Bullying, Mental Health, and Parental Involvement among Adolescents in the Caribbean

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ABSTRACT

Objective: *To examine the relationships between peer victimization, mental health, and parental involvement among middle school students in the Caribbean.*
Methods: *Data from the Global School-based Student Health Survey (GSHS) conducted in the Cayman Islands, St Lucia, St Vincent and the Grenadines, and Trinidad and Tobago in 2007 were analysed using age- and gender-adjusted logistic regression models.*
Results: *About one-quarter of the 6780 participants reported having been bullied in the past month. Rates of bullying were similar for boys and girls, and younger children reported higher rates of peer victimization. Nearly 25% of students reported sadness and hopelessness, more than 10% reported loneliness and anxiety and more than 15% reported having seriously considered suicide in the past year. Bullied students were much more likely than non-bullied students to report mental health issues (*$p < 0.01$*). Students who felt that their parents were understanding and monitored their free time activities reported fewer mental health issues and were somewhat less likely to report being a victim of a bully.*
Conclusion: *The strong association between bullying and poor mental health in the Caribbean emphasizes the need to develop and implement strategies for reducing bullying among children and adolescents.*

Keywords: Bullying, peer victimization, mental health, parenting

Acoso Escolar, Salud Mental, e Involucración de los Padres, entre los Adolescentes del Caribe

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RESUMEN

Objetivo: *Examinar las relaciones entre la victimización entre iguales, la salud mental, y la involucración de los padres entre estudiantes de centros de enseñanza media en el Caribe.*
Métodos: *Se analizaron los datos de la Encuesta Mundial de Salud Escolar (EMSE), realizada en Islas Caimán, Santa Lucia, San Vicente y las Granadinas, y Trinidad y Tobago, en 2007, usando modelos de regresión logística ajustados por edad y sexo.*
Resultados: *Alrededor de un cuarto de los 6780 participantes reportaron haber sido víctimas de acoso escolar (bullying) en el último mes. Las tasas de acoso escolar fueron similares para los niños y las niñas, y los niños de menor edad reportaron tasas más altas de victimización entre iguales. Casi el 25% de los estudiantes reportaron estados de tristeza y abatimiento; más del 10% reportaron soledad y ansiedad, y más del 15% reportó haber considerado seriamente recurrir al suicidio en el último año. Los estudiantes acosados presentaron una probabilidad mayor de reportar problemas de salud mental (*$p < 0.01$*) en comparación con aquellos que no eran víctimas de acoso escolar. Los estudiantes que sentían que sus padres eran comprensivos y supervisaban sus actividades de tiempo libre, reportaron menos problemas de salud mental y presentaron una menor probabilidad de ser víctimas de algún abusador.*
Conclusión: *La marcada asociación existente entre el acoso escolar y una pobre salud mental en el*

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Caribe, pone de relieve la necesidad de desarrollar e implementar estrategias dirigidas de reducir el acoso escolar entre los niños y los adolescentes.

Palabras claves: Acoso escolar, victimización entre iguales, salud mental, crianza de los hijos

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INTRODUCTION

About one-third of middle school children worldwide (roughly ages 13 to 15 years) report having been the victim of a bully in the past month (1, 2). Bullies abuse another child using physical attacks such as hitting or pushing, verbal attacks such as name-calling and threatening, and/or indirect acts of relational aggression such as the spreading of cruel rumours or social exclusion (3, 4). Bullying is characterized by repeated, intentional acts of aggression stemming from a power imbalance between a perpetrator and his or her victim (5). As a result, the same child might simultaneously be an aggressor in one relationship and a victim in another (6).

Bullying is not just a social problem; it is also a health problem. Adolescent victims of bullies are more likely than their peers to smoke, drink, use drugs, engage in other risky behaviours and report physical and mental health problems and adjustment difficulties (2, 7−10).

Previous studies have suggested that parental involvement in the lives of their offspring can help reduce the likelihood that their sons or daughters will be bullied (11, 12). Parental involvement also appears to be related to reduced reports of mental health problems by adolescents (13, 14). However, these relationships require additional clarification.

