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*Toward A Better Understanding of the Relation  
Between Violent Videogame Play and Different Types  
of Antisocial Behavior*

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\* Thank you for your interest in this presentation. Please note that analyses included herein are preliminary. More recent, finalized analyses may be available by contacting CIPHR for further information.



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**Growing up with Media  
(GuwM) Methodology**




- Baseline data were collected August - September, 2006
- 1,588 households (one caregiver, one child) were surveyed online
- Participants recruited from Harris Poll On Line

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**GuwM Eligibility**




- **ADULT**
  - Be the most (or equally) knowledgeable of the youth's media use in the home
  - Be a member of HPOL
- **YOUTH**
  - Aged 10-15 years
  - Use the Internet at least once in the last 6 months
- English speaking

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**Harris Poll On Line**




- HPOL is a double opt-in panel of millions of respondents.
- HPOL data are consistently comparable to data that has been obtained from RDD telephone samples of general populations when sampling and weighting is applied.

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## GuwM RR and Weighting




- Response rate was 26%
- Propensity scoring was applied
- Data were weighted to match the US population of adults with children between the ages of 10 and 15 years

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## GuwM Youth characteristics (n=1,588)



- 48% Female
- Mean age: 12.6 years (SE: 0.05)
- 71% White, 13% Black, 9% Mixed, 7% Other
- 19% Hispanic
- Median time spent online on a typical day: 31 minutes – 1 hour

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## Why Video Games?




- Video games are **BIG BUSINESS**
  - ~268 million computer/video games sold in 2007
  - ~\$9.5 BILLION in revenue (for 2007)
- Approximately 60% youth (8-18) play video games for about an hour on any given day

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## Violence in Videogames



- > 50% of the most popular video games are rated 'T' or 'M'
- Teen/Mature rated games
  - Almost all have violent content
  - Most (90%) reward injuring characters
  - Many (~69%) reward killing characters
- Youth (8-18) prefer 'T' and 'M' rated games

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## Exposure to Violent Video Games

Exposure related to:

- Increased
  - Aggressive behavior,
  - Aggressive affect, and
  - Aggressive cognitions
- Decreased prosocial behavior

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## Immersion as a Mediator

A player's sense of 'presence' in the game

- Realism
  - Effects more pronounced if game is realistic
- Immersion
  - Effects more pronounced if player identifies with characters

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## Problem Statement

Little is known about how exposure to violent video games is associated with: (a) seriously violent behavior; (b) antisocial behavior; and (c) delinquency.

→What is the association between playing violent video games and concurrent reports of externalizing behavior;

→To what extent does immersion mediate this association?

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## Characteristics of game video players

- $N=1,493$  (video game players)
- 48% Female
- Mean age: 12.5 years ( $SE: 0.04$ )
- 79% White, 13% Black, 8% Other
- 12% Hispanic
- Median HH income: \$50,000-\$74,999


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## Game Playing Behavior

- Median # of days / week: 3-4
- Median time playing/ day: 31-60 min
- Overall median exposure: 157 min / week
- Median exposure by violent video game
  - None: 67.5 min / week
  - Some: 157.5 min / week
  - Many / Most / All: 287.8 min / week

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## Violent Video Game Play

*“When you play video, computer, or Internet games, how many show physical fighting, shooting, or killing?”*

Response alternatives:  
‘None’; ‘Some’; ‘Many’; ‘Most/All’


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## Outcome Variables...

- Seriously Violent Behavior
  - Behavior likely resulting in murder
  - Aggravated assault;
  - Robbery;
  - Sexual assault
- Alpha = 0.87


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## Outcome Variables...

- Antisocial Behavior
  - Breaking rules
  - Threatening / fighting with people
  - Burglary
  - Animal cruelty
- Alpha = 0.85

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## Outcome Variables...




- Delinquency
  - Relational bullying;
  - Physical aggression;
  - Vandalism
  - Manipulative/coercive behavior
- Alpha = 0.80

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## Potential Effect Modifiers




- Realism
  - The action in the games is like 'real life.'
- Identification
  - The people in the games are 'just like me or people I know'

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## Results



Variable	# Yes (N = 1,493)	% of Sample
Serious Violent Behavior	89	6
Antisocial Behavior	400	27
Delinquency	1,028	69.5
Violent Video Game	388	26.3
Realistic	471	49.1
Identification	185	19.4

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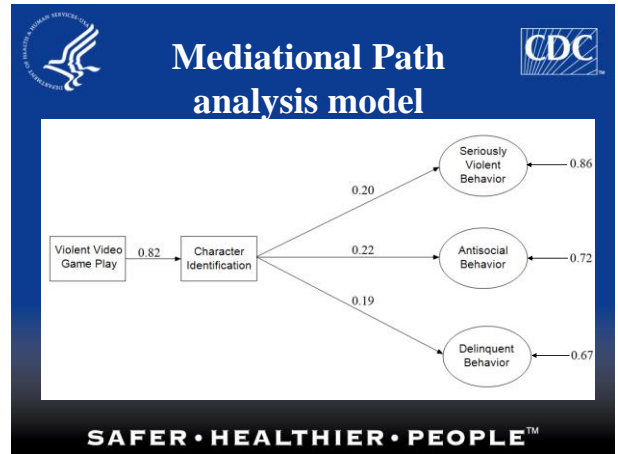
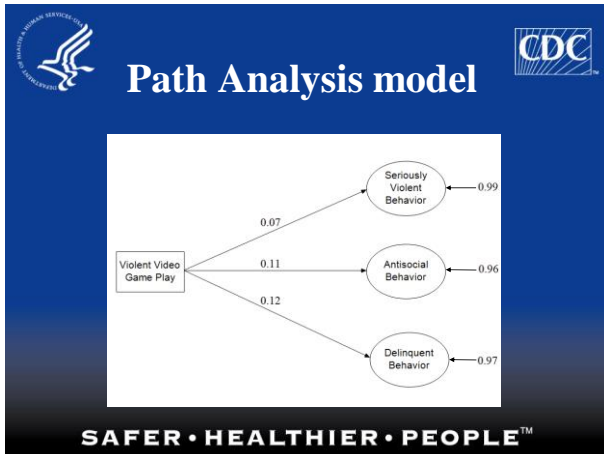
## Bivariate Odds



Variable	Violent Behavior	Antisocial Behavior	Delinquency
Violent Video Game Play	<b>1.92 (1.19-3.08)</b>	<b>1.92 (1.45-2.52)</b>	<b>1.62 (1.22-2.17)</b>
Realism	1.14 (0.71-1.84)	<b>1.46 (1.09-1.94)</b>	1.22 (0.91-1.64)
Identification	<b>3.35 (2.02-5.55)</b>	<b>2.51 (1.76-3.57)</b>	<b>1.68 (1.11-2.54)</b>

Controlling for participant age, sex, and income

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 **Summary** 

Playing violent video games is common.

- Over a quarter of respondents report playing violent video games
- Weekly exposure significantly related to playing violent video games


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 **Summary** 


Consistent with previous literature reporting associations between violent video games and aggression..

- Frequent exposure to violent video games is concurrently associated with **serious** externalizing behaviors,
- Character identification is a mediator

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## Limitations of GuwM Data




- Data are cross-sectional
- Reliance on self-reports
- It is possible that:
  - Children were monitored by their parents
    - 22% of youth indicated someone was close enough to see the screen during data collection
  - Parents completed the youth survey.

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## Implications




- Need to educate caregivers about the growing evidence for the impact of violent media / video games on serious externalizing behaviors
- Character identification appears to be important, over and above the violence in the game itself.

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## Contact Information



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