was one.

1 Q If there is a difference in the control game,  
2 would that contribute to a change in the effect size?

3 A It would offer another possible explanation.  
4 It depends whether or not the effects that Sherry  
5 used in his meta-analysis were controlled or  
6 uncontrolled, depends what level of data analysis he  
7 was using.

8 Q Do you know if I were to tell you -- Do you  
9 know whether the Ballard & Weist study used a  
10 billiard game called the Corner Pocket as the control  
11 game?

12 MS FALLOW: Objection, he said he doesn't know  
13 whether they used a control game.

14 THE WITNESS: I don't know.

15 BY MS. CHERIAN:

16 Q Do you know the game Corner Pocket?

17 A I don't.

18 Q Have you played billiard games before?

19 A Billiard computer games? I think a long time  
20 ago, I think I have.

21 Q The Ballard & Weist study and Hoffman study  
22 were published in '85. Do you know the game Sonic  
23 the Hedgehog?

24 A I do, well.

<p style="text-align: right;">Page 98</p> <p>1 Q Do you know Sonic the Hedgehog 2?  2 A I am afraid I do.  3 Q Can you tell me whether there is any violence  4 in Sonic the Hedgehog 2?  5 A There is comic violence in Sonic. Sonic  6 flies through situations at extremely rapid speeds.  7 It is a very, very fast paced game, very exciting  8 game. He jumps in the air, spins into a ball and  9 bonks things and tends to break them.  10 It's not violence in the sense there is  11 bloodshed or weaponry. But there is certainly a  12 sense of conflict and physical interaction. But in a  13 game like Sonic nobody dies or is injured. Although,  14 I do think the bosses at the end of levels had  15 cartoonish explosions. It's a hard question to  16 answer if there is violence in Sonic.  17 Q Does Sonic have to destroy other creatures?  18 A At the end of levels Sonic has to destroy  19 large boss monsters. Boss monsters is a term used by  20 most game players to describe a large obstacle at the  21 end of a level.  22 I can't remember if Sonic has to knock  23 things unconscious or knock them off ledges. I think  24 most of the game play in Sonic is reflex based trying</p>	<p style="text-align: right;">Page 100</p> <p>1 Exhibit 6.  2 (Exhibit No. 6 was marked for  3 identification.)  4 BY MS. CHERIAN:  5 Q Dr. Williams, this is the Hoffman study  6 according to the format cited by Dr. Sherry in his  7 meta-analysis. This is the actual dissertation as  8 opposed to an abstract.  9 MS FALLOW: Are you telling him this?  10 BY MS. CHERIAN:  11 Q Why don't we look at this. Do you see Dr.  12 Sherry's citation to Dr. Hoffman's study?  13 MS FALLOW: Where is that?  14 MS. CHERIAN: It's on the second to the last page  15 of Exhibit 5.  16 THE WITNESS: Yes, I see that.  17 BY MS. CHERIAN:  18 Q Doctor, would it be correct that Dr. Sherry  19 cites this as University Microfilm No. 9522426?  20 A That's what it says.  21 Q If you look at page two of Exhibit 6  22 University, UMI No. 9522426?  23 A That's what it says.  24 Q Do you have any reason to believe that is not</p>
<p style="text-align: right;">Page 99</p> <p>1 to control his actions at high speeds in precarious  2 situations against obstacles which are trying to hurt  3 him, rather than him inflicting pain on others.  4 If I am recalling this correctly, but it's  5 been a while.  6 Q I can imagine. Based on level of excitement  7 if you were to compare Sonic the Hedgehog 2 versus a  8 computer billiards game, would you say that Sonic the  9 Hedgehog 2 was more exciting?  10 A Definitely.  11 Q In terms of controlling for arousal for the  12 control game, if in fact, Ballard &amp; Weist used Corner  13 Pocket and Hoffman used Sonic the Hedgehog 2, would  14 that cause you to expect some sort of difference in  15 the results?  16 A If the results were based on difference  17 between control and treatment groups, yes, it would.  18 The Hoffman study is a much more balanced, more  19 carefully done. I assume you are implying here that  20 that is what he did. If that's the case, it makes  21 for a much better test. It also explains why he  22 would find null or smaller findings.  23 MS. CHERIAN: This is not meant to be any sort of  24 trick. I'll hand you a copy, let's mark this as</p>	<p style="text-align: right;">Page 101</p> <p>1 the Hoffman study?  2 A I don't. I see that Professor Hoffman had  3 Dolf Zillmann on her dissertation.  4 Q Who?  5 A Dolf Zillmann.  6 Q Do you know Dr. Zillmann?  7 A He is a leading figure in communication  8 research, yes. I don't know him personally.  9 Q Dr. Hoffman's dissertation is entitled the  10 effects of playing versus witnessing video game  11 violence on attitudes toward aggression and  12 acceptance of violence as a means of conflict  13 resolution.  14 Do you see that?  15 A I see that.  16 Q Do you know if Dr. Hoffman separated the  17 participants in the study into players and observers?  18 MS FALLOW: I object to this line of questioning.  19 He already said that he has never reviewed the study.  20 If you want to sit here and we can spend a good chunk  21 of time as he reviews the whole study. But to the  22 extent that you are asking him to draw conclusions  23 about something that he said that hasn't reviewed.  24 BY MS. CHERIAN:</p>

1 Q I believe, Dr. Williams, that you say that  
2 Hoffman ran studies of the aggression effects of  
3 Mortal Kombat on the same type of subjects and you  
4 said that Hoffman kept testing and measured at  
5 multiple intervals ending at 75 minutes.

6 Can you tell me where you got the statement  
7 that Hoffman kept testing and measured in multiple  
8 intervals?

9 A I don't think that I have that from Sherry's  
10 meta-analysis. I can't remember if I have seen it in  
11 Goldstein's work or in other literature or if it's  
12 something that I heard from Professor Sherry in  
13 person who I met and talked to about these issues on  
14 a number of different occasions. I have not read the  
15 study myself the, dissertation.

16 Q Dr. Sherry's measure that he used in his  
17 study was related to the Buss-Durkee?

18 MS FALLOW: On what page?

19 MS. CHERIAN: Page 425, the Buss-Durkee measures  
20 of aggression.

21 THE WITNESS: Yes.

22 BY MS. CHERIAN:

23 Q Dr. Sherry says that Hoffman found an effect  
24 side of R equals .05?

1 A That's what he says.

2 Q On page 420 of Dr. Sherry's analysis do you  
3 see where he has listed the N for Dr. Hoffman's  
4 study?

5 A I do. It says 64.

6 Q And the N is the sample size?

7 A It's the sample size that he used for data  
8 for the meta-analysis. It doesn't mean that it is  
9 necessarily the sample size for everything in  
10 Hoffman's dissertation. There are times in  
11 meta-analysis when based on criteria, the  
12 meta-analyst makes a decision to use or exclude some  
13 portion of the sample based on some theoretically  
14 relevant criteria.

15 If I look at this column and see numbers,  
16 this doesn't necessarily always tell me what the  
17 original sample size was in the source study.

18 Q If you could turn to the dissertation by Dr.  
19 Hoffman to page 48, actually it you look at 47 and  
20 48. Indirect aggression is one part of the  
21 Buss-Durkee hostility inventory, is that correct?

22 A I think so.

23 Q Table two on page 48 reflects the results for  
24 Dr. Hoffman's study on indirect aggression?

1 MS FALLOW: I object to the extent that you are  
2 pointing him to one page and one table. As I said  
3 before he haven't had an opportunity to review the  
4 whole study.

5 THE WITNESS: Normally when I am asked to comment  
6 on a result section, I have had a chance to  
7 understand what theory is being tested and be able to  
8 assess the method and read it in context with the  
9 rest of it. So this is a little bit flying blind  
10 here.

11 BY MS. CHERIAN:

12 Q You're the one that cited the Hoffman study?

13 A I'm citing Sherry's analysis of the Hoffman  
14 study, which I said I have not read.

15 Q To the extent that the Sherry's analysis of  
16 the Hoffman study was wrong, then your statement  
17 related to that would also be wrong?

18 A If I am repeating what Sherry says and he is  
19 wrong, I would also be wrong, that is correct.

20 Q So if the effect size if you compare players  
21 of violent video games versus players of nonviolent  
22 video games in the Hoffman study, if that effect size  
23 is actually .37 rather than .05, than Dr. Sherry's --

24 A Where are you getting that .37?

1 Q I am just asking if it was .37 and Sherry  
2 reported it was .05, then that would be, your  
3 reliance on Dr. Sherry would be incorrect?

4 MS FALLOW: Objection, are you saying a purely  
5 hypothetical question?

6 MS. CHERIAN: I am asking a purely hypothetical  
7 question.

8 THE WITNESS: If Dr. Sherry used a wrong number  
9 from the study and I based my opinion on what he  
10 wrote, and he was wrong, than I would also be wrong,  
11 that is correct.

12 BY MS. CHERIAN:

13 Q Did you base your opinion on Dr. Sherry's  
14 assessment of an effect size of .05 from the Hoffman  
15 study?

16 A Actually it wasn't about a specific number,  
17 it was this contrast between duration. So yes,  
18 indirectly it is the relative difference in the  
19 effect size. It's not how I think about it in my  
20 head. But in the nitty-gritty of it, yes, that's how  
21 I would assess it.

22 Q So to the extent that Sherry reported the  
23 wrong effect size for players versus nonplayers on  
24 the Buss-Durkee measures of aggression, that would

1 affect your conclusion?  
 2 A If he were incorrect, it would affect my  
 3 conclusions. I am not comfortable assessing  
 4 hypotheticals when I have a study in front of me and  
 5 I haven't a chance to look through it.  
 6 Q Why don't we take a break.  
 7 A A long break?  
 8 Q Why don't we break for lunch. We can come  
 9 back to this after lunch. I am not asking you to  
 10 look over that at lunch. Off the record.  
 11 (Recess was taken.)  
 12 BY MS. CHERIAN:  
 13 Q Dr. Williams, I want to remind you that you  
 14 are still under oath from this morning?  
 15 A I understand.  
 16 Q With respect to the duration effect that we  
 17 were talking about before lunch, other than the  
 18 Ballard & Weist and Hoffman studies as reported by  
 19 Dr. Sherry, are there any other studies that you are  
 20 aware of that deal with duration of the effects of  
 21 video games on aggression?  
 22 A There is Dr. Sherry's overall meta-analytical  
 23 point that is independent of the Hoffman, Ballard &  
 24 Weist comparison. That's the coefficient on time in

1 his meta-analysis. That's the only analysis that I  
 2 have seen that talks about time and duration,  
 3 although there have been many commentators talking  
 4 about the short-term effects versus the need for  
 5 longitudinal research. But the actual  
 6 meta-analytical review only comes from Sherry.  
 7 Q If you could turn to page, on Exhibit 5 of  
 8 Dr. Sherry's meta-analysis on page 424.  
 9 A Yes.  
 10 Q Toward the bottom of the page, Dr. Sherry  
 11 writes, examining the partial plot of playing time on  
 12 effect size controlling for age of subjects and year  
 13 of study, much of this relationship is anchored by  
 14 two studies, with the remained of the studies grouped  
 15 in the center with supporting the general trend.  
 16 Do you see that?  
 17 A Yes.  
 18 Q So his finding is anchored on the Ballard &  
 19 Weist and Hoffman study?  
 20 A It's hard to see without seeing the actually  
 21 plot that Dr. Sherry refers to, but it looks like  
 22 there would be some kind of more central trend if it  
 23 weren't for these two, which tilt the line of best  
 24 fit into a negative slope, yes.

1 Q When you say these two, you mean Ballard &  
 2 Weist and Hoffman?  
 3 A According to what Dr. Sherry says, yes.  
 4 Q Other than that analysis by Sherry, do you  
 5 know of any other studies that specifically deal with  
 6 the length of time and duration of the effects?  
 7 MS FALLOW: Objection, asked and answered.  
 8 THE WITNESS: In the meta-analytical sense, no.  
 9 In the literature review sense, yes, as I mentioned  
 10 earlier.  
 11 BY MS. CHERIAN:  
 12 Q When you are comparing the effect of playing  
 13 a violent video game on aggression, would it be  
 14 appropriate to combine players and observers rather  
 15 than isolating players?  
 16 A Compared with what, I'm sorry?  
 17 Q If you are comparing the effect of playing  
 18 violent video games on aggression, would it be  
 19 appropriate to combine people who are playing and the  
 20 people who are observing in determining the effects?  
 21 A It would depend on the theoretical model that  
 22 you were testing. If you were testing for GAM type  
 23 specific effects, I think probably no.  
 24 Q Do you know if Ballard & Weist tested only

1 players?  
 2 A I don't.  
 3 Q If we could turn now to your study. When was  
 4 the study conducted, the experimental portion of it?  
 5 MS FALLOW: What study are you referring to?  
 6 MS. CHERIAN: The Asheron's Call.  
 7 MS FALLOW: I'm sorry, are you referring to a  
 8 published article on that?  
 9 MS. CHERIAN: Dr. Williams, do you understand  
 10 what I am asking you?  
 11 THE WITNESS: I do. You are asking when the data  
 12 were collected independent of what format the  
 13 published results were in. I am trying to remember.  
 14 I think it is, I know it's reported in the  
 15 dissertation what months, month it took place in, but  
 16 I believe it's 2001. I could be wrong. It could be  
 17 2002, but I think it's 2001.  
 18 BY MS. CHERIAN:  
 19 Q I have a copy of your dissertation if you  
 20 want to take a look.  
 21 A If you would like me to be more precise, I  
 22 can look it up.  
 23 Q I don't need months, but a year would be  
 24 helpful. If you can mark this as Exhibit 7.

<p style="text-align: right;">Page 110</p> <p>1 (Exhibit No. 7 was marked for 2 identification.) 3 THE WITNESS: I was wrong. It was more recent. 4 On page 209 in my dissertation I wrote, the 5 recruitment and measurement procedures were carried 6 out over the internet between late January and early 7 March of 2003. 8 Q Okay. 9 A That's right. 10 Q Can you explain to me how you, generally how 11 you recruited participants for the study? 12 A My concern was that I would get only game 13 players or I would only get game players of this 14 specific type of game. I was more interested in the 15 impacts of first time players rather than trying to 16 detect effects or potential effects on a range of 17 dependent variables along some later portion of time. 18 So it's a challenge to find people who would 19 be interested or willing to play some game, who would 20 also be representative of the people who do play that 21 game who have not yet played it. It is a difficult 22 sampling technique. 23 So what I did was I over-sampled in places 24 where there weren't game topics. And I also did a</p>	<p style="text-align: right;">Page 112</p> <p>1 would be. I could see which were more affective in 2 getting people in the study. 3 Q When you say Q and A, Q and A with who? 4 A With the potential subjects. The people 5 would ask me questions. For example, many people are 6 typically suspicious that the rewards are too good to 7 be true. You mean you want me to play a game and you 8 are going to pay me, this must be fake. 9 There can be some pretty convoluted 10 conspiracy theorys posted on a message board claiming 11 that the study is a fake or bogus or not real or 12 don't answer their questions, they are the CIA or any 13 number of things. So in addition to defusing those 14 things and learning when not to address them if they 15 are kooks, it also helped me to know which places 16 were having the most successful recruitment 17 strategies, so I can follow and spend more time with 18 those. 19 There is also the question of time and 20 resource allocation. You can't recruit in all places 21 at all times actively. It helped me focus on which 22 one was working and which one wasn't. 23 Q All of the recruitment was done on the 24 internet?</p>
<p style="text-align: right;">Page 111</p> <p>1 personal referral type of sample. So let me explain 2 those two a little bit more in depth. 3 I knew that it would be harder to find 4 female subjects so I went to female oriented websites 5 and posted on their message boards the call for 6 subjects. And in this dissertation I spell out many 7 of these sites. Like for example, I went to high 8 village dot com, which is a site for women and went 9 to some specific message boards. 10 For example, I remember posting the 11 recruitment call on the pregnant mothers board 12 thinking this might be a group which might have the 13 time to play, but which clearly wasn't going to hear 14 about the study unless I reached out to them. 15 I also knew that the easiest way to get 16 people was to ask gamers, but I didn't want people 17 experienced. So the call for subjects specifically 18 said do you have friends who have never played this 19 game. It was more of a referral basis. 20 And the nice part about doing internet 21 recruiting is that because the calls were put on 22 message boards, I could do a Q and A in response with 23 people as they asked questions about the study in 24 this public arena. I could see what the concerns</p>	<p style="text-align: right;">Page 113</p> <p>1 A Yes. 2 Q In terms of verification were people required 3 to produce any sort of identification? 4 A I could never confirm who they were, but I 5 certainly had a filtering process to make sure that 6 these were serious people, that they really existed. 7 They are required in the wave one survey to give me 8 their name, their telephone number and their address. 9 We never asked people for their Social Security 10 number because red flags would go off, obviously. 11 One thing I could do with those data is that 12 I could tell them that you will be contacted. That 13 kind of filtering usually gets rid of duplicate 14 entries and people who are not taking the study 15 seriously. We put this at the tail end of the study 16 so people are not scared off. That's pretty standard 17 practice in this survey works. 18 They would give us all of this data and then 19 when they were finished it would generate a batch 20 e-mail that would go to all the people that completed 21 it. The database would dump the e-mails into my 22 outlook program and would sent the e-mails out. Any 23 e-mail which came back as unverified, I would then 24 call the person. So I made perhaps 15 or 20 phone</p>

1 calls to try to figure out if these were, in fact,  
 2 real people, discounting the fact that they might  
 3 have had a typo in the e-mail address.  
 4 A couple of people simply had that problem.  
 5 Other people I could never verify if they were  
 6 for real, so I dropped them from the study. I also  
 7 used that to filter out people from other countries  
 8 that I didn't want in the sampling frame.

9 Q When you say that the e-mails came back  
 10 unverified, does that mean undeliverable?

11 A It came back for any reason that it was red  
 12 flagged. I wanted to follow up and make sure that  
 13 was a real person in some way. If I couldn't reach  
 14 them via phone, I also dropped them from the study  
 15 too.

16 Q Other than the people whose e-mails came back  
 17 for whatever reason, was there any other independent  
 18 verification of the telephone, address or name?

19 A Well, the people in the treatment condition,  
 20 so roughly half or a little bit more than half of the  
 21 subjects in the study all had their street mail used.  
 22 So I had I think ten games come back with an  
 23 incorrect street address. Very similar problem to  
 24 the e-mail address that some portion of them were

1 typos and problems. In a few cases the person had  
 2 moved. In some cases there was never an explanation  
 3 so they were dropped from the study.

4 They were also asked in wave two to keep  
 5 going so I could see who stayed and who left the  
 6 study. There is always a mortality rate in any  
 7 study. We want to do everything that we can to keep  
 8 the response rate as high as possible, the retention  
 9 rate as high as possible.

10 I had 22 cases, I think it was 22 cases, no,  
 11 I'm sorry, it was slightly less. I sent out, I want  
 12 to say somewhere in the low 390 and wound up with an  
 13 initial sample in the high 370, I think 378. There  
 14 was a batch of people with incorrect problems,  
 15 incorrect mailing addresses or had moved or I could  
 16 never verify who they were so they were dropped from  
 17 the study.

18 I can't verify who received the mail  
 19 packages. I didn't do any kind of signature program  
 20 to make sure that they got it. This was not a big  
 21 concern to me.

22 Q When you say that you sent out 390, what was  
 23 the package that got sent to those 390 people?

24 A The package included a copy of the game

1 removed from its original packaging. I had very  
 2 little money to carry out the study. I found by  
 3 volume and by weight in order to finance the study, I  
 4 had to take all the games out of the boxes and  
 5 include the disk and instruction manual, put them in  
 6 a smaller envelope with postage so that I could  
 7 afford based on the people in the study.

