

Growing Up With Media: Methodology Details

March 2010

Internet Solutions For Kids

1820 E. Garry Ave., Suite 105
Santa Ana, CA 92705

This is the second in a series of 8 bulletins summarizing findings from the Growing up with Media (GuWM) Study. GuWM is a 3-Wave longitudinal survey of 1,588 youth aged 10-15 years at Wave 1. Data were collected initially between August-September, 2006, again between September – December, 2007, and finally between August –December, 2008. The survey protocol was reviewed and approved by the Centers for Disease Control and Prevention Institutional Review Board (IRB).

Introduction

Youth violence is a significant public health issue that negatively affects individuals, families, and communities^{1,18}. According to the Centers for Disease Control and Prevention, youth violence represents a wide range of behaviors¹⁹. While some behaviors can cause more emotional harm than physical harm (e.g., bullying, slapping), others can result in serious injury or death (e.g., assault with a deadly weapon, robbery). Estimates of combined direct and indirect costs associated with youth violence in the United States are more than \$158 billion every year¹.

Research on the development of aggression and violence indicates that it occurs via a confluence of factors including individual (e.g., genetics), family (e.g., poor parent-child relationships), school (poor academic performance), peers, and community (e.g., neighborhood violence) characteristics²¹. Although exposure to media violence is not the single reason for youth violence, it probably is, as the American Academy of Pediatrics asserts, “the singly most easily remediable contributing factor”²². After an exhaustive review of available research, Anderson and colleagues concluded that “the scientific debate over whether media violence increases aggression and violence is essentially over” and underscored the need for studies identifying the “magnitude of media-violence effects on the most severe types of violence”²³.

Research compiled over the last 45 years points to the conclusion that exposure to TV violence is one of many factors contributing to violent behavior among young people^{13,24,25}. Research also suggests links between violent video games and aggressive behavior^{26,27}. Learning techniques used to teach and reinforce game behaviors are the same as those utilized by educators to teach and reinforce positive academic lessons. Graphic content centered on killing other players and characters immerses the player in a world of death, blood, and violence. The graphics in today’s video games are much more realistic than those used in earlier studies. A recent meta-analysis found that recently conducted studies report a larger correlation between playing violent video games and aggressive behavior than earlier research²⁷. With the rapid increases in access to the new, more realistic games there is a need to continue to examine the link between violence and video games including the access to these games through the Internet.

Gaps remain in our understanding of the relationship between media violence and aggressive behavior despite the prolific research activity that has taken place^{4-8,10,28}. First, despite substantial evidence of *short-term* effects of media violence on arousal, thoughts, and emotions^{12,13,29}, little research has considered the *long-term* link with seriously violent or criminal behavior^{14-16,30}, particularly among youths (as opposed to adults). Second, adult studies suggest that frequent pornography use among men who consume violent pornography may be more likely to perpetrate sexual aggression³¹⁻³³. How findings of adult studies translate to child and adolescent perpetration of sexually aggressive behavior is largely unknown. In a review of the literature, Benedeck and Brown conclude that additional research is necessary and that “perhaps the most ethical and safe route to studying the effects on children of exposure to televised pornography is epidemiological studies”³⁴. Third, the influence that exposure to violence in new media, particularly the Internet and cell phones, is largely unknown.

To address these issues, the *Growing up with Media* 2-year, national longitudinal study of 1,588 children was funded through a CDC cooperative agreement, ending in September, 2008. The aim of the study was to measure youth exposures to violent media and the subsequent expression of seriously violent and aggressive behavior. Preliminary findings suggest that

exposure to violence in new medias (e.g., hate sites on the Internet) is significantly related to the report of violent behavior. Emerging trends, such as violent video games on Nintendo Wii, the use of cell phones to harass and embarrass others through text or pictures, and exposure to violent x-rated mate-

Objectives

The primary objective of this study is to assess prospectively the role of violent media in involvement in violent behavior. More specifically, the objectives are:

- ◆ **Objective 1.** To examine the association between exposure to violent media and serious violent behavior, including victimization and perpetration resulting in injury.
- ◆ **Objective 2.** To assess specific aspects of media (i.e., type and content) that are likely to contribute to risk for violence.
- ◆ **Objective 3.** To identify individual and contextual factors that mediate or moderate the association between exposure to violent media and serious violent behavior, with particular attention to the potential moderating effects of gender and prior exposure to real-life violence.

Study Population

The sampling frame includes all members of the Harris Interactive Online poll who have reported they have a child under the age of 18 years living in their household. To keep member profiles as current as possible, every time a panelist completes a survey, they are asked to provide updated demographic information.

