

Peer victimization and mental health outcomes: Genetic, neurophysiological, and neuroendocrine considerations

Tracy Vaillancourt, Ph.D.
Professor and Canada Research Chair, Children's Mental Health and Violence Prevention
Counselling, Faculty of Education
School of Psychology, Faculty of Social Sciences
University of Ottawa



Declaration of Disclosure

- In 2011 I was a paid consultant for Pfizer's More Than Medication®
- I have no actual or potential conflict of interest in relation to this program.
- I also assume responsibility for ensuring the scientific validity, objectivity, and completeness of the content of my presentation.

Learning Objectives

Examine...

- 1 link b/w bullying and mental health
- 2 temporal sequence
- 3 heterogeneity in MH outcomes
considering genetic, neurophysiological, and neuroendocrine evidence
- 4 best-practice recommendations

What is bullying?

- A person is being bullied if he or she is exposed repeatedly and over time, to negative actions on the part of one or more persons.
- Three Criteria:
 - repeated over time
 - imbalance of power
 - intentionality

DEFINITION OF BULLYING

For the purposes of developing and implementing policies on bullying prevention and intervention, boards will use the following definition of *bullying*:

Bullying is typically a form of repeated, persistent, and aggressive behaviour directed at an individual or individuals that is intended to cause (or should be known to cause) fear and distress and/or harm to another person's body, feelings, self-esteem, or reputation. Bullying occurs in a context where there is a real or perceived power imbalance.

Bullying takes many forms

- Physical
- Verbal
- Social
- Cyber
- Racial
- Sexual



1 Link b/w bullying and MH

Long term consequences

- academic difficulties
- school truancy/avoidance
- increased absenteeism
- somatic complaints
- stress-related illness
- physical health problems
- low self-esteem
- depression
- social withdrawal/isolation
- social anxiety
- loneliness
- suicide
- aggressive behaviour

see review by McDougall & Vaillancourt, 2013

“Better Dead than Gay”

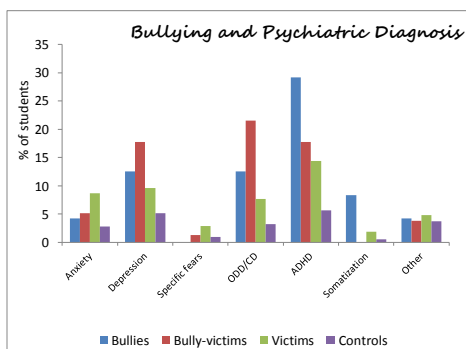
- Gay youth are 4 times more likely to attempt suicide than straight youth (Garofalo, et al., 1999; Howard, 1998)

TABLE 1—The Prevalence and Odds of Suicide Risk in Adolescent Males and Females According to Sexual Orientation: Minnesota Public School Survey, Grades 7 through 12, 1987

Suicide Variable	Bisexual/Homosexual		Heterosexual		OR*	95%CI
	No.†	%	No.†	%		
Males						
Ideation	173	31.2	164	20.1*	1.61	0.94, 2.76
Attempts	178	28.1	168	4.2**	7.10	3.05, 16.53
Intent	173	14.5	164	4.3**	3.61	1.40, 9.36
Females						
Ideation	185	36.4	143	34.3	1.09	0.67, 1.78
Attempts	166	20.5	145	14.5	1.50	0.81, 2.75
Intent	155	9.7	143	6.3	1.67	0.68, 4.07

Note: OR = odds ratio; CI = confidence interval.
 †Number of respondents; numbers varied owing to missing data.
 *Odds ratio associated with homosexuality, adjusted for race in females and socioeconomic status in males.
 †P = .02; **P = .0015; ***P < .00001.

Refamedji et al., 1998



Kumpulainen, K., Rasanen, E., & Puura, K. (2001)

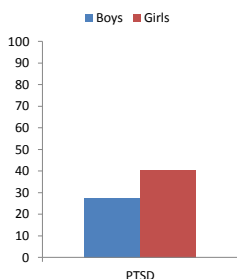
J Abnorm Child Psychol (2012) 40:986–993
 DOI 10.1007/s10802-012-9620-4

Bullying and PTSD Symptoms

Therese Liden • Ailsa Brydson • Elin Comas-Forgas

Published online: 9 March 2012
 © Springer Science+Business Media, LLC 2012

Abstract PTSD symptoms related to school bullying have rarely been investigated, and never in national samples. We used data from a national survey to investigate this among students from grades 8 and 9 (n=963). The prevalence estimates of exposure to bullying were within the range of earlier research findings. Multinomial logistic regression showed that boys were 2.7 times more likely to be exposed to frequent bullying than girls. A least variable second-order model demonstrated an association between frequency of bullying exposure and PTSD symptoms (beta=0.49). This relationship was not moderated by gender. However, the average levels of PTSD symptoms as well as clinical range symptoms were higher for girls. For all clinical students, 27.6% of the boys and 40.7% of the girls had scores within the clinical range. A logistic model showed that youth who identify as being both a bully and a victim of bullying were most troubled than those who were victims only. Our findings support the idea that exposure to bullying is a potential risk factor for PTSD symptoms among students. Future research could investigate whether the same holds for PTSD through diagnostic procedures, but this will depend on whether or not bullying is decided to comply with the DSM-IV classification of trauma required for diagnosis. Results are discussed with regard to their implications for school interventions.



