

**Survey of Teens and Adults about the  
Use of Personal Electronic Devices and Head Phones**

Submitted to:  
American Speech-Language-Hearing Association

Submitted by:  
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## **I. Methodology and Sample Characteristics**

### **Survey Methodology: National Survey Of Adults, 2/20/06 – 2/22/06**

This is a national telephone survey of adults conducted by Zogby International. The target sample is 1,000 interviews with approximately 39 questions asked. Samples are randomly drawn from telephone cd's of national listed sample. Zogby International surveys employ sampling strategies in which selection probabilities are proportional to population size within area codes and exchanges. As many as six calls are made to reach a sampled phone number. Cooperation rates are calculated using one of AAPOR's approved methodologies<sup>1</sup> and are comparable to other professional public-opinion surveys conducted using similar sampling strategies.<sup>2</sup> Weighting by region, age, race, and gender is used to adjust for non-response. Margin of error is +/- 3.2 percentage points. Margins of error are higher in sub-groups.

### **Survey Methodology: National Survey Of High School Students, 2/20/06 – 2/21/06**

This is a national telephone survey of high school students conducted by Zogby International. The target sample is 301 interviews with approximately 30 questions asked. Samples are randomly drawn from a purchased list of high school students. Zogby International surveys employ sampling strategies in which selection probabilities are proportional to population size within area codes and exchanges. As many as six calls are made to reach a sampled phone number. Cooperation rates are calculated using one of AAPOR's approved methodologies<sup>3</sup> and are comparable to other professional public-opinion surveys conducted using similar sampling strategies.<sup>4</sup> Weighting by grade, race, and gender is used to adjust for non-response. Margin of error is +/- 5.8 percentage points. Margins of error are higher in sub-groups.

Zogby International's sampling and weighting procedures also have been validated through its political polling: more than 95% of the firm's polls have come within 1% of actual election-day outcomes.

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<sup>1</sup> See COOP4 (p.38) in *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates of Surveys*. The American Association for Public Opinion Research, (2000).

<sup>2</sup> *Cooperation Tracking Study: April 2003 Update*, Jane M. Sheppard and Shelly Haas. The Council for Marketing & Opinion Research (CMOR). Cincinnati, Ohio (2003).

Sample Characteristics	Adults		High School Students	
	Frequency	Valid Percent*	Frequency	Valid Percent*
Sample size	1,000	100	301	100
East	230	23	65	21
South	260	26	57	19
Central/Great Lakes	310	31	119	40
West	200	20	60	20
9 <sup>th</sup> grade	--	--	75	25
10 <sup>th</sup> grade	--	--	75	25
11 <sup>th</sup> grade	--	--	75	25
12 <sup>th</sup> grade	--	--	75	25
14 years old	--	--	33	11
15 years old	--	--	76	25
16 years old	--	--	91	30
17 years old	--	--	69	23
18 years old	--	--	32	11
18-29 years old	195	20	--	--
30-49 years old	390	40	--	--
50-64 years old	224	23	--	--
65+ years old	166	17	--	--
18-24 years old	93	10	--	--
25-34 years old	166	17	--	--
35-54 years old	395	41	--	--
55-69 years old	200	21	--	--
70+ years old	119	12	--	--
Did not answer age	26	--	--	--
Less than high school	44	4	--	--
High school graduate	216	22	--	--
Some college	293	29	--	--
College graduate+	442	44	--	--
Did not answer education	4	--	--	--
White	846	85	244	81
Black/African American	109	11	36	12
Asian	8	1	8	3
Native Hawaiian/Pacific Islander	2	0	4	1
Native American/Alaska native	9	1	2	1
Other/mixed	21	2	7	2
Did not answer race	5	--	--	--

Sample Characteristics (continued)	Adults		High School Students	
	Frequency	Valid Percent*	Frequency	Valid Percent*
White - Hispanic/Latino	99	12	36	15
White - not Hispanic/Latino	745	88	208	85
Did not answer ethnicity	156	--	57	--
Less than \$15,000	83	10	--	--
\$15,000-\$24,999	82	10	--	--
\$25,000-\$34,999	109	13	--	--
\$35,000-\$49,999	127	15	--	--
\$50,000-\$74,999	189	22	--	--
\$75,000 or more	266	31	--	--
Did not answer income	145	--	--	--
Male	482	48	151	50
Female	518	52	150	50

\* Numbers have been rounded to the nearest percent and might not total 100.

