

Derailed Potential: The Negative Impact of Bullying Victimization on Child Health and Education



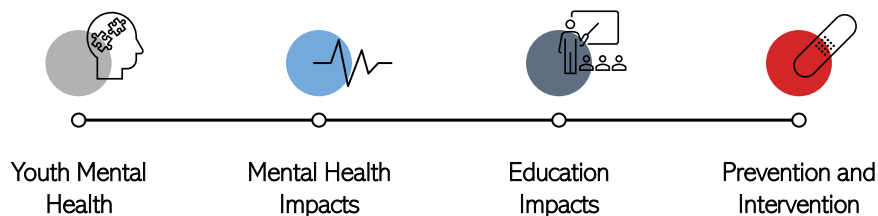
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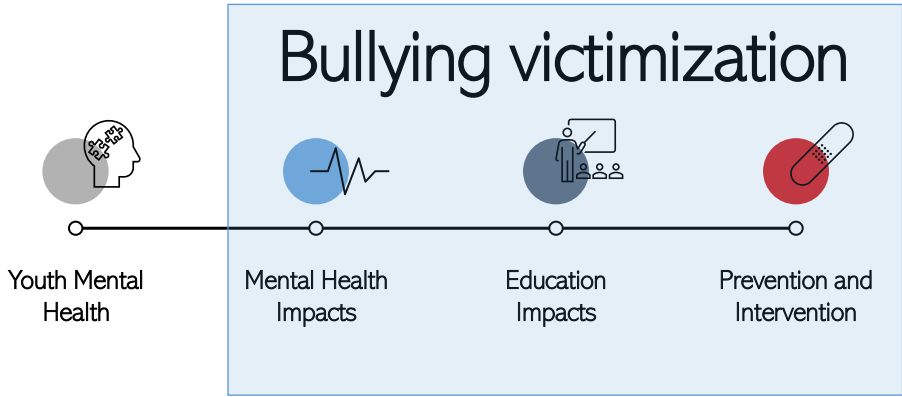


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Bullying victimization



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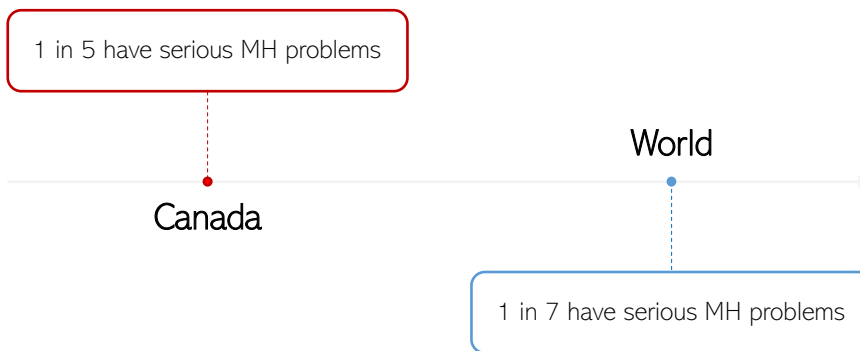


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Scope of the Problem



Elia et al., 2023; Georgiades et al., 2019; Global Health Data Exchange, 2019

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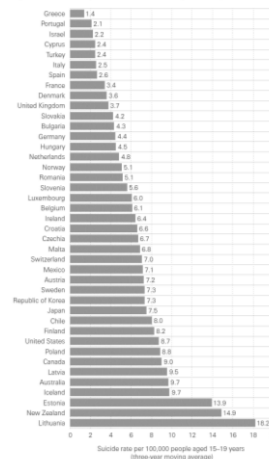
Suicide

Leading cause of death

- youth in high income countries
- issue for boys

17.6%
all deaths

More than 10 in 100,000 adolescents aged 15-19 years commit suicide in some rich countries
Figure 5: Suicide rate per 100,000 adolescents aged 15-19 years