This paper uses data from nationally-representative surveys conducted in 2007 in the Cayman Islands, St Lucia, St Vincent and the Grenadines, and Trinidad and Tobago to examine the associations between peer victimization, mental health, and parental involvement among middle school students. This is one of the first papers to investigate bullying in the Caribbean.

SUBJECTS AND METHODS

The Global School-based Student Health Survey (GSHS) is conducted in low- and middle-income countries around the world through the collaborative efforts of the World Health Organization (WHO), the US Centers for Disease Control and Prevention (US CDC), and national Ministries of Health and/or Education. The goal is to identify the health and risk behaviours of 13- to 15-year-old students. Each country follows the same survey protocol and creates its questionnaire using a question bank common to all participating countries. A representative sample of middle-school students is selected *via* a two-step process. First, middle schools from across the country are sampled at random from a list of all schools in the country. Then one or more classes from within the sampled schools are randomly selected for participation. All students in the sampled classes are invited to participate, and those who volunteer to do so are provided with time during the school day in which to complete the anonymous survey response form (15).

For this analysis, the focus was on peer victimization, mental health, and parental involvement. Peer victimization was assessed with a question about how often a student was bullied in the past 30 days. Bullying was defined as occurring "when a student or group of students say or do bad and unpleasant things to another student. It is also bullying when a student is teased a lot in an unpleasant way or when a student is left out of things on purpose. It is not bullying when two students of the same strength or power argue or fight or when teasing is done in a friendly and fun way" (15). Any student reporting one or more days of peer victimization was categorized as having been bullied. The four questions about mental health and three questions about parental involvement are listed in the tables. For questions with a five-point response scale, responses of most of the time or always (*versus* never, rarely, or sometimes) indicated symptoms of mental health issues or high levels of parental involvement.

Chi-squared tests and multiple logistic regression models were conducted using SPSS (version 18). Each regression model was run separately for each country, with victimization by a bully as the dependent variable and age, gender, and mental health or parental involvement variables as independent variables.

RESULTS

The 6780 study participants are described in Table 1. About one in four students in each country reported being victimized by a bully in the past month. Bullying rates were similar for boys and girls; rates of peer victimization tended to decrease somewhat with increasing age.

About one in four students reported symptoms of depression, one in seven reported loneliness, and one in nine reported anxiety-induced insomnia (Table 2). The rates of reported suicidal thoughts are very concerning, with more than one in six students reporting suicidal ideation. Students reported moderate levels of parental involvement in their lives, with nearly half reporting that their parents know how they spend their free time and about one in three reporting that their parents often check their homework and understand their problems.

Bullied students were much more likely than non-bullied students to report all four of the mental health issues

Table 1: Prevalence of victimization by bullies among the study population

	Cayman Islands		St Lucia		St Vincent and the Grenadines		Trinidad and Tobago	
	n (% of country)	% bullied in past month	n (% of country)	% bullied in past month	n (% of country)	% bullied in past month	n (% of country)	% bullied in past month
Total	1289 (100)	25.8	1268 (100)	26.0	1303 (100)	28.9	2920 (100)	21.2
Boys	627 (48.6)	26.6	538 (42.4)	25.9	610 (46.8)	28.5	1413 (48.4)	19.4
Girls	662 (51.4)	25.0	730 (57.6)	26.2	693 (53.2)	29.3	1507 (51.6)	23.2
p-value for difference by sex	–	0.525	–	0.882	–	0.768	–	**0.015**
≤ 12 years old	216 (16.8)	29.1	210 (16.6)	28.3	166 (12.7)	31.4	376 (12.9)	29.9
13 years old	322 (25.0)	30.4	272 (21.5)	28.8	414 (31.8)	31.7	658 (22.5)	23.3
14 years old	383 (29.7)	24.4	286 (22.6)	23.9	383 (29.4)	27.3	714 (24.5)	21.9
15 years old	226 (17.5)	24.5	305 (24.1)	22.7	230 (17.7)	24.9	709 (24.3)	17.3
≥ 16 years old	142 (11.0)	16.7	195 (15.4)	28.0	110 (8.4)	27.7	463 (15.9)	16.2
p-value for difference by age	–	**0.030**	–	0.371	–	0.424	–	**< 0.001**

