

Linkages between violent exposures in new media and violent behavior: Findings from the Growing up with Media national survey



Michele L Ybarra MPH PhD
Internet Solutions for Kids, Inc.



Philip J Leaf PhD
Johns Hopkins University Bloomberg School of Public Health

Centers for Disease Control, Reverse Site Visit, 2006
Atlanta, GA

* Thank you for your interest in this presentation. Please note that analyses included herein are preliminary. More recent, finalized analyses can be found in: Ybarra M, Diener-West M, Markow D, Leaf PJ, Hamburger M, Boxer P. (2008). Linkages between Internet and other media violence and youth seriously violent behavior. *Pediatrics*. 122(5): 929-93, or by contacting ISK for further information.

Background

- An estimated 97% of youth use the Internet (Lenhart, Madden & Hitlin, 2005; USC Annenberg School Center for the Digital Future, 2005).
- The majority of adolescent Internet-health research has focused on victimization (e.g., Finkelhor, Mitchell, Wolak, 2000; Wolak, Mitchell, Finkelhor, 2006; Ybarra, Mitchell, Wolak, Finkelhor, 2006) and health seeking behavior (e.g., Grey, Klein, Noyce et al., 2005; Ybarra & Suman, 2006).

Background: The positive side of the Internet

- About one in four adolescents have used the Internet to look for health information in the last year (Lenhart et al., 2001; Rideout et al., 2001; Ybarra & Suman, 2006).
- 41% of adolescents indicate having changed their behavior because of information they found online (Kaiser Family Foundation, 2002), and 14% have sought healthcare services as a result (Rideout, 2001).

Background: The negative side of the Internet

- Internet harassment has increased from 6% to 9%, while unwanted sexual solicitation decreased from 19% to 13% from 1999 to 2005 (Mitchell, Wolak, Finkelhor, 2006).
- Just over one-third of youth targeted by Internet victimization report feeling very/extremely upset or afraid because of the incident (Wolak, Mitchell, Finkelhor, 2006; Ybarra, Mitchell, Wolak, Finkelhor, 2006).

Problem Statement

As technology increases in sophistication, questions about its potential impact on child and adolescent behavior offline must be examined:

- **What is the frequency of exposure to violence online?** Is this online violence related to violent behavior? How does this fit into the more general sphere of media violence?
- **With potentially increased access, what is the frequency of exposure to pornography online?** Is it associated with violent sexual behavior?
- **Prevention messages: Are parents getting it?**

Growing up with Media Methodology

- Conducted between August 24 to September 14, 2006
- 1,591 households (one caregiver, one child) were surveyed online
- Eligibility criteria:
 - Adult
 - Be a member of the Harris Poll Online (HPOL) opt-in panel
 - Be a resident in the USA (HPOL has members internationally)
 - Be the most (or equally) knowledgeable of the youth's media use in the home
 - English speaking
 - Youth:
 - Between the ages of 10-15 years
 - Use the Internet at least once in the last 6 months
 - English speaking

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 random telephone samples of general populations when sampling and weighting is applied.

Growing up with Media Data Methods

- Sample selection was stratified based on youth age and sex.
- To control the sample and the increase response rate, the following steps were taken:
 - Password-protected access to the online survey
 - 1 reminder invitation to non-responders
 - Cash incentives (\$10 for adults, \$15 for youth)
- A balance between "novice" and "experienced" survey participants was forced through additional stratification. (In general, panelists are invited to participate in surveys no more frequently than once every three weeks).
- On average, the adult survey took 5 minutes and the youth survey took 21 minutes

Growing up with Media Data Analyses

- Response rate was 26% (rates can range from 5-50%)
- Propensity scoring was applied to adjust for the adult's (i.e., recruitment target) propensity to be online
- Data were weighted to match the US population of adults with children between the ages of 10 and 15 years
- For research questions addressed in the present presentation, cases were required to have valid data for 85% of variables examined.
- Regression estimates are adjusted for 'dishonesty' (6%) and the report of someone in the room near enough to see the computer screen (22%).

Youth characteristics

Demographic characteristics (n=1,591):

- 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

Internet violence

Defining Internet violence

In the last 12 months, have you gone to or seen the following types of websites?

