

# Growing Up With Media: Media Use Patterns

March 2010

## Internet Solutions For Kids

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

*This is the first in a series of 8 bulletins summarizing findings from the Growing up with Media (GuWM) Study. The purpose of the series is to provide a comprehensive overview of the descriptive findings from this longitudinal study ... [ADD TEXT HERE]*

Today's youth are growing up in a media rich environment. Media exposure ranges from the more passive watching of television and listening to music to the more interactive use of video games, the Internet, and text messaging. The *Growing up with Media Study* confirms that today's youth are using a wide range of media technologies, with usage patterns remaining fairly stable over time. We asked youth about six specific types of media use:

- ◆ Playing computer games or video games
- ◆ Playing Internet games
- ◆ Watching television
- ◆ Listening to music
- ◆ Going on the Internet
- ◆ Text messaging

As seen in the figure below, the majority of youth report usage of all media types queried. Given its usage requirement for eligibility to participate in the study, all youth were Internet users. Watching television and listening to music were endorsed by almost all youth at each wave of the study. Although still

### What is Growing up with Media?

- ◆ A longitudinal online survey of a representative national sample of 1,588 young people, ages 10 through 15 at baseline, who use the Internet regularly.
- ◆ "Regular Internet use" was defined as using the Internet at least once in the past 6 months from any location.
- ◆ Parents and guardians first completed a short online survey; approximately 5 minutes.
- ◆ Parents were a member of the Harris Poll Online (HPOL) opt-in panel and residents of the U.S.
- ◆ With parental consent, youth completed an online survey; approximately 25 minutes.
- ◆ Youth sample was stratified based on age and sex.
- ◆ Adult participants received \$15 and youth a \$20 gift certificate.
- ◆ Data were collected across three time points:
  - Wave 1: August – September, 2006
  - Wave 2: September – December, 2007
  - Wave 3: August – December, 2008
- ◆ Data were weighted to match the U.S. Population of adults with children between the ages of 10 and 15 years.
- ◆ Propensity scoring was applied to adjust for the adult's (i.e., recruitment target) propensity to be online and in HPOL.

A full report on the methodology of the GuWM study is posted online at: [\[url for Methodology Bulletin\]](#).

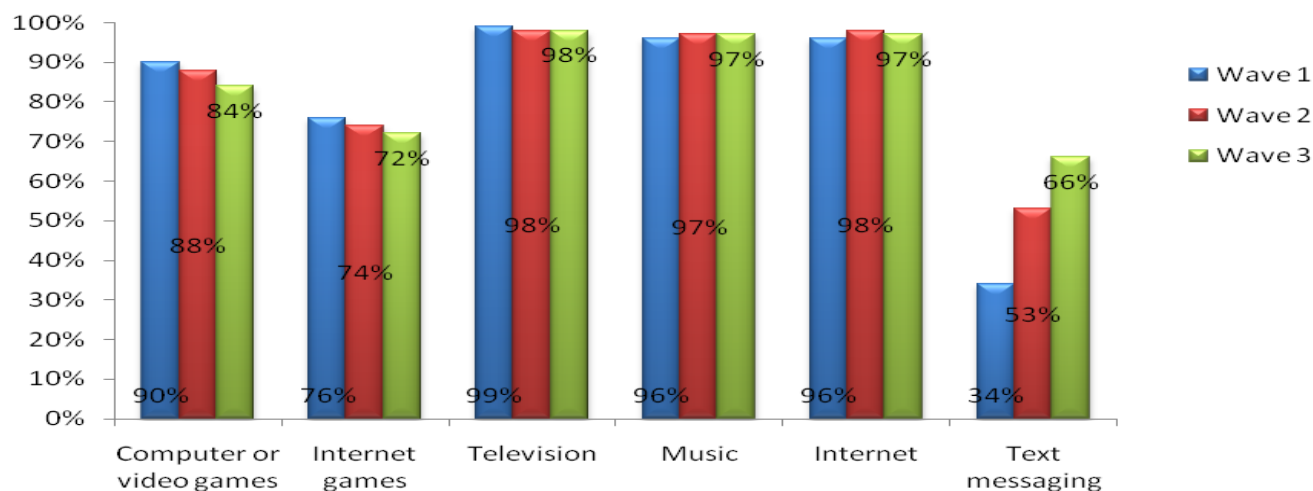


Figure 1. Youth reported type of media usage

games, and Internet games were somewhat less prevalent. Usage of this media showed slight declines over time. Use of text message was the least common but showed large increases over time – from 34% at Wave 1 to 66% of youth at Wave 2. This is not surprising given the rapid expansion of cell phone usage and text messaging technology in the same time period (cite Pew).