## II. Executive Summary

Hearing loss as they age may be a real danger for young people, but it is a danger of which many of them are aware. On the other hand, adults seem less concerned about the dangers to their own hearing, even though in some instances they use some of these products for longer periods and at higher volume than do teens.

High school students surveyed are more likely than adults to say they have experienced three of the four symptoms of hearing loss: turning up the volume on their television or radio (28% students vs. 26% adults); saying “what” or “huh” during normal conversation (29% students vs. 21% adults); and tinnitus or ringing in the ears (17% students vs. 12% adults). More disturbing is that less than half of high school students (49%) say they have experienced *none* of these symptoms, compared to 63% of adults who say this. Among students, African Americans and Hispanics are more likely than whites to report that they have experienced at least some of these symptoms of hearing loss.

Significant majorities of students say they use a cell phone (82%) and a walkman or portable CD player (62%). For both of these products, they are more likely to use them than are adults (78% and 36% respectively). In fact, for all but one of these products, students are more likely than adults to use them, or in the case of portable televisions or DVD players, equally likely to use them. Only of laptops are adults more likely to use the product than are teens.

For a few of these products, adults are more likely to use them for a longer period of time than are teens – the Apple iPod and another brand of MP3 player are used for one to four hours more often by adults than by teens. Perhaps time spent commuting to work daily accounts for using these products for longer periods of time. Nearly equal percentages of adults and students use their Apple iPod with the volume turned loud, while among users of other brands of MP3 players, students are significantly more likely than adults to have the volume turned loud.

Teens are more likely than adults to use the other products for longer periods and at higher volumes. Among teens, boys are more likely than girls to use these products in ways that may cause hearing loss later in life, by listening for longer periods and at higher volumes. Despite the normal loss of hearing that occurs with age, older adults are more likely to report using these products at lower volumes than younger adults and teens.

Equal percentages of adults (48%) and teens (47%) say they are not concerned about hearing loss from use of these products, while teens (53%) are much more likely than adults (33%) to say they are concerned. Despite this concern, more than half (58%) of teens say they are not likely to cut down on the time they use these devices and 31% are not likely to turn down the volume. Even more teens (64%) say they are not likely to purchase specially designed earphones to prevent hearing loss. Just under half (48%) of adults say they are unlikely to cut down on usage. Both teens (69%) and adults (50%) are

more likely to turn down the volume in an effort to prevent hearing loss than any of the other measures.

While a majority of parents (59%) are concerned about hearing loss in their children because of the use of these devices, less than half are willing to limit the amount of time their children use these devices. Most parents (80%) would make their children lower the volume, but how effective this is when the children are away from parental influence is questionable. More than half of parents say they have spoken to their children about the possibility of hearing loss, and just 12% have steered their children toward websites or literature discussing the dangers.

Finally, both adults (32%) and teens (43%) say that the best way to reach teens about the dangers of hearing loss is television. Unfortunately for parents, a majority of whom say they would speak with their teens about hearing loss as a measure of prevention, just 10% of teens say hearing about this issue from family or friends is effective. More teens say hearing about hearing loss in school (15%) or reading it in teen magazines (11%) is a good way to reach them. For boys, television is by far the best way to reach them (50% compared to 36% for girls), while girls are six times as likely as boys to say teen magazines are a good venue of this information.

### III. Narrative Analysis

#### 1. Do you use...? (Choose all that apply.)

**Table 1. Usage of Electronic Devices**

	Adults	High school students
A cell phone	78	82
A Walkman or portable CD player	36	62
A laptop computer	35	28
A portable television/DVD player	31	30
Another brand of MP3 player	12	25
An Apple iPod	11	36
None/not sure	10	1

Most adults (78%) and high school students (82%) use cell phones, and a large majority of students (62%) also uses a Walkman or portable CD player. Approximately one-third of adults also use a Walkman/portable CD player (36%), a laptop computer (35%), and a portable TV/DVD player (31%), while similar amounts of high school students use a laptop (28%) and a portable TV/DVD player (30%). Students are twice as likely as adults to use another brand of MP3 player (25% to 12% respectively), and more than three times as likely to use an Apple iPod (36% to 11% respectively). One in ten adults (10%) use none of these electronic devices – much higher than the one percent of high school students who use none.