Table 2: Prevalence of mental health and parental involvement characteristics

Characteristic reported by student participant	Cayman Islands	St Lucia	St Vincent and the Grenadines	Trinidad and Tobago
Felt sad or hopeless to the point of stopping usual activities every day for two weeks or more consecutively in the past 12 months	25.8	24.5	28.8	20.3
Seriously considered attempting suicide in the past 12 months	17.8	19.0	19.9	17.8
Felt lonely most of the time or always during the past 12 months	13.3	16.3	15.9	12.3
Was unable to sleep due to worry most of the time or always in the past 12 months	11.4	11.5	13.8	11.0
Felt that parents know how they spend their free time most of the time or always in the past 30 days	48.0	46.0	42.1	44.2
Felt that parents check homework most of the time or always in the past 30 days	36.0	33.3	39.9	35.5
Felt that parents understand their problems and worries most of the time or always in the past 30 days	30.0	34.5	34.5	31.9

and less likely to report feeling that their parents understood their problems and worries (Table 3). After adjusting for age and gender, the associations between bully victimization and poor mental health remained very strong (Table 4). The regression models also showed that parental monitoring of free time and parental understanding were associated with lower odds of mental health problems.

DISCUSSION

About one-quarter of students in the Caribbean GSHS studies reported being bullied, which is somewhat lower than the results found in most other GSHS studies (2). Being bullied was associated with significantly higher rates of loneliness, symptoms of depression, anxiety and insomnia, and suicidal thoughts, and these associations were even stronger than those found in most other GSHS studies (2). While bullying has sometimes been considered a rite of passage for children, the health consequences of bullying can be costly.

Students who felt that their parents understood their problems were less likely to report poor mental health and less likely to be bullied. Additionally, parental monitoring of free time was associated with a lower rate of poor mental health. These results are consistent with previous studies from other world regions that have found that students with involved parents tend to be healthier than their peers (13, 14) and that parents who support, encourage, and communicate

Table 3: Associations between victimization by bullies, mental health and parental involvement

Characteristic reported by student participant	Cayman Islands			St Lucia			St Vincent and the Grenadines			Trinidad and Tobago		
	% bullied among those with this response	% bullied among those without this response	*p*-value	% bullied among those with this response	% bullied among those without this response	*p*-value	% bullied among those with this response	% bullied among those without this response	*p*-value	% bullied among those with this response	% bullied among those without this response	*p*-value
Sadness and hopelessness	37.8	21.4	**< 0.001**	35.4	22.8	**< 0.001**	43.8	22.8	**< 0.001**	37.3	16.4	**< 0.001**
Suicidal thoughts	44.2	21.4	**< 0.001**	33.3	24.0	**0.004**	41.5	25.3	**< 0.001**	32.1	18.0	**< 0.001**
Loneliness	52.6	21.7	**< 0.001**	44.6	22.4	**< 0.001**	42.8	25.8	**< 0.001**	42.3	18.2	**< 0.001**
Insomnia	42.1	23.7	**< 0.001**	38.6	24.3	**< 0.001**	45.6	26.3	**< 0.001**	40.7	18.7	**< 0.001**
Monitoring of free time	21.7	28.8	**0.01**	24.5	27.2	0.29	28.1	29.0	0.77	20.1	21.5	0.38
Homework checks	23.2	26.6	0.23	26.1	25.8	0.90	27.8	30.2	0.40	20.6	21.4	0.62
Parental understanding	20.9	27.6	**0.02**	20.8	28.6	**0.004**	29.6	29.2	0.91	18.7	22.0	0.06

Table 4: Age- and gender-adjusted odds ratios (and 95% confidence intervals) for the association between victimization by a bully, mental health, and parental involvement