### ***Boys and girls use media in similar ways except for playing video games and text messaging.***

Boys and girls were equally likely to report use of Internet games with the exception of Wave 2 with 80% of boys and 68% of girls reporting use of this media ( $p < .01$ ). Across all time points girls were more likely than boys to reporting text messaging:

- ◆ Wave 1 – 41% of girls and 26% of boys ( $p < .001$ )
- ◆ Wave 2 – 63% of girls and 43% of boys ( $p < .001$ )
- ◆ Wave 3 – 73% of girls and 59% of boys ( $p < .01$ )

<i>Playing Internet games</i>	<i>Wave 1 (n = 1,576)</i>	<i>Wave 2 (n = 1,187)</i>	<i>Wave 3 (n = 1,149)</i>
<u>Days per week</u>			
0 days	24	27	27
1-2 days	36	35	37
3-4 days	21	18	15
5-6 days	8	9	7
7 days	11	11	13
<u>Time per day</u>			
0 minutes	25	28	29
1 – 30 minutes	32	31	31
31 minutes – 1 hour	23	22	19
More than 1 hour – 2 hours	12	11	12
More than 2 hours to 3 hours	4	4	4
More than 3 hours	4	4	5

## **Playing video games**

### ***Kids typically play video games in a common room or their own bedroom.***

Youth play video games in a variety of locations, however, most youth play games in a common room:

- Wave 1 – 52%
- Wave 2 – 38%
- Wave 3 – 48%

...or in their own bedroom

- Wave 1 – 31%
- Wave 2 – 26%
- Wave 3 – 31%

Less commonly reported were other places such as a private room (6-12%), another person's home (2-5%), at school (<1 –

<i>Text messaging</i>	<i>Wave 1 (n = 1,576)</i>	<i>Wave 2 (n = 1,179)</i>	<i>Wave 3 (n = 1,149)</i>
<u>Days per week</u>			
0 days	66	49	35
1-2 days	11	13	12
3-4 days	6	7	6
5-6 days	4	6	7
7 days	12	25	40
<u>Time per day</u>			
0 minutes	66	51	36
1 – 30 minutes	19	26	24
31 minutes – 1 hour	8	7	14
More than 1 hour – 2 hours	4	6	9
More than 2 hours to 3 hours	3	3	5
More than 3 hours	2	7	12

### ***About one-fourth of youth play video games rated 'Mature'.***

We asked youth about the ratings on the games they play.

Most youth are playing “T” (Teen) rated games:

Wave 1 – 64%

Wave 2 – 61%

Wave 3 – 70%

...or “E” (Everyone)

Wave 1 – 61%

Wave 2 – 58%

Wave 3 – 54%

A notable minority do play “M” (Mature) rated games however:

Wave 1 – 19%

Wave 2 – 24%

Wave 3 – 28%

Very few youth reported playing games rated: “EC” (Early Childhood: 1-3%), “AO” (Adults Only: 1-2%), or Rating Pending (1%).

<i>Playing computer or video games</i>	<i>Wave 1 (n = 1,576)</i>	<i>Wave 2 (n = 1,187)</i>	<i>Wave 3 (n = 1,149)</i>
<u>Days per week</u>			
0 days	10	13	16
1-2 days	27	30	33
3-4 days	23	23	20
5-6 days	17	15	12
7 days	22	19	19
<u>Time per day</u>			
0 minutes	12	16	18
1 – 30 minutes	22	25	24
31 minutes – 1 hour	25	25	23
More than 1 hour – 2 hours	22	19	21
More than 2 hours to 3 hours	9	9	7
More than 3 hours	9	8	7

<i>Watching television</i>	<i>Wave 1 (n = 1,576)</i>	<i>Wave 2 (n = 1,189)</i>	<i>Wave 3 (n = 1,149)</i>
<u>Days per week</u>			
0 days	1	0	1
1-2 days	5	6	8
3-4 days	10	12	12
5-6 days	17	14	15
7 days	67	67	64
<u>Time per day</u>			
0 minutes	1	1	2
1 – 30 minutes	4	6	6
31 minutes – 1 hour	14	14	17
More than 1 hour – 2 hours	32	34	34
More than 2 hours to 3 hours	24	22	19
More than 3 hours	26	22	22