UNICEF, 2020

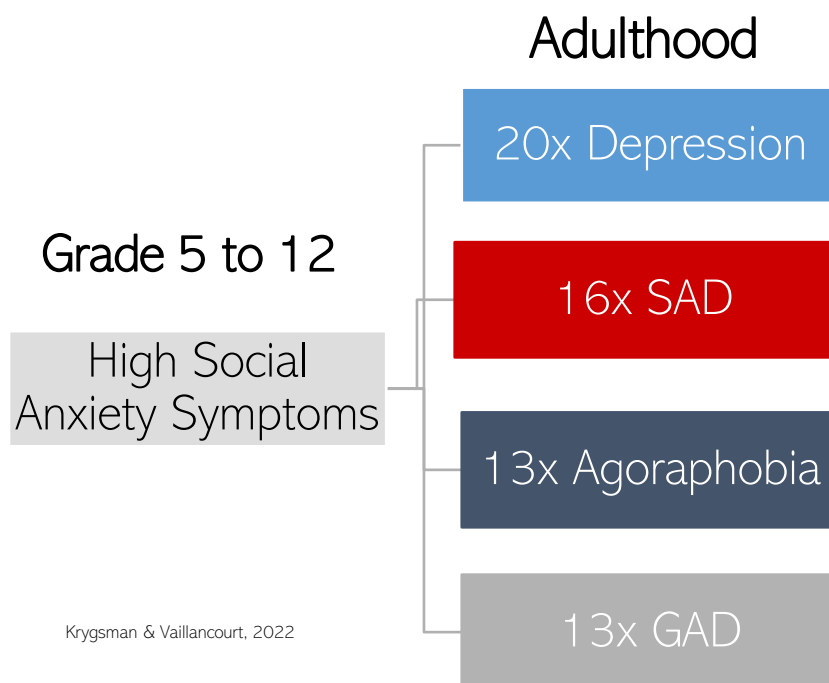
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Enormous continuity

- 50-75% of adult mental disorders begin before age 15

Johnson et al., 2017; Kim-Cohen et al., 2003; Kessler et al., 2001; 2007; Weisz, 1998

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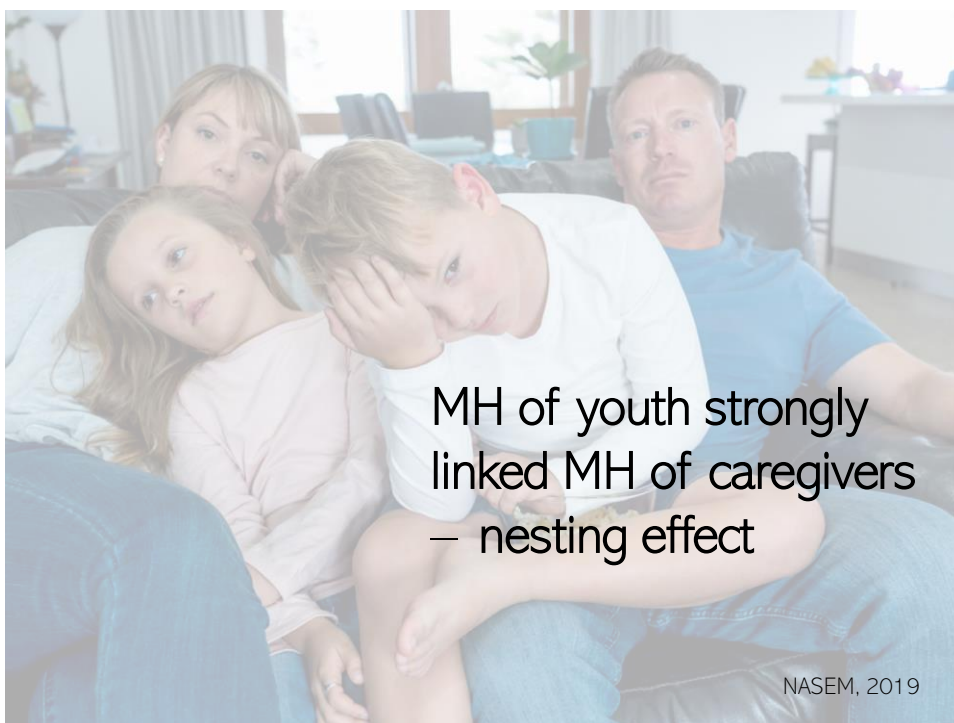
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MH problems in adults
are the leading cause of
disability worldwide