Among adults, Hispanics and African Americans are typically more likely than whites to use each of these electronic devices. Parents of children under 17 are also more likely than non-parents to use each of these devices. In almost every instance, usage generally declines as age increases. The only real exception is in the use of portable TV/DVD players, of which the 30-64 year-olds show higher usage. Usage also generally increases as annual household income increases.

More girls than boys use Apple iPods, laptops, and cell phones; more boys than girls use MP3 players. Larger majorities of African American children than Hispanic and white children use cell phones and Walkman/portable CD players.

101. (Asked only of adults) Have you purchased any of the following for anyone, including yourself? (Choose all that apply)

102. (Asked only of students) Which of these did you purchase yourself? (Choose all that apply)

103. (Asked only of students) Which of these were given to you as a gift? (Choose all that apply)

**Table 2. Who Purchased Electronic Devices**

	<b>Purchased for anyone (Adults)</b>	<b>Purchase yourself (Students)</b>	<b>Given you as a gift (Students)</b>
A cell phone	57	23	49
A Walkman or portable CD player	31	31	29
A laptop computer	25	4	18
A portable television/DVD player	24	3	24
An Apple iPod	15	13	22
Another brand of MP3 player	13	9	16
None/not sure	28	40	18

Adults are most likely to have purchased a cell phone, as a majority has (57%) done so. They are about half as likely to have purchased a Walkman or portable CD player (31%), and less likely to have bought a laptop (25%) or portable television/DVD player (24%). Adults are least likely to have purchased an Apple iPod (15%) or other brand of MP3 player (13%). More than one in four (28%) have not purchased any of these devices, or are not sure.

High school students are more likely to have purchased a Walkman or portable CD player (31%) and a cell phone (23%) than any of the other electronic devices. One in eight (13%) has bought an Apple iPod, while fewer than one in ten has purchased another brand of MP3 player (9%), a laptop (4%), or portable TV/DVD player (3%). Two in five students (40%) have, themselves, purchased none of these or are not sure.

Half of students (49%) have received a cell phone as a gift. One-sixth or more has received each of the other electronic devices, as well. Approximately three in ten (29%) has been given a Walkman or portable CD player, and just less than one in four has received a portable television/DVD player (24%) or Apple iPod (22%). They are less likely to have been given a laptop (18%) or another brand of MP3 player (16%) as a gift. Fewer than one in five (18%) has not received any of these as a gift, or is not sure.

Hispanic adults are more likely than African Americans and whites to have purchased almost each of these electronic devices. More whites (30%) than African Americans (21%) and Hispanics (15%) have not purchased any. Parents of children under 17 are also more likely than non-parents to have bought each of these devices. Among age groups, the 30-49 year olds are generally more likely than others to have purchased each, while the seniors 65 and older are always the least likely. Household income plays

a major factor as well, as nearly half of those with income less than \$15,000 have purchased none of these devices; as income increases, this percentage who have not purchased any of these products continually declines, to just less than one-fifth of people with household income of \$50,000 or more.

Girls are more likely than boys to have received these devices as gifts, while boys are more likely to have purchased them for themselves.

*(Questions 2-7 were asked only of adults who purchased that product.)*

*2 – 6. For whom did you purchase an Apple iPod... another brand of MP3 Player... a laptop computer... a Walkman/portable CD player... a portable television/DVD player... a cell phone? (Choose all that apply.)*

**Table 3. For Whom Adults Purchased Electronic Devices**

	<b>Yourself</b>	<b>An adult over 18</b>	<b>A teen 16-18</b>	<b>A child 12-15</b>	<b>A child younger than 12</b>	<b>None/not sure</b>
An Apple iPod	29	41	14	20	3	5
Another brand of MP3 player	33	32	18	18	6	5
A laptop computer	71	26	6	5	2	3
A Walkman/portable CD player	44	22	13	17	17	4
A portable television/DVD player	54	17	7	12	18	5
A cell phone	82	32	7	7	1	1

More than half of adults have purchased each of these electronic devices for themselves or another adult, while fewer than half bought any of these devices for children or teens age 18 or under.