8 They were also given an instruction sheet, a  
 9 welcome letter to the study. Then secondly, they  
 10 were given a time diary sheet to keep track of the  
 11 number of hours that they played. Prior research  
 12 shows that increases the validity of that measure  
 13 substantially.

14 Q Did you purchase the games?

15 A No, they were donated.

16 Q Who were they donated by?

17 A Microsoft Corporation, specifically the  
 18 people in the usability group.

19 Q The usability group, what is that?

20 A Yes. Microsoft is one of the few video game  
 21 developing houses, in addition to all of the other  
 22 things that Microsoft does, that operates anything  
 23 like an R & D division. They have a usability group  
 24 that tests games for how much people like them, how

1 long they keep playing them, what works for them,  
 2 what doesn't to better improve their product.

3 I had been speaking with a member of the  
 4 usability group about this game and mechanism and  
 5 design and players for about a year before the  
 6 donation occurred.

7 Q Is Microsoft the developer of the game?

8 A Microsoft is the publisher. The developer is  
 9 Turbine Entertainment. Microsoft is the rights  
 10 holder. Turbine is the maker. Microsoft has an  
 11 unusual relationship in that it also does user  
 12 testing independent of its developers. I think that  
 13 they are the only publishing house that does that.

14 Q What was the retail value of the game?

15 A At the time it was \$50, 49.95.

16 Q How many copies were donated?

17 A 400.

18 Q Was there also an on-line sign up required  
 19 for playing the game?

20 A Do you mean when the person first installed  
 21 the game, did they have to sign up in some way?

22 Q Yes.

23 A Yes, it's typical with every massively  
 24 multi-player on-line game, I'll say MMO for here on

1 if that's okay?  
 2 Q That's fine.  
 3 A It's typical of every MMO to have some kind  
 4 of initial sign in period where the person has to  
 5 enter their credit card number so they can be billed  
 6 every month because the games operate on a  
 7 subscription basis. Some game operators, in this  
 8 case the developer is the operator, Turbine is the  
 9 operator, in some cases they also collect other  
 10 information at the front end from people. That's  
 11 independent of my study.  
 12 Q So was everyone required to have a credit  
 13 card?  
 14 A Yes, they were required to have access to a  
 15 credit card as a condition of being able to go in the  
 16 study because of this issue of playing the game.  
 17 Q Do you know how that worked for minors?  
 18 A We have issues with minors in research that  
 19 they have to have parental approval otherwise the  
 20 study wouldn't pass the institutional review board or  
 21 human subjects review committee.  
 22 So minors are always a special concern to us  
 23 in carrying out research. In this case the call said  
 24 that not only would they have to have permission of

1 people over 18, from a guardian or parent, that they  
 2 would have to have access to a credit card in order  
 3 to play the game that had nothing to do with the  
 4 study.  
 5 In fact, I had to send out, I felt it was  
 6 incumbent upon me to send reminders near the end of  
 7 the study to remember to cancel their account so they  
 8 weren't continually charged. It works akin to the  
 9 way that you would give a credit card to the front  
 10 desk at a hotel. It's on file and unless you say  
 11 otherwise, they are going to be charged.  
 12 So I didn't want people to be charged past  
 13 the month of the study unless they wanted to keep  
 14 playing on their own accord.  
 15 Q During that one month -- what is the monthly  
 16 subscription?  
 17 A I think you are asking me what it was then?  
 18 Q Yes, I am.  
 19 A I think it was 12.95 then. I could be off by  
 20 a dollar either way. Prices have gone up. It could  
 21 be 14 or 15 or 16, depending on the game now.  
 22 Q Was the subscription for the group amount  
 23 also donated?  
 24 A In a sense, also in a sense no. The first

1 month of every MMO is always included in the sale  
 2 price of the game if it is bought retail. It would  
 3 have been included in the box. The retail version  
 4 that they received was the \$50 value.  
 5 So the first month is the cost of the game  
 6 plus the value of the play time. The game itself  
 7 could be said to be worth \$35 and the play time  
 8 closer to 15.  
 9 Q After the study was over the participants or  
 10 the treatment group had to take some affirmative step  
 11 not to be charged?  
 12 A They would have had to enter a screen and  
 13 select an option to unsubscribe to them to have their  
 14 credit card charged. I sent the entire treatment  
 15 group a reminder at two weeks left, one week left,  
 16 five days left, one day left to make sure that,  
 17 number one, I was reminding them there was a study  
 18 coming up that I really wanted them to fill out the  
 19 second wave.  
 20 And number two, I didn't want them to be on  
 21 the hook and for me to get customer service calls why  
 22 did I just get charged \$14 because I didn't have the  
 23 budget to pay for their second month.  
 24 Q Do you know how many people continued to

1 participate in, play in the game?  
 2 A I have data on the willingness or interest in  
 3 doing it, I haven't looked at that in a few years. I  
 4 can't remember the proportion, but I know there were  
 5 some who kept playing.  
 6 Q Can we talk about the game a little bit. The  
 7 title of the game is -- are there two, Asheron's Call  
 8 2, is there two different titles of that game?  
 9 A There are two different titles. One is  
 10 Asheron's Call and Asheron's Call 2. It's simply a  
 11 sequel to the original title. The original title is  
 12 still in existence. The one kept going and the new  
 13 one with improved graphics, improved story line,  
 14 theoretically improved, which takes place in the  
 15 mythical world, I think some eons later than the  
 16 original story line is also released.  
 17 The two player basis can play but in two  
 18 different time periods and not feel they are  
 19 destroying their suspension of disbelief too much.  
 20 Q You use the word MMO, massively multi-player  
 21 on-line, is that what it stands for?  
 22 A That's correct.  
 23 Q This is a game that is played through the  
 24 internet?

1 A That's correct.

2 Q Is there like a certain field of players  
3 that, you know -- how does the game work? How do you  
4 play a massively player on-line game specifically  
5 Asheron's Call 2?

6 A It might be helpful to talk about how it's  
7 different than other type of games.

8 Q Certainly.

9 A As a way of getting people's heads around it  
10 because it works in a slightly different way. First  
11 thing to note about an MMO is the game is persistent  
12 and the game is always on. Whether the player is  
13 logged in to or logged out of the game, the game  
14 world is going.

15 As we sit here doing this deposition today,  
16 there are several virtual worlds out there that are  
17 being under operation whether people are playing them  
18 or not. There are monsters cycling back and forth on  
19 paths. There are nonplayer characters moving around  
20 talking to one another. Should a player log in, they  
21 will interact with these things and interact with  
22 them but they are there irregardless.

23 The typical game mechanism is that the  
24 player logs in with a relatively weak characters who

1 is unable to do much. Through a series of encounters  
2 and completion of quests, the player slowly becomes  
3 stronger. In this sense massively multi-player games  
4 are often also role-playing games, which is why the  
5 alphabet soup longer acronym is MMORPG, massively  
6 multi-player on-line role-playing game. I would  
7 rather stick with the MMO.

8 So the player logs in, creates the  
9 character, walks out into the environment with some  
10 kind of basic weapon, attacks a weaker character like  
11 a rat. The character kills enough rats collecting  
12 enough rat pelt to sell to a vendor somewhere. They  
13 are then strong enough and able enough to advance  
14 their character to get a bigger or better weapon and  
15 they go off and kill the next kind of monster.

16 In this sense the player keeps advancing.  
17 The terminology is called leveling up. The player  
18 gets more and more advanced, more and more powerful  
19 and able to handle stronger encounters with stronger  
20 obstacles and stronger and stronger monsters. And in  
21 some cases against other characters.

22 Because this game is largely player versus  
23 the environment rather than player versus player,  
24 it's mostly a matter of trying to become more

1 powerful over time. That's the basic mechanics of  
2 game play.

3 Q Does the player have to kill other people on  
4 the game Asheron's Call 2 specifically?

5 A Do you mean does the player combat other  
6 players or other humanoid figures?

7 Q Or other humanoid figures.

8 A There is a distinction there. Asheron's Call  
9 2 has, like many games, several different servers.  
10 There are parallel versions of the game that are  
11 operating at any one time. There are usually more  
12 players than a single server can handle and more  
13 people that make sense in a given actual virtual  
14 geography.

15 You wouldn't want 100,000 people in a space  
16 the size of this city block trying to interact  
17 because the computer would crash. It wouldn't make  
18 for a very good game experience. They are imaged out  
19 on to different servers. Sometimes the servers are  
20 split into player versus player. Sometimes they are  
21 split into player versus environment. Sometimes this  
22 includes role-playing servers. There are may  
23 variation on the type of game servers that can be in  
24 operation.

1 At the time of the study Asheron's Call 2  
2 had primarily player versus environment servers where  
3 the players did not attack one another. Although  
4 there was about, I think about a quarter of the  
5 players in the study were on a PVP server is my  
6 estimate.

7 It's not something that I built into my  
8 model. But I recall thinking that some smaller  
9 portion because it's not known as a particularly  
10 player versus player type of game.

11 If one wanted to do a study of a player  
12 versus player game, there are some that are  
13 exclusively so. One would set up the study to  
14 differentiate what server type they pick. The  
15 tradeoff for me was in the player's choice of play  
16 experience versus how much control I wanted to impose  
17 on them.

18 In most cases in my study I wanted to error  
19 towards naturalistic settings with the least amount  
20 of intervention from me. So I didn't put a position  
21 on which server type they could choose.

22 So getting back to your question are they  
23 attacking other humans or people, there are plenty of  
24 humanoid characters, monster-like humanoids and

1 actual humans in the game that one might fight and  
2 interact with. That happens a lot. Then there is  
3 the rare case of those humans being, the players  
4 controlled by other people, so the avatars. That the  
5 character on the screen is playing avatar controlled  
6 by another player somewhere else.

7 So as one walks through the virtual  
8 environment, you would sometimes see characters  
9 controlled by other people and sometimes see  
10 characters controlled by the computer. These are  
11 clearly marked differently.

12 Q Does the game in the instance of the player  
13 versus environment game call for aggression, killing  
14 of computer driven humanoid characters?

15 A Consistently, heavily, steadily, intensively.

16 Q Specifically humanoid characters?

17 A Most of the monsters are humanoid in  
18 Asheron's Call 2. It's not exclusive, but I would  
19 say the majority.

20 Q Did you have incentive for the control group?

21 A Yes and no. As far as the control group  
22 members knew, yes, I did. In actuality, no, I  
23 didn't. The control group was promised entry into a  
24 raffle for prizes. They were promised that it would

1 be a generous raffle because we want to make sure  
2 that the incentive structure for both the treatment  
3 and control group is as equivalent as possible so  
4 there isn't a drop out rate based on the payoff in  
5 the end or the perceived reward for being in it. We  
6 don't want that to interact with any of the study  
7 variables.

8 They were promised that they would have  
9 rewards of copies of the game, so that would be  
10 dead-on incentive, the \$50 value. And also what  
11 gamers call swag, which are posters, T-shirts, those  
12 sort of things, promised to me by the developer to  
13 help with the study. Those things didn't materialize  
14 from the developer. They never came through. So  
15 there never actually were any payouts.

16 In addition the university IRB told me that  
17 entering people into a lottery like system for award  
18 entered into a random draw is a violation of Michigan  
19 State lottery licensing laws. Which, although  
20 shocking to everyone that I have ever talked to in  
21 academia, that was their policy. That's why I had to  
22 drop the standard measure, which everyone else that I  
23 have every known doing this kind of research has  
24 used. Nevertheless the players never knew the

1 difference.

2 Even though they didn't ever receive  
3 anything, they all thought they were going to. So I  
4 had no reason to think that it actually effected  
5 their responses, but it was disappointing to not give  
6 them anything.

7 Q Was the drop out rate different from the  
8 treatment and control group?

9 A Yes. The retention rate was 91.7 percent for  
10 the treatment group and 40.5 percent for the control  
11 group. Which is the sort of thing that begs for a T  
12 test, which is what I have done.

13 Q What is a T test?

14 A The T test is a statistical test to make sure  
15 that, to test whether or not members of different  
16 groups are or are not similar on important variables.  
17 It's a common test to use when you have a discrepancy  
18 in retention rates where you want to compare a group  
19 that did or did not complete a study or become  
20 involved in the study in the first place.

21 So the T test takes something, for example,  
22 like gender, if you want to assess whether the  
23 percentage of people who were male versus female in  
24 the treatment group and control group were the same.

1 So what we would do is look at every  
2 possible variable that is central interest to the  
3 study and do a T test on it to make sure that they  
4 were equivalent. Because we know who dropped out, we  
5 can see the difference between the people who stayed  
6 and the people who left to make sure they are fine.

7 We test for the difference between the  
8 treatment and control group in the first place to  
9 make sure that the random assignment was truly  
10 achieved so those things are equivalent. And also to  
11 make sure that the people that dropped out were not  
12 statistically different in the important variables  
13 from the people who stayed in. I did both of those  
14 tests and didn't have any problems.

15 Q I going to hand you a copy of what we will  
16 mark as Williams 8.

17 (Exhibit No. 8 was marked for  
18 identification.)

19 BY MS. CHERIAN:

20 Q Dr. Williams, this is an article that you  
21 wrote in the journal called Communication Monographs?

22 A Yes.

23 Q This article was based on data that was part  
24 of the dissertation?

<p style="text-align: right;">Page 130</p> <p>1 A That's correct. It's the same source data, 2 although the analysis and presentation are 3 significantly refined from the dissertation. 4 Q If we can talk about a couple parts of this, 5 specifically first let's talk about the measures of 6 aggression that you used in the published version. 7 What were the measures of aggression that you tested 8 for as depended variables? 9 A There are measures that I tested for that are 10 in the published version and measures that I tested 11 for that were taken out of the published version. 12 Q Let's do what is in the published version. 13 A The published version is based primarily on 14 Professor Huesmann's normative beliefs and aggression 15 scale, which is abbreviated as NOBAGS. And on two 16 behavioral aggression variables, argument with friend 17 and argument with partner or spouse. 18 Q You describe the latter two as binary in your 19 article on page 226, I believe? 20 A Yes. 21 Q What do you mean by binary? 22 A It's referring to the answer possibilities 23 when the measure is collected. In this case it was 24 yes or no, did you or did you not have this thing</p>	<p style="text-align: right;">Page 132</p> <p>1 the treatment and control group had spouses, 2 boyfriends or girlfriends? 3 A Off the top of my head, I don't. Because 4 it's an older sample, it's likely that many would. 5 Q Was that data that you collected as to how 6 many people had spouses, boyfriends or girlfriends? 7 A I don't remember if I collected that or not. 8 But that in itself is a test that you would want to 9 know if there was an increase or decrease in that 10 independent measure. 11 Because one of the things that I was 12 studying in this study was the social and 13 relationship impacts in addition to the aggression 14 things. So there is a decent chance that I did 15 collect it. 16 Q Did or did not? 17 A Did, I'm sorry. 18 Q As you sit here you don't remember if you 19 did? 20 A I don't remember. 21 Q I am just trying to figure out whether that 22 question means something to somebody who doesn't have 23 a spouse, girlfriend or boyfriend? 24 A It wouldn't. It would be a nonmeasure for</p>
<p style="text-align: right;">Page 131</p> <p>1 happen. 2 Q The question in the first instance was 3 whether you had an argument with a friend in the past 4 month, is that correct? 5 A I don't recall offhand what the time lag is 6 on the measure. If it was month, week or day. 7 Sometimes we use shorter time windows, but it is time 8 based. 9 Q Is there any way to tell what that is? 10 A If I can't tell from here, I can tell from 11 looking up in the dissertation probably. 12 Q Okay, can you look it up? 13 A It's here, in the past month on page 225. 14 Q So the first measure was -- or well, there is 15 the NOBAGS scale, than there is the measure of 16 whether you had an argument, whether the participant 17 has had an argument with a friend in the past month. 18 That's a yes or no answer? 19 A Correct. 20 Q Than the next question was whether you had an 21 argument with a spouse, boyfriend or girlfriend 22 within the past month? 23 A Yes. 24 Q Do you know how many of the participants in</p>	<p style="text-align: right;">Page 133</p> <p>1 someone that didn't apply to. 2 Q For both of these measures did the question 3 measure frequency of argument? 4 A No. It's a much more raw measurement whether 5 it occurred or not at all. 6 Q What about severity of argument? 7 A No. 8 Q So if someone at time one reported that they 9 had had an argument with a friend in the past month, 10 then no matter what happened to them in the next 11 month, they wouldn't be part of an increase in the 12 measure? 13 MS FALLOW: Object to the form. 14 THE WITNESS: I am not sure that I understand the 15 question. 16 BY MS. CHERIAN: 17 Q If you asked a participant when you -- you 18 measure at time one and time two, is that correct? 19 A That's correct. 20 Q When you asked someone at time one had you 21 had an argument with a friend in the past month, if 22 they say yes, they are part of the percentage that 23 say yes at time one, is that correct? 24 A That's correct.</p>

1 Q Than you asked again whether at time two  
2 whether the participant had an argument within the  
3 past month?

4 A That's correct.

5 Q And you are comparing the percentage?

6 A That's correct.

7 Q So if for instance one person had an argument  
8 in the past month and than they had another  
9 argument -- well, if they had an argument in the past  
10 month at time one and they had an argument with a  
11 friend between time one and time two, that wouldn't  
12 reflect an increase in the total percentage?

13 A You are correct in noting that showing time  
14 one to time two is subject to both ceiling and floor  
15 effects. It's a pretty raw, broad measure. What the  
16 measure actually detects is whether these things  
17 happen in the aggregate, not intensity. It is not  
18 intended to measure the intensity.

19 There are other measures in the study which  
20 are not reported here, which we can talk about, that  
21 are probably more likely to get at that. What this  
22 does is over 200 people, you would expect some people  
23 to have this happen and some people not. The people  
24 who would never have an argument are very unlikely to

1 have increase or decrease. The people who always  
2 would have are very unlikely to not have one.

3 Those things get smoothed out when you have  
4 a large enough sample. It tends to insulate the  
5 analysis from those flooring and ceiling effects  
6 which is a fair question. But what we are really  
7 looking at is the difference in variance of the  
8 people that are in the middle of the pack to see if  
9 those went up or down compared to the control.

10 Q If we can look at the chart on page 226 in  
11 the published version.

12 A Yes.

13 Q Would I be correct in interpreting this chart  
14 to mean that for the control group that the  
15 percentage of people who had an argument with a  
16 friend at time one to time two went from 15.94  
17 percent to 17.40 percent?

18 A That's correct.

19 Q For the treatment group the percentage of  
20 people who had an argument with a friend at time one  
21 increased to 28 percent from 21.33 percent?

22 A That's correct.

23 Q So both groups had increased arguments with  
24 friends?

1 A That's correct.

2 Q And the treatment group had a higher  
3 percentage of increased arguments with friends?

4 A In uncontrolled data, that's correct.

5 Q When you say uncontrolled, this is as opposed  
6 to in control data?

7 A This is as opposed to an analysis that would  
8 include other variables which might account for the  
9 change.

10 Q That is reflected on table two?

11 A No, that would be in table three.

12 Q Table three, sorry. So this would be the  
13 effects once controlled for those other variables?

14 A Correct.

15 Q Can we go back to table one for a moment?

16 With respect to the measure of arguments with a  
17 partner, the control group went from 33.33 percent to  
18 24.64 percent from time one to time two, is that  
19 correct?

20 A That's correct.

21 Q Where the treatment group stayed the same at  
22 21 percent at time one and 21 percent at time two?

23 A That's correct.

24 Q Did you find it odd that the control group

1 went down by almost 9 percentage points?