Copeland et al., 2015; Whiteford et al., 2013

9



MH of youth strongly
linked MH of caregivers
– nesting effect

NASEM, 2019

10

Risk is not equally shared

- Socioeconomically disadvantaged youth
 - 25-39% ↑ for children of low-income families
- Girls more affected than boys
 - exceptions are externalizing problems and ASD

APA, 2022; Guhn et al., 2020

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Service Gaps

- Only 20% of youth receive services
 - Youth with severely impairing MD received Tx at ↑ rate
 - Recent immigrants are less likely to access MH care

Durbin et al., 2015;
Mental Health Commission
of Canada, 2017;
Merikangas et al., 2011

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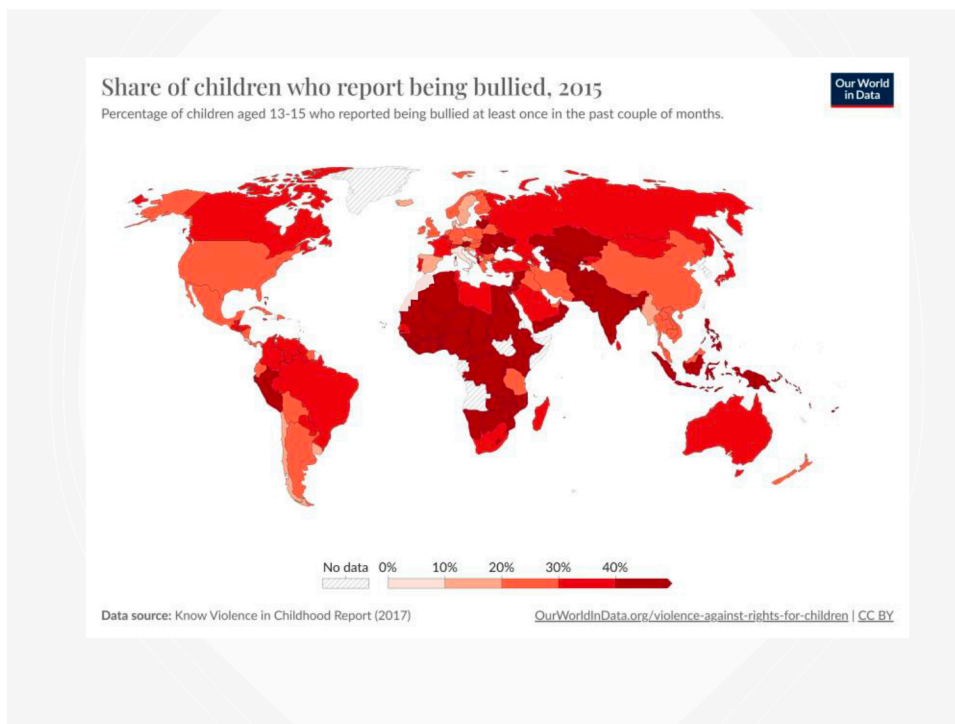
Bullying causes
mental health
issues

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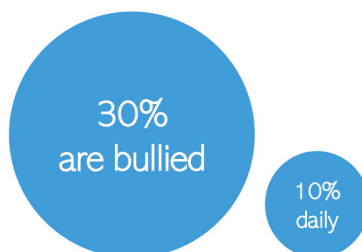
Bullying is a
systematic
abuse of power

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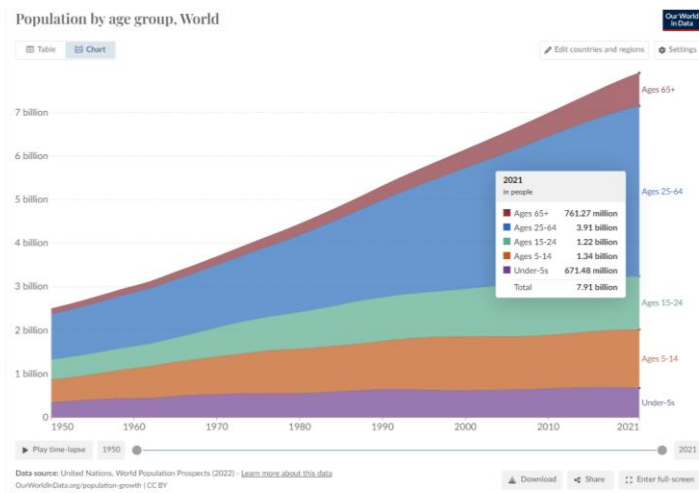
World Prevalence