Large majorities purchased a cell phone (82%) and laptop (71%) for themselves, and more than half (54%) bought a portable television/DVD player for themselves as well. More than two-fifths (44%) purchased a Walkman/portable CD player for their own use, and they were least likely to buy an Apple iPod (29%) or other brand of MP3 player (33%) for themselves.

Two in five (41%) bought an Apple iPod for another adult, and one in three bought another brand of MP3 player (32%) and cell phone (32%) for another adult over 18. One in four (26%) purchased a laptop for another adult, and they were less likely to buy a Walkman/portable CD player (22%) or portable television/DVD player (17%) for another adult.

Just over two-fifths of adults gave a Walkman/portable CD player (43%) or other brand of MP3 player (42%) to a child or teen age 18 or under. Adults were nearly as likely to give an Apple iPod (37%) or portable television/DVD player (37%) to a child or

teen 18 or under, and were least likely to give a cell phone (15%) or laptop computer (13%) to a child or teen.

Of their young recipients, children age 12-15 were the most likely to be given an Apple iPod (20%); teens age 16-18 (18%) and children age 12-15 (18%) were equally likely to be given another brand of MP3 player; children 12-15 (17%) and those younger than 12 (17%) were slightly more likely than teens 16-18 (13%) to be given a Walkman/portable CD player; and children younger than 12 (18%) were the most likely of the non-adults to be the recipients of a portable television/DVD player.

*(Questions 8-9 were asked only of those who say they use an Apple iPod in Question 1.)*

8. Typically, how long do you use your Apple iPod during a single session or use?

**Table 4. Length of Typical iPod Session**

	Adults	High school students
4 hours or more	15	11
Between 1 to 4 hours	38	30
30 minutes to an hour	31	41
15 minutes to half an hour	9	16
Less than 15 minutes	2	2
Do not use/Not sure	5	--

A plurality of adults (38%) uses their Apple iPod between 1-4 hours each session, and another 31% uses it for 30 minutes to an hour. In comparison, high school students are most likely to use their Apple iPods for 30 minutes to an hour for each use (41%), with another 30% using it between 1-4 hours each session.

One in seven adults (15%) uses the device for 4 hours or more at a time, more than the one in nine students (11%) who use their Apple iPods for this duration each use. Almost twice as many high school students (16%) than adults (9%) use their iPods for 15 minutes to half an hour for each use, and only 2% of each group uses their iPods for less than 15 minutes a session.

9. Again, thinking about how you typically use your Apple iPod, would you say that you play the volume very loud, somewhat loud, at medium volume, somewhat low, or very low volume?

**Table 5. Typical iPod Volume**

	Adults	High school students
Very loud	6	13
Somewhat loud	32	28
<b>Loud</b>	<b>38</b>	<b>41</b>
Medium	44	51
Somewhat low	12	7
Very low	4	0
<b>Low</b>	<b>16</b>	<b>7</b>
Not sure	3	--

Approximately two-fifths of both adults (38%) and students (41%) play the volume loud on their Apple iPods, with students being twice as likely as adults to play it very loud (13% to 6%, respectively). Conversely, adults are twice as likely as students (16% to 7%) to play the volume low. Both adults (44%) and students (51%) are most likely to play the volume at a medium level.

More boys than girls play their iPod loud, while girls are more likely to play it at medium.

*(Questions 10-11 were asked only of those who say they use another brand of MP3 player in Question 1.)*

10. Typically, how long do you use your MP3 Player during a single session or use?

**Table 6. Length of Typical MP3 Player Session**

	Adults	High school students
4 hours or more	9	7
Between 1 to 4 hours	43	24
30 minutes to an hour	26	37
15 minutes to half an hour	6	23
Less than 15 minutes	8	9
Do not use/Not sure	8	--

Adults are more likely than students to use their MP3 players for longer periods of time. Combined, more than half of adults use their MP3 players for 1-4 hours (43%) or

4+ hours (9%), while fewer than one-third of students use their MP3 players for these longer periods of time. Conversely, students are approximately twice as likely as adults to use their MP3 players for between 15 minutes and an hour (60% to 32%, respectively). Similar amounts of both groups (8%-9%) use their MP3 players for less than 15 minutes at a time.

11. Again, thinking about how you typically use your MP3 Player, would you say that you play the volume very loud, somewhat loud, at medium volume, somewhat low, or very low volume?