There were no differences between boys and girls for watching television or listening to music. Across all time points boys were more likely than girls to play computer or video games:

- ♦ Wave 1 - 96% of boys and 84% of girls ( $p < .001$ )
- ♦ Wave 2 - 97% of boys and 79% of girls ( $p < .001$ )
- ♦ Wave 3 - 95% of boys and 74% of girls ( $p < .001$ )

<i>Listening to music</i>	<i>Wave 1 (n = 1,576)</i>	<i>Wave 2 (n = 1,189)</i>	<i>Wave 3 (n = 1,149)</i>
<u>Days per week</u>			
0 days	4	2	2
1-2 days	15	9	11
3-4 days	13	12	12
5-6 days	18	16	15
7 days	49	61	61
<u>Time per day</u>			
0 minutes	6	3	2
1 – 30 minutes	20	19	17
31 minutes – 1 hour	23	20	20
More than 1 hour – 2 hours	22	22	26
More than 2 hours to 3 hours	13	14	14
More than 3 hours	16	22	20

### ***Media use patterns change with as youth grow older.***

There were significant age differences in usage of practically all media types at Wave 1 and Wave 2:

- ♦ Computer, video, and Internet game players were younger than non-game players.
- ♦ Watching TV, listening to music, and text messaging was more common among older youth.

By Wave 3 age differences were only apparent for:

- ♦ Playing computer and video games (mean age for players was 14.4 years vs. 15.1 years for non-game players)
- ♦ Text messaging (mean age 14.8 years versus 13.9 years for non-text messengers).

<i>Going on the Internet</i>	<i>Wave 1 (n = 1,576)</i>	<i>Wave 2 (n = 1,189)</i>	<i>Wave 3 (n = 1,149)</i>
<u>Days per week</u>			
0 days	4	2	2
1-2 days	24	16	16
3-4 days	23	21	18
5-6 days	15	22	19
7 days	35	40	46
<u>Time per day</u>			
0 minutes	5	2	3
1 – 30 minutes	23	20	20
31 minutes – 1 hour	28	29	26
More than 1 hour – 2 hours	23	25	29
More than 2 hours to 3 hours	10	13	11
More than 3 hours	10	11	12

### ***Use of the Wii has increased over time while usage of Massively Multi-player Online Games (MMOGs) has remained relatively stable.***

Some video games have a much higher degree of immersion than others, namely MMOGs (massively multiplayer online games) and Nintendo Wii. One such understudied aspect of online games is the influence that clans or guilds (sometimes referred to as MMOs or MMOGs) may have on behavior. Clans are groups of game players that band together to form an on-going team that together play the game. The Nintendo Wii allows the player to physically go through the motions of the game. For example, a video game depicting a tennis match requires the player to physically swing as if swinging a tennis racquet; one depicting a baseball game requires the player to engage in baseball-like activities.

The Wii has become more popular among youth over the course of this study from 33% of youth to 53%. Only a minority of youth did not know what this type of game was.

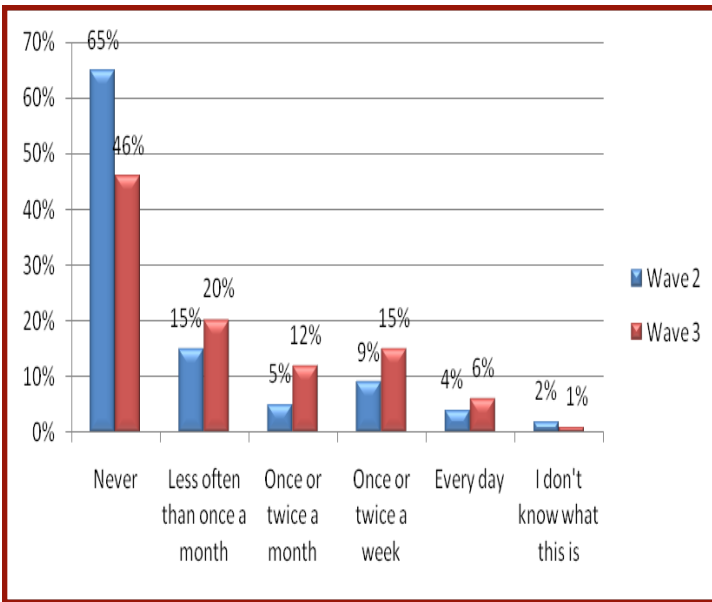


Figure 2: Wii usage over time

Use of MMOG's remained relatively stable over time – from 27% of youth to 31%. More youth, although still a minority, did not know what MMOGs were, in comparison to Wii.