1. A website, including **news-related sites**, that shows pictures of war, death, 'terrorism'
2. A website that shows **cartoons**, like stick people or animals, being **beat up, hurt, or killed**
3. An **X-rated** or 'adult' website where the main topic is sex
4. A website that shows pictures of dead people or people dying. Some people call these '**snuff**' sites.
5. A website that people would call a '**hate**' site. A "**hate**" site is one that tells you to hate a group of people because of who they are, how they look, or what they believe.
6. A website that shows **satanic rituals**, such as devil worship or Satan worship

Response options: 1) No, I don't know what this is; 2) No, I know what this is but I've never gone; 3) Yes

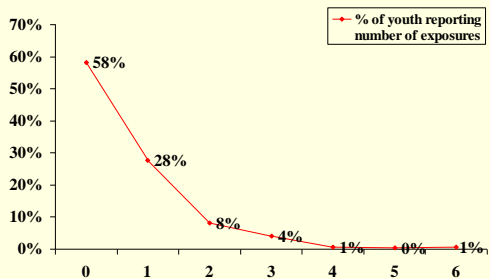
Youth exposure to violence online cont.

In the last 12 months, have you gone to or seen the following types of websites?	No, I don't know what this is	No, I've heard of it but have never been to one	Yes, I've been to one
A website, including news-related sites, that shows pictures of war, death, 'terrorism'	31% (464)	45% (753)	24% (368)
A website that shows cartoons, like stick people or animals, being beat up, hurt, or killed	42% (666)	37% (586)	21% (333)
An X-rated or 'adult' website where the main topic is sex	40% (655)	50% (793)	10% (137)

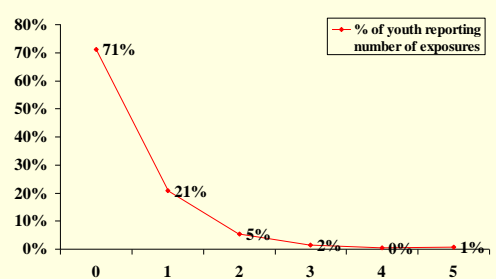
Youth exposure to violence online (n=1,585)

In the last 12 months, have you gone to or seen the following types of websites?	No, I don't know what this is	No, I've heard of it but have never been to one	Yes, I've been to one
A website that shows pictures of dead people or people dying. Some people call these 'snuff' sites.	64% (1036)	31% (482)	5% (67)
A website that people would call a 'hate' site	57% (885)	41% (660)	3% (40)
A website that shows satanic rituals, such as devil worship or Satan worship	58% (911)	40% (636)	2% (38)

Youth exposure to violence online (n=1,585)



Youth exposure to violence online (except news sites) (n=1,585)



Main outcome measure: Seriously violent behavior

Any seriously violent behavior: 7.8%

- Ever shot/stabbed someone: 1.0%
- Used a weapon to steal something: 1.3%
- Hurt someone badly enough to require medical attention: 2.4%
- Forced sexual behavior: 2.5%
- Started a fire purposefully: 2.6%
- Hurt an animal purposefully: 3.3%

Odds of youth reporting at least one seriously violent behavior in the previous year based upon type of online violent exposure

Type of media	No, I don't know what this is		Yes, I've been to one	
	OR (95% CI)	p-value	OR (95% CI)	p-value
A website, including news-related sites, that shows pictures of war, death, 'terrorism'	0.6	0.13	1.3	0.35
A website that shows cartoons, like stick people or animals, being beat up, hurt, or killed	0.9	0.63	2.0	0.03
An X-rated or 'adult' website where the main topic is sex	0.6	0.06	2.7	0.005

Odds of youth reporting at least one seriously violent behavior in the previous year based upon type of online violent exposure

Type of media	No, I don't know what this is		Yes, I've been to one	
	OR (95% CI)	p-value	OR (95% CI)	p-value
A website that shows pictures of dead people or people dying. Some people call these 'snuff' sites.	0.5	0.01	2.8	0.02
A website that people would call a 'hate' site.	0.8	0.38	7.8	<.001
A website that shows satanic rituals, such as devil worship or Satan worship	0.6	0.04	5.0	0.002

Defining exposure to media violence

When you:

1. Play video, computer or Internet **games**
2. Watch **TV** or **movies**
3. Listen to **music**
4. Surf the **web**, how many of the websites you go to show **cartoons**, like stick people or animals
5. Surf the **web**, how many of the websites you go to show **real people**

How many show physical fighting, shooting, or killing?