2 A I am not sure odd is the right word, but it  
3 certainly notable as the kind of thing that we look  
4 at and wonder if there was something about the  
5 administration of the survey itself that would lead  
6 to something. This is the function of the control  
7 group in the first place to make sure there isn't  
8 some testing effect.

9 When you don't have a control group, you  
10 don't see the changes and you don't incorporate them  
11 into the analysis. So there is an increase in one  
12 case and decrease in the other. It's hard to  
13 understand exactly what might have caused those  
14 things in relation to the way that the survey  
15 questions were asked. If it is an artifact of the  
16 way that the people were asked these things.

17 If it was, it justifies the point of having  
18 a control group so we can factor those changes out  
19 from the analysis of the treatment group. In that  
20 sense is it odd, it's a normative interpretation.

21 Q Did you do any further research or do any  
22 further study to determine why that would be so  
23 different from two groups?

24 A The only thing that I could have done is

<p style="text-align: right;">Page 138</p> <p>1 interview the people at time two in some sort of 2 debriefing process. Because of the RB restrictions 3 we are not allowed to keep contact information from 4 the original subjects of the study. 5 By the time I did this analysis about a year 6 later, the subjects were long since gone. I had no 7 way to go back and ask them if there was something 8 about the questions which they found odd or if there 9 was something else going on in their life. There was 10 no way to determine if it was an artifact of the 11 design or something happening in real life. 12 One of the things that happens with 13 longitudinal study is that data collection are 14 subject to history effects. You worry that other 15 major events might have occurred which might throw 16 everybody off. The longer the study, the more 17 possible disruptions there are. That's a concern for 18 everybody who does longitudinal tests. It's 19 difficult to know what sort of major dramatic event 20 might have happened in March of 2003. 21 But during the study period nothing 22 interesting happened in the game world itself, which 23 I monitored. And nothing particularly impactful 24 happened in the real world at least as reported</p>	<p style="text-align: right;">Page 140</p> <p>1 older than the typical male player. So that makes 2 sense. The gender variables is coded as zero male, 3 one female. Anything positive would indicate a 4 positive correlation with femaleness not maleness. 5 Q I wanted to ask you some questions about the 6 amount of time that the players played. I think on 7 page 226 you say that the exposure was averaged 8 56 hours over the month, is that correct? 9 A That's correct. 10 Q The standard deviation that you report on 11 that is 54.02 on table one? 12 A Right. 13 Q Now was this a normal curve distribution on 14 the hours played? 15 A I would like to look this up in the 16 dissertation. There is a test for normal 17 distribution. That is a test of heteroscedasticity 18 that comes out with a measure called kurtosis. And 19 when the data are outside of plus or minus two on a 20 kurtosis score, they are considered not normal. 21 So because there was a high standard 22 deviation compared to the mean, I subjected those 23 data to a test of heteroscedasticity and found that 24 it came within the acceptable bounds of kurtosis. In</p>
<p style="text-align: right;">Page 139</p> <p>1 through the major news media that I could detect. 2 It's hard to know exactly what to make of it. 3 Q One other question that I had was with 4 respect to gender. It looks like the treatment group 5 was 26.67 percent female as opposed to the control 6 group which was 17.4 percent female. You did look at 7 gender as a monitor? 8 A Right, because that was one of the few thing 9 a T test showed that the groups were not equivalent, 10 I made sure to keep that in the design later on. It 11 is included as control variable in the regression on 12 table three for that very reason. 13 We are never entirely confident in random 14 assignments so we do the double checks. When 15 something pops up, we include it later as a covariant 16 in an ANOVA or as a control in a regression. 17 Q If you can turn to page 227, I have a 18 question on the correlation between age and gender of 19 .26. I guess I'm trying to understand what that 20 means? 21 A It means that the women in the study were 22 likely to be older than the men, which is reflective 23 of actual play patterns of people who play MMOs. A 24 typical player who is female is about five years</p>	<p style="text-align: right;">Page 141</p> <p>1 other words, yes. 2 Q If I can ask you briefly to turn to 3 Exhibit 2, I have a question about one of the virtual 4 cultivation articles. If you can turn to, it looks 5 like page 30 of that article. 6 A Right. 7 Q It this a graph of hours of game play versus 8 chances of robbery with weapon change? 9 A It is. 10 Q So the X axis here, is that the range on the 11 hours of game play in the study that we are referring 12 to in the Communication Monographs? 13 A It is. 14 Q When you say that it is the standard 15 deviation is 54 with a mean of 56, can you tell me 16 approximately, if you can, what percentage of people 17 were within one standard deviation of the mean on 18 56 hours of playing time? 19 A That takes me back to statistics class. 20 There is a standard answer that is independent of my 21 data. It's something like 50 or 60 percent or 70 22 percent, I can't recall. Two standard deviations, 23 one ends up being around 95 percent of the data. 24 The high standard deviation is caused by</p>

1 extreme leverage from two or three of these data  
 2 points on the graph. You see a couple of people out  
 3 past 200 and one person nearing 300. Those outliers  
 4 are what make the standard deviation so high, which  
 5 makes it seem like a suspect number. But what we  
 6 usually do is test for effects with and without the  
 7 weird outliers to see if there is something about  
 8 them. To see if maybe they overreported in some kind  
 9 of demand characteristic, like they were showing off  
 10 that they played a lot.

11 The truth is there are people that play that  
 12 much. It's not outside of the realm of plausibility  
 13 that is real data. That is the reason why that  
 14 standard deviation is so high because of those few  
 15 outliers.

16 Q Within the one standard deviation is it 65  
 17 percent, you don't remember what the specific percent  
 18 is?

19 A I don't remember but somewhere around that  
 20 ballpark.

21 Q What that would mean is approximately between  
 22 50 and 65 percent of the people played between in  
 23 this case two hours, approximately two hours and  
 24 110 hours?

1 A The statistic doesn't work perfectly like  
 2 that. Because for example, nobody in my study played  
 3 as few as two hours, the smallest number of hours was  
 4 five if I can recall correctly. It's more of a way  
 5 of explaining variance as a way of describing central  
 6 tendencies in the way that you were describing it.

7 Q I believe you on page 224 --

8 A Which document?

9 Q I'm sorry, the Exhibit 8 the Communication  
 10 Mongraphs article. On participants you state that 68  
 11 percent of the treatment group exceeded this minimum,  
 12 by this minimum you refer to that as five hours a  
 13 week, so that would mean that 68 percent of the group  
 14 played for more than 20 hours?

15 A That's correct.

16 Q Accordingly 32 percent of the group played  
 17 for less than 20 hours?

18 A They did play fewer than 20 hours.

19 Q Did you --

20 A This is -- I'm sorry, this is why we have  
 21 variables, there is a variables somewhere. I'm  
 22 sorry, not in that analysis.

23 Q I think that you anticipated my question in  
 24 terms of a correlation between hours played and any

1 of the dependent variables, did you look at that?

2 A Sure.

3 Q Did you find there was any correlation  
 4 between hours played and any of the dependent  
 5 variables?

6 A I think so. I don't think that that is here.  
 7 I think that would be in either my statistics program  
 8 on my lap top or possibly reported in the  
 9 dissertation. But I can speak to the issue more  
 10 generally if you don't need to get to specifics.

11 Q Can you tell me specifically what you  
 12 remember about that?

13 A About which dependent variables? I had a few  
 14 hundred in the study.

15 Q Let's go with the three that are in the  
 16 reported version, the NOBAGS scale, the argument with  
 17 friend or argument with partner.

18 A I don't recall those three in particular if  
 19 there was. I'm sorry.

20 Q If you can look at page 226, in the second  
 21 paragraph the second sentence, simple correlation  
 22 between hours played and three dependent variables  
 23 were nonsignificant?

24 A There is your answer.

1 Q I didn't mean to go through that and ask you  
 2 the question that is there. But I guess what I am  
 3 asking you is, how this compares to the discussion  
 4 which we were having earlier regarding the two Mortal  
 5 Kombat studies. You didn't find in your study any  
 6 relation between hours played and the dependent  
 7 variables in this study?

8 A That's correct. I showed a flat effect, but  
 9 I also show a null effect. That is to say that if  
 10 things are hovering around zero, it's not that they  
 11 don't decrease, they don't increase or decrease, they  
 12 don't move at all.

13 It's similar that I am looking at time but  
 14 not similar in what we call the functional form of  
 15 the effects whether they go up or down or stay the  
 16 same. In that respect, it's a very different kind of  
 17 outcome.

18 Q But you have not shown that the effects go  
 19 down over time?

20 A That's correct. I would have reported it if  
 21 they had gone down. They didn't move at all. The  
 22 functional form was flat.

23 Q There is nothing in your study that indicates  
 24 that playing for a longer period of time decreases an

<p style="text-align: right;">Page 146</p> <p>1 effect?</p> <p>2 A There is nothing in my study that shows after</p> <p>3 a month of playing Asheron's Call 2 either increases</p> <p>4 or decreases that effect.</p> <p>5 Q Can you turn to page 229 of the Exhibit 8.</p> <p>6 The second to last paragraph it start off with</p> <p>7 second, the last sentence says; however because our</p> <p>8 method did not concentrate solely on younger</p> <p>9 teenagers, we cannot say that teenagers might not</p> <p>10 experience different effects.</p> <p>11 Do you see that?</p> <p>12 A I do.</p> <p>13 Q Your study did not focus on the effects on</p> <p>14 minors specifically?</p> <p>15 A That's correct. We don't have a section</p> <p>16 where we break out just the minors in the study and</p> <p>17 do analysis on them. They are lumped in the rest of</p> <p>18 the sample. When we have findings on age, they are</p> <p>19 part of this but so are older audiences. This is not</p> <p>20 a test of children specifically.</p> <p>21 Q Do you know -- well, do you believe whether</p> <p>22 you can generalized these findings to younger</p> <p>23 players?</p> <p>24 A What do you mean by younger players?</p>	<p style="text-align: right;">Page 148</p> <p>1 we feel more comfortable publishing and stating our</p> <p>2 claims within a reasonable degree of statistical</p> <p>3 certainty.</p> <p>4 We found a finding that was over .05 but was</p> <p>5 under .10. Meaning that it was starting to approach</p> <p>6 significance and with a larger sample size we might</p> <p>7 have found it.</p> <p>8 The coefficient in that case for age was the</p> <p>9 exact opposite in terms of sign on what we would have</p> <p>10 expected based on television literature, at least in</p> <p>11 that, we found that increases in these things were</p> <p>12 more likely as people got older rather than as people</p> <p>13 got younger. So it's very counter to the predicted</p> <p>14 model.</p> <p>15 If one buys that finding as statistically</p> <p>16 significant, we reported it's marginally. Given it</p> <p>17 was such an eyebrow raiser, we reported it.</p> <p>18 Q Could that possibly be related to -- how many</p> <p>19 participants were baby boomers or older?</p> <p>20 MS FALLOW: Objection, in terms of what do you</p> <p>21 clarify as a baby boomer.</p> <p>22 MS. CHERIAN: I am asking him how many of the</p> <p>23 participants were -- you used the term baby boomer.</p> <p>24 THE WITNESS: Do you want to say over 40?</p>
<p style="text-align: right;">Page 147</p> <p>1 Q People who are, you have the lowest person</p> <p>2 on, the youngest person is 14. How about people</p> <p>3 younger than 14?</p> <p>4 A I don't have data on people younger than 14.</p> <p>5 So I would not take data from this study to make</p> <p>6 claims on people younger than 14.</p> <p>7 Q With respect to people between 14 and 18, did</p> <p>8 you isolate them in terms of the study just looking</p> <p>9 at the effect on them?</p> <p>10 A No, that's what I meant when I said I didn't</p> <p>11 do a separate analysis looking at that chunk of the</p> <p>12 data. Since they are consumed in the rest of it, I</p> <p>13 couldn't tell you whether the effects are different</p> <p>14 specifically. I can only tell you they are part of a</p> <p>15 larger trend, which indicates a negative effect for</p> <p>16 age.</p> <p>17 Q When you say that it indicates a negative</p> <p>18 effect for age, what specifically are you referring</p> <p>19 to?</p> <p>20 A We found that age in one of the equations was</p> <p>21 marginally significant. That is it doesn't quite</p> <p>22 reach the level of significance where we can make a</p> <p>23 strong claim. Normally we have what is called a P</p> <p>24 value in research. When the P value gets under .05,</p>	<p style="text-align: right;">Page 149</p> <p>1 BY MS. CHERIAN:</p> <p>2 Q Let's say over 40. How many of your</p> <p>3 participants were over 40?</p> <p>4 A I would say we have 200 people in this study,</p> <p>5 the mean age is 27. There is going to be a long tail</p> <p>6 going off from 27 to 30 going very slowly down where</p> <p>7 there is a much bigger spike on the younger side of</p> <p>8 that distribution. So maybe a quarter. It's hard to</p> <p>9 say without looking at the data itself.</p> <p>10 Q When you talk about the negative correlation</p> <p>11 for age, was that for any specific group or across</p> <p>12 the whole?</p> <p>13 A Across the whole. We didn't go and look to</p> <p>14 see if it would apply for more, for one age more than</p> <p>15 the another.</p> <p>16 Q You can tell me whether that the over 40s are</p> <p>17 more effected or the 20s to 30s or the under 20s?</p> <p>18 A That's correct, it's not broken out by</p> <p>19 segments. It's an overall pattern. It's still the</p> <p>20 exact opposite of the overall pattern that we think.</p> <p>21 When it's reported elsewhere, it usually not broken</p> <p>22 down by segment, by cohort or generation either.</p> <p>23 It's usually longer overall trends.</p> <p>24 If you collect data on specific groups with</p>

<p style="text-align: right;">Page 150</p> <p>1 the purpose of analyzing specific small groups, 2 that's the kind of analysis that you do. That's not 3 the kind of analysis that we set up here. 4 Q Could you turn back to your declaration 5 Exhibit 1. I want to ask you a couple of questions 6 about the studies that you cite in paragraph 20. You 7 cite Garner 1991, Meadows 1985 and Ofstein 1991. 8 Do you see that? 9 A I do. 10 Q Those are all studies of arcades? 11 A Correct. 12 Q So those didn't study console games or PC 13 games at all? 14 A No, those were arcade game studies only. 15 Q In terms of social context of those studies 16 that would be different than PC or console games? 17 A Probably, or I should say possibly since we 18 don't have the equivalent. 19 Q Further down the studies, Mitchell and 20 Murphy. Mitchell '85 and Murphy '84. Do you know 21 whether those are PC or console games? 22 A Those are console games. They are 23 specifically studies of Atari inside of households. 24 I can't remember which of the two. One is confined</p>	<p style="text-align: right;">Page 152</p> <p>1 increasing of processor speed, the number of polygons 2 per screen, et cetera. 3 If you are asking for the perception of 4 violence or aggressive acts in these early games, 5 that's a much more open question. It's hard for me 6 to tell you how people perceive things 20 plus years 7 ago versus today unless I want to rely on my own data 8 set of one person, which is probably not what I would 9 call a generalizable sample. 10 Q If we could look at Dr. Sherry's 11 meta-analysis Exhibit 5, specifically page 422, the 12 first line of the first full paragraph on that page; 13 effect size is moderately correlated with the year in 14 which the study was performed, R equals .39, 15 suggesting that effect sizes have increased over 16 time, see table three. 17 Do you see that? 18 A Yes. 19 Q Would it be fair to say that based on the 20 general trend that Dr. Sherry reports here, that an 21 older study is more likely to have a lower effect 22 size? 23 A On the statistically based study, that's 24 exactly what Dr. Sherry's correlation implies.</p>
<p style="text-align: right;">Page 151</p> <p>1 to the San Francisco bay area. 2 Q Those are now approaching, well, 20 years old 3 at this point. Do you know whether there has been 4 any, do you know if there has been any meta-analysis 5 done of the year of the study compared to the effect 6 size? 7 A I know that Sherry used it as a control 8 variable in his meta-analysis. I can't remember if 9 he reported a coefficient way to see what the results 10 were for strength in a given year. These studies are 11 not statistically based studies which you would use 12 in a meta-analysis. These are apples and oranges. 13 These are qualitative, ethnographic, sit-in 14 anthropological research studies. 15 Q These wouldn't necessarily, they talk about 16 these concluded that games do not lead to aggression. 17 These are 20 years old. Would you say that the 18 violence in these studies is different than the 19 violence in the games currently? 20 A I am not sure if you mean the interpretation 21 of the violent imagery in early game or the graphic 22 realism in games. If you are asking the latter, 23 there is no question that modern games are absolutely 24 more graphic and more realistic because of the</p>	<p style="text-align: right;">Page 153</p> <p>1 MS. CHERIAN: Let's take a break. 2 (Recess was taken.) 3 BY MS. CHERIAN: 4 Q Dr. Williams, you were given a copy of an 5 unpublished longitudinal study that Dr. Anderson and 6 his colleagues have been working on? 7 A Yes. 8 Q I want to ask you about a couple of 9 statements in your declaration about that study. 10 A Okay. 11 Q Specifically in paragraph 21 of your 12 declaration, Exhibit 1, you say that the findings as 13 presented appear to support the hypothesis that more 14 violent game play at time one leads to more 15 aggressive behavior at time two. Than you go on to 16 identify some potential problems with design. 17 The question that I have is, in the sentence 18 that says, as it stands I do not believe it supports 19 the findings at issue in this case. What do you mean 20 by that I do not believe it supports the findings at 21 issue in this case? 22 A My understanding is that the important 23 statement is the one at the end of Professor 24 Anderson's declaration, which is the general</p>

1 statement about violent video game play causing  
2 increases in aggression among minors. That's what I  
3 mean by findings at issue in this case.

4 I don't believe that this study in the form  
5 it's in right now supports that statement.

6 Q You don't believe that the findings support  
7 the statement or you have some questions about some  
8 of the specifics about the study?

9 A Those things are intertwined. You can't move  
10 one without the other. There are enough questions  
11 about the statement that is, first of all, not ready  
12 to be published for some of the reasons that I have  
13 raised and many other reviewers would raise.

14 One wouldn't want to draw conclusions based  
15 on a study which is not ready to go, which is what  
16 this study is. It may turn out that he can address,  
17 he and his team can address some of the issues that I  
18 have raised and doubtlessly other researchers would  
19 raise if this is going through a peer review process.  
20 I don't know what process this is going through or  
21 what stage it is in.

22 From a rough read of it, I'm sorry, from a  
23 read of it in its rough state like this, it is clear  
24 to me that it is not quite ready to be used yet.

1 That's why I use the phrase as it stands.

2 Q Can I ask you about, you discuss in that same  
3 paragraph the measure of violent media exposure seems  
4 to have a lot of noise. What do you mean by noise?

5 A Noise means that in addition to the variables  
6 of interest, this score might reflect things outside  
7 the area of interest. That makes the data noisy. It  
8 includes the things that you don't want in addition  
9 to the things that you do want.

10 Q You discuss the reliability score of .68. Is  
11 that for the media exposure?

12 A Right, that's for the main self-report  
13 violent video game exposure that Anderson and his  
14 colleagues report.

15 Q When you say reliability score, what are you  
16 referring to?

17 A This is a statistically measure called alpha  
18 in most cases. Different than an intracordal  
19 reliability score. This is the extent to which the  
20 scores are consistent across the sample. Do they  
21 behave in the same way. Do they move the same way.  
22 Do they act the same way.

23 That's an good indirect indicator of whether  
24 it is measuring well. It doesn't tell you if it is

1 measuring the right thing, but at least it tells you  
2 if it is doing the measurement part of it well.

3 Q So when you say measuring as they relate to  
4 another, what do you mean? What relates to one  
5 another?

6 A I'm sorry, it's difficult to put this in  
7 layman's terms. There is a test called split F  
8 reliability test where you take the data and you  
9 split it in half and you see if it behaves the same.  
10 And the score is reported how well those things  
11 behave the same as we randomly take them in half or  
12 take all the possible combinations of different  
13 halves, split than at different points to see that  
14 the data is consistent.