### MMOG clan membership increased over time.

There were significant differences in regular membership of a clan or guild, as well as knowledge of clans or guilds, among game players from Wave 2 and Wave 3.

- ◆ During Wave 2, 7% of game players reported being a member of a clan or guild; 22% did not know what this was.
- ◆ During Wave 3, there was an increase to 24% of game

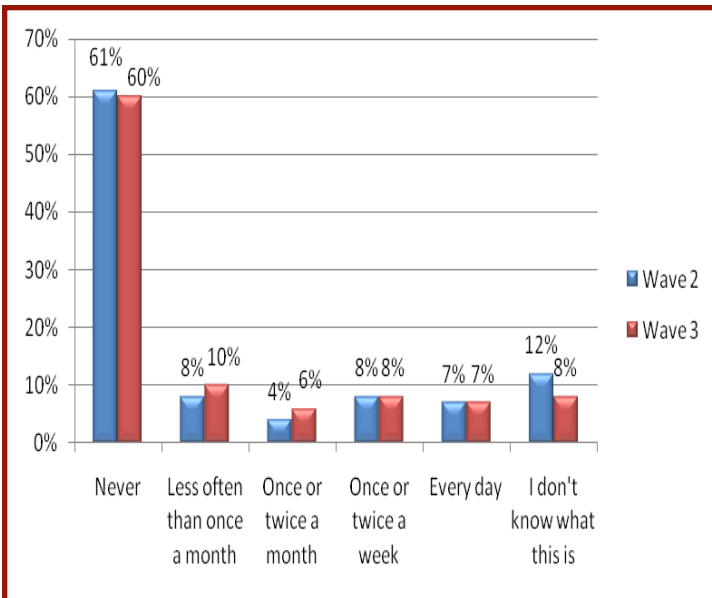


Figure 3: MMOG usage over time

players reporting being a member of a clan or guild; compared to a decrease to 14% who did not know what this was.

There were slight differences between Wave 2 and Wave 3 for game players who had a close friendship with someone they play with in a clan or guild. A close friendship was considered as someone the player felt they could talk about things that were really important to them.

- ◆ During Wave 2, 31% of game players had a close friendship with someone they played with in a clan or guild, compared to 34% at Wave 3.

## Favorite video game

### The majority of youth have a favorite video game they play.

For Wave 2, youth who reported ever playing games were asked if they had a favorite game; 89% reported having a favorite game. Most youth (90%) play their favorite game alone at least some of the time, 28% play it alone every day or almost every day. Three out of every four youth reporting playing their favorite game with other people in the same room; 15% report doing this every day or almost every day. Fewer youth report playing their favorite game with other people on the Internet – 36% reporting doing this at least some of the time.

How often play...	Wave 2
<b>Alone</b>	
Every day/ Almost every day	28%
Once or twice a week	37%
Once or twice a month	13%
Less often than once a month	11%
Never	9%
<b>With other people in same room</b>	
Every day/ Almost every day	15%
Once or twice a week	32%
Once or twice a month	17%
Less often than once a month	12%
Never	22%
<b>With other people on the Internet</b>	
Every day/ Almost every day	12%
Once or twice a week	13%
Once or twice a month	5%
Less often than once a month	5%
Never	63%

Note. 2% of youth report not having a favorite game

Youth play their favorite game in a variety of places – 62% on a video console, 54% on the computer or Internet, and 65% on the Wii at least some of the time. Playing on a video game console or the computer or Internet are the most frequent locations for playing a favorite game.