Biswas et al., 2020; UNICEF, 2020; Vaillancourt et al., 2010; 2021

16

>134 million



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Bullying Victimization

BRIEF REPORT | **WILEY**

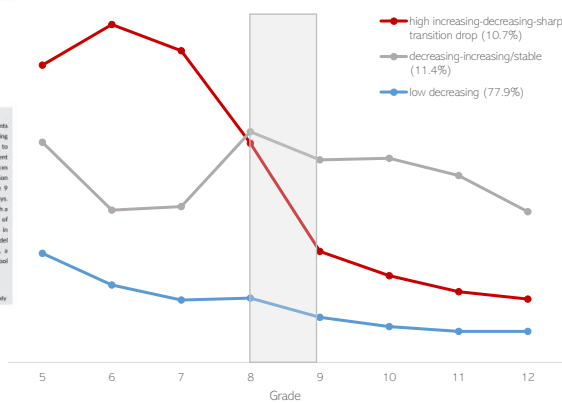
Bullying involvement and the transition to high school: A brief report

Tracy Vallancourt^{1,2} | Heather Brittan¹ | Ann H. Farrell² | Aminda Krygman¹ | Irene Vitorous^{1,2}

¹University of Toronto, Faculty of Education, University of Toronto, Toronto, Canada
²Department of Psychology, Faculty of Social Sciences, University of Ontario, Ontario, Canada
³Department of Child and Youth Studies, Brock University, St. Catharines, Ontario, Canada

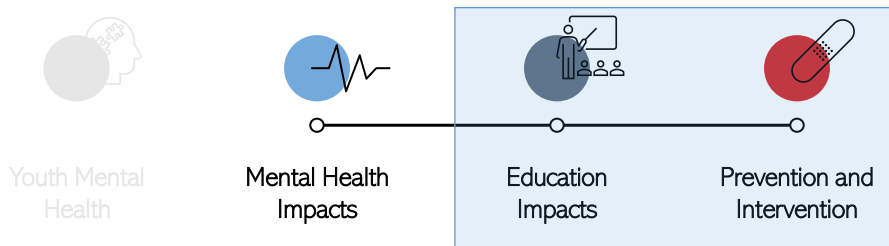
Abstract
 School transitions are common educational experiences for children and adolescents and many of them worry about being bullied during this type of major life-changing point. In a sample of 701 Canadians assessed yearly from grade 5 (age 10) to grade 12 (age 16), we examined heterogeneity patterns of bullying involvement while statistically accounting for the transition into high school. Gender differences were also examined. Results indicated that, on average, bullying victimization declined over time with a significant drop noted between grade 8 and grade 9 (the transition into high school), with few differences between girls and boys. Bullying perpetration also declined for most students (no gender differences), with a notable drop found at the transition into high school. However, for a subset of adolescents, the transition into high school was accompanied by an increase in bullying perpetration. These varied experiences highlight the need to model heterogeneity when examining the impact of school transitions on bullying, a neglected focus of inquiry to date. Our results suggest that moving into high school is beneficial for most adolescents involved in bullying, but not for all.

KEYWORDS
 bullying perpetration, bullying victimization, gender differences, heterogeneity, longitudinal study



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Bullying victimization



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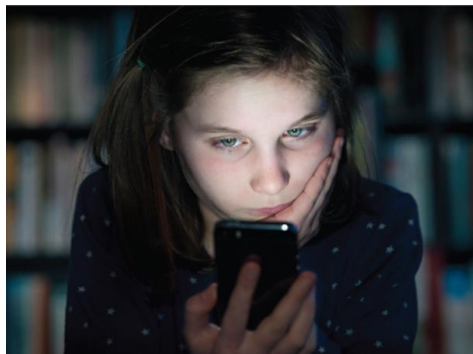
Priority of relationships

- Need to belong is a fundamental human motivator
- Social ties are not just a luxury, they're essential for optimal development