HPOL is not representative of any population in a statistical sense because respondents were not recruited by means of probability sampling.

Harris Poll OnlineSM (HPOL) is a multimillion-member panel of cooperative online respondents. It is the largest database of *individual* double opt-in respondents in the world. All panelists recruited into the Panel have completed a “confirmed” or “double” opt-in (COI/DOI) process. This process requires that each registrant confirm his or her desire to join the panel by clicking on a link within an email that is sent to the registrant’s email address upon registering. If the registrant clicks on the link within the email, he/she is added to the Harris Poll Online. If the registrant takes some other action or simply deletes the email, he/she is not added to the database. Panel participants are recruited through over 100 different sources. Many different diverse methods are leveraged to gain panelists including co-registration offers on partners’ websites, targeted emails

sent by online partners to their audiences, graphical and text banner placement on partners websites, trade show presentations, targeted postal mail invitations, TV advertisements, member referrals, and telephone recruitment of targeted populations. See

As the table below shows, the socio-demographic characteristics of Harris Poll Online U.S. panelists adhere closely to those of the U.S. general population and its online sub-population. For instance, 21 percent of Harris Poll Online panelists reside in the western portion of the U.S., whereas 22 percent of all U.S. adults and 23 percent of all U.S. adults who use the Internet

Table 1: Comparisons of demographic characteristics of HPOL members with the general and online populations

| Variable | HPOL Panel | U.S. General Population | U.S. Online Population |
|------------------|---------------------------|----------------------------------|---------------------------------------|
| REGION | | | |
| Northeast | 19% | 23% | 22% |
| Midwest | 23% | 23% | 24% |
| South | 37% | 32% | 31% |
| West | 21% | 22% | 23% |
| AGE | | | |
| 18-29 | 37% | 22% | 20% |
| 30-39 | 20% | 22% | 19% |
| 40-49 | 20% | 21% | 22% |
| 50+ | 23% | 35% | 39% |
| SEX | | | |
| Male | 46% | 48% | 49% |
| Female | 54% | 52% | 51% |
| RACE | | | |
| White/Other | 80% | 76% | 75% |
| Black | 12% | 12% | 11% |
| Hispanic | 8% | 12% | 13% |
| INCOME | | | |
| \$24,999 or less | 20% | 22% | 17% |
| \$25K - 34999 | 14% | 11% | 11% |
| \$35K - 49999 | 18% | 16% | 13% |
| \$50K - 74999 | 22% | 20% | 24% |
| \$75K - 99999 | 13% | 13% | 17% |
| \$100K+ | 13% | 18% | 18% |
| SOURCE: | <i>Harris Interactive</i> | <i>Current Population Survey</i> | <i>Harris Poll Telephone Research</i> |

Subjects for this study include parents/guardians of children ages 10-15 and youths between the ages of 10-15 at Wave 1. Enrollment in the study requires use of the Internet by the youth and membership of an adult in the household in the Harris Interactive Online Panel. We expect that the sample will be representative of Internet-using young people. 1,588 child-caregiver pairs participated in the Wave 1 survey. Demographic characteristics of these participants are depicted in Table 2 below.

Inclusion and Exclusion Criteria

The survey was available in English. Therefore, all survey respondents were required to be able to understand and read English. Moreover, all survey respondents were required to be able to follow instructions and complete

the self-administered web-based survey without special assistance.

Inclusion criteria for adults included:

- ◇ Adult membership in the Harris Poll Online (HPOL)
 - Able to read and respond to the questionnaire (English speaking);
 - Internet access anywhere (i.e., at home, another person's house, school, library, or elsewhere)
 - Informed consent for self and child
- Equally or most knowledgeable adult in household about child's media use.

Inclusion criteria for youth included:

- Young person ages of 10-15;
- Able to read and respond to the questionnaire (English