15 It's really kind of a measure of consistency  
16 and trustworthiness. It doesn't tell you anything  
17 about the scores themselves, but it tells you that  
18 the data is behaving in such a way that you can use  
19 this variable for analysis. It's a precursor to  
20 analysis.

21 Q In this instance do you know what the various  
22 factors were that were part of the violent media  
23 exposure?

24 A We are not given a lot of information about

1 that in the study, which is one of the things that I  
2 would raise. Rather than throwing this out or saying  
3 this was hopeless, if this were in a peer review  
4 process where I was a reviewer this is the kind of  
5 item that we would send back to the original research  
6 team and say could you please explain this more.

7 Because you haven't given us a lot of  
8 information about how you collected it, because the  
9 score is so low, it's below what is normally  
10 acceptable, can you give us a reason to trust the  
11 measure, otherwise, we would normally throw it out.

12 Because it's the central measure for the  
13 whole study, it's the linchpin on which the whole  
14 thing stands. It's so important to them that we  
15 would always give them the opportunity to defend the  
16 measure or explain better because maybe they forgot  
17 to include something that would allay the concerns on  
18 the part of the reviewer.

19 Q Are we talking about the relationship between  
20 different kinds of violent media exposure?

21 A No, this measure is the self-report for how  
22 much violence the students consumed. So if I recall  
23 correctly, I am not positive that I am, I had to read  
24 this fairly quickly, they asked the students which

<p style="text-align: right;">Page 158</p> <p>1 games do you play and individually how much violence 2 is there in them.</p> <p>3 It's a students' self-reporting their level 4 of violent media. It's not surprising that a 5 self-report like that would be particularly noisy. I 6 noticed in Professor Anderson's deposition that he 7 didn't take very seriously the idea that I collected 8 the data over the internet and self-reported hours. 9 That's for adults who had the benefit of a time diary 10 journal, which is the standard practice in media 11 research.</p> <p>12 It is the same thing that John Roberts and 13 his team in Maryland has been doing for 30 years and 14 is completely accepted in the field. That compared 15 to asking third, fourth and fifth graders to do the 16 assessment is a difficult comparison to make.</p> <p>17 Q So your understanding is that the reliability 18 score of .68 has to do with the measurement -- well, 19 the estimate of violent content by the third and 20 fourth and fifth graders?</p> <p>21 MS FALLOW: Objection, if you are asking 22 questions about what Dr. Anderson's study has said, 23 if you want to give us a copy that we can look at it. 24 He said he wasn't sure.</p>	<p style="text-align: right;">Page 160</p> <p>1 make an argument stronger. It doesn't logically 2 follow. What we really like is a good measure in the 3 first place.</p> <p>4 Q But the low reliability score wouldn't 5 inflate the effect size, would it?</p> <p>6 A It could. The presence of noise in the 7 variable could go either way. One of the problems 8 with asking third, fourth and fifth graders to assess 9 is that we don't know if they would systematically 10 underreport or overreport violence.</p> <p>11 I was willing to give Anderson's team the 12 benefit of the doubt to say they might be 13 underreporting or that the noisiness might work in 14 their favor. It's equally possible that the opposite 15 could be the case that they would be overreporting 16 violence in their games to show off some kind of 17 level of empowerment.</p> <p>18 That wouldn't be uncommon for people age 19 seven to eleven to prove they are more adult like 20 because they consume more violent fair. In that case 21 the measure would potentially work in the opposite 22 direction. The problem is this is the unknown. 23 Again, this is the kind of thing that a 24 reviewer would needle the writers on to clarify and</p>
<p style="text-align: right;">Page 159</p> <p>1 MS. CHERIAN: I am asking what his understanding 2 was.</p> <p>3 THE WITNESS: Can you repeat the question, 4 please?</p> <p>5 BY MS. CHERIAN:</p> <p>6 Q I am asking you what your understanding is of 7 what the low reliability score of .68 relates to?</p> <p>8 A What it relates to?</p> <p>9 Q What is the measure that has the low 10 reliability score of .68?</p> <p>11 A Video game violence.</p> <p>12 Q Ultimately if that is a lower reliability, 13 does that have any, would that have any specific 14 effects on effect size?</p> <p>15 A Possibly, possibly in the sense that when a 16 measure is noisy, it's harder to find effects. If 17 there are smaller effects, sometimes people will make 18 the case that if the measure had been better, the 19 effects would be larger.</p> <p>20 So Anderson's team could take this noisy 21 measure and say if we had a better measure, the 22 effect size would have been even larger, therefore, 23 this is a conservative test. However, this is an if. 24 You can take noise and junk in the data and use it to</p>	<p style="text-align: right;">Page 161</p> <p>1 justify before it would get into publication.</p> <p>2 Q You don't know what the answer to those 3 questions are as to why the reliability score is .68?</p> <p>4 A No, I am basing my opinion solely on that 5 document. And there wasn't much to go on.</p> <p>6 Q If you can go to page 22, paragraph 22 of 7 your declaration on page eight. About halfway down 8 the paragraph you said after talking about 9-11, you 9 talk about this is a particular issue with young 10 children who experience so much developmental change. 11 What do you mean when you say developmental 12 change?</p> <p>13 A I mean that it's generally understood from 14 the television violence literature that children are 15 more likely to experience effects because their minds 16 are less well formed. This is the kind of direction 17 that some of the biological stuff is going. I can't 18 say that I understand that literature myself.</p> <p>19 But we do understand or we have always 20 suspected that younger children are more susceptible 21 to effects because their minds are forming. That's 22 sort of our gross level understanding of it. So we 23 are more likely we think to find effects in younger 24 populations, which is again why the age finding in my</p>

<p style="text-align: right;">Page 162</p> <p>1 study was odd.  2 The problem is pinning down when, at what  3 age that might occur. You very correctly pointed out  4 in your critique of what effects might occur in my  5 own sample, if I would have any leverage to talk  6 about 14 to 18 years old versus 45 to 60 year olds.  7 The answer is I don't.  8 The fact is that we suspect there are  9 developmental changes and we expect we'll find  10 different patterns among different age populations  11 but we don't know exactly when this would occur.  12 What we would really like to do is do a comparative  13 study with people at all these different age points  14 so we can find if there is an effect, when does it  15 happen. Does it increase over a certain time period.  16 Does it decrease. What happens.  17 That to me, and this is out of my expertise  18 as a social science researcher and veering into  19 policy where I'm not supposed to go, that to me  20 sounds like what policy makers would want to hear.  21 Does this happen at age seven. Does it tail off at  22 age 12. Does it increase again at the age of 15 and  23 then drop away.  24 All of these things are unknowns. To me it</p>	<p style="text-align: right;">Page 164</p> <p>1 A I am saying two things. Number one, I am  2 saying that a large time window allows for a  3 significant difference in someone two months later  4 versus six months later because there is so much  5 change happening with young children independent of  6 this research. There is so much going on with kids  7 anyway.  8 If you test someone at age ten and a half  9 versus say age eleven, that you introduce some  10 confusion and some noise there because changes might  11 be due to the regular ageing process. That's why we  12 try to at least have everybody be as closely linked  13 as possible in the other characteristics.  14 This large time window opens this up as a  15 possible flaw. It doesn't mean for sure it is, but  16 it is the kind of thing where we would say can you  17 please address this with more than, including a  18 control measure for it. Tell me why it is happening.  19 The second problem with history effects in  20 research is that the outside world can act upon the  21 testing situation. The analogy here was given back  22 when I was answering questions on my own study that  23 we talked about the month duration. I wanted to make  24 sure that nothing else was happening in that month</p>
<p style="text-align: right;">Page 163</p> <p>1 makes more sense to try to figure out when these  2 things happen than making assumptions and saying 18  3 and under. The fact is we have a lot of question  4 marks in that very large age frame. Of course, we  5 look at young children and we say they are the most  6 likely to. My thinking is let's find out exactly  7 when and how much and to which groups.  8 Q But you are not saying in paragraph 22 that  9 children would be affected by things like 9-11  10 because of their developmental changes but not be  11 affected by video games?  12 MS FALLOW: Object to form.  13 THE WITNESS: Could you say that again?  14 BY MS. CHERIAN:  15 Q I am trying to, you talk about in paragraph  16 22 this is a particular issue with young children who  17 experience so much developmental change. Proceeding  18 that you talk about the intrusion of life events and  19 historical events including 9-11.  20 Do you see that?  21 A Yes.  22 Q You are not saying that those things are more  23 impactful on young children than say video games  24 because of their developmental changes?</p>	<p style="text-align: right;">Page 165</p> <p>1 that, no spectacular news events occurred, nothing  2 radical happened also in the game world also because  3 that was something that I had control over.  4 This is all games so it's much harder to  5 have handle on it. We do know there was a traumatic  6 event that occurred in the sampling frame. This is  7 one of those oh, no tragic moments that occurs to  8 researchers that sent up an expensive and time  9 consuming, labor of love type process, than have an  10 extraneous influence like 9-11 occur.  11 You than have to account for in your data  12 how that might have influenced the results. It's why  13 we do control groups for one thing. That helps. But  14 you can't control for having a group of people that  15 didn't live through 9-11. I think that even  16 laypersons would wonder if the images of planes  17 crashing into the twin towers would have some kind of  18 effect on students that are asked questions about  19 aggression and violence and danger and hostility.  20 It's the central portion of their model  21 about hostile attribution bias and suddenly our  22 country is under attack by people who want to kill  23 us. I don't think that it is a stretch to say that  24 some kind of implication has to be addressed in the</p>

<p style="text-align: right;">Page 166</p> <p>1 write up for the research.  2 Q Do you think there would be any difference  3 between the reason -- are we talking about the  4 control group also experiencing the same effect of  5 that?  6 A That's right. Unfortunately that means that  7 the entire subject pool gets contaminated. This is  8 risk of doing longitudinal research. It's why we all  9 hold our breaths when we have a sample in the field.  10 It's the risk we take and the tradeoffs that we make.  11 If you are doing a study of political  12 influence and the president is impeached in the  13 middle of your study, it doesn't matter if you have a  14 control group or not because the control group got to  15 see that too. Everybody might be wigged out  16 universally.  17 The question is whether there is an  18 interaction between the outside event and the people  19 in the treatment condition.  20 Q But what I am trying to understand is, if the  21 control, if you are measuring the difference between  22 the treatment group and control group and everybody  23 experiencing this outside event, shouldn't the  24 variation between the two groups still remain</p>	<p style="text-align: right;">Page 168</p> <p>1 things in some kind of write up rather than including  2 just a variable for it. There seems a lot more to  3 answer for than simply putting in a number especially  4 when there is a traumatic outside event.  5 Again, it doesn't mean that the results they  6 have don't exist. These are challenges that the  7 researchers should address. They should foresee  8 these things and knock them down in the write up.  9 That's the job of research. Research is ugly, messy  10 and hard to do. What we try to do is prevent all of  11 these plausible alternative hypothesis.  12 It's the job of the outside research  13 community not to come in and do it unkindly but to  14 try to poke holes to make the original research  15 stronger. In that sense this is an adversarial  16 process. We all want good data. Theoretically the  17 research team wants good data too. They should  18 address these thing so the peer reviewers don't have  19 to.  20 It's surprising to not have many of these  21 issue addressed, especially something as traumatic as  22 that. I can't think of a more traumatic, single  23 history influence tampering possibility for  24 longitudinal study to have happened in the last, I</p>
<p style="text-align: right;">Page 167</p> <p>1 constant if everybody experienced the traumatic  2 event?  3 MS FALLOW: Objection, asked and answered.  4 THE WITNESS: The question is whether or not  5 there is an interact with the thing that is happening  6 in the treatment condition with the outside event.  7 If I am doing a study of a violent game, the people  8 who are playing the violent game might have an  9 interaction effect with the thing that occurred in  10 the real world in a way that the people in the  11 control group who are not playing the game wouldn't.  12 So there is a difference there. It is  13 exacerbated or a possibly interaction. I don't  14 recall this correctly whether or not there was a  15 treatment or control group in the study. I thought  16 there wasn't. This is a moot line of thinking for  17 them in particular. I think this is just a cross  18 line correlation. I can't remember if there is a  19 control group.  20 Q If there was a variable that was added or do  21 you remember if there was a variable for the time  22 window for data collection?  23 A There was. That's what I meant when I said  24 it would say better if they would address these</p>	<p style="text-align: right;">Page 169</p> <p>1 don't know, December 7, until now time.  2 Q Now this is one longitudinal study. This is  3 the only one that in the video game with minors that  4 you know of, is that's correct?  5 A That depends on one's definition of  6 longitudinal. For minors as far as I know, yes.  7 Q If we could turn to paragraph 27 in your  8 declaration, the first sentence, in the end I am left  9 thinking that they might establish causal direction  10 and violent game effects in their sample, which would  11 be a new and important finding. But I am not sure if  12 those effects are moderate or miniscule and how they  13 truly compare with other factors including other  14 media.  15 Do you see that?  16 MS FALLOW: I just want to say you said which  17 would be and it is which could be.  18 MS. CHERIAN: Which could be a new and important  19 finding.  20 THE WITNESS: I see that.  21 BY MS. CHERIAN:  22 Q In terms of this study in terms of seeing  23 this in the context of the other research literature,  24 how do you see Dr. Anderson's longitudinal study in</p>

<p style="text-align: right;">Page 170</p> <p>1 terms of the other research in the area?  2 A Potentially path breaking. This is very  3 important research. I was really excited to read  4 this. It's the kind of data that we would all like  5 to see if we can knock down some of these plausible  6 alternative hypothesis.  7 Those of us that criticize the research  8 don't do so out of glee. We criticize because we  9 would like to see better data. We see a study like  10 this reported or read the abstract, we think maybe  11 this is it, maybe this is the one that knocks down  12 our objectives and we are ready to see it.  13 When I read through the study I was  14 relatively disappointed because there are some of  15 these issues which could be addressed. So I remain  16 agnostic about how to react until the authors have  17 had a chance to address the shortcomings. As I am  18 confident they will attempt to do, not on my feedback  19 but based on peer reviewing or whatever process they  20 are going through.  21 I hope they can because the field as a whole  22 needs to know truth in data. That's what we are all  23 about.  24 Q So in terms of looking at this as part of a</p>	<p style="text-align: right;">Page 172</p> <p>1 other writings. I would like to see it incorporated  2 in it. I would like to see a better handle on the  3 content of games.  4 There are many things I would like to see  5 addressed, but this is the way forward. They are  6 doing the right thing. They have my sympathy as a  7 fellow researcher. It's hard to get a study like  8 this off the ground in terms of financing, in terms  9 of access to students especially in schools, which is  10 very difficult. They absolutely have my sympathy for  11 how hard it is to do these things.  12 I don't want to be one of those persons that  13 simply says ah-hah and do nothing but tear down other  14 people's work. I would like them to succeed because  15 I would like to know the answers. I think they are  16 leading the charge in this field. I just don't truth  17 their results yet.  18 Q If we could turn to cross-sectional studies,  19 specifically on your declaration on paragraph 28 and  20 29. What do you see as the usefulness of  21 cross-sectional, correlational -- is it  22 cross-sectional correlational study, is that what it  23 is?  24 A Well, correlational simply means relationship</p>
<p style="text-align: right;">Page 171</p> <p>1 whole picture, this is something new and different  2 but you don't think at this point given the status of  3 this, you think it needs more fine tuning?  4 A There are fundamental problems with it. I  5 don't think that fine tuning is the right word. It's  6 more put the ball back in their court and see what  7 they come up with. The process of the peer review is  8 an integrated one. The challenge is thrown down by  9 the reviewer and the original writer or writers have  10 a chance to respond to it. It might fundamentally  11 change their thinking. It's not usually considered  12 ready to go until it's ready to go, however long that  13 is.  14 I think about fine tuning as substantively  15 negligible things. Where there are substantively  16 substantial things here.  17 Q In terms of the criticism of the video game  18 research, it does not have any longitudinal studies  19 this begins to address that?  20 A Absolutely. For that it is very important.  21 I welcome it and hope there is more of it. I would  22 like to see them address some of the other outside  23 variables especially social context because they  24 themselves have said this is an important variable in</p>	<p style="text-align: right;">Page 173</p> <p>1 between two things. But when you also but the words  2 cross-sectional in front of it, that implies at one  3 point in time. So technically speaking their  4 longitudinal study is also a correlational study. We  5 call it a longitudinal study rather than use the work  6 correlational because they are controlling for time,  7 which makes it much more powerful or potentially more  8 powerful if they could dot, dot, dot, do the things  9 that I talked about.  10 Cross sectional means it is just a one time  11 only, so therefore you can't control for Mill's  12 condition number two, the order of time effects. You  13 can't control for which came first. You can address  14 some of the other things. Cross-sectional studies  15 can be very useful, but they can't prove causation.  16 Q Can cross-sectional studies be used to test  17 for alternative plausible hypothesis?  18 A For many of them, but not all of them, yes.  19 In that sense they are very useful. Since they are  20 relatively inexpensive compared to experimental work,  21 which is in turn is relatively inexpensive compared  22 to longitudinal work, they are the cheapest way of  23 knocking down some of these things or finding out if  24 they exist in the first place.</p>

1 So you would much rather spend a few  
2 thousand dollars on a cross-sectional survey approach  
3 to find out if we are even barking up the right tree.  
4 Because since they are necessary but not sufficient  
5 conditions, if they don't satisfy the necessary  
6 criteria, they tell us to go back to the drawing  
7 board in the first place.

8 In that sense I agree with what Dr. Anderson  
9 says that they are important for theory building in  
10 the sense that they can say well, we didn't disprove  
11 this, let's move forward to the next step. But no  
12 one should make the mistake of then saying we can  
13 prove causation with these things, otherwise, no one  
14 would bother with experiments.

15 Q Would you agree that these are layers of  
16 experimental studies, cross-sectional studies and  
17 longitudinal studies in terms of proving causation?

18 A No, I wouldn't characterize it as layers  
19 because when something is insufficient, it's not  
20 building up at all. It's knocking out obstacles in  
21 the path. If you want to have some other kind of  
22 physical analogy, you can call it knocking down  
23 hurdles so that you can then run around in a circle.  
24 It's a hurdle knocker-downer.

1 Q The cross-sectional studies are hurdle  
2 knocker-downers. But you are not saying that you  
3 should disregard all correlational studies or  
4 cross-sectional studies in terms of looking at the  
5 research on video games, are you?

6 A No, what I'm saying is they should be  
7 interpreted appropriately. And no one should make  
8 causal arguments out of them, which I see happen all  
9 the time. I see it happen in the research  
10 literature. I have seen it happen in these  
11 declarations. People are not careful of their  
12 language.

13 In Dr. Rich's declaration he keeps using  
14 language which implies causal links with  
15 correlational findings. It's completely  
16 inappropriate use of the methodology. People often  
17 say associated with or linked to. They should just  
18 say are correlated with because that way it doesn't  
19 imply there is some sort of causal relationship for a  
20 layperson who is not familiar with the methodology.

21 Q In the last sentence of paragraph 28 you,  
22 talk about it is equally likely that student with  
23 poor grades and aggressive behavior are more likely  
24 to play, likely due to a lack of parental involvement

1 and oversight, and there is no causal relationship.

2 Are you familiar with studies that  
3 controlled for trade hostilities, for instance?

4 A Yes.

5 Q So these are things that can be controlled  
6 for?

7 A Many of the things can be controlled, just  
8 not time.

9 Q If we can discuss briefly the meta-analysis.  
10 You have not undertaken any meta-analysis of video  
11 game literature, have you?