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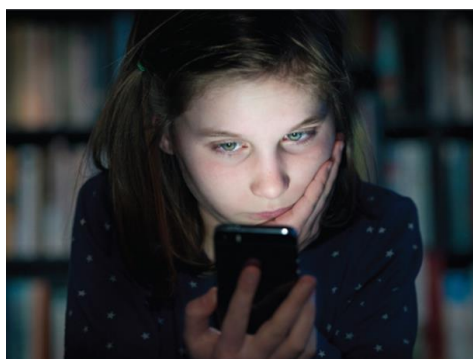
Bullying
victimization
thwarts need to
belong



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Bullying
victimization
thwarts need to
belong

Negatively
impacts all
aspects of
functioning



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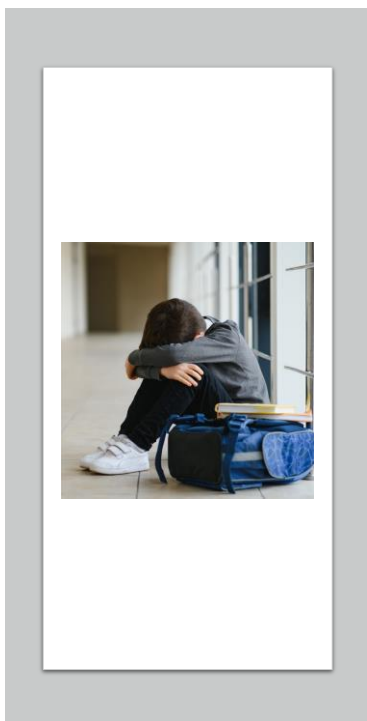
Concurrent Correlates

- academic difficulties
- increased absenteeism
- somatic complaints
- stress-related illness
- physical health problems

- low self-esteem
- depression
- social withdrawal
- social anxiety
- loneliness
- suicide
- aggressive behaviour

Beeson & Vaillancourt, 2016; Vaillancourt et al., 2013, 2010, 2017; Vaillancourt, 2018

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Poorly treated youth get
mad or sad

- Immediate
- Long-term

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“Strong evidence exists for a causal relationship between bullying victimization, mental health problems and substance use”.

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Long-Term Adult Outcomes of Peer Victimization in Childhood and Adolescence

Pathways to Adjustment and Maladjustment

Patricia McDougall *University of Saskatchewan*
Tracy Vaillancourt *University of Ottawa*

American Psychologist, 2015

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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 long-term effects on victims' well-being; such interventions should cast light on causal processes.

(*Am J Psychiatry* 2014; 171:777–784)

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Article

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Depression
Anxiety
Suicidality

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(*Am J Psychiatry* 2014; 171:777–784)

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



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



Summary

Background The adult mental health consequences of childhood maltreatment are well documented. Maltreatment by peers (ie, bullying) has also been shown to have long-term adverse effects. We aimed to determine whether these effects are just due to being exposed to both maltreatment and bullying or whether bullying has a unique effect.

Methods We used data from the Avon Longitudinal Study of Parents and Children in the UK (ALSPAC) and the Great Smoky Mountains Study in the USA (GSMS) longitudinal studies. In ALSPAC, maltreatment was assessed as physical, emotional, or sexual abuse, or severe maladaptive parenting (or both) between ages 8 weeks and 8.6 years, as reported by the mother in questionnaires, and being bullied was assessed with child reports at 8, 10, and 13 years using the previously validated Bullying and Friendship Interview Schedule. In GSMS, both maltreatment and bullying were repeatedly assessed with annual parent and child interviews between ages 9 and 16 years. To identify the association between maltreatment, being bullied, and mental health problems, binary logistic regression analyses were run. The primary outcome variable was overall mental health problem (any anxiety, depression, or self-harm or suicidality).

Findings 4026 children from the ALSPAC cohort and 1420 children from the GSMS cohort provided information about bullying victimisation, maltreatment, and overall mental health problems. The ALSPAC study started in 1991 and the GSMS cohort enrolled participants from 1993. Compared with children who were not maltreated or bullied, children who were only maltreated were at increased risk for depression in young adulthood in models adjusted for sex and family hardships according to the GSMS cohort (odds ratio [OR] 4.1, 95% CI 1.5–11.7). According to the ALSPAC cohort, those who were only being maltreated were not at increased risk for any mental health problem compared with children who were not maltreated or bullied. By contrast, those who were both maltreated and bullied were at increased risk for overall mental health problems, anxiety, and depression according to both cohorts and self-harm according to the ALSPAC cohort compared with neutral children. Children who were bullied by peers only were more likely than children who were maltreated only to have mental health problems in both cohorts (ALSPAC OR 1.6, 95% CI 1.1–2.2; $p=0.005$; GSMS 3.8, 1.8–7.9, $p<0.0001$), with differences in anxiety (GSMS OR 4.9; 95% CI 2.0–12.0), depression (ALSPAC 1.7, 1.1–2.7), and self-harm (ALSPAC 1.7, 1.1–2.6) between the two cohorts.