	Cayman Islands	St Lucia	St Vincent and the Grenadines	Trinidad and Tobago
Bullying and sadness and hopelessness	**2.27 (1.69, 3.04)**	**1.91 (1.43, 2.56)**	**2.79 (2.10, 3.71)**	**3.37 (2.71, 4.18)**
Bullying and suicidal thoughts	**3.01 (2.19, 4.15)**	**1.61 (1.17, 2.22)**	**2.12 (1.56, 2.90)**	**2.35 (1.87, 2.95)**
Bullying and loneliness	**4.14 (2.91, 5.89)**	**2.92 (2.11, 4.04)**	**2.29 (1.63, 3.22)**	**3.68 (2.87, 4.73)**
Bullying and insomnia	**2.34 (1.61, 3.42)**	**2.02 (1.39, 2.92)**	**2.42 (1.70, 3.45)**	**3.50 (2.69, 4.57)**
Bullying and parental knowledge of free time	**0.68 (0.52, 0.90)**	0.86 (0.66, 1.12)	0.95 (0.72, 1.24)	0.86 (0.71, 1.04)
Bullying and parental homework checks	0.78 (0.58, 1.05)	1.00 (0.75, 1.32)	0.87 (0.66, 1.14)	0.85 (0.70, 1.04)
Bullying and parental understanding	**0.67 (0.49, 0.91)**	**0.64 (0.48, 0.85)**	1.00 (0.76, 1.32)	**0.75 (0.60, 0.92)**
Monitoring of free time and sadness/hopelessness	**0.67 (0.51, 0.87)**	**0.61 (0.46, 0.80)**	**0.74 (0.57, 0.96)**	**0.60 (0.49, 0.73)**
Monitoring of free time and suicidal thoughts	**0.60 (0.44, 0.82)**	**0.65 (0.49, 0.88)**	**0.56 (0.41, 0.76)**	**0.48 (0.39, 0.60)**
Monitoring of free time and loneliness	**0.68 (0.48, 0.96)**	0.79 (0.58, 1.08)	**0.64 (0.46, 0.90)**	**0.56 (0.44, 0.72)**
Monitoring of free time and insomnia	0.87 (0.60, 1.25)	0.94 (0.66, 1.34)	**0.53 (0.37, 0.76)**	**0.70 (0.55, 0.90)**
Homework checks and sadness/hopelessness	0.78 (0.58, 1.03)	**0.69 (0.52, 0.92)**	0.84 (0.65, 1.08)	**0.81 (0.66, 0.99)**
Homework checks and suicidal thoughts	**0.63 (0.45, 0.88)**	0.74 (0.54, 1.02)	**0.47 (0.34, 0.65)**	**0.65 (0.52, 0.81)**
Homework checks and loneliness	0.77 (0.54, 1.11)	0.81 (0.58, 1.13)	0.82 (0.59, 1.13)	**0.70 (0.54, 0.90)**
Homework checks and insomnia	0.78 (0.53, 1.15)	0.94 (0.65, 1.37)	1.10 (0.79, 1.54)	0.82 (0.63, 1.05)
Parental understanding and sadness/hopelessness	**0.58 (0.43, 0.80)**	**0.60 (0.45, 0.81)**	**0.70 (0.53, 0.91)**	**0.55 (0.44, 0.68)**
Parental understanding and suicidal thoughts	**0.51 (0.35, 0.75)**	**0.50 (0.36, 0.70)**	**0.53 (0.38, 0.74)**	**0.43 (0.34, 0.55)**
Parental understanding and loneliness	**0.49 (0.32, 0.75)**	0.49 (0.34, 0.70)	**0.60 (0.42, 0.86)**	**0.38 (0.28, 0.52)**
Parental understanding and insomnia	1.02 (0.69, 1.52)	0.75 (0.51, 1.09)	0.83 (0.58, 1.18)	**0.60 (0.45, 0.80)**

with their children help reduce their children's risk of being the target of a bully (8, 11, 12).