**Table 7. Typical MP3 Player Volume**

	Adults	High school students
Very loud	16	21
Somewhat loud	18	38
<b>Loud</b>	<b>34</b>	<b>59</b>
Medium	50	33
Somewhat low	5	6
Very low	4	2
<b>Low</b>	<b>9</b>	<b>8</b>
Not sure	7	1

High school students are again more likely than adults (59% to 34%) to play the volume on their MP3 player loud. More adults (50%) than students (33%) play the volume medium, and similar amounts (8%-9%) play the volume low.

Younger adults are much more likely than middle-age and older adults to play the volume loud, while the older adults typically play it on medium.

Larger majorities of boys (63%) than girls (52%) play the volume on loud.

*(Questions 12-14 were asked only of those who say they use a laptop in Question 1.)*

12. When using your laptop computer, do you usually use earphones?

**Table 8. Using Earphones with a Laptop**

	Adults	High school students
Yes	9	19
No	91	79
Not sure	0	1

Approximately one-tenth of adults (9%) and one-fifth of students (19%) who have a laptop use earphone with the computer.

*(Questions 13-14 asked only of those who use earphones.)*

13. Typically, when using earphones, how long do you use your laptop computer during a single session or use?

**Table 9. Length of Typical Session Using Earphones with a Laptop**

	Adults	High school students
4 hours or more	5	16
Between 1 to 4 hours	35	52
30 minutes to an hour	32	20
15 minutes to half an hour	2	--
Less than 15 minutes	--	4
Do not use/Not sure	25	7

High school students are much more likely than adults to use their laptop with earphones for longer periods of time. One-sixth of these students (16%) use their laptops for 4 hours or more, and more than half (52%) use it for 1 to 4 hours. In comparison, 5% of adults use a laptop for 4 hours or more, and one in three (35%) uses it with headphones for between 1 to 4 hours. Adults are more likely to use headphones with their laptops for 30 minutes to an hour (32%), or not at all (25%).

14. Again, thinking about how you usually use your laptop computer when using ear phones, would you say that you play the volume very loud, somewhat loud, at medium volume, somewhat low, or very low volume?

**Table 10. Typical Laptop Earphone Volume**

	Adults	High school students
Very loud	3	23
Somewhat loud	12	48
<b>Loud</b>	<b>15</b>	<b>71</b>
Medium	42	15
Somewhat low	12	8
Very low	11	--
<b>Low</b>	<b>23</b>	<b>8</b>
Not sure	20	7

Most students (71%) have the volume turned loud when using headphones for their laptops, with about half (48%) saying it is somewhat loud. Adults are more likely to have the volume at medium (42%) or low (23%).

*(Questions 15-16 were asked only of those who say they use a Walkman or portable CD player in Question 1.)*

15. Typically, how long do you use your Walkman/portable CD player during a single session or use?

**Table 11. Length of Typical Walkman/Portable CD Player Session**

	Adults
4 hours or more	4
Between 1 to 4 hours	37
30 minutes to an hour	38
15 minutes to half an hour	10
Less than 15 minutes	6
Do not use/Not sure	5

Three-fourths of adults (75%) are evenly divided between using their Walkman/portable CD players either between 1 to 4 hours or for 30 minutes to an hour. Only 4% use this device for 4 hours or more per use, while only 6% use it for less than 15 minutes at a time.

16. Again, thinking about how you typically use your Walkman/portable CD player, would you say that you play the volume very loud, somewhat loud, at medium volume, somewhat low, or very low volume?

**Table 12. Typical Walkman/Portable CD Player Volume**

	Adults
Very loud	11
Somewhat loud	23
<b>Loud</b>	<b>34</b>
Medium	47
Somewhat low	13
Very low	2
<b>Low</b>	<b>15</b>
Not sure	4

One-third of adults (34%) play the volume on their Walkman/portable CD players loud, including 11% who play it very loud. Close to half (47%) set the volume at medium, while one in seven (15%) play it on low.

Younger adults are much more likely than middle-age and older adults to play the volume on loud. These older adults usually have the volume at medium.

