





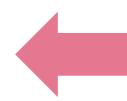
## **The Consequences of Bullying** July 28<sup>th</sup>, 2016

# **Tech Tips**

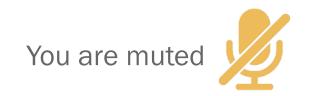


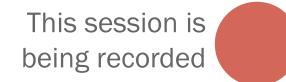
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### Tracy Vaillancourt, Ph.D.



# PREVENTING BULLYING

### Through Science, Policy, and Practice

The National Academies of SCIENCES • ENGINEERING • MEDICINE

### STUDY SPONSORS

- Centers for Disease Control and Prevention (CDC)
- Eunice Kennedy Shriver National Institute of Child Health & Human Development
- Health Resources and Services Administration
- National Institute of Justice
- Robert Wood Johnson Foundation
- Substance Abuse and Mental Health Services Administration
- The Semi J. and Ruth W. Begun Foundation
- Highmark Foundation

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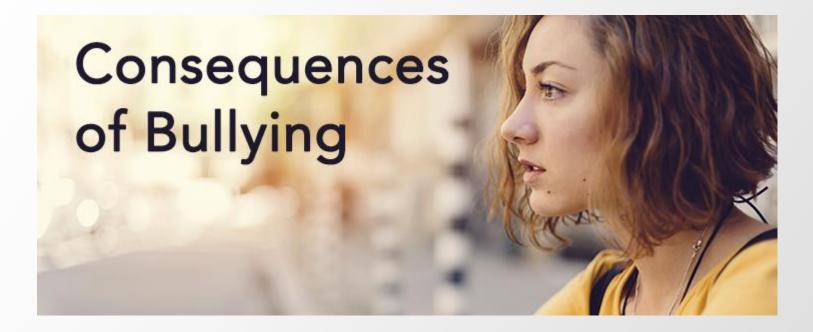
Natacha Blain Director, Board on Children, Youth, and Families

Kathi Grasso Director, Committee on Law and Justice

### INTERDISCIPLINARY COMMITTEE WITH BROAD PERSPECTIVE













Bullying, long tolerated as just a part of "growing up," is now recognized as a major and preventable public health problem



Growing concerns about bullying and its short and long-term consequences



### STATEMENT OF TASK

 The Board on Children, Youth, and Families in conjunction with the Committee on Law and Justice, of the National Academies convened a committee of experts to:

conduct a consensus study and produce a comprehensive report on the state of the science on:

- 1) the biological and psychosocial consequences of peer victimization and
- 2) the risk and protective factors that either increase or decrease peer victimization behavior and consequences.

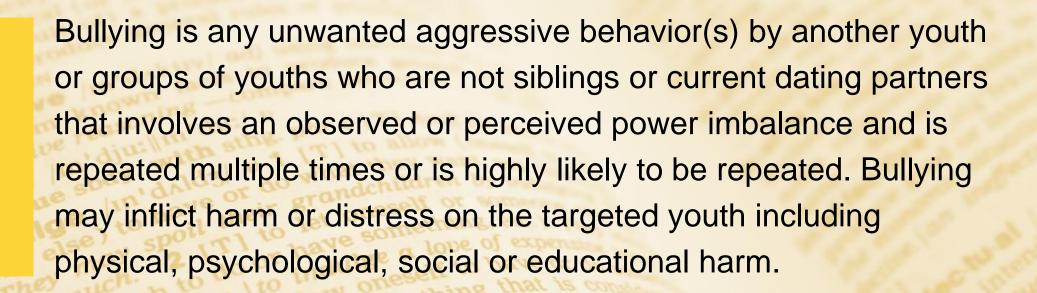
A particular focus on children who are most at risk of peer victimization— those with high risk factors in combination with few protective factors— such as **children with disabilities**, **LGBT youth**, **poly-victims**, and **children living in poverty** were included in the study.