Interpretation Being bullied by peers in childhood had generally worse long-term adverse effects on young adults' mental health. These effects were not explained by poly-victimisation. The findings have important implications for public health planning and service development for dealing with peer bullying.

Funding Wellcome Trust, Medical Research Council, Economic and Social Research Council, National Institute of Mental Health, the National Institute on Drug Abuse, NARSAD (Early Career Award), and the William T Grant Foundation.

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[http://dx.doi.org/10.1016/S2215-0366\(15\)00173-X](http://dx.doi.org/10.1016/S2215-0366(15)00173-X)
 Department of Psychology, University of Warwick, Coventry, UK (S T Lereya PhD, Prof D Wolke PhD); and Department of Psychiatry and Behavioural Sciences, Duke Medical Center, Sheffield, UK (W E Copeland PhD, Prof E J Costello PhD)
 Correspondence to: Prof Dieter Wolke, Department of Psychology, University of Warwick, Coventry CV4 7AL, UK d.wolke@warwick.ac.uk

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| | Overall mental health problem | | | Anxiety | | | Depression | | | Self-harm and suicidality | | |
|--|-------------------------------|---------------|---------|-----------|-----------------|---------|------------|----------------|---------|---------------------------|---------------|---------|
| | n (%)* | OR (95% CI) | p value | n (%)* | OR (95% CI) | p value | n (%)* | OR (95% CI) | p value | n (%)* | OR (95% CI) | p value |
| Maltreatment, being bullied, or both vs none (not maltreated nor being bullied) | | | | | | | | | | | | |
| 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%) | 1.7 (0.8-3.3) | 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 | 24 (8%) | 4.7 (2.6-8.7) | <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 | 24 (8%) | 3.5 (1.7-7.1) | <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 being bullied | | | | | | | | | | | | |
| ALSPAC (n=1538) | -- | (n=1538) | -- | -- | (n=1538) | -- | -- | (n=1538) | -- | -- | (n=1538) | -- |
| Maltreatment only (n=341) | 59 (17%) | [reference] | -- | -- | [reference] | -- | 25 (7%) | [reference] | -- | 24 (7%) | [reference] | -- |
| Being bullied only (n=1197) | 296 (25%) | 1.6 (1.2-2.1) | 0.004 | 156 (13%) | 1.6 (1.2-2.1) | 0.004 | 135 (11%) | 1.6 (1.0-2.5) | 0.037 | 143 (13%) | 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
 1.7 child abuse
 4.7 bullied
 3.5 both

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.

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

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Do the victims of school bullies tend to become depressed later in life?

A systematic review and meta-analysis of longitudinal studies

Maria M. Ttofi, David P. Farrington, Friedrich Lösel and Rolf Loeber

Maria M. Ttofi, David P. Farrington and Friedrich Lösel 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 28 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 6.9 years) was much higher for children who were bullied at school than for non-involved students (odds ratio (OR) = 1.99; 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 covariates) 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

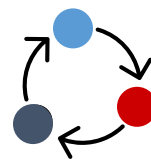
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- Individual & societal economic impacts
 - 4 decades after exposure



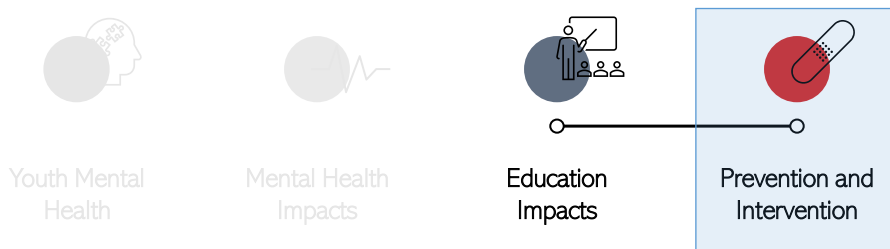
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- Bullied in childhood = < employed in mid-life
 - Impacted mid-life income and accumulated wealth
- Higher societal employment costs for men
- Higher health service costs for women