*(Questions 17-18 were asked only of those who say they use a portable TV or DVD player in Question 1.)*

17. Typically, how long do you use your portable television/DVD player during a single session or use?

**Table 13. Length of Typical Portable TV/DVD Player Session**

	Adults	High school students
4 hours or more	6	5
Between 1 to 4 hours	65	69
30 minutes to an hour	17	21
15 minutes to half an hour	4	2
Less than 15 minutes	3	3
Do not use/Not sure	6	--

Approximately two-thirds of both adults (65%) and high school students (69%) use their portable TV/DVD players for between 1 to 4 hours at a time. Only a handful of each (5%-6%) uses it for a longer period of time each session.

18. Again, thinking about how you typically use your portable television/DVD player, would you say that you play the volume very loud, somewhat loud, at medium volume, somewhat low, or very low volume?

**Table 14. Typical Portable TV/DVD Player Volume**

	Adults	High school students
Very loud	7	9
Somewhat loud	13	34
<b>Loud</b>	<b>20</b>	<b>43</b>
Medium	59	51
Somewhat low	14	7
Very low	3	--
<b>Low</b>	<b>17</b>	<b>7</b>
Not sure	4	--

Majorities of both adults (59%) and students (51%) have the volume set at medium when listening to their portable TV/DVD players. Students are otherwise twice

as likely as adults (43% to 20%) to play the volume on loud, and adults are twice as likely as students (17% to 7%) to have the volume on low.

Younger adults, in this instance, are not much more likely than the older adults to play the volume on loud.

*(Questions 19-21 were asked only of those who say they use a cell phone in Question 1.)*

19. When using your cell phone, do you typically use earphones?

**Table 15. Using Earphones with a Cell Phone**

	Adults	High school students
Yes	14	10
No	86	90
Not sure	1	--

One in seven adults (14%) and one in ten high school students (10%) typically use earphones when using their cell phones.

Hispanic (26%) and African American (31%) adults are much more likely than their white counterparts (9%) to use earphones for their cell phones.

*(Questions 20-21 asked only of those who use earphones.)*

20. Typically, when using earphones, how long do you use your cell phone player during a single session or use?

**Table 16. Length of Typical Session Using Earphones with a Cell Phone**

	Adults	High school students
4 hours or more	5	--
Between 1 to 4 hours	12	27
30 minutes to an hour	24	30
15 minutes to half an hour	12	30
Less than 15 minutes	41	13
Do not use/Not sure	6	--

Adults and students are more likely to use earphones with cell phones for shorter periods of time than they use the other electronic devices. Two-fifths of adults (41%) say a typical session lasts less than 15 minutes, and while only one in eight (13%) students say the same, three in five (60%) say their typical session lasts 15 minutes to an hour.

One in twenty adults (5%) use their cell phones with an earphone for 4 hours or more at a time.

21. *Again, thinking about how you typically use your cell phone when using earphones, would you say that the volume is very loud, somewhat loud, at medium volume, somewhat low, or very low volume?*

**Table 17. Typical Cell Phone Earphone Volume**

	Adults	High school students
Very loud	12	7
Somewhat loud	18	30
<b>Loud</b>	<b>30</b>	<b>37</b>
Medium	52	46
Somewhat low	11	9
Very low	3	9
<b>Low</b>	<b>14</b>	<b>18</b>
Not sure	4	--

Adults (52%) and students (46%) are most likely to set the volume at medium when using earphones for their cell phones. High school students are only slightly more likely than adults to have the volume set on loud (37% to 30%) or low (18% to 14%).

22. *Have you purchased specially designed earphones for any of the following to cut down on ambient or distracting noise? (Choose all that apply.)*

**Table 18. Purchase of Specially Designed Earphones**

	Adults	High school students
A cell phone	8	3
A Walkman or portable CD player	6	12
An Apple iPod	5	9
A portable television/DVD player	4	4
Another brand of MP3 player	3	4
A laptop computer	3	2
Other/None/not sure	81	77

Vast majorities of adults (81%) and high school students (77%) have not purchased specially designed earphones for any of these electronic devices. Fewer than one in nine adults have purchased these earphones for any of these devices. Students are more likely to have purchased special earphones for their Walkman or portable CD players than for any other device.

Among income groups, adults with annual household income of \$75,000 or more (75%) are least likely to say they have not purchased special earphones for any of these devices; as income decreases, this percentage rises – to a high of 92% of those with household income less than \$15,000.

Most Hispanic (88%) and white (78%) students have purchased earphones for none of these, while the same is true of a smaller majority of African American students (55%).