12 A No.

13 Q Have you undertaken any sort of systematic  
14 analysis of these studies on the effects of violent  
15 video games on aggression?

16 A What do you mean by systematic analysis?

17 Q Have you gone through and pulled all the  
18 studies in a server or, you know, lists or something  
19 to try to figure out whether you have seen all of  
20 them?

21 A Right. When I first started my dissertation  
22 work, this is 2001 or 2002. I was in an archival  
23 research class. So one of our tasks was find out  
24 everything about something.

1 So what I did was find every single article  
2 or dissertation or news report or magazine or  
3 anything that I could find on the topic of video  
4 games that existed at that time period and cataloged  
5 every single thing. I came up with a file of several  
6 hundred documents. So I was first of all aware of  
7 everything that was out there.

8 When I became more specific with what areas  
9 I was going to study, I would segment that archive  
10 and read through the literature. So for example, I  
11 have a publication out about the microeconomic  
12 analysis of the industry. This took a subset of that  
13 archive and looked through it and I read everything.  
14 Then when it was time to do the effects based  
15 literature and the social capital work, which is one  
16 of the main portions of my research, I read through  
17 those things.

18 So I did, in fact, at one point read through  
19 everything that I could possibly find, including  
20 these. It's been several years. There were some  
21 articles at the time I read abstracts or I skimmed  
22 through because I didn't know how important they were  
23 going to be. This was just a resource tradeoff.

24 My analysis has been relatively thorough. I

1 also made a point of reading through all of the  
2 articles that are the most cited and most  
3 influential. So the Anderson and Bushman and  
4 Anderson and Dill pieces I have read several times.  
5 I also made sure to keep rereading them and keep  
6 myself involved in literature by assigning them as  
7 papers for my students to read.

8 So I have taught video game class now three  
9 different times. And each time I have assigned a  
10 major article or two from the game effects literature  
11 always using Anderson's work to make sure that I am  
12 constantly staying fresh with it. Because it's a  
13 complex area. I have learned a lot from a growing  
14 number of articles.

15 Q Approximately when did you do the collection  
16 of all of that research?

17 A That would have been, it's tough to say  
18 without looking at my transcript, probably 2001. I  
19 think 2001 class, Ph.D. seminar taught by Professor  
20 Susan Douglas at the University of Michigan on  
21 archival research.

22 Q In terms of the meta-analysis that have been  
23 done, which ones are you aware of?

24 A I am aware of the two technically

1 meta-analytical pieces. The one by Anderson and  
2 Bushman. I am aware of but have not read their  
3 follow-up piece where they talk about the defense of  
4 the meta-analysis, which I think is a 2004 article.  
5 Professor Sherry's which is one of the exhibits here.

6 There are number of literature reviews, many  
7 of which I have read, some of which are referenced in  
8 my piece, some of which are referenced in Professor  
9 Goldstein's declaration. And I believe in Professor  
10 Goldstein's declaration he may have mentioned other  
11 meta-analysis as well. If he did, I haven't read  
12 them.

13 Q You have not read the update of Dr.  
14 Anderson's meta-analysis that was published in 2004?

15 A I have not read it. I have spoken with  
16 Professor Bushman in person about it.

17 Q When did you speak to him?

18 A I spoke with Professor Bushman most recently  
19 on the phone about two months ago. I spoke with him  
20 at the big ten graduate student conference that was  
21 held at the University of Michigan when I was  
22 visiting an assistant professor there in the spring  
23 of last year.

24 I have had lunch with him on a few

1 occasions. I have met with him in his office both  
2 with myself and the coauthor on the paper, now  
3 Professor Skoric as well. So I had a number of  
4 interactions with Brad. He was a faculty member at  
5 the University of Michigan when I was there, along  
6 with Professor Huesmann.

7 Q Did Professor Bushman give you any, did you  
8 discuss the 2004 update on the meta-analysis?

9 A We talked about the idea of the failsafe end  
10 when we were discussing the file drawer problem.

11 Q What did you discuss with Professor Bushman  
12 regarding the failsafe end?

13 A He described to me something that is  
14 consistent with what is in Anderson's declaration  
15 about how many studies there would have to be which  
16 have not been published in order for the effects in  
17 their studies to be mitigated or minimized or  
18 reversed. That's what he described to me.

19 Q Did that make sense to you?

20 A Yes and no. Conceptually it makes perfect  
21 sense to think there is some kind of failsafe number.  
22 I am unfortunately not versed in the statistics or  
23 the algorithm for coming up with that number. So I  
24 can't say I'm an expert in how to calculate the

1 failsafe end. So I can only talk about it  
2 conceptionally.

3 What make sense to me is that if there is a  
4 body of literature that predicts something with  
5 consistency, and let's say there were 30 studies  
6 which showed something, that it would take 30 studies  
7 in the exact opposite direction of equal weight to  
8 balance it out in the sense of a literal scale.

9 What doesn't make sense to me is that since  
10 the video games literature effects are relatively  
11 small and there are so few, it doesn't make sense how  
12 the failsafe end of that could be over a thousand.  
13 This could be my own ignorance of how that statistic  
14 is calculated. I don't purport to be an expert in  
15 it.

16 I can say that it doesn't make intuitive  
17 sense to me given that Professor Sherry's  
18 meta-analysis found what is a relative small effect  
19 size. I would think that it wouldn't take that many  
20 studies to have not been published to balance it out.

21 But I would like to say also that the file  
22 drawer problem isn't particularly central to my own  
23 set of arguments. I think that this is independent  
24 of the file drawer problem, which is criticizable.

<p style="text-align: right;">Page 182</p> <p>1 Q You describe Dr. Sherry as having described 2 the effects as small. I want to go into Dr. 3 Sherry's. 4 A Right, you are going to want to go to page 5 423 at the bottom, overall effect. 6 Q What does, Dr. Sherry uses an R of .15 of the 7 correlation between video game play and aggression in 8 this meta-analysis, R equals .15, is that correct? 9 A That's correct. 10 Q On the next page 424 Dr. Sherry says, overall 11 this analysis suggests that there is a correlation 12 between video game play and aggression, but that the 13 relationship is smaller than that found for 14 television. 15 Do you see that? 16 A I do. 17 Q He uses, he says it's a small effect sizes, D 18 equals .3 and R is .15, would that be accurate? 19 A That's what he says. D and R are not 20 equivalent. They are entirely different scales. 21 Power analysis is a different animal altogether. 22 Q Dr. Sherry says he was published in 2001, is 23 that right? 24 A That what it says here, July of 2001.</p>	<p style="text-align: right;">Page 184</p> <p>1 her own review of the literature said, I don't see 2 there is enough studies to do meta-analysis so I am 3 doing a literature review instead. That's sort of a 4 middle position between Dr. Anderson and myself. 5 I would simply say that since I have 6 problems with the base methodology of many of these 7 original studies that I wouldn't do a meta-analysis 8 in the first place. 9 Q Now Dr. Dill said that in 1998, is that 10 correct? 11 A That's right. 12 Q So in terms of Dr. Dill's viewpoint on 13 whether there is dearth of experimental findings 14 after 1998, you don't know that, do you? 15 A That's correct, I have no idea what Dr. Dill 16 would say today. 17 Q And Dr. Sherry found enough to do a 18 meta-analysis in 2001, was that correct? 19 A Yes, it is. 20 Q The meta-analysis that Dr. Anderson did in 21 2001 and Dr. Bushman and Dr. Anderson did in 2001 was 22 published and peer reviewed, is that correct? 23 A It was. 24 Q Do you know whether the 2004 meta-analysis</p>
<p style="text-align: right;">Page 183</p> <p>1 Q Do you know whether that was, he uses 2 aggression. Do you know if he breaks that out for 3 different types of aggressive behavior or aggressive 4 cognition or aggression effect? 5 A Offhand I don't recall. I could read through 6 this and answer if you would like. 7 Q That's okay. Going back to paragraph 30 of 8 your declaration you say, however my own separation 9 technique would not have left enough to do a 10 meta-analysis. What do you mean by your own 11 separation technique? 12 A What I mean is Anderson has established a set 13 of criteria to determine which studies would be 14 working including in a meta-analysis. He uses the 15 analogy of separating wheat from chaff. I was 16 keeping in his analogy and suggesting that there 17 wouldn't be enough wheat left in order to do a 18 meta-analysis. 19 A meta-analysis requires a large body of 20 research. One of the problems that many people that 21 have done literature reviews have noted that there 22 are not enough really good experimental studies on 23 which to base a meta-analysis. 24 One of Dr. Anderson's coauthors Dr. Dill in</p>	<p style="text-align: right;">Page 185</p> <p>1 update was also peer reviewed and published? 2 A I don't know. I would assume so. 3 Q Do you know if it was published in the 4 Journal of Adolescence? Have you ever seen that 5 study? 6 A No, I think that I mentioned earlier that my 7 only knowledge of it comes from talking to Dr. 8 Bushman about it. I assumed it would be similar. I 9 heard the key points from Professor Bushman and in 10 Anderson's declaration. 11 Q Do you know whether there was an attempt to 12 separate the weak studies from the strong studies in 13 the update? 14 A That's what Anderson says in his declaration. 15 That is my understanding. 16 Q Do you have any opinion about separating the 17 weak, the way in which Dr. Anderson separated weak 18 from strong studies? 19 A Having not read it, I can't give you expert 20 opinion about his separation technique. I would just 21 simply say that the criteria would have to be chosen 22 very carefully, laid out for the reader to make a 23 judgment about it. I am sure that they probably 24 were.</p>

1 But I'm also sure they would be different  
2 than my own since when I look back at the studies, I  
3 would probably not include the majority of them in a  
4 meta-analysis. So there would not be enough wheat  
5 left, staying in the analogy. Clearly my criteria  
6 are different than Professor Anderson's on this  
7 score.

8 Q I'd like to turn to the GAM model. The GAM  
9 model for --

10 A Are you refer to a document in particular?

11 Q No, I am just talking in general about the  
12 GAM model.

13 A Okay.

14 Q The GAM model for studying the effects of  
15 video games on aggression, would you agree that that  
16 model has been published in peer review articles?

17 A It has been.

18 Q Would you agree that the GAM model for  
19 studying the effects of aggression, the effect of  
20 violent video games on aggression is accepted in the  
21 scientific community?

22 A What do you mean by accepted?

23 Q Is this among the researchers that do  
24 research on violent video games and aggression, is

1 this an accepted model?

2 A I'm still not entirely sure what you mean by  
3 accepted model. If by accepted model you mean is it  
4 one of the possibility that could predict effects  
5 people are still thinking about and are testing, yes.  
6 If you mean by accepted as in accepted as fact and  
7 there are no other approaches, I would say definitely  
8 not.

9 Q Is it accepted as in acceptable technique to  
10 study?

11 A I'm sorry.

12 Q I guess what I am trying to say is, is using  
13 the GAM model to study violent video game and  
14 aggression, is that within the mainstream of the  
15 research in violent video games?

16 A Sure. A lot of people have used it.

17 Q It's is considered an acceptable model to use  
18 in studying violent video games?

19 A It's considered acceptable by the people that  
20 have used it. I'm confident about that. Whether  
21 it's considered acceptable by a majority of  
22 researchers or there is some kind of opinion pole  
23 component of this, I am much less comfortable saying  
24 it because conversations that I have had with other

1 researchers and colleagues in this area have been all  
2 over the board about the acceptability of the GAM.

3 I put the antidote in my declaration about  
4 trying to get a panel of people to discuss this at  
5 next years ICA conference and I couldn't get anybody  
6 to defend the GAM. I was surprised at that. I  
7 thought it was more accepted than that and I couldn't  
8 find anyone to defend it.

9 Q What other models are in the publication on  
10 violent video games, other then the GAM model?

11 A In Professor Sherry's meta-analysis, he lays  
12 out a series of three or four other possible  
13 theoretical models which might predict effects and  
14 uses of video games. In addition to those there is  
15 my own much less fully-formed thinking about social  
16 context variables as well.

17 That is something that doesn't fall under  
18 the heading of a model. It is the kind of thing I  
19 would like to see included in a model. My own  
20 personal opinion on the GAM isn't that it should be  
21 tossed out entirely, it's that it is underspecified.  
22 Meaning that if we included some other variables, it  
23 might account for some of the things that it says it  
24 would account for.

1 In other words it might still work, it needs  
2 to be employed differently.

3 Q Are you saying that the GAM model doesn't  
4 work?

5 A I am saying it doesn't account for other  
6 significant variables, which would have moderating,  
7 potentially moderating impact on the process that it  
8 outlines.

9 So I am saying it oversimplifies and  
10 conflates. If one wants to characterize that as  
11 saying it doesn't work, that's okay. I don't want to  
12 be dismissive of it because I think it's fine as a  
13 starting point as a foundation to build and refine  
14 from.

15 Q There is certainly a lot of researchers that  
16 have used the GAM model. Let's not say a lot. There  
17 are researchers that have published using the GAM  
18 model?

19 A Certainly other people have based their  
20 hypothesis and theories off of the GAM up to this  
21 point. It the most cited work out there. It is the  
22 one that get the most notoriety.

23 Q In paragraph 32 of your declaration you talk  
24 about other, that there are, a player might model

<p style="text-align: right;">Page 190</p> <p>1 after the player's character, computer driven 2 characters, other player controlled characters and 3 other people in the room. 4 Do you see that? 5 A Yes. 6 Q Do you know of any studies that deal with 7 those issues? 8 A The Williams study, the one that is not me, 9 it's a 2002 study that was in the Rich database, Dr. 10 Rich's Harvard Center database gets into whether the 11 objects of hostility are computer controlled or 12 player controlled characters. I read that for the 13 first time just a few days ago. 14 So the answer is yes, some people are 15 starting to address some of these criteria. That is 16 one. And the study that I reviewed on my own as part 17 of the peer review process for Human Communication 18 Research last week also starts to get at these 19 variables in a very interesting and important way, I 20 think. 21 Q The Williams study, do you remember what any 22 of the conclusions related to those variables? 23 A We have a document of my notes which has an 24 abstract of that, which would be helpful to refer to.</p>	<p style="text-align: right;">Page 192</p> <p>1 aggression. So the social context explained 2 everything in a highly significant way. 3 Those kind of studies I believe will be the 4 direction of our field as we add more variables and 5 start to really get a handle on things. When there 6 is and when there isn't aggression in which context. 7 That's the way that I would like to see the field go. 8 It's the beginning of addressing some of these points 9 that I have laid out in my own thinking. 10 Unfortunately it's a series of variables 11 which haven't been included until very recently, 12 which is one reason that I am so suspicious of the 13 prior work. 14 Q When you say in paragraph 32 there are a wide 15 range of possibilities here and some might lead to 16 better or worse outcomes. Do you know, do you have 17 an opinion as to which direction the social context 18 factors would weigh? 19 A I think there are many and they are varied 20 because there are a wide range of social context for 21 media use. So we would start with the most gross 22 level ones as our first things to test. We test for 23 the broad before we test for the narrow. 24 The first thing we would test would be</p>
<p style="text-align: right;">Page 191</p> <p>1 The general finding was that there was more, I think 2 that it was that there was more hostility when the 3 opponent in the game was a computer controlled 4 characters than if it was a player controlled 5 character. 6 That's the kind of important social 7 contextual variable that might help explain a lot of 8 the results and might explain why there are some many 9 mixed findings. It might simply be mixing up 10 findings of different directions. It is not that 11 there are no effects or there are always effects, but 12 that they may occur in different directions at 13 different times. 14 This is what I mean when I say that the 15 model might be underspecified. Not that it's out and 16 out wrong and should be thrown out. This more recent 17 study that I peer reviewed had a finding that I don't 18 think that the authors even quite appreciated or 19 understood because they have a one sentence line in 20 the study that says something to the effect of social 21 context explained the entire aggression outcome. 22 That is whether people were playing with 23 each other on a team or against each other, that 24 single variable accounted for all of the increase in</p>	<p style="text-align: right;">Page 193</p> <p>1 playing with each other versus against each other, 2 playing co-located versus playing remotely. Those 3 kind of things. I wouldn't feel comfortable making 4 predictions that are more specific or more nuance of 5 that having those base source studies to go on. 6 I just mentioned this past week I have seen 7 those two studies for the first time and I'm still 8 trying to get my head around what they might mean for 9 predictions for the future. They certainly strongly 10 imply that social context is going to matter. Now 11 the challenge is how and in what ways and what 12 settings. 13 Q So are you not or are you saying that social 14 context would mean that there is no aggression or are 15 you talking about the explanation for the aggression? 16 A I am saying that it is a variable that has 17 not been included. I have never said that we will 18 never find aggression effects. I think it's 19 possible. When I say I am agnostic about the 20 findings, it doesn't mean that I think they are not 21 there. It means that I don't know based on my 22 interpretation of the data in hand. 23 I can envision plausible hypothesis where 24 social context variables might make aggression</p>

<p style="text-align: right;">Page 194</p> <p>1 effects worse. I can conceive ones where they might  2 make it better. The problem is this is in the  3 abstract, the let's test this phrase, not the I know  4 it is going to happen phrase.  5 MS FALLOW: If you are moving to a distinct  6 point, could we take a short break?  7 MS. CHERIAN: That's fine.  8 (Recess was taken.)  9 BY MS. CHERIAN:  10 Q Going to paragraph 33 of your declaration, in  11 this paragraph you deal with the level of active  12 cognition. I think we talked about some of this a  13 little earlier. Would you, do video games generally  14 involve more or less active cognition than  15 television?  16 MS FALLOW: Objection, asked and answered.  17 THE WITNESS: I think my answer earlier, I am  18 trying to remember exactly what I said, but I am  19 pretty sure it is something like on average probably  20 yes, but because of the variation in content, you  21 wouldn't want to go with averages and generalities.  22 It's a little bit dangerous.  23 Overall probably more active thinking. But  24 again the presence of selective exposure, mood</p>	<p style="text-align: right;">Page 196</p> <p>1 THE WITNESS: I am not an educational games  2 person. I talk with educational game researchers. I  3 listen to their sessions. I am not as deeply  4 ensconced in their literature as my own. So my  5 understanding is relatively surface on this.  6 But it is if you can harness the level of  7 high cognition and you can do it in a socially  8 moderated way with authority figures sanctioning the  9 activity, that there could be potential for positive  10 learning.  11 We haven't talked very much about the  12 acquisition of scripts. But I don't think that  13 scripts are necessarily the kind of things that  14 educational researchers are talking about. I think  15 that they are talking about different cognitive  16 process use, retention of things.  17 When people play games, they essentially  18 problem solve. One of the ironies of the school  19 environment versus the game space environment is that  20 children are often bored in school. One of the  21 reasons that children are bored at school or so say  22 many play theorists is that they are actually not  23 challenged, they are underchallenged.  24 There is therefore some irony that children</p>
<p style="text-align: right;">Page 195</p> <p>1 management means that the person, the user, player is  2 probably taking an active role in when they are going  3 to have passive or active levels of involvement with  4 their media. It's unfortunately a complex  5 phenomenon. It's difficult to answer with a yes or  6 no.  7 BY MS. CHERIAN:  8 Q Do people use video games to teach children  9 things?  10 A People are trying to. There is a large group  11 of researchers who are interested in potential  12 learning effects from video games, yes.  13 Q Is the hypothesis for those tests that they  14 are more effective at teaching things?  15 MS FALLOW: Objection to form.  16 THE WITNESS: Could you say it again?  17 BY MS. CHERIAN:  18 Q For the people, in testing whether, in using  19 video games to teach children whatever, is the  20 hypothesis to your knowledge that those video games  21 might be more effective in teaching children whatever  22 it is that you are trying to teach them?  23 MS FALLOW: Objection, more effective than what?  24 MS. CHERIAN: More effective than television.</p>	<p style="text-align: right;">Page 197</p> <p>1 that are bored in class race home to play a video  2 game to experience challenge. So the desire for  3 learning and for challenge and for problem solving is  4 there along with the desire for team work and to  5 impress ones peers, if one reads the uses and  6 gratification literature on video games, that peer  7 evaluations have a lot to do with this.  8 That might be harnessed to teach people  9 positive prosocial skills and lesson in a way that  10 they are not getting in a regular classroom. As an  11 example I would cite a game that was tested on the  12 University of Illinois campus called, Making History,  13 the Calm in the Storm. In which teams of players in  14 world history classes were assigned the roles of the  15 major super powers in World War II and they go  16 through a turn-based system where the team that is  17 playing Italy decides they are going to invade France  18 and sees what happens. They learn and experience  19 history and deal with the outcomes.  20 They probably learn the material of history  21 better than if they had been assigned to read a  22 chapter about Mussolini's rise to power at the same  23 time. We might speculate that the cognitive  24 processing is higher there because they are motivated</p>

1 to learn and they are motivated to acquire those  
 2 lessons and they are doing it under an authority  
 3 figures which is encouraging them to do it.  
 4 My colleagues who do educational game  
 5 research frequently report that their students stay  
 6 longer and want to do extra work, which is the kind  
 7 of thing that most educators would be pretty happy  
 8 about.