Table 2: Youth and household characteristics

| <i>Youth and Household Characteristics</i> | <i>Wave 1 (n=1,588) % (n)</i> | <i>Wave 2 (n=1,206) % (n)</i> | <i>Wave 3 (n=1,159) % (n)</i> |
|--|-----------------------------------|-----------------------------------|-----------------------------------|
| Sex | | | |
| Female | 49.9 (792) | 49.8 (600) | 49.5 (574) |
| Male | 50.1 (796) | 50.3 (606) | 50.5 (585) |
| Age^b | | | |
| 10 | 17.5 (278) | n/a | n/a |
| 11 | 15.4 (244) | 15.8 (191) | 1.5 (17) |
| 12 | 16.9 (268) | 15.8 (190) | 15.3 (177) |
| 13 | 14.9 (237) | 17.2 (207) | 16.8 (195) |
| 14 | 17.9 (284) | 14.8 (179) | 17.3 (200) |
| 15 | 17.4 (277) | 16.2 (195) | 14.1 (163) |
| 16 | n/a | 17.4 (210) | 17.6 (204) |
| 17 | n/a | 2.8 (34) | 17.0 (197) |
| 18 | n/a | n/a | 0.5 (6) |
| Hispanic ethnicity | | | |
| Yes | 12.9 (205) | 11.9 (143) | 11.7 (136) |
| No | 85.5 (1358) | 86.8 (1047) | 87.3 (1012) |
| Decline to answer | 1.6 (25) | 1.3 (16) | 0.9 (11) |
| Race | | | |
| White | 72.5 (1152) | 74.8 (902) | 73.9 (857) |
| Black or African American | 13.1 (208) | 11.8 (142) | 12.4 (144) |
| Asian | 1.6 (25) | 1.6 (19) | 1.7 (20) |
| Native Hawaiian/Pacific Islander | 0.4 (6) | 0.6 (7) | 0.3 (3) |
| Native American/Alaskan Native | 0.8 (13) | 0.9 (11) | 0.9 (10) |
| Mixed racial background | 7.2 (115) | 6.7 (81) | 7.2 (84) |
| Other | 3.2 (50) | 2.6 (31) | 2.7 (31) |
| Decline to answer | 1.2 (19) | 1.1 (13) | 0.9 (10) |

speaking)

- Internet use within the previous 6 months by youth;
- Internet access anywhere (i.e., at home, another person's house, school, library, or elsewhere);
- Youth living in the household at the time of the survey; and
- Informed assent.

Sampling

The sampling frame was randomly identified subset of all members of the Harris Interactive Online Panel who indicated they had a child under the age of 18 years living in the household and were residents in the United States. The sample was a mix of newer panelists and older panelists. In most cases, panelists are not contacted to participate in a survey more than once every 10 days.

The sample was drawn and/or released in stages. xxxx emails were sent as we are targeting HPOL members who have indicated they have children. Emails were released in batches to ensure that the response rate and incidence rate could be monitored, and the sample was calibrated as needed. By doing so, we were able to reach our target sample size efficiently while meeting our sampling goals (e.g., half boys and half girls), and were sure not to overshoot and end up with more than the intended number of recruited households.

An area of caution when undertaking Internet-based surveys concerns the integrity of the data. In some forms of online surveys, respondents can take a survey as many times as they wish and/or they can choose the subject of the survey. Both of these activities can distort the results. Harris Interactive randomly selects respondents from HPOL panel based on the population of interest.

- * Their surveys are password protected so that respondents can take the survey only once.
- * Respondents cannot choose the subject of the surveys they are offered the opportunity to participate in (although they may, of course, choose not to take a particular survey.)

These practices substantially reduce the error associated with online surveys. The HPOL panel management policies specify that panel members can only receive one survey invitation every ten days unless the panelist has agreed to take additional surveys as part of one of Harris Interactive's specialty panels.

The study was conducted at the Internet login location of the participant's choice. Possibilities include but were not limited to the participant's house, a friend or family's house, the library, school if personal activities are allowed, or work if personal activities are allowed.

Online sampling and data collection was utilized to minimize costs and maximize the confidentiality of the information provided by the respondents. Web-based data collection has been

found to provide greater self-disclosure for sensitive topics than found with telephone surveys²¹⁻²².

Retention rates

Wave 2 of the longitudinal study was conducted between November 2, 2007 and January 10, 2008. The online survey was completed by 1,206 pairs of parents/guardians and their children who had completed the Wave 1 study. The follow-up rate was 76%. Differential follow-up by demographic characteristics was not apparent. Wave 3 was conducted between August 29 and November 25, 2008. 1,159 households completed the survey, yielding a 73% follow up rate from Wave 1. Differential follow-up by demographic characteristics from Wave 1 was not apparent.

Enrollment

Identification of eligible participant will be a multi-step process:

- ◆ **Step 1.** A randomly selected number of Harris Poll OnLine (HPOL) members who have indicated they have a child under the age of 18 years living in the household and are a US resident receive an invitation email. The email will be formatted according to the typical invitation email sent to members for various surveys. The email will contain a brief description generally about the survey topic and have a link to the survey.

Those who do not respond to the first invitation will receive a reminder invitation 2 days later. A second and final reminder is sent out 3 days after the second reminder.