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Bullying victimization



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Aggression and Violent Behavior 64 (2022) 101722



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The temporal sequence of bullying victimization, academic achievement, and school attendance: A review of the literature

Refa Laith, Tracy Vaillancourt*

Counselling Psychology, Faculty of Education, University of Ottawa, 145 Jean-Jacques-Lussier Piv, Ottawa, ON K1N 6N5, Canada



ARTICLE INFO

Keywords:
Bullying victimization
Academic achievement
School attendance

ABSTRACT

Bullying is recognized as a significant problem that negatively impacts school-aged children worldwide. Although much has been learned about bullying and related physical and mental health problems, a limited number of studies have examined the relations between bullying victimization, academic achievement, and school attendance, and fewer studies have been published on the temporal priority of these variables. Our aim was to review literature on this topic with a specific focus on longitudinal studies. Our narrative review suggests that being the target of bullying can function as both antecedent and consequence of poor academic achievement and engagement. Our review also highlights that far more research needs to be conducted on the longitudinal relations between bullying victimization, academic achievement, and school attendance to better understand the true direction of effects.

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Academic Outcomes

Aggression and Violent Behavior 64 (2022) 101722



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Refa Laith, Tracy Vaillancourt*

Counselling Psychology, Faculty of Education, University of Ottawa, 145 Jean-Jacques-Lussier Piv, Ottawa, ON K1N 6N5, Canada

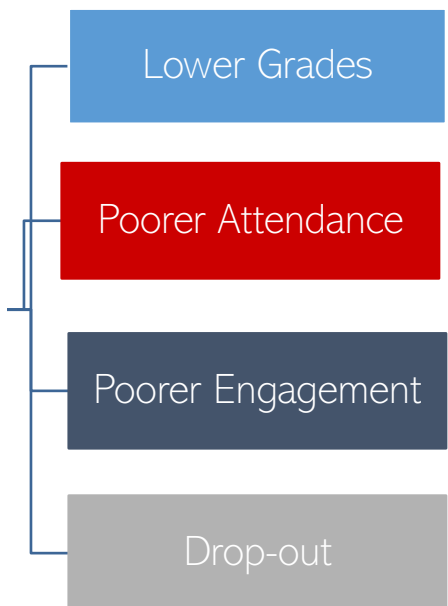


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ABSTRACT

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Physical pain network is activated when a person experiences social pain

- share similar neural structures
- linked to evolution

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doi:10.1093/scan/nqz007

SCAN (2009) 4, 143-157

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

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Developmental research has demonstrated the harmful effects of peer rejection during adolescence; however, the neural mechanisms responsible for this salience remain unexplored. In this study, 23 adolescents were excluded during a ball-tossing game in which they believed they were playing with two other adolescents during an fMRI scan. In reality, participants played with a preset computer program. Afterwards, participants reported their exclusion-related distress and rejection sensitivity, and parents reported participants' interpersonal competence. Similar to findings in adults, during social exclusion adolescents displayed insular activity that was positively related to self-reported distress, and right ventrolateral prefrontal activity that was negatively related to self-reported distress. Findings unique to adolescents indicated that activity in the subgenual anterior cingulate cortex (subACC) related to greater distress, and that activity in the ventral striatum related to less distress and appeared to play a role in regulating activity in the subACC and other regions involved in emotional distress. Finally, 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

Social pain impacts inflammation

Childhood bullying involvement predicts low-grade systemic inflammation into adulthood