2 Temporal Sequence

- Do children and youth become unwell as a consequence of poor treatment?
 OR
- Are children and youth bullied because they are unwell to begin with?
 – Bullied ⇔ poor MH?
 – Poor MH ⇔ bullied ⇔ poorer MH?

Internalizing Problems

- Peer victimization linked to **I** internalizing problems in ensuing years
 - Arseneault et al., 2006; Goodman, Stormshak & Dishion, 2001; Hanish & Guerra, 2002; Hodges, Boivin, Vitaro, & Bukowski, 1999; Hodges & Perry, 1999; Kumpulainen & Rasanen, 2000; Schwartz, Gorman, Nakamoto, & Toblin, 2005; Snyder et al., 2003; Sweeting, Younger, West & Der, 2006; Troop-Gordon & Ladd, 2005; Vaillancourt et al., 2011; Zwierzyńska, Wolke, & Lereya, 2012; see also meta-analyses by Reijntjes, Kamphuis, Prinzie, & Telch, 2010; Tofli, Farrington, Losel, & Loeber, 2011

Do the victims of school bullies tend to become depressed later in life? **Yes** A systematic review and meta-analysis of longitudinal studies

Maria M. Tofli, David P. Farrington, Friedrich Losel and Rolf Loeber

Maria M. Tofli, David P. Farrington and Friedrich Losel are based at the Institute of Criminology, Cambridge University, Cambridge, UK.
Rolf Loeber is based at the Western Psychiatric Institute and Clinic, University of Pittsburgh, Pittsburgh, Pennsylvania, USA.

Abstract

Purpose – The purpose of this paper is to investigate the extent to which bullying victimization in school predicts depression in later life and whether this relation holds after controlling for other major childhood risk factors.

Design/methodology/approach – As no previous systematic review has been conducted on this topic, effect sizes are based on both published and unpublished studies; longitudinal investigators of all studies have conducted specific analyses for the authors' review.

Findings – The probability of being depressed up to 36 years later (mean follow-up period of 16.9 years) was much higher for children who were bullied at school than for non-bullied students (odds ratio (OR) = 1.89, 95 per cent CI: 1.71–2.32). Bullying victimization was a significant risk factor for later depression even after controlling for up to 20 (mean number of six covaried) major childhood risk factors (OR = 1.74, 95 per cent CI: 1.54–1.97). Effect sizes were smaller when the follow-up period was longer and larger the younger the child was when exposed to bullying. Finally, the summary effect size was not significantly related to the number of risk factors controlled for.

Originality/value – Although causal inferences are tentative, the overall results presented in this paper indicate that bullying victimization is a major childhood risk factor that uniquely contributes to later depression. High quality effective anti-bullying programmes could be viewed as an early form of public health promotion.

Keywords Bullying, Schools, Adults, Depression

Paper type Research paper

Externalizing Problems

- Peer victimization linked to **E** externalizing problems in ensuing years
 - Barker, Arseneault, Brendgen, & Maughan 2008; Hanish & Guerra, 2002; Ladd & Troop-Gordon, 2003; Smith, Talamelli, Cowie, Naylor, & Chauhan, 2004; Yeung & Leadbeater, 2010; see also meta-analysis by Reijntjes et al., 2011

Symptom Driven Pathway

- Meta-analytic work supports observation...
 - internalizing challenges antecede peer victimization although the reverse direction appears to be stronger
 - Reijntjes et al. 2010
 - externalizing symptoms are sometimes observed to precede peer victimization
 - Reijntjes et al., 2011

Academic Functioning

- Knowledge is more limited and associations less straightforward
 - pathways are often indirect or are not found
 - Beran, 2008; Hanish & Guerra, 2002; Kochenderfer & Ladd, 1996
 - some longitudinal studies show that victimized children fare less well academically and avoid school more over time
 - Buhs et al., 2006; Gastic, 2008; Kochenderfer & Ladd, 1996; Nansel, Haynie, & Simons-Morton, 2003; Schwartz et al., 2005

Limitations

- Primary focus is on one-to-one connections
 - Narrowed our comprehension of how peer victimization might have an indirect effect on other constructs
 - No consideration of bidirectional influences and complex transactions
 - Example: Peer victimization, mental health, and academic functioning in consort over time.

Cascade Models

- “... the cumulative consequences for development of the many interactions and transactions occurring in developing systems that result in spreading effects across levels, among domains at the same level, and across different systems or generations” (p. 491).

Masten and Cicchetti (2010)

- The way a child functions in one domain will have an impact on how he or she functions in other areas.