9 BY MS. CHERIAN:

10 Q In paragraph 33 you say that you do not  
 11 accept the simple statement that game players are  
 12 more like to become violent because they are playing  
 13 the game rather than watching it. Do you see that  
 14 statement?

15 A I do.

16 Q Isn't that what Dr. Hoffman's studied in her  
 17 study?

18 MS FALLOW: Objection to the extent that we have  
 19 been over this that he has not reviewed Dr. Hoffman's  
 20 dissertation.

21 THE WITNESS: I have not reviewed the Hoffman  
 22 dissertation. My only knowledge of it comes from the  
 23 secondhand reporting in the Sherry meta-analysis. If  
 24 you would like I could read more about sections that

1 might relate to this passage. I don't make a  
 2 connection in my mind right now between Hoffman and  
 3 this statement.

4 BY MS. CHERIAN:

5 Q Given the title of Dr. Hoffman's dissertation  
 6 which is called, effects of playing versus witnessing  
 7 video game violence on attitudes toward aggression  
 8 and acceptance of violence as a means of conflict  
 9 resolution, would you expect that is the type of  
 10 thing that is in Dr. Hoffman's study?

11 MS FALLOW: I object. You are asking him to  
 12 judge the book by its cover.

13 MS. CHERIAN: I am.

14 Q Go ahead.

15 A I don't know.

16 Q Do you know of any studies that study the  
 17 effects of playing versus watching the game?

18 A I know there are some. I am having a hard  
 19 time remembering citations on the spot, but I am  
 20 pretty sure there is at least one study, maybe more  
 21 that look at play versus participation. If I am  
 22 recalling correctly, the finding was that play led to  
 23 more hostility than only watching.

24 Q So when you say that you find it worrisome

1 that some researchers accept the claim without proof,  
 2 would those studies be proof that playing the game,  
 3 that players are more likely to become violent  
 4 because they are playing the game rather than  
 5 watching it?

6 A No, my statement doesn't reflect the  
 7 difference between a person watching the game or  
 8 playing the game. My statement reflect the  
 9 difference between a person watching television or  
 10 playing a game. Apples to oranges to what you are  
 11 suggesting.

12 Q Looking at the statement, that game players  
 13 are more likely to become violent because they are  
 14 playing a game rather than watching it. When you say  
 15 it there, you are referring to television?

16 A That's correct. I'm implying the  
 17 relationship and the contrast between the two media,  
 18 television versus video games. Again this idea that  
 19 we can import theories and the interaction of one  
 20 study to the second.

21 Q What is the difference between watching a  
 22 video game and watching television?

23 A We don't know.

24 Q What do you expect the difference to be

1 between watching a video game and watching  
 2 television?

3 A I am not sure because there isn't much  
 4 research to suggest one thing or the other. As I am  
 5 sitting here thinking about it, I have social  
 6 contextual variables popping up in my head that  
 7 watching someone playing a game might make a big  
 8 difference to watching television because it's your  
 9 friend, son, mother, aunt, whoever playing the game  
 10 and you have a relationship to that person as opposed  
 11 to watching Starsky and Hutch, with whom you don't  
 12 have a personal relationship.

13 That along might make for a different  
 14 moderation. Again, I don't know what direction it  
 15 would moderate it, but there is a social contextual  
 16 variable there when the player becomes a participant.  
 17 It is simply fundamentally different than television.

18 That's the central gist that I'm trying to  
 19 get to here that these media are apples and oranges.  
 20 We don't want to study one like the other. It's not  
 21 a defense. It's saying it's different, let's think  
 22 about it differently.

23 Q But if you are watching your friend do these  
 24 things, do you have an opinion as to whether it would

<p style="text-align: right;">Page 202</p> <p>1 increase the effect on the viewer?  2 A I can speculate. Would you like me to  3 speculate?  4 Q What do you think?  5 A It's pure speculation because there is no  6 research to go off of here. I mentioned earlier in  7 the declaration that the social context might matter  8 and I gave two examples. One of some kind of  9 authority figure there and one of a peer there.  10 I think it would be the kind of thing if I  11 were going to do a study, I would research this a lot  12 more fully to come up with a good hypothesis. Off  13 the top of my head hypothesis, usually this is the  14 kind of thing that we spend a lot of time and money  15 to research.  16 But if I had a good well-developed  17 hypothesis and I had looked and the research of  18 social contextual variables and play experiences,  19 which I haven't yet, I might say something like if an  20 authority figure tells you that this action on the  21 screen is perfectly acceptable and justifiable, that  22 could lead to an immense amount of hostility and  23 aggression as opposed to that same person saying that  24 was reprehensible.</p>	<p style="text-align: right;">Page 204</p> <p>1 Q There has been no formal statement one way or  2 the other by the Digital Games Research Association?  3 A No, there is certainly informal consensus but  4 there is no formal press release type opinion paper  5 or statement like the APA has.  6 Q What type of informal consensus, what are you  7 specifically referring to when you say informal  8 consensus?  9 A I'm referring to the language I see on  10 listserv surrounding, we call DiGRA. The DiGRA  11 listserv and the meetings of the general assembly of  12 DiGRA at the Vancouver conference earlier this year.  13 At reports from colleagues at the UTREX meeting two  14 years before. And at my own attendance at a  15 precursor to DiGRA held in Manchester, England. A  16 conference that was called playing with the future,  17 sponsored by the ESRC, which I think is the  18 European -- I am not sure what it stands for.  19 But in each of those cases, conversations  20 have been consistent.  21 Q What conversations, what consistency do the  22 conversations show?  23 A The people in those organizations almost as a  24 rule dispute the psychological research of Anderson</p>
<p style="text-align: right;">Page 203</p> <p>1 The moderator effects, again coming back to  2 the original communication literature, the idea that  3 other people are moderators of the effect. Other  4 literature suggests to me that is probably a pretty  5 powerful variable. That's not the sort of thing that  6 is tested in people watching and playing at the same  7 time at all.  8 Q What do you mean? I'm sorry, what's not the  9 kind of thing that is tested in people watching and  10 playing?  11 A The relationship between the two people.  12 Q That could increase the effect or decrease  13 the effect, you just don't know?  14 A That's correct. It could do either. It's an  15 empirical question that I would love to see studied.  16 Q If you can turn to look at paragraph 34. You  17 discuss the APA resolution regarding violent video  18 games. Do you see that?  19 A Yes.  20 Q Than you discuss the Digital Games Research  21 Association conference. First of all, has the  22 Digital Games Research Association adopted any sort  23 of resolution regarding video games and aggression?  24 A Not in the sense that the APA has, no.</p>	<p style="text-align: right;">Page 205</p> <p>1 and his colleagues. Some of them dispute it on  2 methodological grounds, some of them think of it on  3 culture studies grounds, think of it as a witch hunt.  4 Some of them -- that's good enough.  5 Q Has there been any attempt to make a formal  6 resolution that digital, that video games do not  7 cause aggression?  8 A No. DiGRA is not well-formed enough to make  9 a formal resolution about anything at this point.  10 Q Who are the members of DiGRA?  11 A There are somewhere between 300 and 500  12 members of the DiGRA. The president is a fellow  13 named Frans Mayra. He is Norwegian. The membership  14 is probably 50 percent European, 25 percent North  15 American, 25 percent scattered around Asia and South  16 America.  17 Q And in terms of the membership are these  18 academic?  19 A All. There is a very small portion of DiGRA  20 which is devoted to technical issues in games, maybe  21 5 percent of the membership comes together to talk  22 about programming.  23 Q How many of, do you know whether the  24 membership has done effect research on video games?</p>

<p style="text-align: right;">Page 206</p> <p>1 MS FALLOW: Objection, are you asking for every 2 single member? 3 BY MS. CHERIAN: 4 Q To the extent that you know of percentage or 5 certain people? 6 A Part of the answer of that question would 7 depend on how you would describe effects research. 8 If that by necessity includes statistical modelling, 9 the number is relatively low. It is going to include 10 myself, though. There are probably only a handful of 11 people in DiGRA who would use quantitative social 12 psychological measures to study these issues. 13 Maybe 15, I am guessing. The vast majority 14 of members of DiGRA are qualitative researchers that 15 tend to use just observation, ethnographic, 16 anthropological research methodologies. And so their 17 studying perception processes, which they might not 18 describe as effects, this is very similar to the 19 Mitchell and Murphy studies cited earlier in my 20 declaration, the early '80s studies. 21 Those researchers sat in on people's homes 22 actually watched them playing, talked and 23 interviewed. They want indepth rather than inbreadth 24 with a large sample. They really get to know the</p>	<p style="text-align: right;">Page 208</p> <p>1 is a Ph.D. student just now finishing at Carnegie 2 Mellon University, Sean Zendor who is in the 3 communication department and is now graduating from 4 Northwestern University. 5 I think I am comfortable in saying all four 6 of us would categorize ourselves as effects 7 researchers. And I am certain there are probably a 8 few more that I am not thinking of now without a 9 membership list in front of me. 10 Q Are you the only one of those people who has 11 published research in the area? 12 A Nikky just published his first study, which 13 is impressive for a Ph.D. student. Flemming has 14 published at least one study, possibly more in 15 conjunction with his advisor, Professor Robert Kraut. 16 I can't remember if Sean Zendor has 17 published or not. I think that he might have. They 18 are well above average Ph.D. students who are going 19 to be highly sought after the second they graduate. 20 Q Do any of those published studies involve the 21 effects of violent video games on aggression? 22 A Flemming studies addiction. Nikky studies 23 motivation so it be more in the line with the 24 selective exposure kinds of thinking, typologies of</p>
<p style="text-align: right;">Page 207</p> <p>1 people and try to understand what is going on in the 2 dynamics of their households. They wouldn't 3 categorize their work as effects research. Indeed, 4 most of them are turned off by the terminology. 5 And yet they are still studying what effect 6 the thing has on something else. So an outsider to 7 that methodology like myself might say that actually 8 is effects research. 9 Q Within the North American group of the 10 membership of DiGRA, other then you, do you know 11 anyone else who you would characterized as an effect 12 researcher? 13 A I am not sure exactly who is a member of 14 DiGRA and who simply comments on the listserv. I 15 don't want to be inaccurate. They almost all tend to 16 the younger scholars. They are folks who are 17 interested in these issues who are just now coming 18 out of the academy. 19 They tend to be coming out with social 20 science research training. They are asking different 21 questions than the more established researchers like 22 Professor Anderson. Among this relatively small but 23 emerging crowd, I would count myself, Nikki who is a 24 Ph.D. student at Stanford, Dave Flemming Casey, who</p>	<p style="text-align: right;">Page 209</p> <p>1 players. The kind of fundamental work that you have 2 to have in order to do good effects work later. 3 Something in the back of my mind tells me 4 that Sean might have, but I can't recall. This 5 research body is radically different than the APA. 6 It's also very different than ICA in terms of its 7 composition and the methodologies they employ and 8 sometimes the hypothesis they are trying to ask. 9 Q If we can go back to your declaration 10 paragraph 34, you discuss the term true expert. 11 Would you agree that there are experts, let's not use 12 the word true experts, but there are people who are 13 experts in the field of video games effects on 14 aggression? 15 MS FALLOW: Objection, I don't know what you mean 16 by expert. 17 THE WITNESS: I was going to ask the same thing. 18 Can you give me a definition of expert, I can answer 19 it better. 20 BY MS. CHERIAN: 21 Q I was going to ask you what your definition 22 of an expert would be? 23 A I'm not sure that I am comfortable with the 24 term. Some people use it to describe someone's</p>

<p style="text-align: right;">Page 210</p> <p>1 academic qualifications. Other people would use it 2 to describe someone who has done research in a given 3 area. Still others would describe it as somebody who 4 has thought about it and has something valuable to 5 say. 6 That last definition is the broadest and 7 would be the biggest pool of people. I would rather 8 evaluate people based on the logic of their claims 9 rather than on the label that we want to give them. 10 Q Would you expect that someone who has not 11 done original research on the effects of violent 12 video games on aggression would be qualified to give 13 opinion on other research that was done? 14 A Yes. 15 Q Why is that? 16 A Because it's essentially what we are trained 17 to do in graduate school. Almost all of graduate 18 school consists of reading other people's research, 19 criticizing it and saying how we would do it better 20 if we had the time and resources. In that sense 21 there is a lot of vanity in graduate school because 22 it is easy to tear other people down. 23 That's essentially how Ph.D. students are 24 trained. By the time we graduate we are very good at</p>	<p style="text-align: right;">Page 212</p> <p>1 people quickly. If you don't have a lot of time and 2 access to other information, that's what we use. In 3 the absence of other information, of course we use 4 the shortcuts. 5 We look at who is the acknowledged expert, 6 who has the most voice on it, who talks the most on 7 the listserv. Who has published the most. Who has 8 come up with the best studies. Who has the best 9 thoughts. All of these things. The more time we 10 have, the better we are able to evaluate who is or 11 isn't an expert. 12 If you want a snapshot, usually the first 13 thing is whether the person is published in the area. 14 Q Would you make a distinction between peer 15 review journals and other types of publications? 16 A It's not absolute, but there is no question 17 that peer review journals are more respected and 18 given more credence. This is a reflection of the 19 tenure process where peer review journals are more 20 highly valued than a book chapters. 21 It doesn't, however, mean that book chapters 22 cannot be influential. And more people that are 23 experts that happens all the time. 24 Q If we can talk briefly about the</p>
<p style="text-align: right;">Page 211</p> <p>1 evaluated other people's research. That's our main 2 skill. 3 Q In terms of looking at the research 4 methodology and specific problems that might come up 5 in the research methodology, if you haven't done 6 original research, would you be aware of those 7 things? 8 A You are certainly less likely to be aware if 9 you haven't been in the trenches, so to speak, but it 10 doesn't mean that you couldn't be aware. It depends 11 how good your training was, how much you read and how 12 much you talked to other people. 13 I would say it's a likely predictable 14 variable, if you are going to put this in an 15 equation. But I wouldn't assume it would be the only 16 thing that would matter or that it would explain 17 everything. 18 Q What about whether somebody has been 19 published in peer review journals, is that something 20 that you would look at to determine if someone is an 21 expert qualified to give an opinion about the 22 research? 23 A All the things that you are describing are 24 heuristics, they are shortcuts as ways of evaluating</p>	<p style="text-align: right;">Page 213</p> <p>1 International Communication Association? 2 A Yes. 3 Q Has the International Communication 4 Association adopted any sort of resolution regarding 5 the effects of video games on aggression? 6 A I am going to use the first person plural 7 here because I am a member of the games special 8 interest group. It is a group that has just recently 9 formed. And the answer is no, because only last year 10 we were able to meet and form the vote that 11 established us as an actual specific subarea of 12 research where we have our own track at the 13 conference. People can submit papers about game 14 specific media issues. 15 So it's simply too new to have anything. At 16 this year's conference we will likely have a series 17 of policy debates cosponsored with the communication 18 and technology division. It's my hope that we start 19 trying to assess out who thinks what and what we have 20 been missing. To have a real synergistic meeting of 21 the minds about the state of the research. 22 To that end we propose at this time of end 23 research panels and discussion panels. As it so 24 happened that the deadline was last night. So a few</p>

Page 214

1 days ago I submitted a panel of experts to talk about  
 2 these very issues to see if we can come to any kind  
 3 of conclusions or consensus. So I would very much  
 4 like to see what my colleagues think to see if that  
 5 make sense at this point.  
 6 When I look at the APA statement, I am  
 7 surprised. So were the rest of my communication  
 8 colleagues that they said something so strong based  
 9 on the evidence that most of us find mixed.  
 10 Nevertheless, I may have colleagues out there who  
 11 will fully agree with the APA statement. I would  
 12 like to hear what they have to say.  
 13 Hopefully, that's what we will do next May  
 14 when we meet in Dresden is work through some of these  
 15 issues. Academic time, unfortunately moves glacially  
 16 slow.  
 17 Q The group, the sub, the games, whatever you  
 18 call it, the games research --  
 19 A Special interest group.  
 20 Q How many people are part of that group?  
 21 A I think it's up to 60 or maybe 70 now.  
 22 Q Do you know how many of them are in the  
 23 United States?  
 24 A Probably 80 percent. They are very different

Page 215

1 than the DiGRA membership. These are social  
 2 scientist almost all of them. These are people who  
 3 are completely on board with Huesmann, Pike and  
 4 Comstock about television research and violence.  
 5 These are people who are absolutely accepting, like  
 6 myself, experimental longitudinal designs.  
 7 These are people who are ready and willing  
 8 to accept data if it shows up and is presentable.  
 9 But these same people look like they are not yet  
 10 convinced, much like myself.  
 11 Q As of now that group within the ICA has not  
 12 the, Digital Games Research Group has not adopted any  
 13 sort of a finding or resolution?  
 14 A No.  
 15 Q If you can go to paragraph 39 of your  
 16 declaration.  
 17 A Yes.  
 18 Q You say that you disagree with the claim that  
 19 minors who play violent video games are more likely  
 20 to exhibit violence, asocial or aggressive behavior  
 21 and/or experience feelings of aggression.  
 22 Do you see that?  
 23 A I do.  
 24 Q Are you saying that minors are not more

Page 216

1 likely to experience violent, asocial or aggression  
 2 behavior?  
 3 MS FALLOW: Object to the form.  
 4 THE WITNESS: I am saying that the research to  
 5 date doesn't support that statement.  
 6 BY MS. CHERIAN:  
 7 Q But you're not saying to a reasonable degree  
 8 of scientific certainty that that statement is wrong?  
 9 MS FALLOW: Object as to form.  
 10 THE WITNESS: I think this is the place where I  
 11 repeat that I'm agnostic about the effects. So no, I  
 12 am not saying that we won't find something or that  
 13 nothing exists. I am saying that the jury is out.  
 14 That's very different than saying I know for  
 15 sure one way or the other. My objection to many of  
 16 the claims on the other side is they seem very, very  
 17 certain with data that to me looks cloudy. It  
 18 doesn't mean that might not be proven right  
 19 eventually once they satisfy myself and other people  
 20 in this area. It is just that I'm not satisfied yet.  
 21 BY MS. CHERIAN:  
 22 Q Do you have an opinion as to whether minors  
 23 who play violent video games are more likely to  
 24 exhibit violent, asocial or more aggressive behavior?