Response options: 1) None/almost none; 2) some; 3) many; 4) almost all/all

Amount of media depicting physical fighting, shooting, or killing depicted

When you:	How many show physical fighting, shooting, or killing?			
	Almost/None of them	Some of them	Many of them	Almost all/All of them
Play video, computer or Internet games	34.9% (613)	39.3% (584)	16.2% (263)	9.6% (125)
Watch TV or movies	14.2% (253)	53.0% (848)	25.5% (361)	7.3% (123)
Listen to music	42.5% (704)	41.6% (646)	11.6% (171)	4.4% (64)
Surf the Web, how many of the websites you go to show cartoons, like stick people or animals	57.3% (936)	32.8% (505)	8.6% (118)	1.3% (26)
Surf the Web, how many of the websites you go to show real people	85.2% (1366)	11.3% (175)	2.9% (38)	0.5% (6)

Odds of youth reporting at least one type of seriously violent behavior in the previous year based upon quantity of violent exposures by given media type

Media Type	Some of them		Many/Almost all/All of them	
	OR	p-value	OR	p-value
Play video, computer or Internet games	1.7	0.10	3.9	<.001
Watch TV or movies	1.9	0.27	4.9	0.004
Listen to music	2.8	0.004	5.4	<.001
Surf the Web, how many of the websites you go to show cartoons, like stick people or animals	1.5	0.21	4.4	<.001
Surf the Web, how many of the websites you go to show real people	3.8	<.001	3.9	0.001

Summary

Among all youth:

- 42% report exposure to violence on at least one type of web site in the last year (29% if news sites are excluded)
- News-related sites (24%) and cartoon violence sites (21%) are the two most common exposures

Summary

The report of visiting

death sites (OR = 7.8) and hate sites (OR = 5.0)

are the two online exposures most strongly associated with concurrent reports of seriously violent behavior.

Summary

Not knowing about some types of web sites

(Satanic sites OR = 0.6)

Death sites OR = 0.5)

Appears to be protective against concurrent reports of seriously violent behavior

Summary

Youth whose majority of media exposures (i.e., many/most/all) are violent

Are significantly more likely to also report seriously violent behavior

Irrespective of media type

Summary

More youth report "none / almost none" of exposures on the Internet depict violence

Than any other media type examined

Exposure to x-rated material

Defining exposure to x-rated material

In the last 12 months have you watched an X-rated movie at a friend's house, your house, or in the theatre where the main topic was sex?

In the last 12 months, have you looked at an X-rated magazine, like Playboy, on purpose where you knew that the main topic was sex?

In the last 12 months, have you gone to or seen an X-rated or "adult" website where the main topic is sex?

Defining exposure to violent pornography

In the last 12 months, have you seen a movie that showed a person being physically hurt by another person while they were doing something sexual?

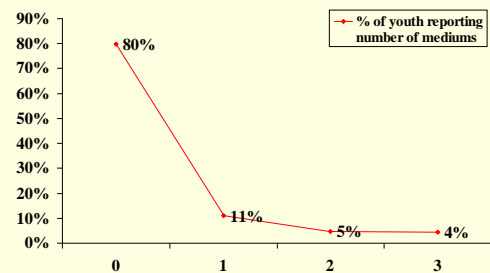
Have you ever looked at a magazine that showed a person being physically hurt by another person while they were doing something sexual?

When you have gone to or seen an X-rated or adult website, have you ever seen a person being physically hurt by another person while they were doing something sexual?

Frequency of intentional exposure to pornographic material (n=1,578)

Medium of x-rated exposure	Any exposure	Violent exposure
Magazines	13.6% (181)	2.4% (27)
Movies	10.7% (150)	3.1% (52)
Internet	10.3% (135)	1.5% (21)

Overlap in mediums (n=1578)

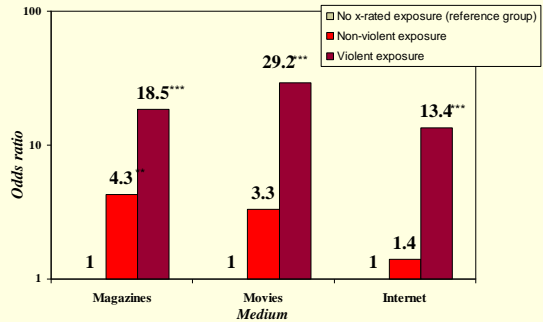


Main outcome measure: forced sexual behavior

In the past 12 months, how many times have you ever

Kissed, touched, or done anything sexual with another person when that person did not want you to

Odds of sexually aggressive behavior given report of x-rated exposure



Summary

Among all youth:

- 20% of youth report intentional exposure to x-rated material
- Magazines are the most commonly reported medium of x-rated exposure

Summary

Intentional exposure to **violent** x-rated material appears to be strongly related to concurrent reports of sexually aggressive behavior, irrespective of medium.

