Having been bullied in childhood: Relationship to aggressive behaviour in adulthood
Randy A Sansone, Justin S Leung and Michael W Wiederman
Int J Soc Psychiatry 2013 59: 824 originally published online 12 September 2012
DOI: 10.1177/0020764012456814

The online version of this article can be found at:
http://isp.sagepub.com/content/59/8/824

Published by:
http://www.sagepublications.com

Additional services and information for International Journal of Social Psychiatry can be found at:

Email Alerts: http://isp.sagepub.com/cgi/alerts
Subscriptions: http://isp.sagepub.com/subscriptions
Reprints: http://www.sagepub.com/journalsReprints.nav
Permissions: http://www.sagepub.com/journalsPermissions.nav
Citations: http://isp.sagepub.com/content/59/8/824.refs.html

>> Version of Record - Nov 24, 2013
OnlineFirst Version of Record - Sep 12, 2012
What is This?
Having been bullied in childhood:
Relationship to aggressive behaviour in adulthood

Randy A Sansone,1,2 Justin S Leung3 and
Michael W Wiederman4

Abstract
Aims: Victimization through being bullied in childhood is traditionally associated with subsequent internalizing symptoms, but some literature suggests otherwise. In this study, we examined a history of being bullied in relationship to 21 externalized aggressive behaviours in adulthood.

Methods: Using a cross-sectional approach and a self-report survey methodology, we examined a history of being bullied in childhood in relation to 21 aggression variables in a consecutive sample of 342 internal medicine outpatients.

Results: In comparison with the not bullied, participants who reported having been bullied in childhood had a statistically significantly greater overall number of self-reported aggressive behaviours. Longer duration of being bullied was statistically significantly correlated with a greater number of reported aggressive behaviours. With regard to individual behaviours, four were statistically significantly associated with being bullied: hitting walls; intentionally breaking things; getting into fist fights; and pushing/shoving a partner.

Conclusions: While relationships between bullying in childhood and subsequent internalizing symptoms have been well established, the present study indicates that bullying in childhood is also associated with externalizing/aggressive behaviours in adulthood.

Keywords
Aggression, bully, bully victim, bullying, externalizing behaviour

Introduction
Relationships between bully victimization and internalizing symptoms appear well established in the literature (Menesini, Modena & Tani, 2009; Zdemir & Stattin, 2011), yet relationships between bully victimization and aggressive behaviour in adulthood remain unclear. In this regard, various investigators report no relationship between being bullied in childhood and externalizing behaviours (Kristensen & Smith, 2003), aggressive behaviours (Veenstra et al., 2005) or antisocial personality disorder (Sourander et al., 2007). However, other researchers report opposing findings. For example, Hampel, Dickow, Hayer and Petermann (2009) reported anger-control problems among bully victims; Kim, Leventhal, Koh, Hubbard and Boyce (2006) reported slightly higher rates of aggression and externalizing problems in bully victims; and Campfield (2009) identified externalizing behaviours among cyber-bullying victims. To summarize, the relationship between bully victimization in childhood and externalized aggression in adulthood remains unclear. In further pursuit of clarification, we examined relationships between being a victim of bullying while growing up and various aggressive behaviours in adulthood.

Method
Participants
Participants were consecutive internal medicine outpatients, ages 18 years or older, seeking non-emergent medical care that is provided predominantly by resident physicians.

1Departments of Psychiatry and Internal Medicine at Wright State University School of Medicine in Dayton, Ohio, USA
2Department of Psychiatry Education, Kettering Medical Center, Ohio, USA
3Wright State University School of Medicine, Dayton, Ohio, USA
4Columbia College, Columbia, South Carolina, USA

Corresponding author:
Randy A Sansone, Sycamore Primary Care Center, 2115 Leiter Road, Miamisburg, Ohio 45342, USA.
Email: Randy.sansone@khnetwork.org
At the outset, individuals with impairment of sufficient severity to preclude the successful completion of a survey (e.g. severely ill, language barrier) were excluded (n = 62). Of the 480 individuals approached, 369 (76.9%) agreed to participate. Of these, 342 (232 females, 108 males, and two not indicated) completed the relevant study measures (participation rate of 71.3%). The average age of participants was 50.01 years (SD = 15.50), ranging from 18 to 87 years. Most were either white (85.1%) or African American (9.4%), with the remaining 5.5% being of other ethnicities. All but 7.6% had at least graduated high school, whereas 29.5% had earned at least a four-year college degree.

Procedure

During morning and afternoon clinic hours, one of the authors (JSL) positioned himself in the lobby of the internal medicine outpatient clinic, approached consecutive incoming patients, and informally assessed exclusion criteria (i.e. at a glance, did the patient appear able to complete a survey?). With regard to exclusion, the recruiter was specifically advised to carefully observe individual patients as they checked into the centre, and visually and aurally assess whether the candidate appeared extremely debilitated or might have a possible language difficulty – either of which might interfere with the ability of the candidate to participate in a survey project. While this method of exclusion is admittedly informal, we elected this approach due to the busy nature of the clinic (i.e. 11,000 patient visits per year), as well as the need for the participant to complete the survey before the appointment with their primary care provider. It is unlikely that there was a risk of significant selection bias, as neither childhood bullying nor aggression history of candidates would be detectable on superficial examination. With potential candidates, the recruiter reviewed the focus of the project and then invited each to participate. Each participant was asked to complete a six-page survey, and then to place the completed survey into a sealed envelope and into a collection box in the lobby.