### THE FOLLOWING QUESTIONS WERE OF PARTICULAR INTEREST TO THE COMMITTEE:



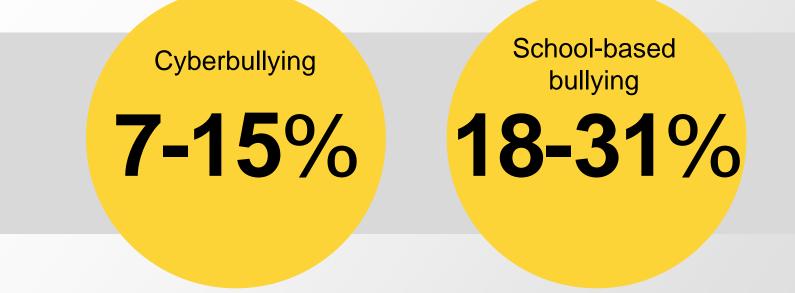
What is the state of the research on neurobiological, mental and behavioral health effects of bullying? How are individual and other characteristics related to the dynamic between perpetrator and target? Short and long-term outcomes for both?

What is known about physiological and psychosocial consequences of bullying (both perpetrator and target)? What factors contribute to resilient outcomes of youth exposed to and involved in bullying?

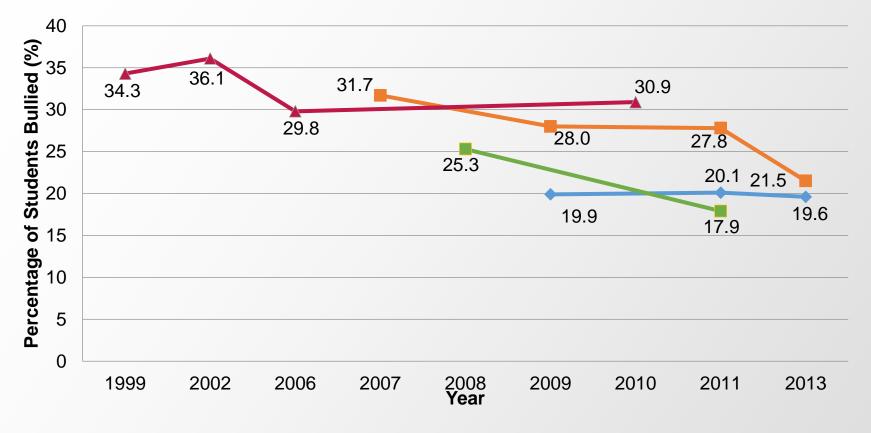


### PREVALENCE OF BULLYING

National surveys show bullying behavior is a significant problem that affects a large number of youth:

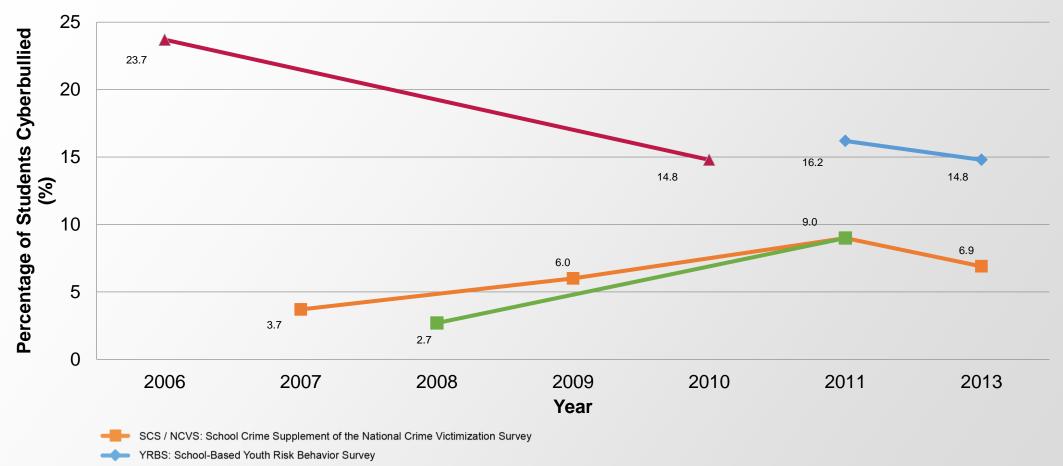


### TRENDS IN STUDENTS WHO ARE BULLIED OVER TIME



- SCS / NCVS: School Crime Supplement of the National Crime Victimization Survey
- YRBS: School-Based Youth Risk Behavior Survey
- HBSC: The Health Behavior in School-Aged Children Survey
- NatSCEV II: National Survey of Children's Exposure to Violence

### TRENDS IN CYBERBULLYING OVER TIME



- HBSC: The Health Behavior in School-Aged Children Survey
- NatSCEV II: National Survey of Children's Exposure to Violence

### GROUPS VULNERABLE TO BULLYING

Prevalence increases for subgroups of children- particularly those that are most vulnerable:

- LGBT Youth: Prevalence is double that of heterosexual youth
  25.6% 43.6%
- Youth with Disabilities: Over-represented in bullying dynamic.
  1.5 times as much
- **Obese Youth**: At increased risk but difficult to attribute to a single physical attribute; often co-exists with other factors



### RISK FACTORS REQUIRING MORE RESEARCH IN RELATION TO BULLYING

#### Socioeconomic Status

Conflicting studies

#### Immigration Status

Inconsistencies in studies

#### Minority Religious Affiliations

Hypothesis only; need empirical documentation to assess link

#### • Youth with Multiple Stigmatized Statuses

Largely unknown area

#### Urban Youth vs Rural Youth

Rural vs urban inconsistencies in literature



### SOCIAL CONTEXT AND BULLYING

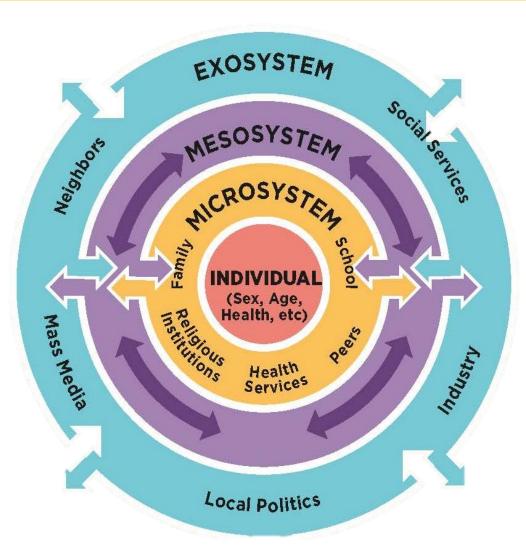
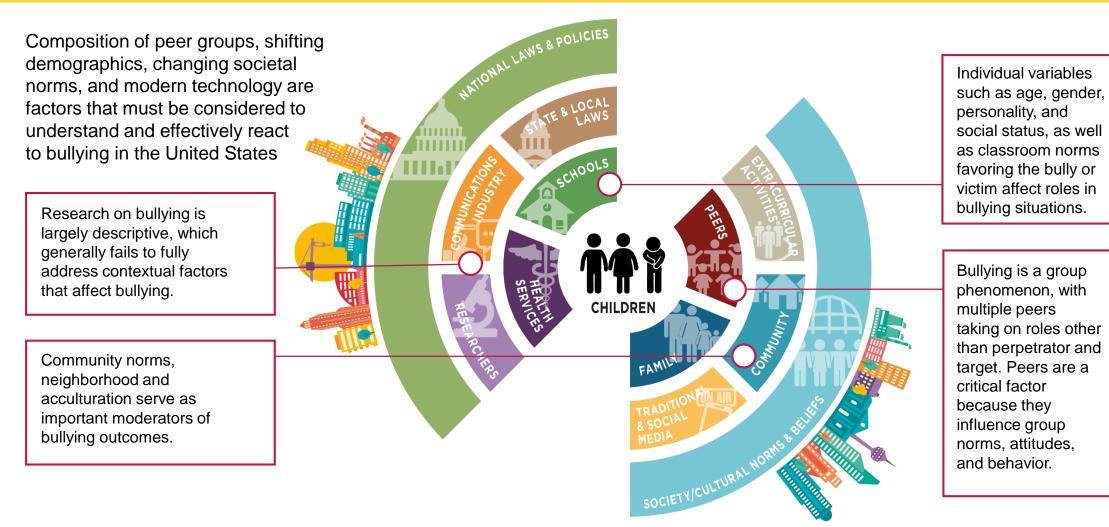
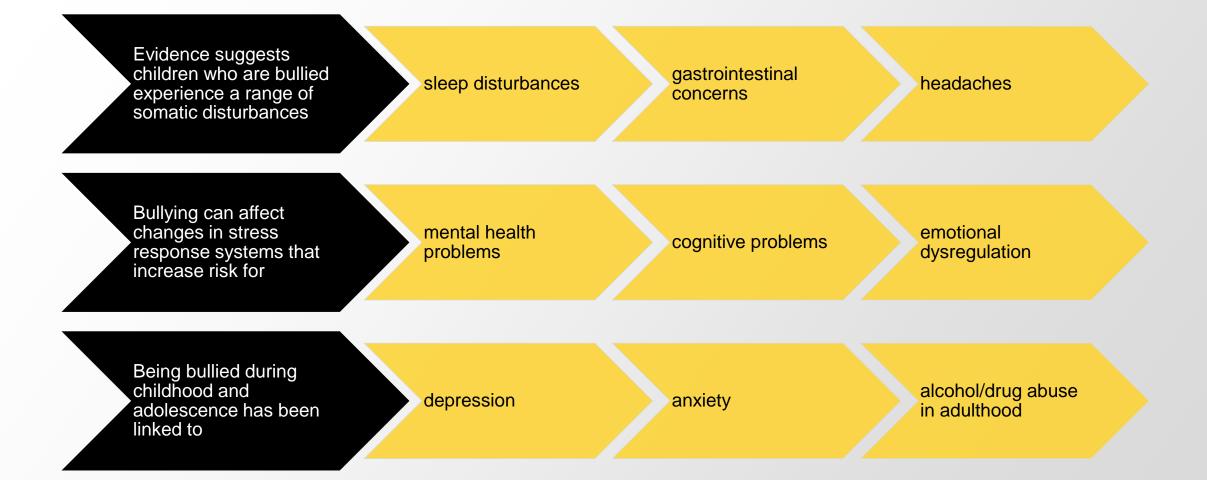