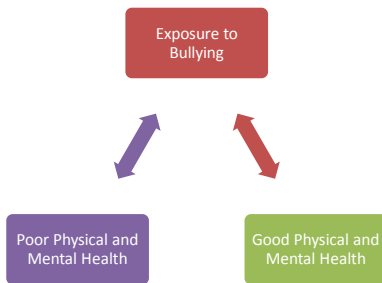


Kochel, Ladd, and Rudolph (2012)

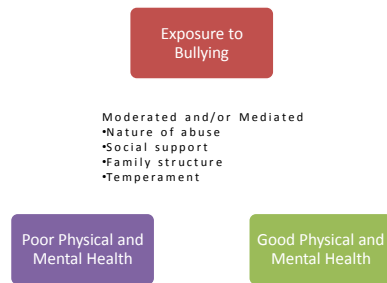
3 Heterogeneity in MH outcomes

- Why is it that some children seem to be so adversely affected by bullying while others seem to cope better?

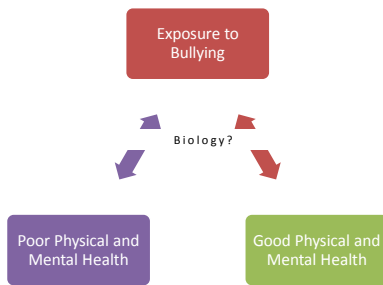
Divergent Pathways



Divergent Pathways



Divergent Pathways



Not Drama Queens!



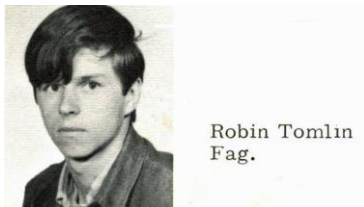
UN World Report on Violence against Children (2006)

- “...persistent social acceptance of some types of violence against children...”
- “...corporal punishment and other forms of cruel or degrading punishment, bullying and sexual harassment, and a range of violent traditional practices may be perceived as normal, particularly **when no lasting visible physical injury results.**”

Sticks and stones may break my bones but words will never hurt me. SAYS WHO?



Neurophysiological Evidence



“I feel like, emotionally, they have been beating me with a stick for 42 years”



- Studies show that people can relive and re-experience social pain more easily than physical pain and the emotions they feel are more intense and painful.

– Chen, Williams, Fitness, Newton, 2008

- Physical pain is often short lived whereas social pain can last a life time.



Sir Winston Churchill (1874-1965)

“Criticism may not be agreeable, but it is necessary. It fulfills the same function as pain in the human body. It calls attention to an unhealthy state of things”

doi:10.1038/nrn2907

SCN (2009) 4, 140-157

Neural correlates of social exclusion during adolescence: understanding the distress of peer rejection

Recent neuroimaging studies have shown that parts of the cortical physical pain network are also activated when a person is socially excluded

- Physical & social pain share similar neural structures
- Linked to evolution
 - ↑ survival among mammalian species

adolescents with higher rejection sensitivity and interpersonal competence scores displayed greater neural evidence of emotional distress, and adolescents with higher interpersonal competence scores also displayed greater neural evidence of regulation, perhaps suggesting that adolescents who are vigilant regarding peer acceptance may be most sensitive to rejection experiences.

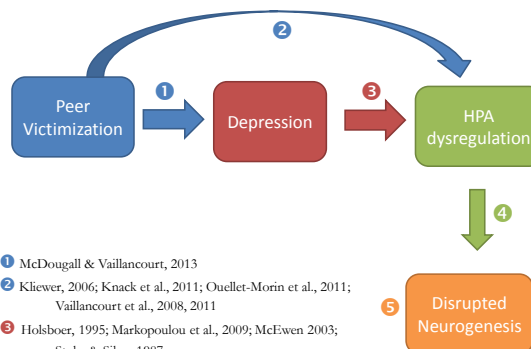
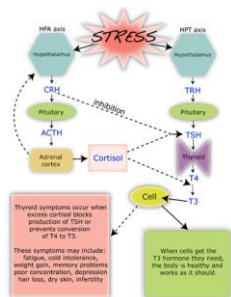
Keywords: peer rejection; adolescence; functional magnetic resonance imaging

Neural Alarm

- Rejection is differentiated in less than 500 ms by children
 - Using event-related potentials (ERPs) to study neural activity that occurs when a person is rejected

Crowley et al., 2010

Neuroendocrine Evidence



- 1 McDougall & Vaillancourt, 2013
- 2 Kliever, 2006; Knack et al., 2011; Ouellet-Morin et al., 2011; Vaillancourt et al., 2008, 2011
- 3 Holsboer, 1995; Markopoulou et al., 2009; McEwen 2003; Stoke & Sikes, 1987
- 4 Horna et al., 1997; Leon-Carrion et al., 2009; Michopoulos et al., 2008
- 5 Vaillancourt et al., 2011

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

Tracy Vaillancourt^{a,b,c}, Eric Duku^{a,d}, Suzanna Becker^a, Louis A. Schmidt^{b,e}, Jeffrey Nicol^a, Cameron Muir^a, Harriet MacMillan^{a,f}

