

KidsHealth KidsPoll—Coping Poll: Summary of Findings

KidsHealth KidsPoll is collaboration among the Nemours Foundation/KidsHealth, the Department of Health Education and Recreation at Southern Illinois University Carbondale, the National Association of Health Education Centers, and participating health education centers. The purpose is to gather information (opinions, attitudes, and feelings, etc.) about current health issues from children. The information is gathered using handheld data collection devices from children ages 9 to 13 as they attend classes in the health education centers. The information is shared with educators, caregivers, healthcare organizations, the media, and other interested parties at the national and local levels. The goal is to provide insightful information that will enable them to develop programs to help children to make healthy life decisions, prevent disease and injury, and understand their bodies. This poll focused on issues related to coping with stress and worry.

Individual Demographics

Individual-level information was collected anonymously from each child who participated.

- 875 children
- 55% boys, 45% girls
- 9 to 13 (average age 11.1)
- 6 centers participated in this poll:
 - HealthWorks! Kids Museum – South Bend, IN
 - Health World Children’s Museum – Barrington, IL
 - Robert Crown Center for Health Education – Hinsdale, IL
 - Ruth Lilly Health Education Center – Indianapolis, IN
 - Poe Center for Health Education– Raleigh, NC
 - Susan P. Byrnes Health Education Center – York, PA

School Demographics

School-level information was not collected from each child, but is based on statistics for the schools.

- 19 schools
- The schools participating averaged: 75% White, 10% Black, 12% Hispanic, 3% Asian/Pacific, 0% Native American:
 - 79% of the schools had student bodies that were 0% to 33% Black/Hispanic/Asian/Native American combined
 - 5% of the schools had student bodies that were 33% to 67% of these groups
 - 16% of the schools had student bodies that were 67% to 100% of these groups
- 25% of students in participating schools qualified for free or reduced lunch:
 - 83% of the schools had 0% to 33% of their student body qualifying for free or reduced lunch
 - 15% of the schools had 33% to 67% of their student body qualifying for free or reduced lunch
 - 2% of the schools had 67% to 100% of their student body qualifying for free or reduced lunch

The U.S. Census Bureau and the U.S. Department of Education use a measure of city size and location called a Metropolitan Statistical Area (MSA). The categories for MSA are:

- Large city center = center of an MSA city with population >250,000
 - Midsize city center = center of an MSA city with a population <250,000
 - Large city fringe = urban fringe of a large MSA city
 - Midsize city fringe = urban fringe of a midsize MSA city
 - Large town = not within an MSA with a population >25,000
 - Small town = not within an MSA with a population 2,500-25,000
 - Rural outside = not within an MSA with a population <2,500
- Of the participating schools: 36% large city center, 10% midsize city center, 28% large city fringe, 26% midsize city fringe, and 0% small town or rural.
 - Average school size: 440
 - 36% enrollment of 0-300
 - 32% enrollment of 301-600
 - 22% enrollment of 601-900
 - 10% enrollment of 900+

Significant Demographic Associations

- There was a high correlation between proportion of schools with more non-white students and proportion receiving lunch assistance (r = 0.90).

Statistically Significant Findings — Overall

1. What makes you feel stressed or upset? (open-end)

This question was coded into 29 categories of responses:

grades, school, homework	36%
my family	32%
friends/peers don't like/tease/lie/gossip about me	21%
my brothers or sisters	20%
mean or annoying people	20%
my parents	14%
yelling or loud noise	9%
fighting	9%
sports	8%
not allowed to do something/autonomy	7%
getting in trouble	7%
exhausted/tired/overextended	6%

do something wrong or failure	5%
video games or computers	4%
chores	4%
lies/stealing	4%
confusion/bad memory	4%
physically unwell	3%
being ignored	3%
animals or pets	2%
bad day	2%
food or eating	2%
sleep issues	1%
someone dies	1%
crying or upset people	1%
stressors or phobias	1%
money issues	<1%
nothing	<1%
surveys/researchers	<1%
All others	7%

Note: All others category inflated due to the intercorrelation of responses unaccounted for.

For ease of interpretation, the 12 most common categories were analyzed for differences by gender, age, and admission of self-harm. Girls were more likely to say they get upset about family issues: my family (37% vs. 28%), my brothers or sisters (23% vs. 17%), and fighting (11% vs. 7%). Boys were more likely to say that sports-related issues make them upset (10% vs. 5%).

Three categories seem to show age-related differences. Older children were more likely to get upset about grades, school, or homework (10=27%, 11=29%, 12=54%, and 13=51%). Younger children were more likely to say they get upset about their bothers or sisters (10=27%, 11=20%, 12=13%, and 13=14%) and about getting in trouble (10=8%, 11=9%, 12=4%, and 13=2%).

Children who admit to having hurt themselves when upset more often volunteered that they get upset about their family (39% vs. 30%), their parents (22% vs. 11%), and about getting in trouble (10% vs. 5%). They are less likely to be upset about grades, school, or homework (27% vs. 42%) or peer difficulties (13% vs. 24%).