FIGURE 3-2 BRONFENBRENNER'S ECOLOGICAL THEORY OF DEVELOPMENT. SOURCE: Adapted from Bronfenbrenner (1979).

### THE LANDSCAPE OF BULLYING



### CONSEQUENCES OF BULLYING



### PSYCHOLOGICAL CONSEQUENCES

#### The Evidence Shows:

- Individuals who are involved in bullying in any capacity are more likely to contemplate or attempt suicide, however
- High-status bullies have been found to rank high on assets and competencies, but have also been found to rank low on psychopathology
- Individuals who both bully others and are bullied are at the greatest risk for poor psycho-social outcomes but contextual factors can affect this risk.

There is not enough evidence to conclude that bullying is a causal factor for youth suicides.

Also, data are unclear on the role of bullying as one of the precipitating factors in school shootings.



Bullying has significant short- and long-term psychological consequences for involved children.

### LONG-TERM PSYCHOLOGICAL CONSEQUENCES

#### Article

#### Adult Health Outcomes of Childhood Bullying Victimization: Evidence From a Five-Decade Longitudinal British Birth Cohort

Ryu Takizawa, M.D., Ph.D. Barbara Maughan, Ph.D. Louise Arseneault, Ph.D. **Objective:** The authors examined midlife outcomes of childhood bullying victimization.

Method: Data were from the British National Child Development Study, a 50-year prospective cohort of births in 1 week in 1958. The authors conducted ordinal logistic and linear regressions on data from 7,771 participants whose parents reported bullying exposure at ages 7 and 11 years, and who participated in follow-up assessments between ages 23 and 50 years. Outcomes included suicidality and diagnoses of depression, anxiety disorders, and alcohol dependence at age 45; psychological distress and general health at ages 23 and 50; and cognitive functioning, socioeconomic status, social relationships, and well-being at age 50.

**Results:** Participants who were bullied in childhood had increased levels of psychological distress at ages 23 and 50. Victims of frequent bullying had higher rates of depression (odds ratio=1.95, 95% CI=1.27–2.99), anxiety disorders (odds ratio=1.65, 95% CI=1.25–2.18), and suicidality (odds ratio=2.21, 95% CI=1.47–3.31) than their nonvictimized peers. The effects were similar to those of being placed in public or substitute care and an index of multiple childhood adversities, and the effects remained significant after controlling for known correlates of bullying victimization. Childhood bullying victimization was associated with a lack of social relationships, economic hardship, and poor perceived quality of life at age 50.

**Conclusions:** Children who are bullied and especially those who are frequently bullied—continue to be at risk for a wide range of poor social, health, and economic outcomes nearly four decades after exposure. Interventions need to reduce bullying exposure in childhood and minimize longterm effects on victims' well-being; such interventions should cast light on causal processes.