Page 217

1 A No.  
 2 Q Do you have an opinion as to whether minors  
 3 who play violent video games are more likely to  
 4 experience feelings of aggression?  
 5 A I don't have a research opinion on the whole  
 6 stream of different possibilities offered by the GAM  
 7 because of the absence of data, not because I don't  
 8 think they are interesting questions to ask.  
 9 Q I'm just trying to see if you actually have  
 10 an opinion on whether minors are more likely to  
 11 experience feelings of aggression?  
 12 MS FALLOW: Objection, I think that he stated  
 13 that he has an opinion, that that statement has not  
 14 been proved.  
 15 BY MS. CHERIAN:  
 16 Q Do you have an opinion, Dr. Williams, on  
 17 whether minors are more likely to, who play violent  
 18 video games are more likely to experience feelings of  
 19 aggression?  
 20 MS FALLOW: The same objection.  
 21 THE WITNESS: Based on the definition of  
 22 aggression as the intent to cause harm to a person  
 23 who is trying to avoid it, I do not have an opinion  
 24 one way or the other on the issue right now based on

1 the evidence to date.  
 2 The long answer is much more complicated and  
 3 is hopefully summed up in this document, which shows  
 4 there is a long list of pros and cons and ways of  
 5 thinking about it.  
 6 BY MS. CHERIAN:  
 7 Q But you are not saying that the statement has  
 8 been proven wrong, specifically the statement that  
 9 violent --  
 10 A That's correct, I am not saying that  
 11 statement has been disproved.  
 12 MS. CHERIAN: If we can take a short break.  
 13 (Recess was taken.)  
 14 BY MS. CHERIAN:  
 15 Q Dr. Williams, if we could turn to your  
 16 declaration paragraph seven.  
 17 A Yes.  
 18 Q Specifically I am going to ask you about the  
 19 standard measures used in the research, you used that  
 20 phrase?  
 21 A Yes.  
 22 Q You have used word completion task?  
 23 A When working with another professor at the  
 24 University of Michigan, I have, yes.

1 Q What sort of word completion task have you  
 2 used?  
 3 A It was a way of testing priming effects. It  
 4 was to see how fast someone would press a button when  
 5 one kind of word would come up and not another. Some  
 6 were racially primed and some were not. It was  
 7 called a syntactic response task.  
 8 Q CRT?  
 9 A No, it's slightly different than word  
 10 completion test. I'm sorry, it was a lexical timing  
 11 task. So it wasn't fill in missing letters in the  
 12 sense that they use, but I have no problem with that.  
 13 It's me trying to illustrate that I have no problem  
 14 with a variety of different word completion response  
 15 timing type of measure. I think they are perfectly  
 16 fine.  
 17 Q Are they accepted within the research  
 18 community as appropriate measures?  
 19 A By some researchers. It's hard to find a  
 20 measure that is accepted by everybody. We don't have  
 21 a lot of universal benchmarks in social science.  
 22 That is one that usually is relatively immune during  
 23 the peer review process. But never always, there is  
 24 no always.

1 Q You said scales, for instance, the  
 2 Buss-Durkee scales, would you consider those to be  
 3 appropriate measures?  
 4 A Yes.  
 5 Q What about the administering of noise blasts  
 6 as measures of impression?  
 7 A I think that it is as far as we can go  
 8 without violating people's human subjects response  
 9 rights. And that is a pretty good proxy for  
 10 aggression. It certainly shows intent to disturb,  
 11 although in some measures it is not clear that  
 12 duration of the blast means as much as the intensity  
 13 of the blast.  
 14 One of the problems is that some of the  
 15 original research of administering some kind of  
 16 harmful effect actually caused psychological trauma  
 17 among the subjects of pressing a button and turning a  
 18 dial and we are aware of that and don't want to harm  
 19 the people doing our research.  
 20 So these are the kind of things that are  
 21 often the best that we can do because of the ethical  
 22 restrictions involved. I don't have a major problem  
 23 with them.  
 24 Q Do you understand there to be differences in

1 measures concerning aggressive behavior versus  
 2 aggressive cognition?  
 3 A Yes.  
 4 Q And aggression behavior versus -- again, I'm  
 5 going to give you certain categories and just ask you  
 6 if there are certain measures that test each of these  
 7 specifically? Aggressive behavior?  
 8 A Yes.  
 9 Q Aggressive cognition?  
 10 A Yes.  
 11 Q Hostile attribution bias?  
 12 A There are tests that measure what people  
 13 think that is, yes.  
 14 Q What about aggression feelings or affect?  
 15 A Yes, beliefs as well.  
 16 Q Would listing aggression thoughts and  
 17 feelings be an appropriate measure of one of those  
 18 things?  
 19 MS FALLOW: Objection as to form.  
 20 THE WITNESS: Do you have one of those in mind in  
 21 particular?  
 22 BY MS. CHERIAN:  
 23 Q Is listing aggressive feelings an appropriate  
 24 measure of, say, aggressive feelings?

<p style="text-align: right;">Page 222</p> <p>1 A Yes.</p> <p>2 Q What about withholding money from someone, do</p> <p>3 you considering that to be an appropriate measure of</p> <p>4 aggressive behavior?</p> <p>5 A In the right context it can be.</p> <p>6 Q What would that context be?</p> <p>7 A The intent to cause harm and somebody trying</p> <p>8 to avoid it.</p> <p>9 Q What about interpretation of ambiguous</p> <p>10 stories?</p> <p>11 A If done properly those can be valid measures.</p> <p>12 Q What about time elapsed to recognize</p> <p>13 aggressive words?</p> <p>14 A For some theoretically driven cognitive</p> <p>15 constructs those can be appropriate, especially</p> <p>16 priming based.</p> <p>17 Q Would that be appropriate to measure</p> <p>18 aggressive cognitive?</p> <p>19 A It can be.</p> <p>20 Q Do you have any medical training?</p> <p>21 A No.</p> <p>22 Q Have you reviewed Dr. Kronenverger's</p> <p>23 declarations or opinions in this matter?</p> <p>24 A I have read through it. I understood very</p>	<p style="text-align: right;">Page 224</p> <p>1 Q Would you consider Dr. Anderson an expert on</p> <p>2 that subject?</p> <p>3 A Yes.</p> <p>4 Q Have you ever worked in the video game</p> <p>5 industry?</p> <p>6 A I play tested a game when I was nine for an</p> <p>7 hour.</p> <p>8 Q What game was it?</p> <p>9 A Dragon Flight. It was in Sunnyvale. That's</p> <p>10 the extent of my professional involvement. I</p> <p>11 certainly know a lot of developers. Talk to a lot of</p> <p>12 developers, attend their trade shows and conferences,</p> <p>13 but I do not work with them or for them. It's been a</p> <p>14 long time since I thought about Dragon Flight.</p> <p>15 MS. CHERIAN: If we can mark this as Exhibit 9.</p> <p>16 (Exhibit No. 9 was marked for</p> <p>17 identification.)</p> <p>18 BY MS. CHERIAN:</p> <p>19 Q Dr. Williams, after your study was published,</p> <p>20 did you have any sort of interview to the Los Angeles</p> <p>21 Times?</p> <p>22 A Three.</p> <p>23 Q Specifically it you turn to page two of this</p> <p>24 article, I would like to direct your attention to</p>
<p style="text-align: right;">Page 223</p> <p>1 little.</p> <p>2 Q Do you, would you consider yourself to have</p> <p>3 any expertise in the area of brain development from a</p> <p>4 physiological standpoint?</p> <p>5 A No.</p> <p>6 Q So you have not formed any opinion about Dr.</p> <p>7 Kronenverger's declaration or research?</p> <p>8 A No, that's an area where I do not feel expert</p> <p>9 at all.</p> <p>10 Q Do you consider yourself an expert on the</p> <p>11 effects of violent video games on minors?</p> <p>12 MS FALLOW: Objection, depends on how you are</p> <p>13 defining the term expert.</p> <p>14 BY MS. CHERIAN:</p> <p>15 Q However you would define that.</p> <p>16 MS FALLOW: My objection is are you asking him as</p> <p>17 a legal matter under the Daubert Standard whether he</p> <p>18 considers himself to be an expert, then I object to</p> <p>19 calling for a legal conclusion.</p> <p>20 BY MS. CHERIAN:</p> <p>21 Q I am asking you, Dr. Williams, if you</p> <p>22 consider yourself an expert on violent video games on</p> <p>23 children?</p> <p>24 A Yes.</p>	<p style="text-align: right;">Page 225</p> <p>1 about halfway down the page.</p> <p>2 A Yes.</p> <p>3 Q The article quotes you as saying, with</p> <p>4 respect to the American Psychological Association, I</p> <p>5 don't think the data today warrants the strength of</p> <p>6 their claims. I don't think that they are going to</p> <p>7 be proven wrong long term, but I don't think that</p> <p>8 they have proven their case yet.</p> <p>9 Do you see that?</p> <p>10 A Yes.</p> <p>11 Q Is that a statement that you made to the Los</p> <p>12 Angeles Times?</p> <p>13 A I think there is a word wrong there. I don't</p> <p>14 recall saying I don't think they are going to be</p> <p>15 proven long term. I thought what I said was I don't</p> <p>16 know they are going to be proven long term.</p> <p>17 MS. CHERIAN: If we can mark this as Williams</p> <p>18 Exhibit 10.</p> <p>19 (Exhibit No. 10 was marked for</p> <p>20 identification.)</p> <p>21 BY MS. CHERIAN:</p> <p>22 Q Dr. Williams, did you give an interview to</p> <p>23 Web MD?</p> <p>24 A I did.</p>

1 Q If you could look on the third page of the  
2 printout on Exhibit 10?  
3 A Yes.  
4 Q Paragraph that says, the classic case is, you  
5 are talking about the previous sentence, which is  
6 that Williams also found that the more people played  
7 on-line games, the more they think the real world is  
8 like their virtual world --  
9 A I'm sorry, I am not sure that I am on the  
10 same page. Thank you.  
11 Q The quote starts, the classic case is someone  
12 who watches a lot of TV news and sees a lot of  
13 violence and crime, they tend to predict more crime  
14 for their neighborhood even if they live in a low  
15 crime area. And that is an effect that I saw in the  
16 game. People who played were much more likely than  
17 the comparison group to think that the world was a  
18 more dangerous place in terms of being hit with  
19 weapons.  
20 Is that a quote that you gave?  
21 A Yes. That's also trying to shorthand the  
22 cultivation hypothesis for a reporter, which is a  
23 difficult thing to do.  
24 MS. CHERIAN: Let's mark this Williams 11.

1 (Exhibit No. 11 was marked for  
2 identification.)  
3 BY MS. CHERIAN:  
4 Q Dr. Williams, did you give an interview to  
5 the Washington Post?  
6 A I don't think so.  
7 MS FALLOW: I want to note that there is  
8 something that says here is what the Associated Press  
9 wrote.  
10 BY MS. CHERIAN:  
11 Q Did you give an interview to the Associated,  
12 no, that's -- hold on one second.  
13 A I have been collecting most of the articles.  
14 It's part of my responsibility for my job to track  
15 where I am interviewed. The vast majority of  
16 articles take their material from the University of  
17 Illinois press office rather than from a direct  
18 interview, although I have done many interviews.  
19 I don't recall talking to Mr. MacMillan or  
20 doing an interview with the Washington Post. It  
21 might be a reasonable guess that they were taking the  
22 material from another source or from the press  
23 release.  
24 Q I am going to direct your attention to one

1 portion of this, they have a quote where you say or  
2 you are quoted as saying, I am not saying some games  
3 don't lead to aggression, but I am saying that the  
4 data are not there yet.  
5 Is that a statement that you made either in  
6 the press release or in interviews?  
7 A Yes. The follow-up sentence has more  
8 qualification in it.  
9 Q Yes. The game that you studied Asheron's  
10 Call has fantasy violence?  
11 A Depends on what your definition of fantasy  
12 violence is. It takes place in a fantasy setting,  
13 but the violence involves real world physics and real  
14 world weaponry in addition to fantastic weaponry.  
15 Q You haven't done any studies on more  
16 realistic setting video games, have you?  
17 MS FALLOW: Object as to form.  
18 THE WITNESS: I have only done one effects study  
19 of video games and it was for this one. So no, I  
20 haven't done a study of any other settings other than  
21 this fantasy based setting, including more realistic.  
22 By more realistic if you mean more closely resembling  
23 businesses and buildings and more suburban  
24 environments.

1 BY MS. CHERIAN:  
2 Q If you could turn to your article, the  
3 Communication Monographs article, Exhibit 8. The  
4 last paragraph on page 230.  
5 A The policy implication or the next one?  
6 Q The paragraph that starts on that point.  
7 A Okay.  
8 Q The second sentence says, that our own  
9 results speak to violent fantasy role-playing games  
10 that are played on-line. Do you see that?  
11 A I do.  
12 Q To the extent that we would be talking about  
13 games that are not played on-line, could there be  
14 differences based on from your study?  
15 A There could be based on the social contextual  
16 variables that might be present in an on-line game  
17 that might differ from a console setting.  
18 Q What might those variables be? You said on  
19 the on-line game there is interaction with other  
20 players?  
21 A Number one would be co-location versus by  
22 remote. There is no sensibility yet whether that  
23 might effect this or any other process. We have no  
24 idea.

<p style="text-align: right;">Page 230</p> <p>1 Than there is also the question of whether 2 or not if all else were equal, if they were the same 3 game played on the consol, this is testable with one 4 game I can think of, whether the actual physical 5 environment of sitting on a couch usually versus than 6 being at a desk might lead to some kind of social 7 architecture where there is more or less interaction 8 based on the actual form factors of what is going on 9 in the room.</p> <p>10 And I can also imagine there might be a 11 difference in the likelihood of the kind of people 12 that you might play with in the two different 13 settings and two different games. All of these 14 things are possibilities.</p> <p>15 Q Now if we could go back to the previous 16 paragraph that you were referring to earlier, I guess 17 it's third line down, for example, this game featured 18 fantasy violence while others featuring outer space 19 or even every day urban violence may yield different 20 outcomes.</p> <p>21 That's a statement that you made in this 22 article?</p> <p>23 A Yes.</p> <p>24 Q You don't know, you are not saying this is</p>	<p style="text-align: right;">Page 232</p> <p>1 valid criticism that people were coming and playing a 2 game for 10 minutes or 20 minutes and I wasn't sure 3 what to make of that effect.</p> <p>4 Another potential confound that we haven't 5 talked about today is the simple level of frustration 6 of becoming familiar with the game. There is a 7 learning curve in understanding the interface. When 8 you sit down and play for 10 minutes it's not sure if 9 you are testing the effects of the game or 10 experimenting for the effect of 10 minutes of 11 learning something and being uncomfortable in that 12 environment, especially if you are not accustomed to 13 the game interfaces.</p> <p>14 So I wanted to avoid that completely and 15 have a released, sustained long-term exposure, to 16 know the content of that game really well. To 17 understand the mechanics of the game. To talk to the 18 game players of that game, to talk to the developers 19 to know as much about it as I possibly could so that 20 I would understand how they played the game. And 21 most importantly how to fashion questions that would 22 make sense to them.</p> <p>23 How to translate the psychological variables 24 of interest into questions that make sense to people</p>
<p style="text-align: right;">Page 231</p> <p>1 generalized to other types of games?</p> <p>2 A That's correct. I think generalizability is 3 the Achille's heel of research. Given that I'm 4 criticizing everybody else, I hardly want to say that 5 I am somehow immune to this criticism. The way to 6 build strong findings is to test in a variety of 7 different locations for a variety of different games 8 in this sense and see if the outcomes are the same or 9 different.</p> <p>10 When you have enough of those kinds of 11 studies that are specific to a particular game, than 12 you can feel stronger about making broad conclusions, 13 rather than taking one study and saying I know what 14 games do. I didn't want to fall into that trap. So 15 it's limits my firepower, so to speak, my ability to 16 make big claims. But it's a level of conservatism 17 that we should have in our findings.</p> <p>18 Q When you chose Asheron's Call, did you 19 consider choosing a game that had been studied in 20 either an experimental or cross-sectional context 21 before doing your study?</p> <p>22 A I had two factors which influenced my choice 23 of the game. One was that I wanted sustained 24 exposure to one title because I thought it was a</p>	<p style="text-align: right;">Page 233</p> <p>1 who are not thinking about psychological variables. 2 They are thinking about how to attack a drudge 3 spell-caster on top of a hill. To bridge that gap I 4 needed intimate knowledge of that specific title, 5 that's why there is only one.</p> <p>6 Q Did you consider choosing a game --</p> <p>7 A I didn't answer the second part of the 8 question. The second part was based on the 9 feasibility and resources. I tested this game 10 because it's the game I could get 400 copies of it 11 for free. I didn't pick the perfect game in essence 12 from whatever variables I wanted to study.</p> <p>13 I found a game and than decided based on the 14 content of this game what would be the hypothesis 15 that would be appropriate to study now that I have 16 this one. Like many graduate students I was 17 constrained by resources. Oftentimes our research 18 question have to bend to reality.</p> <p>19 I was lucky enough to find a game that was 20 both socially variable and it had some interesting 21 things going on with the mixing of people and it was 22 consistently steadily violent, which let me test some 23 of these violence hypothesis. In that sense it was 24 luck.</p>

1 Q Do you know if Asheron's Call has been  
2 studied in any sort of a short-term context to see if  
3 it produces aggressive behavior or aggression in the  
4 short-term context?

5 A I know there was a study of Asheron's Call  
6 by people within Microsoft that is not a peer  
7 reviewed piece of research. But honestly off the top  
8 of my head, I can't remember what their findings  
9 were. I can remember the authors' names, it's  
10 Paxillson (phonetic) and Regan, something like that.

11 But it's a different game and they also  
12 weren't doing a controlled experiment so I am not  
13 sure that I gave it much credence.

14 Q Would it make sense to have chosen a game,  
15 obviously understanding your constraints, that have  
16 been shown to have a short-term effect before testing  
17 it in a longitudinal study?

18 A There would have been a game as far as theory  
19 building across the literature to be able to do the  
20 kind of meta-analytical analysis or to allow for it  
21 in the sense that Sherry compared two tests of Mortal  
22 Kombat.

23 If I had been able to take a game where some  
24 effect had appeared or not appeared and shown

1 increases or decreases from that over a month, that  
2 would have told us something about the long-term  
3 form, the functional form that the effects might  
4 take. That would have been nice. In a perfect world  
5 I might have been able to do that.

6 My interests, however, lie in understanding  
7 on-line behavior because on-line play, networked  
8 play, social play are the trends of the present and  
9 future in the video game industry. It doesn't make  
10 sense to me to study games in a way that they are  
11 being played less and less in that fashion.

12 People are playing more or more together.  
13 So it made sense to play a game that people are  
14 playing together.

15 Q When you say that the trend is in the  
16 direction of on-line games, do you know if that is  
17 true for minors?

18 A The best research on people's on-line  
19 behavior by demographics comes from the Pew Internet  
20 and American Life Project. They have asked a few  
21 general survey questions over the last few years  
22 about patterns and demographics. One is reported in  
23 my dissertation on page 159.

24 It talks about who has played an on-line

1 game ever and it shows a cohort breakdown, but it  
2 only goes as young as 18. I believe there are other  
3 studies that have looked at children's on-line  
4 internet usage. I may have reported one in one of my  
5 more social papers. I am pretty sure that they  
6 either came from the Jupiter or Kaiser Foundation.

7 And they show that the overwhelming portion  
8 of minors use the internet for e-mail, something over  
9 90 percent. And the game play is number two or  
10 number three in the highest usage, ahead of homework  
11 by percentage for common activities percentagewise  
12 among youth.

13 So yes, is the answer. So if people are  
14 playing on-line, it makes sense that is how we should  
15 study them.

16 Q Do you know what percentage of console game  
17 users are under 18 currently?

18 A I know average ages, but that is a different  
19 question than parceling out. Without seeing the raw  
20 data, no, I don't.