^aCentre of Excellence for Child Health, University of Ottawa, Ottawa, Ontario, Canada
^bDepartment of Psychology, Neuroscience & Behaviour, Brock University, St Catharines, Ontario, Canada
^cChild Center of Excellence, Memorial University, St John's, Canada
^dDepartment of Psychology, Memorial University, St John's, Canada
^eDepartment of Psychology, York University, North York, Ontario, Canada
^fDepartment of Psychology, Centre for Neuroscience, York University, St. Catharines, Ontario, Canada

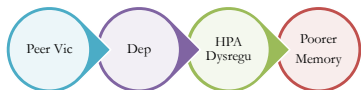
ARTICLE INFO

Article history:
Available online 19 August 2011

Keywords:
Peer victimization
Memory
Cortisol
Depressive symptoms
Children
Longitudinal

ABSTRACT

The prospective relations of peer victimization, depressive symptoms, and salivary cortisol on memory in 106 children aged 12 at Time 1 (T1) were examined using a longitudinal design in which data were collected on their victims over a 3-year period. Results indicated that (1) peer victimization, depressive symptoms, and salivary cortisol were related over time, (2) peer victimization and elevated symptoms of depression were associated with poorer memory at T2, and (3) peer victimization predicted elevated symptoms of depression at T2 which in turn predicted lower cortisol levels at T2, and (4) controlling for earlier memory predicted memory deficits at T2. The links between elevated cortisol, symptoms of depression, and poor memory are consistent with published research on impaired ability and memory deficits in children exposed to peer victimization. These findings highlight the importance of identifying and treating children's long-term mental health and memory difficulties. © 2011 Elsevier Inc. All rights reserved.



A Discordant Monozygotic Twin Design Shows Blunted Cortisol Reactivity Among Bullied Children

Isabelle Chouli-Martin, M.D., Andrea Danese, M.D., Ph.D., Lucy Bowes, Ph.D., Santa Shakoor, M.Sc., Anthony Ambler, M.Sc., Carmine M. Pariante, M.D., M.Sc.Psych., Ph.D., Andrew S. Papadopoulos, Ph.D., Avshalom Caspi, Ph.D., Terrie E. Moffitt, Ph.D., Louise Arseneault, Ph.D.

“Results from this natural experiment provide support for a causal effect of adverse childhood experiences on the neuroendocrine response to stress”.

Environmental Risk (E-Risk) Longitudinal Twin Study, a nationally representative 1994-1995 cohort of families with twins. Results: Bullied and nonbullied MZ twins showed distinct patterns of cortisol secretion after the TSST. Specifically, bullied twins exhibited a blunted cortisol response compared with their nonbullied MZ co-twins, who showed the expected increase. This difference in cortisol response to stress could not be attributed to children's genetic makeup, their familial environments, pre-existing and concomitant individual factors, or the perception of stress and emotional response to the TSST. Conclusion: Results from this natural experiment provide support for a causal effect of adverse childhood experiences on the neuroendocrine response to stress. J. Am. Acad. Child Adolesc. Psychiatry, 2011;50(6):774-782. Key words: early-life stress, cortisol, HPA axis, discordant MZ twin design, bullying

JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY
VOLUME 50 NUMBER 6 JUNE 2011

Genetic Evidence

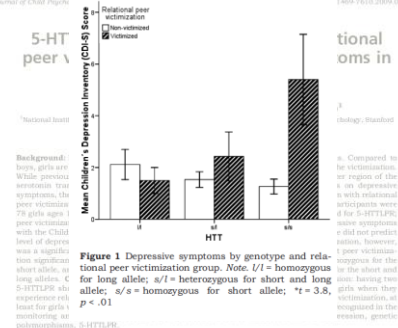
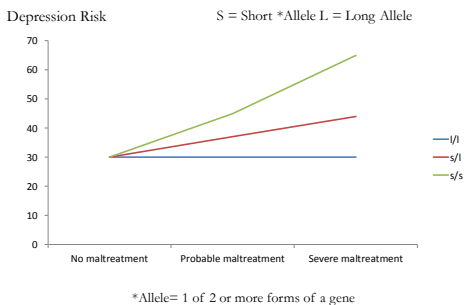


Influence of Life Stress on Depression: Moderation by a Polymorphism in the 5-HTT Gene

Avshalom Caspi,^{1,2} Karen Sugden,¹ Terrie E. Moffitt,^{1,2*} Alan Taylor,¹ Ian W. Craig,¹ Honalee Harrington,² Joseph McClay,¹ Jonathan Mill,¹ Judy Martin,³ Antony Braithwaite,⁴ Richie Poulton³

In a prospective-longitudinal study of a representative birth cohort, we tested why stressful experiences lead to depression in some people but not in others. A functional polymorphism in the promoter region of the serotonin transporter (5-HTT) gene was found to moderate the influence of stressful life events on depression. Individuals with one or two copies of the short allele of the 5-HTT promoter polymorphism exhibited more depressive symptoms, diagnosable depression, and suicidality in relation to stressful life events than individuals homozygous for the long allele. This epidemiological study thus provides evidence of a gene-by-environment interaction, in which an individual's response to environmental insults is moderated by his or her genetic makeup.