(Am J Psychiatry 2014; 171:777–784)

### LONG-TERM PSYCHOLOGICAL CONSEQUENCES

### Adult mental health consequences of peer bullying and maltreatment in childhood: two cohorts in two countries



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Suzet Tanya Lereya, William E Copeland, E Jane Costello, Dieter Wolke

	o						<b>D</b>			6.141		
	Overall mental health problem			Anxiety			Depression			Self-harm and suicidality		
	n (%)*	OR (95% CI)	p value	n (%)*	OR (95% CI)	pvalue	n (%)*	OR (95% CI)	pvalue	n (%)*	OR (95% CI)	p value
Maltreatment, being	g bullied, or l	both vs none (n	ot maltreate	ed nor being bu	llied)							
ALSPAC (n=4026)		(n=4026)			(n=4026)			(n=4026)			(n=4026)	
None (n=2205)	339 (15%)	[reference]	-	175 (8%)	[reference]		116 (5%)	[reference]		156 (7%)	[reference]	
Maltreatment only (n=341)	59 (17%)	1.2 (0.9–1.6)	0.362	33 (10%)	1-2 (0-8-1-8)	0-276	25 (7%)	1.4 (0.9–2.2)	0.122	24 (7%)	1-0 (0-6–1-6)	0.980
Being bullied only (n=1197)	296 (25%)	1.8 (1.5–2.2)	<0.0001	156 (13%)	1.7 (1.4–2.2)	<0.0001	135 (11%)	2-3 (1-8-3-0)	<0.0001	143 (12%)	1.8 (1.4-2.3)	<0.0001
Both (n=283)	81 (29%)	2.2 (1.7-2.9)	<0.0001	38 (13%)	1.8 (1.2-2.6)	0-002	40 (14%)	3.0 (2.0-4.3)	<0.0001	38 (13%)	2.0 (1.4-3.0)	0.0002
GSMS (n=1273)		(n=1273)			(n=1273)			(n=1273)			(n=1273)	
None (n=682)	74 (11%)	[reference]		46 (6%)	[reference]		29 (2%)	[reference]		22 (5%)	[reference]	
Maltreatment only (n=207)	50 (17%)	1.7 (0.8-3.3)	0.16	24 (8%)	1-3 (0-6-3-1)	0-53	22 (9.5%)	5.6 (2.2-14.3)	<0.0001	15 (8.5)	1.9 (0.7–5.5)	0.23
Being bullied only (n=225)	41 (36%)	4.7 (2.6-8.7)	<0.0001	34 (25.5%)	5.0 (2.4-10.3)	<0.0001	19 (11%)	6.9 (2.7–17.2)	<0.0001	14 (13%)	3.0 (1.2-8.0)	0.02
Both (n=159)	43 (30%)	3.5 (1.7-7.1)	<0.0001	31 (26%)	5.1 (2.3-11.4)	<0.0001	17 (13-5%)	8-4 (3-1-22-7)	<0.0001	13 (10%)	2.2 (0.7-6.9)	0.19
Maltreatment vs bei	ng bullied											
ALSPAC (n=1538)		(n=1538)			(n=1538)			(n=1538)			(n=1538)	
Maltreatment only (n=341)	59 (17%)	[reference]	-	33 (10%)	[reference]		25 (7%)	[reference]		24 (7%)	[reference]	
Being bullied only (n=1197)	296 (25%)	1.6 (1.2–2.1)	0.004	156 (13%)	1-4 (0-9-2-1)	0-097	135 (11%)	1.6 (1.0-2.5)	0.037	143 (12%)	1.8 (1.1-2.8)	0.011
GSMS (N=432)		(n=432)			(n=432)			(n=432)			(n=432)	
Maltreatment only (n=207)	50 (17%)	[reference]	-	24 (8-3)	[reference]		22 (9.5)	[reference]		15 (8-5)	[reference]	
Being bullied only (n=225)	41 (36%)	2.9 (1.4-6.0)	0.006	34 (25-5)	3.8 (1.60-9.30)	0-003	19 (11·3)	1.2 (0.4-3.5)	0.71	14 (13-0)	1-6 (0-5-5-0)	0.42