- ◆ **Step 2.** Participants will click on the link and be directed to a screening document and a mini-survey that includes general demographic questions as well as four general media questions. Eligibility questions include questions about the child's sex and age to determine eligibility. [The general media questions are included because all members who click on the invitation email link and answer the mini-survey are regarded as having participated in a HPOL survey – regardless of eligibility for Growing up with Media. This encourages people to click on the invitation every time they are invited. If instead, some of the time they were asked to complete the survey and other times not, the likely participation at this first, eligibility determination step would decrease, thereby biasing the results.] The mini survey is embedded in the survey document at Section 1340, Q1340 – Q1380. The purpose of this survey is to allow all responders to the invitation email to earn HiPoints as per the protocol of HPOL surveys.

Specifically eligibility will be:

- Step 2a.** The presence of a child in the household between the ages of 10 and 15 will be confirmed. If there

is more than one child within the household who is eligible, one will be randomly chosen by the computer assisted telephone program used by the surveyor.

Step 2b. Respondents (both the adult and the child) are required to be able to understand English. This is a necessary restriction based upon budgetary constraints. Additional languages would require multi-lingual surveyors, as well as additional programming and web site size.

Step 2c. Internet access for both the caregiver and the child and use by the child within the previous 6 months, will be confirmed. Location of 'log-in' will not be restricted so that a participant may complete the survey at home, at a library, at school, or any other place with which they are comfortable. A recent national survey indicates that 85% of young people who use the Internet use the Internet at home, 73% have accessed the internet at school, and 60% have accessed the internet 'somewhere else'¹¹. Similarly, 81% of adults who use the Internet use the Internet at home³⁰. We are not restricting participation in this study to those who have access to the Internet at home, as this would cause the survey not to include the 15% of young people and 19% of adults who access the internet elsewhere.

Step 2d. The child or adolescent will be required to live in the household at least 50% of the time.

- ◆ **Step 3.** Respondents who meet the eligibility criteria are then directed to a screen that provides a brief explanation of the study and asked whether they are interested in participating.

Those who are not qualified will be directed to a thank you screen; they will not know that there is another survey that they were being considered for or that they were not eligible. In accordance with HPOL policies, they will receive HIPoints for completing the mini-survey.

- ◆ **Step 4.** Participants who agree to participate will be directed to the Growing up with Media Survey, which begins with the online informed consent form. Those who decline will be redirected to the thank you page, where they will be notified of the number of HIPoints received for completing the mini-survey.
- ◆ **Step 5.** When the adult is finished with his or her section of the survey, the adult will be asked to have the child complete his or her survey. Two options will be offered: 1) if it is convenient for the child to complete the survey at that time and he or she can do so in a private space, the adult will be told to have the child come to the computer and complete the survey; 2) if it is inconvenient, the adult will be told to forward the email that contains the link to

the survey web site to the child so that he or she can complete the survey at a later time.

- ◆ **Step 6.** The child will access the youth survey section by providing information that confirms his or her identity (i.e., age and sex). After reading about the survey and providing assent, the child will complete the online survey.

Households that agreed to participate but did not complete the survey received an email reminder 2 days after they agreed to participate and again 3 days later if they still had not completed the survey.

At any time during the survey, the participant had the option to pause the survey and return to it at a later time. It was emphasized to the child that this option could be utilized if he or she no longer felt that the space in which the survey was being completed was private.

Incentives

As a thank you for their time, the child received a \$15 gift certificate for Target and the adult received a \$10 check following the completion of interviews at T1 and T2. Following the completion of the interview at T3, the child received a \$25 store gift certificate from Target and the adults received a \$20 check. Harris Interactive was responsible for remitting these incentives as they had the contact information. Participants received their incentives 6-8 weeks after completing the survey and sooner when possible. In the event that a caregiver chose to participate and the child subsequently declined, the adult still received \$10 for their time. These incentives were in addition to what adult HPOL members typically receive whenever they complete an online survey as part of the poll. Members have access to a loyalty and retention program called HarrisPollOnline Rewards. This program has been carefully designed to increase the activity levels of the HPOL panelists and to demonstrate our appreciation for the time they take to participate in survey research. HarrisPollOnline Rewards has two key features:

- ◆ HIpoinits offers Harris Poll Online panel members "points" for select surveys they complete. When they accumulate enough points in their online "accounts," panelists can redeem them for products or gift certificates.
- ◆ Hlstakes is a bi-monthly sweepstakes available to all survey respondents.

To promote retention of the Growing Up With Media panel, participants were contacted over the course of the following 12 months. Specifically:

- ◆ Four months after survey completion, households received a certificate that was personalized to the parent and child and a letter thanking them for their participation. They were also asked to update their contract information if it has or was anticipated to change. They

were able to update their information one of three ways: with a prepaid postage postcard included in the mailing, by sending an email, or calling the study 1-800 number.