Serotonin Gene, Experience, and Depression: Age 26
Caspi et al., Science, 18 July 2003, Vol 301



DNA Methylation

- “...is an epigenetic mechanism that maintains gene activity or changes gene expression by activating or silencing the gene, resulting in the development of phenotypes that are time-dependent and are not determined by the DNA sequence at that locus” (Vaillancourt et al., 2013).

Psychological Medicine, Page 1 of 11 © Cambridge University Press 2012
doi:10.1017/S0000712912002794 ORIGINAL ARTICLE

Increased serotonin transporter gene (*SERT*) DNA methylation is associated with bullying victimization and blunted cortisol response to stress in childhood: a longitudinal study of discordant monozygotic twins

I. Ouellet-Morin^{1,2}, C. C. Y. Wong^{1,3}, A. Danese^{4,5}, C. M. Pariante⁶, A. S. Papadopoulos^{6,7}, J. Mill⁸ and L. Arseneault^{1*}

¹MRC Social, Genetic, and Developmental Psychiatry Centre, Institute of Psychiatry, King's College London, London, UK

²Centre for Cognitive, Emotional and Behavioural Science, Institute of Psychiatry, King's College London, London, UK

³Department of Child and Adolescent Psychiatry, Maudsley Hospital, London

⁴Department of Psychological Medicine, Institute of Psychiatry, King's College London, London, UK

⁵Department of Psychology, University of Exeter, Exeter, UK

⁶Department of Psychiatry, University of Exeter, Exeter, UK

⁷Department of Psychiatry, University of Exeter, Exeter, UK

⁸Department of Psychiatry, University of Exeter, Exeter, UK

DNA methylation of the serotonin transporter (*SERT*) gene between ages 5 and 10 was found for bullied twins

Children with *SERT* DNA methylation also showed a blunted cortisol response to stress.

Molecular Psychiatry (2012), 1–6
© 2012 Molecular Psychiatry Limited. All rights reserved. 1359-4184/12
www.nature.com/mp

ORIGINAL ARTICLE

Exposure to violence during childhood is associated with telomere erosion from 5 to 10 years of age: a longitudinal study

I. Shalev^{1,2}, T. E. Moffitt^{1,3,4,5,6}, K. Sugden^{1,5,6,7}, B. Williams^{1,2,3,4,5,6}, R. M. Houts^{1,2,3,4}, A. Danese⁸, J. Mill⁹, L. Arseneault¹⁰ and A. Caspi^{1,3,4,5,6,7}

There is increasing interest in discovering mechanisms that mediate the effects of childhood stress on late-life disease morbidity and mortality. Previous studies have suggested one potential mechanism: linking stress to cellular aging, disease and mortality in humans: telomere erosion. We examined telomere erosion in relation to children's exposure to violence, a salient early-life stressor, which has known long-term consequences for well-being and is a major public health and social-welfare problem. In the first prospective-longitudinal study with repeated telomere measurements in children while they experienced stress, we tested the hypothesis that childhood violence exposure would accelerate telomere erosion from age 5 to age 10 years. Violence was assessed as exposure to maternal domestic violence, frequent bullying victimization and physical maltreatment by an adult. Participants were 236 children (199 females; 42% with one or more violence exposures) recruited from the Environmental Risk Longitudinal Twin Study, a nationally representative 1994–1995 birth cohort. Each child's mean relative telomere length was measured simultaneously in baseline and follow-up DNA samples, using the quantitative PCR method for T/S ratio (the ratio of telomere repeat copy numbers to single-copy gene numbers). Compared with their counterparts, the children who experienced two or more kinds of violence exposure showed significantly more telomere erosion between age-5 baseline and age-10 follow-up measurements, even after adjusting for sex, socioeconomic status and body mass index ($\beta = -0.052$, $s.e. = 0.021$, $P = 0.015$). This finding provides support for a mechanism linking cumulative childhood stress to telomere maintenance, observed already at a young age, with potential impact for life-long health.

Molecular Psychiatry advance online publication, 24 April 2012; doi:10.1038/mp.2012.32

Keywords: childhood stress; cumulative violence exposure; erosion; longitudinal; telomere length

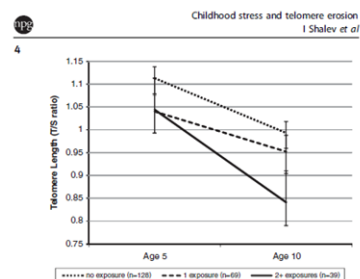


Figure 2. Association between cumulative violence exposure and telomere length at 5 and 10 years of age.

- Vaillancourt et al. (2010a, 2010b, 2013) suggest, understanding biological underpinnings of peer relations helps legitimize the plight of peer-abused children and youth
- Encouraging policy makers and practitioners to prioritize the reduction of school bullying

4 Best Practice Recommendations

- 1 The nature of our anti-bullying programs
- 2 Targeting a stereotype
- 3 Need to increase student supervision
- 4 Need to engage the bystander
- 5 Teacher Training
- 6 It is complicated



1 The nature of our anti-bullying programs



What Can Be Done About School Bullying? Linking Research to Educational Practice

Susan H. Swettenham, Dorothy L. Espelage, Tracy Yelland, and Shelley Hymel

In this article, the authors review research on individual, peer, and school-level factors that may be contributing to school bullying and address bullying among students. Psychological challenges are discussed with emphasis on how bullying is defined and assessed and the subsequent implications for bullying prevention and intervention program evaluation. The impact of school-based anti-bullying programs and the challenges currently facing educators and researchers in this area are discussed. The article concludes with a proposal for a holistic, ecologically based model of school bullying based on the emerging literature.