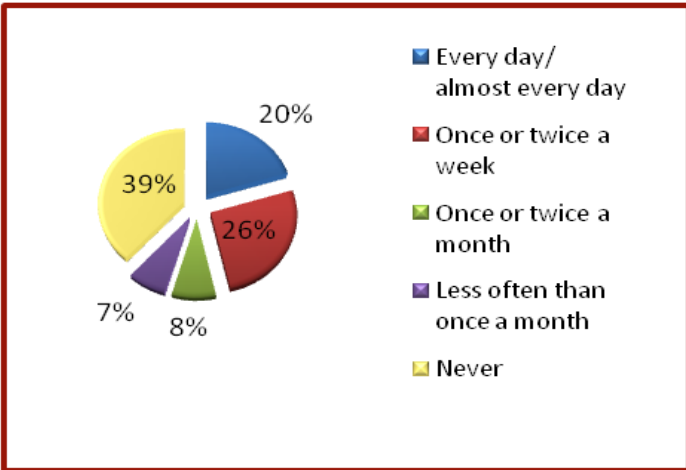


Figure 4. Youth reported play of favorite game on video console

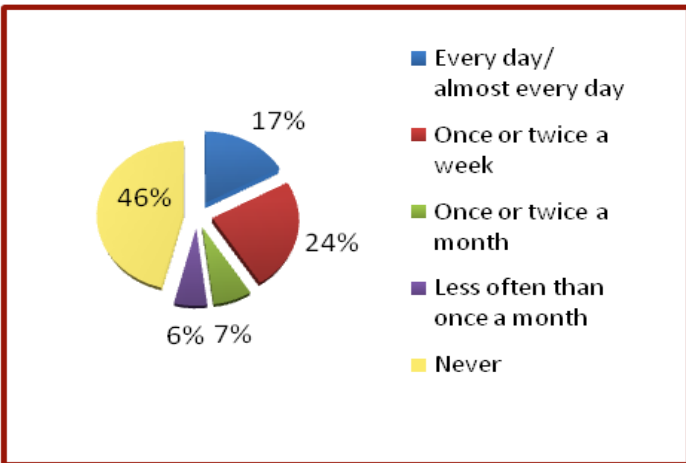


Figure 5. Youth reported play of favorite game on computer or Internet

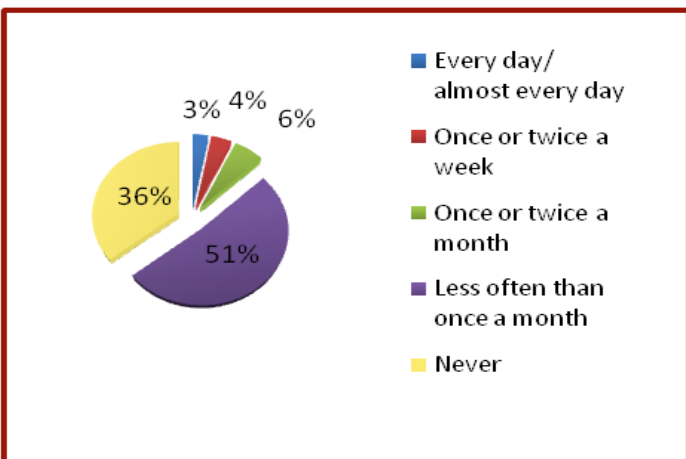


Figure 6. Youth reported play of favorite game on Wii

Type of favorite game varied widely with fantasy / role-playing games the most commonly endorsed (27%). Other favorite games included sports games; classic games, or puzzles and logic-based; and first person shooter games. The least commonly reported favorite games were educational in nature.

Type of favorite game	Wave 2
First person shooter game	14%
MMOG	12%
Classic game or puzzle and logic	15%
Educational game	6%
Kids game	14%
Fantasy/ role playing game	27%
Sports game	15%
Other	25%

Note. 2% of youth report not having a favorite game

## Youth use of the Internet

We were interested in how youth used the Internet. Specifically, we wanted to know what two things youth spent the most of your time doing when online. At Wave 1, playing games was the most commonly reported online event for youth, reported by 45%. This was followed by instant messaging, surfing the web, doing school work, and listening to music. Over time, the importance of playing games decreased and the most notable increase was in reports of using social networking websites, such as MySpace and Facebook – from 17% at Wave 1 to 32% and 38% at Wave 2 and Wave 3, respectively.

Spend most time online...	Wave 1	Wave 2	Wave 3
Emailing	15%	14%	15%
Blogging	1%	1%	1%
Instant messaging	22%	22%	19%
Playing games	45%	32%	24%
Going to chat rooms	3%	1%	1%
Surfing the web	17%	13%	17%
Designing websites	1%	1%	1%
Doing schoolwork	25%	29%	31%
Podcasting/ Downloading files or software	2%	2%	3%
Social networking websites	17%	32%	38%
Buying things or looking at prices	6%	5%	6%
Listening to music	23%	28%	28%
Readings news or current affairs	2%	3%	2%
Something else	6%	5%	4%

Most youth consider themselves to be good or excellent Internet users. The percentage who considered themselves ‘excellent’ users increased with age – from 36% at baseline to 46% and 50% at Wave 2 and Wave 3, respectively.