- ◆ Ten months after survey completion, households received a mailing alerting them of the T2 survey and asking for an update on any changed contact information. Again, three ways to update information were offered: with a prepaid postage postcard included in the mailing, by sending an email, or calling the study 1-800 number. A nominal amount (\$2) will be included to encourage response.
- ◆ 11 months after survey completion, adults received an email alerting them to the upcoming T2 survey.

At the time of the second survey, an email invitation was sent to the participants. Two email reminders (when needed) were sent. Households that did not respond to the survey invitation email additionally received reminder phone calls 2-3 weeks post-invitation. Up to 8 attempts were made to contact the household. The shorter T2 surveys took an average of 10 minutes per child and 5 minutes per caregiver.

Panel retention efforts between T2 and T3 followed the same protocol. Participants who did not respond at T2 were still contacted for participation at T3 unless they told the study that they were withdrawing, in order to maximize data. The T3 surveys were similar to those in year one and took estimated 20 minutes for each child and 5 minutes for each caregiver.

Procedures

Focus groups

The focus group was conducted March of 2005 in **Rochester**, New York. We conducted two focus groups, one with boys and the other with girls, with 5-6 participants in each. Participants were in grades 7-8 and required to have at least some Internet exposure weekly (i.e., at least 2 hours in the past week).

Participants in the focus groups were recruited using one or both of the following methods:

1. Using Harris Interactive's Harris Poll Online (HPOL) database, emails will be sent out to Rochester area members (parents) who are known to have children of the target age in their household. The email will ask if their children would be interested and able to take part in a focus group/research study. Once agreed, Harris Interactive will then place a phone call to screen both the parent and the child.
2. If additional respondents are required that cannot be obtained using the HPOL database, Harris Interactive will retain the services of an outside recruiting vendor. Using their own database, the outside vendor will telephone potential respondent households and

screen both the parents and the children using the same screening criteria developed by Harris Interactive and the client.

In addition to general Internet exposure, we will ask about the following during screening, so that participants represent a range of the following experiences:

- 1 Time spent online (excluding email) in past week: Light (2-7 hours), Medium (8-14 hours), Heavy (15+ hours) Users;
- 2 Where they usually access the Internet: home vs. not home (school, library, etc.);
- 3 Internet Service Provider (AOL vs. other);
- 4 Parental rules on Internet use or Blocking software on computer they use to access the Internet (Y/N); and
- 5 Typical Internet activities: frequent vs. infrequent use of computer games, chat rooms, and visiting websites.

Households who agree to participate will receive a packet that includes a parental consent form, a child assent form, and a homework assignment for the child. The homework is intended to help children think about their media consumption so that they can more fully participate in the focus group discussions. Children will be told to bring the completed homework with them to the focus group for reference.

It is estimated that the focus group will take approximately an hour and twenty minutes. To thank focus group participants for their time, children will receive \$40. Reminder calls will be made to respondents the day before the research is scheduled to be conducted.

There are two goals of the focus group: confirming the language of items that are potentially trend-specific (e.g., names of current violent computer games), and exploring issues related to logistics and panel retention (e.g., what reasons do youth find compelling to participate in a project like this). The videotapes will be sent to Dr. Ybarra along with the results of the focus group. Once the findings have been integrated into to survey design, the tapes will be destroyed.

Pilot survey

We also propose to conduct a pilot survey with 100 randomly identified households. There are three goals of the pilot survey: 1) to test the survey instrument, 2) to test the recruitment and survey completion methodology, and 3) to confirm the hypothesized prevalence rates of eligible households. Data will be collected only once for the pilot, with no follow-up data collection. Procedures will thus include a total of \$25 incentive for participating households, and will include random digit dialing of households, online log in, consent of the adult, subsequent online assent from the child, and completion of the surveys online.

We anticipate changes will be made to the questionnaire and possibly the methodology based upon findings of the pilot survey, thus disallowing the pooling of pilot data (N=100) with that collected in the first year of the full-study (N=1400). If however, we determine that the survey instrument used in the pilot study is sufficiently similar to that used in the full study, we will pool the pilot survey data (N=100) with the full survey data (N=1400) to maximize data collected. If this happens, we will not follow up with pilot study participants in Year 2 of the full study and subsequent analyses will be restricted as such. These pilot data will not take the place of people who provide multiple waves of data.