However, it is not possible for a cross-sectional study to determine the directionality of these associations. It is possible that bullied students withdraw from their families rather than students with strong family support being less likely to be victimized. The analysis is further limited by a reliance on student self-reports that were not corroborated by direct observation or parental reports, and by the limited number of questions about these topics included in the GSHS survey. For example, the sole question about bullying did not allow bullies, victims, and bully-victims (who are aggressors in some relationships and victims in others) to be categorized separately.

Even so, the strong association between bullying and poor mental health emphasizes the need to implement strate-

gies to reduce bullying among children and adolescents. Parents have an important role to play in reducing bullying and its negative health effects, and so do teachers, healthcare providers and communities. Studies of the effectiveness of interventions tailored to local cultures and practices would provide important information about best practices for mitigating bullying among students. Additional research is particularly important for the Caribbean, since the region is understudied and reliable and effective policies and programmes need to build on a solid evidence base that accounts for local family dynamics and communication styles (16).

REFERENCES

1. Craig W, Harel-Fisch Y, Fogel-Grinvald H, Dostaler S, Hetland J, Simons-Morton B et al. A cross-national profile of bullying and victimization among adolescents in 40 countries. Int J Public Health 2009; **54 (Suppl 2):** 216−24.
2. Fleming LC, Jacobsen KH. Bullying among middle-school students in low and middle income countries. Health Promot Int 2010; **25:** 73−84.
3. Björkqvist KL, Lagerspetz KMJ, Kaukiainen A. Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. Aggress Behav 1992; **18:** 117−27.
4. Rivers I, Smith PK. Types of bullying behavior and their correlates. Aggress Behav 1994; **20:** 359−68.
5. Olweus D. Bullying at school: what we know and what we can do. Cambridge, MA: Blackwell; 1993.
6. Nansel TR, Craig W, Overpeck MD, Saluja G, Ruan WJ, Health Behaviour in School-aged Children Bullying Analyses Working Group. Cross-national consistency in the relationship between bullying behaviours and psychosocial adjustment. Arch Pediatr Adolesc Med 2004; **158:** 730−6.
7. Bond L, Carlin JB, Thomas L, Rubin K, Patton G. Does bullying cause emotional problems? A prospective study of young teenagers. BMJ 2001; **323:** 480−4.
8. Cassidy T. Bullying and victimization in school children: the role of social identity, problem-solving style, and family and school context. Soc Psychol Educ 2009; **12:** 63−76.
9. Duncan RD. Peer sibling aggression: an investigation of intra- and extra-familial bullying. J Interpers Violence 1999; **14:** 871−86.
10. Juvonen J, Graham S, Schuster MA. Bullying among young adolescents: the strong, the weak, and the troubled. Pediatrics 2003; **112:** 1231−7.
11. Spriggs AL, Iannotti RJ, Nansel TR, Haynie DL. Adolescent bullying involvement and perceived family, peer and school relations: commonalities and differences across race/ethnicity. J Adolesc Health 2007; **41:** 283−93.
12. Yeung R, Leadbeater B. Adults make a difference: the protective effects of parent and teacher emotional support on emotional and behavioral problems of peer-victimized adolescents. J Community Psychol 2010; **38:** 80−98.
13. Fröjd S, Kaltiala-Heino R, Rimpela M. The association of parental monitoring and family structure with diverse maladjustment outcomes in middle adolescent boys and girls. Nord J Psychiatry 2007; **61:** 296−303.
14. Hasumi T, Ahsan F, Couper CM, Aguayo JL, Jacobsen KH. Parental involvement and mental well-being of Indian adolescents. Indian Pediatr 2012. PII: S097475591200123-2.
15. World Health Organization. Global School-based Student Health Survey (GSHS): purpose and methodology [Internet]. Geneva: WHO; 2009 [cited 27 Jun 2012]. Available from: http://www.who.int/chp/gshs/
16. Evans H, Davies R. Overview of issues in childhood socialization in the Caribbean. In: Rooparine JL, Brown J, eds. Caribbean families: diversity among ethnic groups. Greenwich, CT: Ablex; 1997: 1−24.