Keywords: anti-bullying, school psychology, student behavior, attitudes, violence

the aforementioned findings are robust, it is not entirely clear whether the connections between bullying, victimization, and psychosocial difficulties reflect causes, consequences, or merely concurrent correlates of bullying and/or victimization. In this article, we review recent research on academic achievement, school climate, peer group, intervention, and individual factors that are critical for addressing our efforts to effectively address school bullying. We consider the impact of school-based anti-bullying programs and the challenges currently facing educators and researchers, and we propose an ecologically based model of school bullying informed by the emerging empirical literature.

Research on Bullying Among School-Aged Youth
Over the years, considerable debate has ensued regarding aspects of the school environment that foster or buffer the development of bullying among youth. Early research focusing on physical aspects of the school environment, including teacher-student ratio, population, and budget (Kistella, 1996; Hattie, 1983; Bates, Slingsby, Morrison, Chasen, & Smith, 1979; added

School-based anti-bullying efforts

- Typically involve universal programs with goal of:
 - awareness about bullying
 - bullying behaviour

Smith et al. (2004)

- Negligible to small effect sizes
- In some cases bullying reports ↑

Merrell et al. (2008)

- Yielded similarly disappointing results

Vreeman and Carroll (2007)

- Most promising results reported for whole-school anti-bullying efforts
 - established school-wide rules and consequences for bullying, teacher training, conflict resolution strategies, and classroom curricula and individual training
- School-wide programs far more effective than classroom curriculum programs or social skills training

Ttofi et al. (2008)

- Showed Olweus Bullying Prevention Programme most effective program

Why are whole-school approaches designed to bullying relatively ineffective?

1 Most fail to direct interventions at social ecology that promotes and sustains bullying perpetration, such as peers and families.

2 Many programs do not address changing demographics of communities and fail to incorporate factors such as race, disability, and sexual orientation.

3 School-wide programs seldom include direct intervention for the perpetrators.

- And when they do target children who bully others, they tend to focus on the stereotype.

4 May need to target different types of bullying behaviour.

5 Use the wrong approach to discipline.

Proc. Soc. (2012) 113, 538–558
DOI: 10.1093/psp/113/1-2/538-558

Examining School-Based Bullying Interventions Using Multilevel Discrete Time Hazard Modeling

Stephanie L. Ayers • M. Alex Wagaman • Jennifer Mullins Geiger • Monica Bermudez-Parasi • E. C. Holtberg

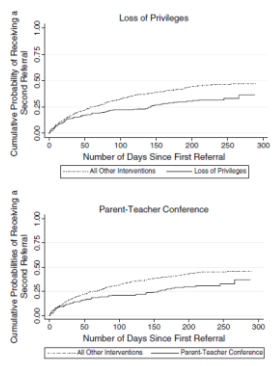
Published online: 10 August 2012
© Society for Prevention Research 2012

Abstract Although schools have been trying to address bullying by utilizing different approaches that stop or reduce the incidence of bullying, little remains known about what specific intervention strategies are most successful in reducing bullying in the school setting. Using the social-ecological framework, this paper examines school-based disciplinary interventions often used to deliver consequences to deter the recurrence of bullying and aggressive behaviors among school-aged children. Data for this study are drawn from the School-Wide Information System (SWIS) with the final analytic sample consisting of 1,221 students in grades K–12 who received an office disciplinary referral for bullying during the first semester. Using Kaplan-Meier Failure Functions and Multi-level discrete time hazard models, determinants of the probability of a student receiving a second referral over time were examined. Of the seven interventions tested, only Parent-

Teacher Conference (AOR = 0.65, $p < .01$) and Loss of Privileges (AOR = 0.71, $p < .10$) were significant in reducing the rate of the recurrence of bullying and aggressive behaviors. By using a social-ecological framework, schools can develop strategies that deter the recurrence of bullying by identifying key factors that enhance a sense of connection between the students' mesosystems as well as utilizing disciplinary strategies that take into consideration student's microsystem roles.