2. When you are feeling stressed or upset, how often do you do each of the following? (closed-end with three levels).

	A LOT	SOMETIMES	NEVER
play or do something active	52%	37%	11%
listen to music	44%	38%	18%
watch TV or play a video game	42%	43%	15%
talk to a friend	30%	42%	28%
try not to think about it	29%	50%	21%
try to work things out	28%	53%	19%
eat something	26%	48%	25%
lose my temper	23%	60%	17%
talk to a parent	22%	50%	28%
keep it to myself	21%	68%	11%
feel bad about myself	15%	47%	38%
cry	11%	42%	47%

There seems to be a strong preference for techniques that distract one from worry (playing, listening to music, watching TV/playing video games, or not thinking about it). Based on responses marked “a lot,” boys and girls appear to have different coping styles. Girls were more likely to listen to music (51% vs. 37%), talk to a friend (37% vs. 24%), try to work it out (32% vs. 25%), feel bad about themselves (20% vs. 12%), and cry (20% vs. 4%). Boys were more likely to play or be active (56% vs. 46%), watch TV/play a video games (50% vs. 32%), or keep it to themselves (24% vs. 18%).

For most of the coping categories, there were no interpretable age patterns with a few exceptions. Older children were less likely to try to work things out (10=34%, 11=27%, 12=25%, 13=20%), or to talk to a parent (10=25%, 11=23%, 12=21%, 13=12%). They were more likely to listen to music (10=32%, 11=45%, 12=54%, 13=48%).

When upset, kids who have hurt themselves also were more likely to have other potentially unhealthy coping patterns such as eating (36% vs. 24%), losing their tempers (36% vs. 19%), keeping it to themselves (26% vs. 19%), and feeling bad about themselves (20% vs. 13%). They also were more likely to cry (16% vs. 10%) and to listen to music (51% vs. 41%). Conversely, they were less likely to try to work things out.

3. Have you ever hurt yourself on purpose when you were stressed or upset?

Yes = 25.2% No=74.8%

If yes, what did you do? (open-end)

Six students gave a valid description of something they had done to hurt themselves at least once when upset. Their responses can be grouped into seven categories:

no answer	80%
bang head or body on object	8%
hit/bite/burn self	5%
cut/stab self	4%
pinch or pull hair	1%
choke self	1%
all others	1%
gave an answer, but probably misunderstood the question	4%

Note: Totals to more than 100% because some students gave more than one answer

Note: All others category inflated due to the intercorrelation of responses unaccounted for.

Note: When asked if they have every hurt themselves 25% said yes, but only 20% gave a specific way.

Among the top four answers, boys were slightly more likely to admit hurting themselves (28% vs. 21%). They were also more likely to say they did so by banging their head or body on an object (11% vs. 4%). There were no differences by age.

4. What should parents do to help kids when they are stressed or upset? (open-end)

The students' responses were grouped into 11 categories:

talk with them about it	57%
help them feel better/comfort/cheer up/hug	43%
give attention/listen/play/do something special	27%
teach/guide/help solve problem	18%
let kids do what they want/leave them alone	15%
nothing/don't care	3%
stop yelling/stop what is going on	3%
don't make them feel worse	2%
help them get their minds off it	2%
pray with them	<1%
include friends, teachers, and others in the conversation	<1%
All others	7%

Note: All others category inflated due to the intercorrelation of responses unaccounted for.

Of the top nine categories, girls were more likely to say talk with them about it (66% vs. 50%) and to say stop yelling/stop what is going on (4% vs. 2%). Boys were slightly more likely to say do nothing/don't care (4% vs. 2%).

Older kids were more apt to say leave them alone or let them do what they want (10=11%, 11=12%, 12=20%, 13=29%) and less likely to say help them feel better/comfort/cheer/hug (10=50%, 11=53%, 12=38%, 13=37%). Children who admit to having hurt themselves are less likely to suggest parents should talk to their children about their worries (50% vs. 60%).

Other Findings Worth Highlighting

Another way of looking at the data is to calculate odds ratios for outcomes based on the predictive variables. To control for overlapping effects, the odds ratios were adjusted by including all the variables simultaneously in a logistic regression model. The outcome of interest is risk for self-injury. Categories that were significant in Chi-Squared analysis plus gender and age were entered into the regression model. For ease of interpretation, coping frequency was recoded into dichotomous levels (“ever use the coping technique” vs. “never use”). Each level of each variable has a comparison level. For example, in the presence of the other variables, being a boy more than doubles a child’s risk of hurting himself when upset. For the other variables, the comparison is “never used the technique” or “did not volunteer the answer.”

	Have Hurt Self When Upset	
	<i>(Outcome based on using coping strategies a lot)</i>	<i>(Outcome based on <u>ever</u> using coping strategies)</i>
Gender		
Boy	2.0x*	2.2x*
Girl	comparison level	comparison level
Age		
13 years old or older	0.7x	0.9x
12 years old	0.6x	0.8x
11 years old	0.9x	1.1x
10 years old or younger	comparison level	comparison level
Volunteered Worries		
My parents	1.8x	2.0x*
My family	1.1x	1.0x
Getting in trouble	1.6x	1.8x
Use Coping Strategy	A lot	Ever
Try to work it out	0.6x* <i>(inverse =1.6x)</i>	0.6x* <i>(inverse =1.6x)</i>
Lose my temper	1.7x*	4.1x*
Feel bad about myself	1.1x	1.8x*
Cry	1.5x	1.6x*

*Odds ratio statistically significant at $P < 0.05$.

Based on this analysis, it appears that boys and those who volunteer that they get stressed or upset about their parents are more likely to hurt themselves when upset. Additionally, those who use active coping (try to work out the concern) are less likely to hurt themselves, while those who feel bad about themselves, cry, and lose their tempers are more likely to hurt themselves. In fact, the single greatest risk factor for self-injury when upset is a tendency to lose one's temper.

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