23. *How concerned are you about losing your hearing as you age?*

**Table 19. Concerns of Hearing Loss**

	<b>Adults</b>	<b>High school students</b>
Very concerned	25	18
Somewhat concerned	33	36
<b>Concerned</b>	<b>58</b>	<b>54</b>
Not really concerned	26	31
Not at all concerned	16	15
<b>Not concerned</b>	<b>42</b>	<b>46</b>
Not sure	1	--

More than half of adults (58%) and high school students (54%) are concerned about losing their hearing as they age. Adults are slightly more likely than students to be very concerned (25% to 18%, respectively). More than two-fifths of both groups, however, are not really or not at all concerned.

African American adults (65%) are more likely than whites (57%) or Hispanics (53%) to be concerned about losing their hearing.

More girls (59%) than boys (49%) are concerned about losing their hearing. Hispanic students (67%) are more likely than African Americans (61%) to concur, while only half of white students (49%) are concerned.

24. Have you experienced any of the following after using any of the popular technologies discussed previously? (**Choose all that apply.**)

**Table 20. Experiencing Hearing Loss Conditions**

	Adults	High school students
Turning the volume up on your television or radio in order to hear it better	26	28
Finding yourself saying “what” or “huh” a lot when having a conversation with someone in normal voice tones	21	29
People appearing to mumble or speak with muffled voices	16	13
Tinnitus or ringing in the ears	12	17
None/not sure	63	49

One-fourth of adults (26%) say they have to turn up the volume on their television or radio in order to hear it better; one in five (21%) finds themselves saying “what” or “huh” a lot when having a conversation with someone in normal voice tones; one in six (16%) say that people appear to mumble or speak with muffled voices; and one in eight (12%) has tinnitus or ringing in the ears. More than three in five adults (63%) have none of these conditions.

High school students are more likely than adults to find themselves saying “what” or “huh” a lot when having a conversation with someone in normal voice tones (29%) and suffer from tinnitus or ringing in the ears (17%). They are about as likely as adults to also have to turn up the volume on their television or radio in order to hear it better (28%) and say that people appear to mumble or speak with muffled voices (13%). Only half of high school students (49%) suffer from none of these conditions.

Among adults, seniors 65 and older (54%) are least likely to have experienced none of these conditions, as compared to three-fifths of 30-64 year-olds, and 70% of 18-29 year-olds.

White students – and only a small majority of them (52%) – have suffered none of these conditions. Hispanic students are even less likely to have experienced any of these conditions (44%), while African Americans are even further less likely to say so (28%).

25. How concerned are you that any of the electronic devices you typically use with earphones will cause hearing loss?

**Table 21. Concerns of Hearing Loss from Earphone Usage**

	Adults	High school students
Very concerned	13	9
Somewhat concerned	20	44
<b>Concerned</b>	<b>33</b>	<b>53</b>
Not really concerned	23	31
Not at all concerned	25	16
<b>Not concerned</b>	<b>48</b>	<b>47</b>
Not sure	3	0
Do not use headphones	16	--

A majority of high school students (53%) is concerned that the electronic devices they typically use with earphones will cause hearing loss. Only one in three adults (33%) concur. Similar percentages of both groups (47%-48%) are not really or not at all concerned.

Once again, African American adults (42%) are slightly more likely than Hispanics (34%) or whites (32%) to be concerned.

Female students (63%) are much more likely than males (41%) to be concerned. The same is true of more African American students (68%) and Hispanics (68%) than whites (46%).

26 – 28. I am going to read to you some ways to prevent hearing loss. Please tell me if you are very likely, somewhat likely, not very likely, or not at all likely to do each.

**Table 22. Hearing Loss Prevention**

	Adults				High school students			
	Likely*	Not likely*	Not sure	Do not use	Likely*	Not likely*	Not sure	Do not use
Turning the volume down on your electronic devices you use with earphones	50	27	2	21	69	31	1	--
Cutting down on the time you listen to or use your electronic devices that you use with earphones	28	48	2	22	42	58	--	--
Purchasing specially designed earphones	28	54	2	16	36	64	1	--

(\*”Likely” combines “very” and “somewhat”; “not likely” combines “not very” and “not at all”.)

Interestingly, high school students are more likely and more *unlikely* than adults to do each of these to help prevent hearing loss. Both groups have the highest likelihood of turning the volume down on their electronic devices that they use with earphones, and in each group, being *much more* likely than unlikely to do so.