Longitudinal (full) survey

Recruitment for the full survey is proposed to begin in late May-early June, 2006. Based upon findings from the pilot survey, we will be recruiting participants from the Harris Poll Online (HPOL), Harris Interactive's online panel. Recruitment and completion of the Wave 1 survey is anticipated to take approximately four weeks to complete. We anticipate the child survey to be completed in an average of 20 minutes. This will be longer for some young people depending on their answers and need for further detailed information. The caregiver survey will be completed in an average of 5 minutes. Data collection through the Internet is expected to take no longer than 1 month beyond the end of telephone recruitment. Table 1 details the proposed timeline over three years. Data collection through the Internet is expected to take no longer than 1 month beyond the end of recruitment.

Consent Process

For the focus groups, informed consent will be gathered from both the adult and the child prior to the groups. Parents who agree to their child's participation will be told that consent forms for them and their child, and a homework guide for their child, will be sent to their home. Parents will be told that they will need to read and sign the consent form prior to their son's or daughter's participation in the discussion group. They are told that the form needs to be read, signed and brought with them when their child comes to participate in the focus group. Without the consent form, we cannot accept their child into the group.

When the child arrives at the location for the focus group, a research assistant will go through the informed consent documents with him or her, making sure the child understands the content and answering any questions he or she may have. The same procedure will be conducted with adults who have not completed the consent form. Each will receive a copy of the informed consent that they sign.

For the online pilot study and the online longitudinal study, we are requesting a waiver of documentation of informed consent because the study involves minimal risk and a common noncon-

sent procedure (clicking on 'I agree' to indicate agreement with online 'terms') is involved. The CDC IRB "C" has determined that this study represents minimal risks to its participants. Informed consent will be required for the adult and child online before each of the three surveys. The CDC IRB will approve the final consent forms. Phone numbers for the Primary Investigator and the IRBs will be listed in case participant has a question or would like to discuss the study or any concerns.

Step 1. The adult participant will be asked for his or her consent on the Internet prior to completing the survey online. This consent reflects parental consent to participate in the survey and also permission for the child to participate in the survey.

Step 2. The child participant will be asked to assent to study participation on the Internet prior to beginning the online survey (i.e., the first pages of the survey will be the assent form).

The Flesch-Kincaid reading levels of the child and adult consent forms are 5.9 and 7.7, respectively.

We believe informed consent and assent can be obtained online. Providing consent is very similar to other activities adults regularly engage in online. For example, to purchase online travel, adults are asked to read a contract and indicate that they have read and agree with the terms and conditions. Indicating that they agree, by a "click" represents a legally binding contract even though there is no written document. We are requesting a waiver of documentation of informed consent however, because this action, while suggesting documentation of informed consent, it is not yet recognized as documentation of consent, permission, and assent by the Office of Human Research Protections (OHRP), DHHS.

The first survey (T1) will take place immediately or shortly after recruitment among members of the Harris online Panel, who have actively joined HPOL to take surveys. When participants' qualifications and interest in participating have been confirmed. When the adult indicates they are interested in participating, the next screen will provide the consent information. The adult will be required to click on 'I agree'. An email and toll-free number will be available so that they contact the PI if they have questions or concerns. After providing consent, the adult participant will complete the survey, which includes questions about demographic characteristics and the child's behaviors. After completing their part of the questionnaire, they will be told that the adult survey has ended and that it is time for the child to complete the youth survey. The adult will be told that if it is convenient for the child and he or she can complete it in a private space now, to have the child come to the computer to complete the survey. Otherwise, the adult will be told to exit the survey and forward the survey link by sending an email to their child. The importance of privacy will be stressed, and caregivers will be encouraged to ensure that the child completes the survey in an unmonitored location. Children will also have the option to pause the survey and begin again when

[Accessing the data collection website](#)

Adults

The first survey (T1) will take place shortly after recruitment, when participants will be invited via email message to participate in an online survey (T1). Email invitations will be sent to parents/guardians. Adults will click on an embedded link that takes them to a mini-online survey, where their eligibility is determined. Those who are eligible and agree to participate, will then proceed to the first page of the adult survey. The first part of the instrument will contain the consent information. The adult will be required to click on 'I agree'. An email and toll-free number will be available so that they can contact the PI if they have questions or concerns. After providing consent, the adult participant will complete the survey, which includes questions about demographic characteristics and the child's behaviors. After completing their part of the questionnaire, they will be told that the adult survey has ended and that it is time for the child to complete the youth survey. The adult will be told that if it is convenient for the child and he or she can complete it in a private space now, to have the child come to the computer to complete the survey. Otherwise, the adult will be told to forward the survey link by sending an email to their child. The importance of privacy will be stressed, and caregivers will be encouraged to ensure that the child completes the survey in an unmonitored location.