Keywords: Bullying • Interventions • Schools • Social-ecological framework • Multi-level discrete time hazard models

Introduction



- Detention
- In-school suspension
- Out of school suspension
- Parent contact
- Time in office
- Parent-teacher conference
- Loss of privileges

2 Targeting a stereotype



- We need to appreciate that all children are capable of bullying
 - Cannot change what we don't acknowledge

Classification of Bullies

- Created extreme groups based on bully and power nominations
 - High power bullies (90%)
 - Low power bullies (10%)

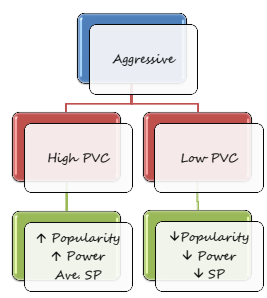
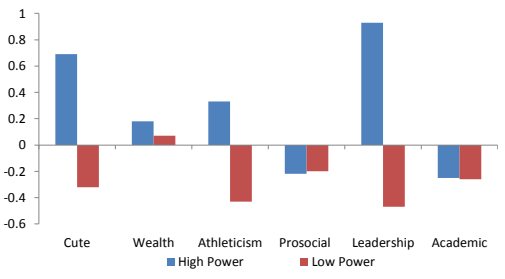
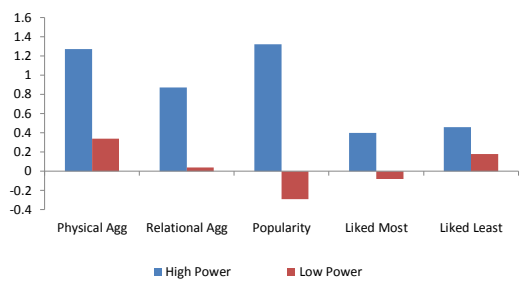
**Bullying Is Power:
Implications for School-Based
Intervention Strategies**

Tracy Willmscott
Shefley Hyman
Patrick McDiarmid

Much of what is known about bullies and bullying behavior comes from Olweus's (1973, 1978, 1993, 1994) large-scale studies of Scandinavian children in which he distinguished bullies from traditional victims or victims themselves. This positive view of bullies sets it distinct from high rather than low self-esteem, their impulsivity and physical strength, and their lack of empathy, control, and capacity for empathy. More recent studies have focused on the mental health functioning of children identified as bullies. Life events, bullies are at risk for experiencing difficulties including depression, social isolation (Kaltiala-Heino, Kumpulainen, Marttunen, Rimpelä, & Rautava, 1999), and loneliness (Finns, & Kulkas, 1998), and their aggressive attitudes, bullies are at risk for experiencing difficulties (Kumpulainen et al., 1998), delinquency and offending (Olweus, 1993), as well as poor academic achievement, reading, and emotional state (Shaw et al., 2001). These findings are consistent with traditional, intuitive notions of bullies as poorly accepted, rejected members of the peer group who are psychologically unwell. We question this stereotypical portrayal.

This article was adapted from "Bullying Is Power: Implications for School-Based Intervention Strategies" by Tracy Willmscott, Shefley Hyman, and Patrick McDiarmid. Published in Journal of Applied School Psychology, 2002, pp. 157-176.

Bullying, Victimization, and Peer Rejection
Published by The Guilford Press, Inc., 2007. All rights reserved.
doi:10.1080/15326900701411111



AGGRESSIVE BEHAVIOR
Volume 32, page 464-486, 2006

Aggression and Social Status: The Moderating Roles of Sex and Peer-Valued Characteristics

Tracy Willmscott¹ and Shefley Hyman²
¹Department of Psychology, Neuroscience and Behaviour, McMaster University, Hamilton, ON, Canada
²Department of Educational and Counseling Psychology and Special Education, University of British Columbia, Vancouver, BC, Canada

Research on peer relations has long emphasized links between aggression behavior and peer liking, with aggressive children and adolescents often perceived as unpopular. However, recent research suggests that in some cases aggression may be associated with popularity and social status. The present research examined these links in a sample of middle school students, assessed popularity and social status, and explored the moderating role of sex and peer-valued characteristics. Results showed that aggressive boys were more popular than aggressive girls, and that aggression was associated with higher popularity in boys than in girls. Moreover, aggression was associated with higher popularity in boys who were high in physical strength and athletic ability, and in boys who were high in social status. These findings suggest that aggression may be associated with popularity in boys, and that this relationship may be moderated by sex and peer-valued characteristics. Implications for understanding aggression and social status are discussed.

3 Need to ↑ supervision

Journal of School Psychology 51(2) 89-104, 2012
Copyright © Taylor & Francis Group, LLC
ISSN: 1751-0359 print/ISSN 1744-5019 online
DOI: 10.1080/17510359.2012.657174



A Qualitative Analysis of the Bullying Prevention and Intervention Recommendations of Students in Grades 5 to 8

CHARLES E. CUNNINGHAM
Department of Psychology and Educational Psychology, Wilfrid Laurier University, Waterloo, Ontario, Canada
JESSA KATLIFE
Department of Psychology and Educational Administration, Wilfrid Laurier University, Waterloo, Canada
TRACY VAILLANCOURT
Faculty of Education and School Psychology, University of Ottawa, Ottawa, Ontario, Canada, and Department of Psychology, Neuroscience and Behaviour, Wilfrid Laurier University, Waterloo, Ontario, Canada

Focus groups explored the bullying prevention suggestions of 62 Grade 5 to 8 students. Discussions were structured and structured thematically. Students advocated a comprehensive approach including: improved supervision, playground activities, group monitoring to prevent social isolation, influential personnel, proactive skills training, school-based parents, and meaningful consequences. In addition, students suggested that parents should improve relationships with their children.