As for adults, just over one in four are likely to purchase specially designed earphones, and cut down on the time they listen to or use electronic devices with earphones. Approximately half is not likely to use either of these preventative measures.

Among students, two in five are likely to cut down on the time they listen to or use electronic devices with earphones, while one in three is likely to purchase specially designed earphones. Majorities of around three in five are unlikely to do either.

*(Questions 29-30 were asked only of adults who are parents/guardians of children under 17 living at home.)*

29. How concerned are you with your child losing some of his or her hearing because of using electronic devices with earphones?

**Table 23. Parents Concerned with Children’s Hearing Loss**

	<b>Adults</b>
Very concerned	32
Somewhat concerned	27
<b>Concerned</b>	<b>59</b>
Not really concerned	15
Not at all concerned	22
<b>Not concerned</b>	<b>37</b>
Not sure	5

Three-fifths of these parents (59%) are concerned with their children losing some of their hearing because of using electronic devices with earphones. One in three (32%) is very concerned. In comparison, fewer than two in five (37%) are not really or not at all concerned.

Stark differences are seen among adults by age and race. Most 50-64 year-olds (81%) are concerned, as compared to a majority of 30-49 year-olds (64%) and half as many 18-29 year-olds (31%). Also, a vast majority of African American parents (84%) show concern, as compared to small majorities of Hispanics (50%) and white (56%).

*(Asked only of parents who are very or somewhat concerned.)*

*30. Do you do, or have you done, any of the following in an effort to prevent hearing loss in your child or children? (Choose all that apply.)*

**Table 24. Efforts that Parents Use to Help Children Prevent Hearing Loss**

	<b>Adults</b>
Make them lower the volume	80
Spoken to your child or children about the dangers to hearing of using electronic devices requiring earphones	57
Limit the amount of time your child or children use electronic devices requiring earphones	48
Given your child literature or directed them to an article or website discussing hearing loss	12
Purchased specially-designed earphones	9
Purchased a regulator or a product with a regulator installed	4
*Other	2
Not sure	9

**\*Other responses:** (Number in parentheses denotes frequency of similar response.)

I muffle the sound if their toys are too loud; Removed the equipment temporarily

Most concerned parents (80%) have made their children lower the volume when using earphones. A majority (57%) has spoken to their children about the dangers to hearing of using electronic devices requiring earphones, and almost half (48%) limits the amount of time their children use electronic devices requiring earphones. They are least likely to have given their children literature or directed them to an article or website discussing hearing loss (12%), purchased specially designed earphones (9%), or bought a regulator or product with a regulator installed (4%).

31. What do you think is the best way to reach children, teens, or young adults about the dangers associated with some personal electronic equipment and hearing loss?

**Table 25. Best Way to Reach Children**

	Adults	High school students
Television	32	43
From family and friends	29	10
In school	15	15
Inserts in electronic products or music products	5	9
Teen magazines	4	11
Radio	4	7
Through the mail	1	1
*Other	6	2
Not sure	4	3

**\*Other:**

**Adults**

All of the above (31); They'll do what they want (7); Internet (6); Make them spend time with someone who has or is losing their hearing (5); Take it away (4); Celebrity spokespeople (3); Just tell them to turn it down and explain (4); Possible legislation to limit volume (3)

**One each:** Keeping busy in sports; Make them learn from their mistakes; Manufacturers should regulate; Newspaper; No way to lose hearing by headphones; Posters

**Students**

Internet (2); Only allow the products to go up to a certain volume; Video game mats

Pluralities of adults and high school students agree the best way to reach children, teens, or young adults about the dangers associated with some personal electronic equipment and hearing loss is using television. Students (43%) are more likely than adults (32%) to choose TV as an avenue, with adults nearly as likely to cite friends and family (29%) as the best option. One-seventh of each group (15%) says the best place for children to learn about this is in school. Approximately one in ten students feels the best way to reach them is either through family and friends, in teen magazines, or using inserts in electronic products or music products.

While pluralities of adults age 18-64 feel television is the best way to reach children, seniors 65 and older are more likely to agree that family and friends are the best routes.

More boys (50%) than girls (36%) think TV is the best way to reach them, while girls are much more likely than boys (19% to 3%) to cite teen magazines.