Children and adolescents

To access the youth portion of the survey, the child will first be asked to enter his or her sex and age. This information will be used to confirm the child's identity. Next, the child will see an introductory screen that has the detailed assent information. Those who agree to participate will be directed to the survey pages. The first screen includes a paragraph reinforcing the importance of being able to answer the questions freely and being in a private space. Instructions are offered on how to log off if a later time is more convenient for the child.

[Online customer support](#)

Harris Interactive maintains an online Survey Help Desk to assist with survey completion. Participants can submit questions online to the Survey Help Desk, which typically follows up within 24 hours.

[Measures](#)

Demographic characteristics of child and household

Based upon previous surveys related to Internet health^(12,13), various demographic indicators will be collected from the child and the adult. Youth will be asked to provide their sex, age, grade, race, and ethnicity at Wave 1. Caregivers will provide the household composition, household income, marital status, caregiver age, highest household educational attainment, number of people in the household, and lifetime history of adult criminal conviction, during their online survey.

Externalizing behaviors

We operationalized *seriously violent behavior* as aggressive acts identified by the U.S. Department of Justice as seriously violent^{1,31-33}: 1) behavior likely resulting in murder (i.e., stabbing or shooting someone); 2) aggravated assault (i.e., threatening someone with a weapon; attacking someone resulting in the need for medical care); e) robbery (i.e., using a knife or gun or some other kind of weapon like a bat to get something from someone else); and 4) sexual assault (kissing, touching, or doing anything sexual with another person when it was not wanted by that person).

Delinquent behavior was operationalized as non-personal, externalizing behaviors. Nine behaviors were included, several based upon the DSM-IV definition of conduct disorder: 1) banged up or damaged something that did not belong to you; 2) started a fire on purpose, where you wanted something to get damaged or destroyed; 3) broken into someone else's house, building or car; 4) lied to someone to get something that you wanted, or to get someone to do you a favor, or to get out of doing something you didn't want to do; 5) taken something that was valuable, like shoplifting or using someone else's credit card, when no one was looking; 6) stayed out at night even though you knew your parents would not want you to; 7) run away from home and stayed away overnight; 8) ditched / skipped school; and 9) hurt an animal on purpose, like cutting off its tail, hitting or kicking it, or killing it for fun.

Offline aggressive behavior is measured with six different behaviors: 1) shoved, or pushed, or hit or slapped another person your age; 2) threatened to hurt a teacher; 3) been in a fight in which someone including yourself was hit; 4) gotten into a fight where a group of your friends were against another group of people; and relational aggression - 5) excluded someone from your group, 6) spread a rumor about someone.

Online aggressive behavior is a combination of harassment and sexual solicitation experiences based upon those fielded in the first Youth Internet Safety Survey [1]: 1) rude or mean comments; 2) spread rumors about someone else; 3) made aggressive or threatening comments to someone; 4) tried to get someone to talk about sex when they did not want to; 5) tried to get someone to do something sexual when they did not want to, and 6) ask someone online about really personal sexual information when they did not want to give it.

Involvement in each behavior described above was captured on a Likert scale. Within each behavior type, a summation variable was created to reflect the intensity of involvement in the behaviors in question (seriously violent behavior score range: 0-25, Wave 2 Cronbach's alpha = 0.xx, Wave 3 Cronbach's alpha = 0.xx; delinquent behavior score range: 0-45, Wave 2 Cronbach's alpha = 0.95, Wave 3 Cronbach's alpha = 0.xx; offline aggression score range: 0-30, Wave 2 Cronbach's alpha = 0.89, Wave 3 Cronbach's alpha = 0.xx; online aggression score range: 0-30, Wave 2 Cronbach's alpha = 0.96, Wave 3 Cronbach's alpha =

0.xx).

Exposure to Violent Media

Violent computer/video games and television/movies. Questions regarding the playing of violent Internet/computer games will be based upon those used by Rideout and colleagues²⁰ for a paper and pencil survey of technology used by young people between the ages of 8-18. First, the respondent will be asked about the types of Internet games played the previous day; examples are provided for each type. Genres include: action or combat, adventure, arts and crafts, classic games or gambling, educational, kids, popular culture or lifestyle, reflex, role playing or interactive fiction or fantasy, simulation or strategic planning, sports or competition, or something else. The youth respondent will be asked to indicate whether he or she usually plays games alone or with someone else. Similar questions will be asked about exposure to violent video games (e.g., Nintendo, game cube, play station, etc.). Questions about exposure to violent television and movies will also be modeled after Rideout and colleagues²⁰ survey, asking about the types of shows watched and frequency of exposure.