The survey consisted of three sections. The first section was a demographic query. The second section assessed a history of bullying through three queries: (1) ‘When you were growing up, were you ever a victim of bullying?’, with response options of ‘yes’ or ‘no’; (2) ‘If yes, for how many years (please circle one)?’, with 13 response options ranging from ‘less than 1 year’ to 12; and (3) ‘If yes, how many individual bullies?’, with six response options ranging from one to ‘6 or more’. The third section of the survey contained a 21-item, yes/no, author-developed survey that inquired about a history (since age 18) of externalized aggressive behaviours (labelled ‘Aggressive Behavior Questionnaire’ or ABQ; Appendix). We developed this survey to capture a broad range of graphic behaviours.

This project was reviewed and exempted by the institutional review board of the sponsoring hospital as well as of the local university. The elements of informed consent were stated on the cover page of the survey. Completion of the survey was assumed to function as implied consent, which was explicitly stated on the cover page.

Results

Of the 342 respondents, 146 (42.7%) reported having been bullied while growing up. The number of years bullied and the number of different bullies each ranged from the lowest to the highest available response option, with averages of 5.38 (SD = 4.03) years bullied and 3.43 (SD = 1.97) different bullies. The number of years bullied was positively correlated with the number of different bullies (r = 0.49, p < .001). The rates of having been bullied were not statistically significantly different for males (41.7%) compared to females (43.1%), χ² = 0.06, p < .88. Scores on the ABQ ranged from 0 to 17 (M = 2.56, SD = 3.07), with 112 (32.7%) respondents denying all 21 of the listed types of aggressive behaviour.

Respondents who reported having been bullied while growing up had a statistically significantly greater score on the ABQ (M = 3.38, SD = 3.09) compared to respondents who did not report having been bullied (M = 1.96, SD = 2.93) (F(1,340) = 18.72, p < .001, d = .46). For those respondents who had been bullied, the total number of years bullied was statistically significantly correlated with scores on the ABQ (r = .22, p < .01), whereas the total number of different bullies was not (r = .15, p < .09). To investigate the nature of the apparent relationship between a history of having been bullied and endorsement of aggressive behaviours, we correlated victimization history with endorsement of each of the 21 behaviours comprising the ABQ. Because of the large number of such correlations (n = 21), we applied the Bonferroni correction to determine the appropriate probability value for each test (0.05/21 = 0.002; therefore p < .002 was used to determine statistical significance for each correlation coefficient). Only four of the 21 correlation coefficients were statistically significant: a history of having been bullied was positively correlated with having punched a wall when angry (r = 0.19, p < .001), intentionally broken things when angry (r = 0.20, p < .001), gotten into fist fights (not in a bar) (r = 0.19, p < .001), and pushed or shoved a partner when angry (r = 0.19, p < .001).

Discussion

Findings indicate that being bullied in childhood is associated with externalized aggressive behaviours in adulthood, particularly hitting walls, breaking things, getting into fist fights and pushing/shoving a partner. In addition, the total number of years bullied correlated with higher scores on the ABQ, indicating a dose/response relationship (i.e. longer bullying is associated with a greater number of externalized aggressive behaviours).
Importantly, due to the cross-sectional nature of this study, we do not know if the relationship between being bullied in childhood and externalized aggression in adulthood is a causal relationship. Therefore, we can only report the observed statistical relationships between these variables. However, there may be other types of associations between these variables beyond a causal relationship. For example, it is possible that some individuals in this study were bullied in childhood because of their own aggressive temperaments – aggressive temperaments that were maintained in adulthood and subsequently manifested as externalized aggression. Only future research will clarify the observed statistical relationships in this study and any possible mediating and moderating variables.

Limitations
This study has a number of potential limitations. First, we did not tease out being bullied from also being a bully. However, Solberg, Olweus and Endresen (2007) indicate that such an overlap is small and likely to affect only 10–20% of bullied individuals. Second, there is the possibility of unintended selection bias due to the informal nature of exclusion. Third, all data were self-reported in nature and subject to the vicissitudes of such information, such as recall. In addition, it is possible that aggressive individuals may be more likely to recall aggressive childhood experiences than their non-aggressive counterparts. Fourth, the ABQ is not a validated measure.

Conclusion
Despite the above limitations, the sample was consecutive and reasonable in size, the examination of externalized aggressive behaviours was robust, and the response rate was acceptable. Findings indicate that being bullied in childhood may not only result in internalizing behaviours but in externalized aggression, as well.

References
&ID=1597617791&RQT=309&attempt=1&ecf=1

Appendix
Aggressive Behavior Questionnaire (ABQ)
As an adult (ages 18 and older), have you ever:

Yes/No

1. Punched a wall when angry?
2. Intentionally broken things when angry?
3. Hit your partner when angry?
4. Hit a child out of anger, not because of discipline?
5. Caused and gotten into a bar fight?
6. Gotten into fist fights (not in a bar)?
7. Mistreated an animal when angry?
8. Killed an animal when angry?
9. Been charged with assault (not necessarily convicted of it)?
10. Damaged anyone else’s car on purpose?
11. Damaged the property of others to ‘get back’ at them?
12. Stolen from anyone because of anger, not need?
13. Defaced public property (e.g., walls, buildings, parks)?
14. Intentionally ran anyone off the road?
15. Beat up anyone such that they required medical attention?
16. Pushed or shoved a partner when angry?
17. Caused anyone to have an ‘accident’?
18. Bullied a partner into sex?
19. Spat at or on anyone?
20. Bitten anyone?
21. Threatened anyone with a weapon?