The associations between non-violent x-rated material and sexually aggressive behavior are less clear.

Prevention messages:

Are parents getting it?

Research Question

Are indicators of parental monitoring associated with reduced odds of violent media exposures?

Main outcome measures:

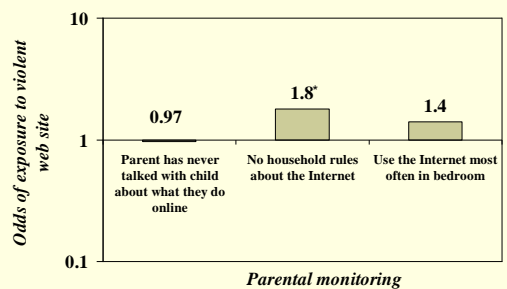
Internet → violent web sites

Games → M or AO rated-games are most frequently played

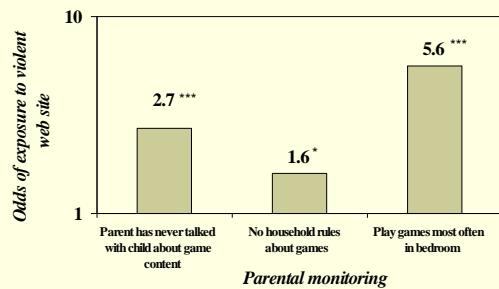
Youth-reported parental monitoring of media use

Youth-reported aspects of media use	Games (n=1,437)	Internet (n=1,557)
Where do you play most often		
Own room	32%	16%
Common area in the house	51%	59%
All other responses	17%	25%
Parental involvement		
How often do your parents talk to you about what you've seen / done	73%	83%
Rules		
No rules	15%	8%
Have to ask permission	38%	47%
Time limit	45%	46%
Restrictions (ratings, no x-rated sites)	63%	77%
Have to finish school work first	60%	58%

Association between Internet parental monitoring and exposure to violent web sites



Association between game parental monitoring and violent video game playing



Summary

According to youth, parents tend to monitor their actions online more than on games.

A lack of monitoring of game playing appears to be related to playing Adult or Mature games most often (which are rated as such because of their violent or sexual content).

In comparison, this does not appear to be the case for exposure to violence on the Internet.

Limitations of the data

Data are cross-sectional.

In no way can we tease out what happened first. Directionality is unknown.

Limitations of the data

Respondents were not observed during the data collection process.

It is possible that:

- Children were monitored by their parents, or
 - Parents completed the youth survey.
- 22% of youth reported that someone was in the room close enough to see the screen when they completed the survey.

Limitations of the data

Findings are relevant to households where both the child and the adult use the Internet. General population findings may yield different frequencies.

Discussion: Internet violence

The majority of youth are not exposed to violence online.

The majority of youth who are exposed, do not also report seriously violent behavior.

Nonetheless, findings suggest that for some youth, violence online is associated with seriously violent behavior offline.

Discussion: Internet violence

Despite the wide availability of violent exposures online,

The Internet does not appear to be a 'risk medium' for most youth:

- Most youth report "none/almost none" of online exposures depict violence
- The Internet is a less commonly cited source of x-rated material than more traditional sources

Discussion: Exposure to violence across mediums

Youth who report that many/most/all of the media they consume depicts violence are more likely to concurrently report seriously violent behavior

across ALL types of media examined.

Discussion: Pornography

Despite the number of pornographic web sites available online,

The Internet does not appear to be a more common method than traditional mediums (i.e., magazines, movies) as a way to access pornography among adolescents.

Irrespective of medium, intentional exposure of violent pornography appears to be related to sexual aggression.

Discussion: Parental prevention

According to youth, most parents have tried to implement some monitoring efforts for Internet and game playing activities, including household rules and discussions with children what they are seeing in these media.

These efforts appear to be especially important in reducing the likelihood of playing violent video games (Mature or Adult Only).

Implications

These data provide a foundation to build upon our understanding of youth exposures to violence on the Internet, including x-rated violence.

The findings provide justification for continued research to better understand who may be more vulnerable to the impact of Internet violence.

Acknowledgements

Any well-conducted project is a team effort. Ours is no exception. We would like to thank our colleagues who have contributed to the Growing up with Media project. We are lucky to have such an amazing team, including:

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Questions?

Michele@ISolutions4Kids.org