Violent web sites. Youth respondents will also be asked about their exposure to violent web sites. Specifically, based upon the Youth Internet Safety Survey¹³, young people will be asked whether they have purposefully entered, in the previous year: a hate web site, a death web site, a satanic web site, or any other disturbing web site. For those who respond positively, they will be asked how often they visit the web site.

Violent sexual material. Each respondent will be asked whether they have ever lied about their age to gain access to a web site; this is a behavior frequently taken to gain access to age-controlled sites such as those with pornographic material^{16, 35}. Next, young people will be asked whether they have ever seen a naked person while on the Internet. They will then be asked whether they have purposefully entered an X-rated web site¹³. Research on the effects of exposure to pornography often make distinction between violent and non-violent material because findings indicate that violent sexual material may be associated with a stronger relationship to sexually aggressive behavior. For example, a review of the pornography research conducted by Malmuth, Addison, and Koss (2000) concludes that there is a consistently significant relationship between sexually aggressive behavior and pornography consumption, and that the association is especially strong for violent pornography. Linz and colleagues (1984) report desensitization of violence among viewers of violent sexual material and that violent pornography may promote sexually aggressive behavior (Donnerstein & Linz, 1986) in laboratory settings. Results of a survey of college males suggest that these behavioral findings are especially true for young men who have more permissive attitudes towards violence in general (Demare, Briere, & Lips, 1988).

Internet use

A young person's Internet use may affect the relationship between exposure to violence and violent behavior because it is related to the person's time 'at risk' for exposure, as well as their aptitude for gaining exposure to restricted web sites. Young people will be asked to estimate the average amount of time they spend online in a typical day and the average number of days in a typical week. They will also be asked to indicate the activity for which they use the Internet most (e.g., emailing, Instant Messaging, playing games, etc.). Youth will also be asked to indicate their tenure using the Internet, and from where they are logging into the Internet most frequently (e.g., home, library, school, another person's house) to participate in the survey.

Scholastic functioning

As reported in the US Surgeon General's Report on Youth Violence (1999), poor attitude towards school and school failure has been linked to youth aggression and violent behavior. We have therefore included questions such as, "How well do you like school?"

Anger and aggressiveness

Levels of anger and aggression are related to one's violent behavior³⁶⁻³⁷. The State-Trait Anger Expression Inventory (STAXI-CA) T-Anger scale is a 10-item assessment that measures a child's experience, expression, and control of anger (Spielberger, in press). This subscale has very high internal consistency ($\alpha=.70$), and acceptable test-retest reliability (Spielberger, in press). (Cronbach's $\alpha = 0.xx$).

Victimization experiences

Victimization may be related to one's susceptibility to victimizing others. They will also be asked whether they have been the target of peer victimization, including having something stolen from them, and being physically harmed by another person or by a group of people¹³. Events during which young people have witnessed violence will be queried using questions from the Juvenile Victimization Questionnaire³⁸. It was recently normed in a national sample of youth between the ages of 10 and 17 years (N=2,030). Strong internal consistency and test-retest reliability are reported.

Limitations of the Study

The main limitation of the proposed study is the caregiver population. The study will recruit a sample of parent/caretakers and youth who have access to the Internet because violent exposure online is a primary exposure of interest. While the proportion of adults and children who have access to the Internet is rapidly increasing, children who live with parents who access the Internet may be different than those who live with caregivers who do not. Given the rapid development in this area, the extent of the bias is difficult to assess but is likely to be minor.

The GuwM Study was funded by a Cooperative Agreement with the Centers for Disease Control and Prevention (U49/CE000206). Points of view or opinions in this bulletin are those of the authors and do not necessarily represent the official position of policies of the Centers for Disease Control.

Internet Solutions for Kids

Internet Solutions for Kids is a non-profit research organization in the US centered on understanding the impact on and opportunities for adolescent health represented by new technologies. Our mission is to promote new and innovative methods that improve the health and safety of young people. We believe a multi-pronged approach is necessary, with research alongside active youth education and support.

Other GuwM Publications

Other bulletins in this series:

- ◆ Media Use Patterns
- ◆ Exposure to Violent Media
- ◆ Exposure to X-rated Material
- ◆ Problem and Aggressive Behavior
- ◆ Victimization
- ◆ Mental Health Indicators
- ◆ Household Rules

Other publications:

- ◆ [list peer-reviewed publications here]

Please check our website periodically for more publications

Acknowledgements

This bulletin was prepared jointly by: Kimberly Mitchell, Michele Ybarra, and Tonya Prescott

For Further Information

For more information about this bulletin or the GuwM Study, contact:

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

P: 1 877 302 6858 ext. 801

F: 1 877 362 1629

www.is4k.com