Ability to use Internet...	Wave 1	Wave 2	Wave 3
Poor	2%	<1%	<1%
Fair	15%	10%	6%
Good	48%	44%	44%
Excellent	36%	46%	50%

Where youth used the Internet most often varied but remained stable over time. Slightly more than half of youth reported using the Internet in a common room of the house. A notable minority reported using the Internet in their own bedroom or some other private room in the house. Overall, the great majority of youth use the Internet most frequently at home.

Location of most often use...	Wave 1	Wave 2	Wave 3
In my bedroom	15%	19%	21%
In a common room	58%	56%	54%
In a private room	18%	18%	18%
At the library	1%	<1%	<1%
At school	5%	4%	3%
At another person's home	1%	2%	1%
Somewhere else	3%	1%	3%

## Text messaging

### Who is using cell phones?

There is no one type of teen that owns a cell phone. Teens from a varying social and economic background own cell phones and use them to text message.

- ◆ Females were 60% more likely (OR = 1.6,  $p=0.02$ ) than males to own a cell phone and use text messaging than not own a cell phone.
- ◆ No differences were noted by youth race or ethnicity.
- ◆ There was some indication that youth in low-income households were less likely to use text messaging. Even among households with a 2008 annual income of less than \$35,000 though, 57% of 15-17 year olds owned a cell phone and had used it for text messaging in the past year.

### Teen cell phone use and texting is increasing.

The survey also finds that youth cell phone ownership and text messaging use has increased from Wave 1 to Wave 3.

- ◆ Since Wave 1, texting has increased steadily among all age groups from 2006 to 2008. At Wave 2, the mean number of text messages sent per day was 30, with a range of 0-500 text messages. At Wave 3, the mean number of text messages sent per day was 43, with a range of 0-500 text messages.
- ◆ Data suggest that cell phone ownership and text messaging use more than doubled from 32% in Wave 1 to 73% in Wave 3 for 15 year olds in particular.

### Text messaging increases with age and over time.

Among older teens the frequency of both owning a cell phone and texting increases compared to younger teens.

- ◆ An estimated 70% of 15-17 year olds owned a phone and used it to send and receive text messages in Wave 3.
- ◆ Findings suggest that among the older youth (15-18 years), 55% have a cell phone and text message.
- ◆ Among older youth (15-18 years), the odds of reporting text messaging use increases 48% with each increasing year in age.
- ◆ As depicted below, overall, any text messaging increases with age and rates within age tend to be higher over time.

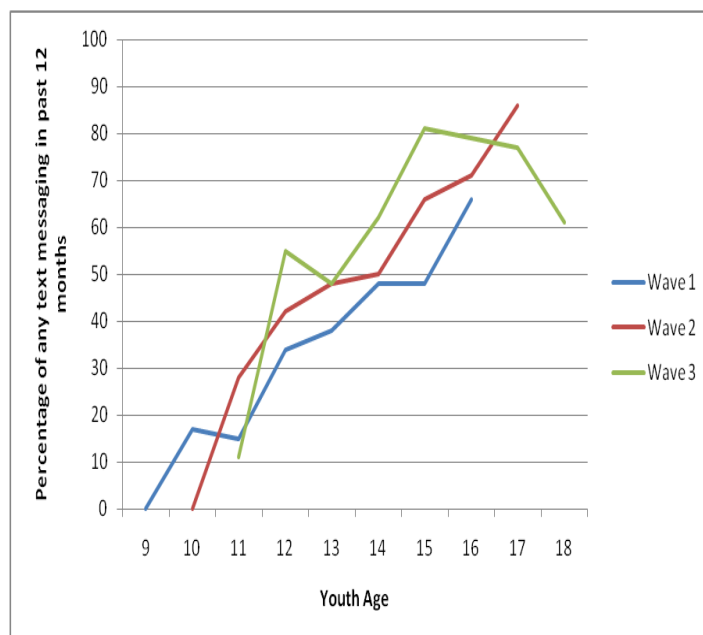


Figure 7. Youth reported text messaging in the past year

## Conclusion

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**

**Bulletins:** Methodological Details  
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](http://www.is4k.com)