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Bullying is a common childhood experience that involves repeated mistreatment to improve or maintain one's status. Victims display long-term social, psychological, and health consequences, whereas bullies display minimal ill effects. The aim of this study is to test how this adverse social experience is biologically embedded to affect short- or long-term levels of C-reactive protein (CRP), a marker of low-grade systemic inflammation. The prospective population-based Great Smoky Mountains Study ($n = 1,420$), with up to nine waves of data per subject, was used, covering childhood-adolescence (ages 9–10) and young adulthood (ages 19 and 23). Structured interviews were used to assess bullying involvement and relevant covariates at all childhood-adolescent observations. Blood spots were collected at each observation and assayed for CRP levels. During childhood and adolescence, the number of waves at which the child was bullied predicted increasing levels of CRP. Although CRP levels rose for all participants from childhood into adulthood, being bullied predicted greater increases in CRP levels, whereas bullying others predicted lower increases in CRP compared with those uninvolved in bullying. This pattern was robust, controlling for body mass index, substance use, physical and mental health status, and exposure to other childhood psychosocial adversities. A child's role in bullying may serve as either a risk or a protective factor for adult low-grade inflammation, independent of other factors. Inflammation is a physiological response that mediates the effects of both social adversity and dominance on depression in health.

organismic challenges, but they have not been studied as a mechanism for the social adversity of bullying involvement on health. The aim of this study was to use a prospective, longitudinal study that has followed a sample of 1,420 children up to nine times to test whether involvement in childhood bullying affects low-grade inflammation as measured by CRP levels short term within childhood/adolescence (ages 9–16) and long term into adulthood (ages 19 and 23). Chronic victims and bully-victims display the worst health and psychosocial outcomes (1, 2, 4). It is hypothesized that both these groups will have more systemic inflammation because of the social strain of victimization. Almost no attention has been paid to the biological consequences to bullying itself in the absence of being a victim. Children may use bullying techniques in others to elevate their social status (22). In adults, such elevated social status, measured by income or education level, is associated with lower levels of inflammatory markers (22–25). The role of elevated social status/inflammatory markers has not yet been tested, but we expected that pure bullies would display lower levels of CRP than those uninvolved in bullying.

Results

Descriptive Statistics. By age 23, 8,306 total assessments were completed in the 1,420 study subjects. Blood spots were obtained at 6,897 assessments (69.1%). Comparisons of observations with versus without blood spots indicated no significant differences in any of the bullying measures. Of the 6,897 blood spots collected,

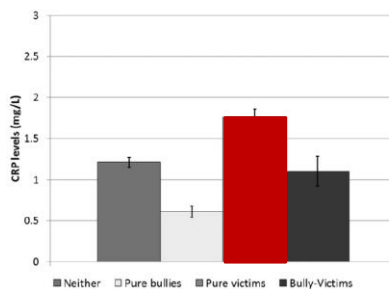
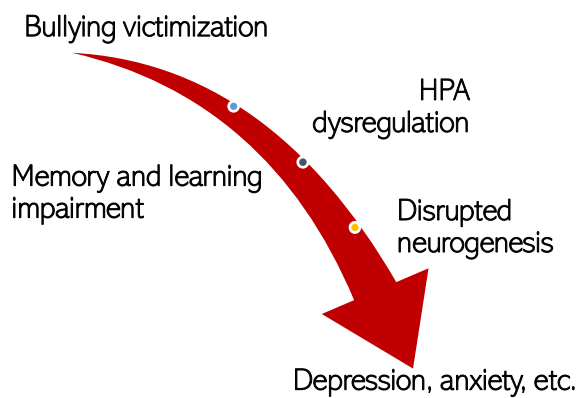


Fig. 2. Adjusted mean young adult CRP levels (milligrams per liter) based on childhood/adolescent bullying status. These values are adjusted for baseline CRP levels as well as other CRP-related covariates. All analyses used robust SEs to account for repeated observations.

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Knack & Vaillancourt, 2012; Palamarchuk & Vaillancourt, 2021, 2022;
 Vaillancourt, 2018; Vaillancourt et al., 2008, 2010, 2011, 2013, 2017, 2018; Vaillancourt & Palamarchuk, 2021

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Bullying victimization



Youth Mental Health



Mental Health Impacts



Education Impacts



Prevention and Intervention

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Effectiveness of School-Bullying Intervention

| | |
|--------------------------|------------------------|
| Ttofi & Farrington, 2011 | Gaffney et al., 2019 |
| 20-23% ↓ perpetration | 19-20% ↓ perpetration |
| 17-20% ↓ victimization | 15-16% ↓ victimization |

Effective up until middle-school (Yeager et al., 2015)

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Increased supervision

Decline worldwide, with few exceptions.

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