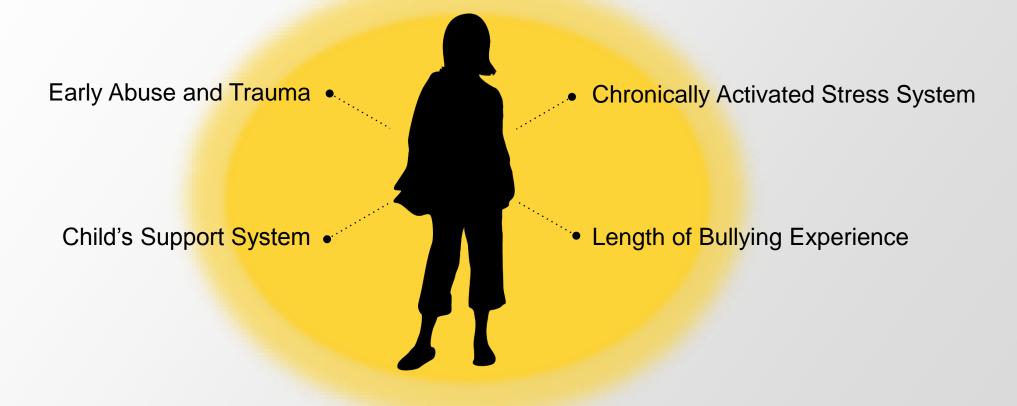
OR=odds ratio. ALSPAC=Avon Longitudinal Study of Parents and Children. GSMS= Great Smoky Mountains Study. Being bullied only refers to being bullied by peers in at least one timepoint. Overall mental health problem refers to having anxiety, depression, or self-harm or suicidality. For GSMS: percentages are weighted; sample sizes are unweighted. \*Refers to the number of children who have the associated mental health problem.

Lancet Psychiatry, 2015

Table 2: Mental health outcomes of maltreatment and being bullied by peers

### NEURO-BEHAVIORAL CONSEQUENCES

Existing evidence suggests both social-cognitive and emotion regulation processes may mediate/moderate the relation between bullying and adverse mental health outcomes



### NEURO-BEHAVIORAL CONSEQUENCES

#### Brain and Cognition 77 (2011) 191–199

	Contents lists available at SciVerse ScienceDirect	BRAIN and COGNITION
5-52.20	Brain and Cognition	
ELSEVIER	journal homepage: www.elsevier.com/locate/b&c	Therease a

### Peer victimization, depressive symptoms, and high salivary cortisol predict poorer memory in children

Tracy Vaillancourt <sup>a,b,c,\*</sup>, Eric Duku <sup>a,c,d</sup>, Suzanna Becker <sup>b</sup>, Louis A. Schmidt <sup>b,c</sup>, Jeffrey Nicol <sup>e</sup>, Cameron Muir <sup>f</sup>, Harriet MacMillan <sup>c,d</sup>

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#### ARTICLE INFO

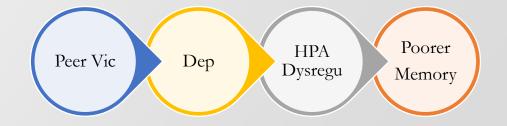
Article history: Available online 19 August 2011

Keywords: Peer victimization Memory Cortisol Depressive symptoms Children Longitudinal

#### ABSTRACT

The predictive relations of peer victimization, depressive symptoms, and salivary cortisol on memory in 168 children aged 12 at Time 1 (T1) were examined using a longitudinal design in which data were collected on four occasions over a 2-year period. Results indicated that: (1) peer victimization, depressive symptoms, and evening cortisol were stable over time, (2) peer victimization and elevated symptoms of depression were concurrently linked at each time, (3) T1 peer victimization predicted elevated symptoms of depression at T2 which in turn predicted lower cortisol levels at T3, and (4) controlling for earlier associations, T3 peer victimization, depressive symptoms, and higher morning and evening cortisol levels uniquely predicted memory deficits at T4. The links between elevated cortisol, symptoms of depression, and poor memory are consistent with published research on depressed adults and extend the findings to children exposed to peer victimization. These findings highlight that peer abuse is harmful and may impact children's long-term mental health and memory functioning.

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### IN SUMMARY

Bullying negatively influences targets and perpetrators... ...and its damaging effects are far reaching... ...impacting multiple domains of functioning both in the short- and long-term.



### FINAL REMARKS



To learn more about the Committee or to access the report, please visit our website: <u>www.nas.edu/scienceonbullying</u>

Help us spread the word on social media: #ScienceOnBullying, #BullyingPrevention

Look for us at the following conferences to hear more about the Report:

Society for Prevention Research conference in San Francisco & International Bullying Prevention Association conference in New Orleans

# Thank you!

### **Please take our short evaluation**

Next webinar:

# Bullying Prevention Law and Policy August 24<sup>th</sup>, 2016 3:00-4:00 p.m. Eastern Time Click here to register