21 MS. CHERIAN: I am going to mark this as Williams  
22 12.

23 (Exhibit No. 12 was marked for  
24 identification.)

1 BY MS. CHERIAN:

2 Q Dr. Williams, do you recognize Exhibit 12?

3 A Yes.

4 Q Is this a draft of your report that you  
5 prepared on or about October 11?

6 A Yes. I can't remember if it is dated  
7 October 11 or completed earlier than that. It is one  
8 of my initial, if not the initial draft.

9 Q In this draft on page two you acknowledge  
10 Professor Anderson as a pioneer in the area. And the  
11 area specifically is the potentially negative impact  
12 on playing violent video games.

13 Do you see that?

14 A Yes.

15 Q Is that your opinion of Professor Anderson?

16 A I think somewhat less than an hour ago I  
17 called their research path breaking. Yes, I have no  
18 problem acknowledging Professor Anderson as a first  
19 mover in this area. Someone that has done important  
20 work in testing things out for the first time.

21 Q If I can turn your attention to page ten, the  
22 second paragraph starts my own conclusion. I am  
23 going to ask you about the following section where  
24 you say, that I find the resources and angst spent on

1 this issue wrongheaded. If policy makers spent half  
2 of those resources on helping us study the topic  
3 properly, we would have solid data to inform the  
4 deliberations. The other half would be well spent on  
5 media literacy for parents. Instead I see money  
6 being paid to lawyers and law enforcement in the  
7 absence of information.

8 I have confident that Anderson would agree  
9 with me on one thing, and that's that there is a need  
10 for resources to be devoted to the systematic and  
11 long-term study of this medium so that there might be  
12 data in the place of conjecture.

13 Do you see that?

14 A I do.

15 Q That's not in your final declaration?

16 A That's correct.

17 Q Did you choose to take that out?

18 A Ms. Hartnett, I can't remember if it was  
19 Kathleen or Katie asked if it was important for me to  
20 have that in there because I wasn't being asked for  
21 my expert opinion on policy issues. They said it was  
22 probably irrelevant and if I feel comfortable taking  
23 it out since I was only being asked to comment as an  
24 expert witness on the social science rather than

1 policy.

2 I said I didn't really have a problem with  
3 that, so I took it out.

4 Q Would this still be an accurate reflecting of  
5 your personal opinion, though?

6 A It is.

7 MS. CHERIAN: Mark this William 13, please.  
8 (Exhibit No. 13 was marked for  
9 identification.)

10 BY MS. CHERIAN:

11 Q If I could direct your attention -- do you  
12 recognize this document, Dr. Williams?

13 A This looks like a more middle of the process  
14 draft.

15 Q A draft of your declaration?

16 A Yes.

17 Q If I could have you turn your attention to  
18 page three, which is Williams 000145.

19 A Yes.

20 Q Directing your attention to paragraph six,  
21 the second, starting with the second sentence there,  
22 your declaration states, thus, I also agree that  
23 media literacy and better rating systems would help  
24 prevent problems. More information more clearly

1 presented would help parents make better decisions  
2 and would obviate the need for governmental  
3 intervention. I agree with him that the research  
4 suggests the usefulness of a universal rating system.

5 Do you see that?

6 A Yes, I do.

7 Q Is that something that you wrote?

8 A It is.

9 Q Is that something that is not in the final  
10 declaration?

11 A That's correct.

12 Q Why is that?

13 A Same reason that Ms. Hartnett and Ms. Fallow  
14 suggested to me this is more of a policy issue and  
15 would I be comfortable taking it out and instead only  
16 address the science in the case. Just like the  
17 earlier example, I agreed.

18 Q Just like you agreed, I'm sorry?

19 A Just like the example we were doing a moment  
20 ago from the first draft.

21 Q With respect to the statement that we just  
22 read from paragraph six, is that your opinion?

23 A It is.

24 MS. CHERIAN: Will you mark this Williams 14.

1 (Exhibit No. 14 was marked for  
2 identification.)

3 MS FALLOW: Off the record.

4 (Discussion had off the record.)

5 BY MS. CHERIAN:

6 Q Dr. Williams, can you tell me what Exhibit 14  
7 is?

8 A This is a version of the chapter that is  
9 currently in press for an edited volume, edited by  
10 Borger and James Bryant set to come out either later  
11 this year or early next year on video games.

12 Q We were talking earlier about square footage  
13 in homes and location of consoles. Is that reflected  
14 in this article? I'll direct your attention to page  
15 17 to help you.

16 A It's both here and also in the dissertation.

17 Q You say on the bottom of 17, that ten percent  
18 more homes had four or more bedrooms, even though  
19 Americans are having fewer children. And you go on  
20 to say, more than half of all U.S. children have a  
21 video game player in their bedroom?

22 A That's correct. I think the number is  
23 actually even higher since I wrote this original  
24 draft going to a more recent Kaiser family study.

1 Q Do you know how high it is?  
 2 A I don't. I just have a recollection that it  
 3 has gone up.  
 4 MS. CHERIAN: Mark this Williams 15.  
 5 (Exhibit No. 15 was marked for  
 6 identification.)  
 7 BY MS. CHERIAN:  
 8 Q Dr. Williams, have you had occasion to review  
 9 the Act which is at issue in this case?  
 10 A Briefly, I read through it once quickly. I  
 11 was told that my role here was to provide expert  
 12 testimony specifically with Anderson's declaration  
 13 rather than to be knowledgeable about the law. But I  
 14 did read through it once fast.  
 15 Q I direct your attention to, if we could turn  
 16 your attention on this exhibit to page --  
 17 MS FALLOW: I assume we are going to violent  
 18 video games.  
 19 MS. CHERIAN: Yes, Section 12A-10.  
 20 THE WITNESS: Yes.  
 21 BY MS. CHERIAN:  
 22 Q Specifically I'll direct you to the 12A-10E  
 23 which is violent. Is says, violent video games  
 24 include descriptions of or stimulations on human on

1 human violence in which the player kills or otherwise  
 2 causes serious physical harm to another human.  
 3 Serious physician harm includes death, dismemberment,  
 4 amputation, decapitation, maiming, disfigurement  
 5 mutilation of body parts or rape.  
 6 Do you see that?  
 7 A I see that. I note that it says depictions.  
 8 Q Yes. I want to ask you what categories of  
 9 that type of violence is included in the game  
 10 Asheron's Call, if any?  
 11 MS FALLOW: Objection to the extent that  
 12 obviously as we pointed out in the plea it involves a  
 13 lot of vague terms. You are going to have to ask him  
 14 how he defines those terms.  
 15 THE WITNESS: Asheron's Call 2 features human on  
 16 human and human on humanoid violence consistently.  
 17 It features serious physical harm including  
 18 depictions of death, maiming, disfigurement,  
 19 mutilation of body parts and a couple of other things  
 20 which I would consider violent, which are not  
 21 included in this list.  
 22 MS FALLOW: I want to clarify that he is making  
 23 these statements in the capacity as an expert, not as  
 24 a lawyer as anything how you would legally interpret

1 this section.  
 2 MS. CHERIAN: Clearly.  
 3 Q If you can turn back to the page before that  
 4 to section 12-A5 findings, A, it says the general  
 5 assembly finds that minors who play violent video  
 6 games are more likely to -- I'm going to skip down to  
 7 three here, experience a reduction of activity in the  
 8 frontal lobe of the brain which is responsible for  
 9 controlling behavior.  
 10 Do you see that?  
 11 A I see that.  
 12 Q Dr. Williams, do you have any opinion  
 13 regarding that finding?  
 14 A I have no opinion regarding that finding.  
 15 MS. CHERIAN: If we can take a short break.  
 16 (Recess was taken.)  
 17 BY MS. CHERIAN:  
 18 Q Just a few more questions, Dr. Williams. Do  
 19 you have any training involving the treatment, either  
 20 medical or psychological of children?  
 21 A No.  
 22 Q Prior to the publication of the article in  
 23 the Communication Monographs, was this study  
 24 submitted to other journals?

1 A Yes.  
 2 Q Which ones?  
 3 A Journal of Communication. I can't recall if  
 4 we sent it to another one. It might have only be the  
 5 Journal of Communication.  
 6 Q What was the result of sending it to the  
 7 Journal of Communication?  
 8 A It was rejected on first pass. Sent it back  
 9 to us with suggestions and changes, advised us to  
 10 send it somewhere else if we could get it into shape.  
 11 Q Did you send back changes?  
 12 A Well, not to them. There is a difference  
 13 between rejection and revise and resubmit. It was  
 14 rejected from them. I think JOC's acceptance rate  
 15 was somewhere around 9 percent. It wasn't entirely  
 16 shocking, but it was disappointing for any researcher  
 17 to have that happen.  
 18 We took their suggestions to heart. I also  
 19 met with Professor Bushman and talked about the  
 20 measures and what would be appropriate to publish.  
 21 We took out two of the measures, three different  
 22 measures that don't show up in the final version  
 23 because Professor Bushman thought it was not  
 24 appropriate and the other ones we should leave in and

1 try elsewhere, although he didn't think that our  
 2 chances were that good.  
 3 So we then decided to send it to  
 4 Communication Monographs, even though they don't have  
 5 a track record of publishing a lot of technology  
 6 work. They had a new editor that seemed open minded  
 7 to possibly doing that. We thought it would reach a  
 8 broader audience than if it was in a more specific  
 9 technology journal.  
 10 Q Do you remember what measures Dr. Bushman  
 11 advised you to take out?  
 12 A The AQ scales, these are for verbal and  
 13 physical aggression.  
 14 Q The Buss-Durkee scale?  
 15 A Yes. We also took out a measure about  
 16 speeding tickets as a measure, another indirect  
 17 measure of aggressive behavior. The findings for all  
 18 three of those measures were the same as the ones in  
 19 the final document. Professor Bushman told us that  
 20 he didn't think they were appropriate measures,  
 21 whereas the NOBAGS one and the argument with the  
 22 spouse and friend were still appropriate to leave in.  
 23 Q Do you know of any, do you know of any  
 24 meta-analysis that have been done regarding video

1 games particularly as to minors?  
 2 A I don't know of any meta-analysis  
 3 specifically about samples with only minors in them.  
 4 I do know of Professor Sherry's meta-analysis that  
 5 breaks down the age of respondents that includes it  
 6 as a variable.  
 7 Q Do you know if Dr. Anderson has done one or a  
 8 subset where he analyzed it with just participants  
 9 under 18?  
 10 A I don't know.  
 11 MS. CHERIAN: I have no further questions.  
 12 MS FALLOW: We might have a couple. I just need  
 13 two minutes to discuss it.  
 14 (Recess was taken.)  
 15 EXAMINATION  
 16 by Ms. Fallow:  
 17 BY MS FALLOW:  
 18 Q Dr. Williams, in the course of rendering your  
 19 expert opinion in this case, did you review the  
 20 report of Dr. Rich?  
 21 A I did.  
 22 Q Did you form any opinions about his study or  
 23 his report?  
 24 A I did. The sections of his study that

1 pertained to the media aggression violence literature  
 2 were essentially drawn from Professor Anderson's  
 3 study or work. I see them as basically duplicative.  
 4 So my opinion about the Anderson work and  
 5 the state of the research in general, more or less  
 6 mirrored my opinion of Rich's declaration, which is  
 7 to say that I find many of the same flaws that I did  
 8 with the other. And the overall picture is that I do  
 9 not agree with his conclusions either.  
 10 Q We talked about this before, but I want to  
 11 make sure we are clear. Have you formed, do you have  
 12 an opinion on whether the current research supports  
 13 the findings of the Illinois legislator that minors  
 14 who play violent video games are more likely to  
 15 exhibit violent, asocial or aggressive behavior  
 16 and/or experience feelings of aggression?  
 17 A I do.  
 18 Q What is your opinion?  
 19 A My opinion is that the research does not  
 20 support that statement.  
 21 MS FALLOW: That's it.  
 22 MS. CHERIAN: Follow-up?  
 23 MS FALLOW: Sure.  
 24 EXAMINATION

1 by Ms. Cherian:  
 2 BY MS. CHERIAN:  
 3 Q You said that you do not think that the  
 4 research supports that statement. You don't think  
 5 that any of the research supports that statement?  
 6 A I am being asked to categorize and comment on  
 7 the research as a whole, broad themes here. It's a  
 8 very strong claim that would need to be backed up  
 9 with very strong systematic and consistent evidence,  
 10 which doesn't exist.  
 11 In fact because we have so many mixed  
 12 findings, I'm surprised that anyone is making a  
 13 strong statement in any direction. My take on the  
 14 research as a whole is that no, it definitely does  
 15 not support that statement.  
 16 Q The research, but you're not saying that none  
 17 of the research supports that statement?  
 18 A There are individual studies here and there  
 19 which could be interpreted to possibly support that  
 20 statement. You would have talk about them one at a  
 21 time. But there is no single study that sticks out  
 22 to my mind that says this really backs this one up.  
 23 Q When you say it is a strong statement, you  
 24 are saying that the fact that it, that minors who

<p style="text-align: right;">Page 250</p> <p>1 play violent video games are more likely to, you 2 regard that as a strong statement? 3 MS FALLOW: Objection as to form. 4 THE WITNESS: My objection isn't to the more or 5 likely part of it. It is to the implication of a 6 causal model that hasn't been established by the 7 science. It's not with the adjective in the 8 statement. It is with the presence of an effect at 9 all. 10 Cause is incredibly challenging and 11 difficult to prove. And something that we usually 12 don't lay claim to until we are very confident that 13 we have knocked down all the opposing theories and 14 ideas. We are so far from that in the research, that 15 I do not support making a causal claim at this point 16 of any degree. 17 BY MS. CHERIAN: 18 Q The finding is not that minors, that playing 19 violent video games causes violent, asocial, 20 aggressive behavior and/or experience feelings of 21 aggression, is it? 22 MS FALLOW: Objection to the extent that I'm not 23 sure that you are in a position to characterize what 24 the finding of the legislature is, but he has made,</p>	<p style="text-align: right;">Page 252</p> <p>1 going to read those, but you think that is a strong 2 causal statement that is not supported by the 3 research literature? 4 MS FALLOW: Objection as to completely 5 mischaracterizing what he said so far, which he said, 6 by the way, several times very clearly. 7 THE WITNESS: The premises of the statement 8 implies cause of any degree, therefore it is not the 9 more word in the statement, it's that there is any 10 kind of statement at all that I have a problem with. 11 So in science we are using a different set 12 of language than you are in legal circles, clearly. 13 I am sure we are all equally befuddled by each other. 14 When we talk about causation it has to be something 15 that we have to feel awfully certain and confident 16 about before we make any causal claim of any 17 strength. More or less certain, whatever causal 18 arrow is a pretty big claim. 19 MS. CHERIAN: That's it. 20 MS FALLOW: That's it for us. Reserve. 21 22 23 24</p>
<p style="text-align: right;">Page 251</p> <p>1 already given you his opinion about what this 2 statement says. 3 BY MS. CHERIAN: 4 Q Have you looked at the specific legislative 5 findings, the words that are used in the legislative 6 findings? 7 A Are we talking about the words at the end of 8 the Anderson statement? 9 Q I'm talking about the words in the 10 legislative findings. 11 A You are talking about section 12A-5, A-1 and 12 A-2? 13 Q Yes. 14 A That's correct. 15 Q The statement in the Act is that the general 16 assembly finds that minors who play violent video 17 games are more likely to and than it lists three 18 things? 19 A Correct. I feel uncomfortable talking about 20 one and two, obviously, but not three. 21 Q Absolutely. I am just trying to make sure 22 whether you believe that the claim that the statement 23 that minors who play violent video games are more 24 likely to -- we'll limit it to one and two, I am not</p>	<p style="text-align: right;">Page 253</p> <p>1 STATE OF ILLINOIS ) 2 ) ss: 3 COUNTY OF C O O K ) 4 5 The within and foregoing deposition of the 6 aforementioned witness was taken before DANA L. 7 LARIMER, C.S.R., R.P.R., and Notary Public, at the 8 place, date and time aforementioned. 9 There were present during the taking of the 10 deposition the previously named counsel. 11 The said witness was first duly sworn and was 12 than examined upon oral interrogatories; the 13 questions and answers were taken down in shorthand by 14 the undersigned, acting as stenographer and Notary Public; 15 and the within and foregoing is a true, accurate and 16 complete record of all of the questions asked of and 17 answers made by the aforementioned witness, at the 18 time and place hereinabove referred to. 19 The signature of the witness was not waived, 20 and the deposition was submitted, pursuant to 21 Rules 30(e) and 32(d) of the Rules of Civil Procedure 22 for the United States District Court, to the deponent 23 per copy of the attached letter. 24</p>

1 The undersigned is not interested in the within  
 2 case, nor of kin or counsel to any of the parties.  
 3 Witness my official signature and seal as  
 4 Notary Public in and for Cook County Illinois on this  
 5 \_\_\_\_\_ day of \_\_\_\_\_, A.D. 2005.  
 6  
 7  
 8  
 9  
 10

11 \_\_\_\_\_  
 12 DANA L. LARIMER, C.S.R., R.P.R.,  
 13 License No. 084-004152  
 14 Notary Public  
 15 230 West Monroe Street  
 16 Suite 1500  
 17 Chicago, Illinois 60606  
 18 Phone: (312) 263-3524  
 19  
 20  
 21  
 22  
 23  
 24

LEGALINK  
 230 West Monroe St. - Suite 1500  
 Chicago, Illinois 60606  
 (312) 263-3524  
 November 2, 2005  
 Jenner & Block  
 Attn: Ms. Katherine Fallow  
 601 Thirteenth St., NW, Suite 1200 S  
 Washington, DC 20005

Case: ESA vs Blagojevich  
 No: 05 C 4265  
 Deponent: Dmitri Williams  
 Date taken: 11-2-05

Dear Ms. Fallow:

Enclosed is your copy of the deposition transcript, along with the original signature page and errata sheet.

Pursuant to the rules of court in this matter, please have the deponent read the transcript and sign the signature page before a notary public.

If any corrections/changes are made, please type or print them on the attached errata sheet, giving the page and line number, desired correction/change, and reason.

Please arrange for accomplishment of same and transmittal of the signature page and errata sheet back to our office within 30 days from the date of this letter.

Upon failure to comply, we shall forward an appropriate affidavit of noncompliance to all counsel of record.

Very truly yours,

LegalLink

132310  
DL

LEGALINK - CHICAGO  
(312) 263-3524 (312) 236-8461

1 LEGALINK - CHICAGO  
 2 230 West Monroe Street  
 3 Suite 1500  
 4 Chicago, Illinois 60606

WITNESS CERTIFICATION

7 I hereby certify that I have read the foregoing  
 8 transcript of my deposition consisting of pages 1  
 9 through 251, inclusive. Subject to the changes set  
 10 forth on the preceding pages, the foregoing is a true  
 11 and correct transcript of my deposition taken on  
 12 November 2, 2005.  
 13  
 14

(signed)

19 SUBSCRIBED AND SWORN TO  
 20 before me this \_\_\_\_\_ day of \_\_\_\_\_  
 21 A.D. 2005.  
 22

Notary Public

CASE: ESA vs Blagojevich  
 DATE TAKEN: 11-2-05  
 DEPONENT: Dmitri Williams  
 PAGE LINE ERRATA SHEET

\_\_\_\_ CHANGE: \_\_\_\_\_  
 \_\_\_\_ REASON: \_\_\_\_\_  
 \_\_\_\_ CHANGE: \_\_\_\_\_  
 \_\_\_\_ REASON: \_\_\_\_\_

(Signed) \_\_\_\_\_ DATE \_\_\_\_\_

Reporter: Dana L. Larimer

LEGALINK - CHICAGO  
(312) 263-3524 (312) 236-8461