- Students suggest this point as well
- Places to Avoid Study



Places to Avoid: Population-Based Study of Student Reports of Unsafe and High Bullying Areas at School

Canadian Journal of School Psychology 35(1) 69-84
© 2010 SAGE Publications
Reprints and permission: <http://www.sagepub.com/journalsPermissions.nav>
DOI: 10.1177/0898264309350846
<http://jcs.sagepub.com>
SAGE

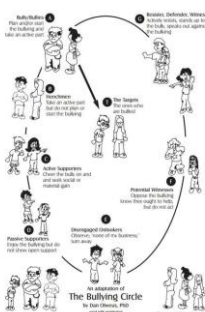
Tracy Vaillancourt,^{1,2} Heather Brittain,² Lindsay Bennett,² Steven Arnocky,² Patricia McDougall,² Shelley Hymel,² Kathy Shortz,² Shaik Sunderani,² Carol Scott,² Meredith Mackenzie,² and Lesley Cunningham¹

Bullying occurs most frequently in:

- playground (ES)
- halls (HS)
- cafeteria (HS)
- outside recess (HS)

Abstract
Students' perceptions of school safety and experiences with bullying in a large Canadian cohort of 5,493 girls and 5,659 boys in Grades 1 to 8 indicate notable differences in when and where students felt safe, perceptions of safety and their own experiences with bullying in elementary and secondary schools. For elementary students, especially those involved in bullying, the playground/school yard and outside recess/break time were particularly hazardous, whereas for secondary students involved in bullying, the hallways, school lunchroom/cafeteria, and outside recess/break were considered especially dangerous. The commonality across student-identified unsafe areas is that they tend to not be well supervised by school personnel. Accordingly, the present results underscore the need to increase adult supervision in areas in which an overwhelming majority of students report feeling unsafe.

4 Need to engage the bystander



Difficult to eliminate what works

- Bullying behaviour is reinforced
 - 54% of time peers were passively watching
 - 21% actively modeled the behavior
 - O'Connell et al. 1999
- Adults rarely intervene
 - only about 4% of the time
 - bullies are seldom punished and so their behaviour goes unimpeded, further devastating their victim
 - Craig & Pepler, 1995, 1997; Salmavalli & Voeten, 2004

Bystanders

- Peers are present in over 85% of the bullying incidents
 - Yet only intervene about 11% of the time ☹ (but in another study 25% of time ☺)
- Peers who regularly see hostile exchanges without sanction are exposed to example of aggression working
 - They see powerful individuals reinforced
 - They see that the aggressor is rarely admonished by the peer group and rarely caught by adults

BUT when bystanders intervene bullying stops; almost always (and immediately).
Why?

- Need to belong is a fundamental human motivator
- Wired to belong



Craig & Pepler, 1995, 1997; Hawkins et al., 2001; Vaillancourt et al., 2009

Involve Bystanders

- **Peer mediation** is the most promising approach to reducing bullying
 - Engages students in prosocial behaviour
 - Teaches them conflict resolution skills
 - Increases playground supervision
 - AND is evidence-based

Cunningham, Cunningham et al., 1998

5 Teacher Training

Journal of School Violence, 11, 226-245, 2012
Copyright © Taylor & Francis Group, LLC
ISSN: 1538-0226 print/1744-8250 online
DOI: 10.1080/15382201.2012.692993



Contextual Attributes of Indirect Bullying Situations That Influence Teachers' Decisions to Intervene

CHRISTINE BLAIN-ARCARO and J. DAVID SMITH
Faculty of Education, University of Ottawa, Ottawa, Ontario, Canada

CHARLES E. CUNNINGHAM
Department of Psychiatry and Behavioural Neuroscience, McMaster University, Hamilton, Ontario, Canada

TRACY VAILLANCOURT
Faculty of Education and School of Psychology, University of Ottawa, Ottawa, Ontario, Canada, and Department of Psychology, Neuroscience, and Behaviour, McMaster University, Hamilton, Ontario, Canada

HEATHER RIMAS
Department of Psychiatry and Behavioural Neuroscience, McMaster University, Hamilton, Ontario, Canada

Teachers most influenced by a student's distress

6 It is complicated

- Sometimes children who get bullied, bully others.
- Even adults have trouble addressing bullying in the workplace.
 - Experimental studies highlight how conformity rules.
 - Calling out bullies carries certain risks.
- We tend to overestimate or underestimate our ability to intervene.

Respect or Fear?

- People with power are held in higher esteem and influence the group more than their less powerful peers
- They are looked at more, validated more, and respected more
 - translates into a perception of approval (respect?)
 - perpetuating the erroneous belief that they are justified in their actions

Moral Disengagement

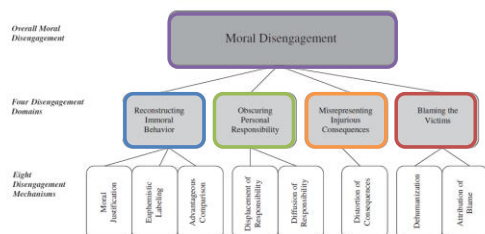


Fig. 1. The three levels in the moral disengagement theory.

Obermann, 2011

