Bullying and bystander behaviour and health outcomes among adolescents in Ireland

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ABSTRACT

Background Little is known about the impact of being a bystander to bullying. This study compared health outcomes among bullies, victims and bystanders, and investigated actions taken by bystanders when they saw bullying.

Method Participants included 7522 students aged 12–18 years that completed self-report questionnaires in the 2013/2014 Health Behaviour in School-aged Children survey. Binary logistic regression models (controlled for bully, victim, bystander status and demographic variables) were used to investigate the associations between participation in bullying as a bully, victim and bystander and health outcomes.

Results Overall, 13.3% of adolescents reported being a bully, 25.1% reported being a victim and 30.5% reported that they saw bullying, in the last couple of months. Bystanders were significantly more likely to experience psychological symptoms (OR 1.355), somatic symptoms (OR 1.392) and low life satisfaction (OR 1.268) than those who were not bystanders. Helping the victim was significantly associated with experiencing psychological symptoms (OR 1.240), somatic symptoms (OR 1.251) and low life satisfaction (OR 1.198). Being a bully was significantly associated with experiencing psychological symptoms (OR 1.382) and not having excellent health (OR 1.252). Victims were significantly more likely to experience psychological symptoms (OR 2.437), somatic symptoms (OR 2.364), low life satisfaction (OR 2.564) and not having excellent health (OR 1.559).

Conclusion In Ireland, being a bystander to bullying is more prevalent in schools than bullying perpetration or victimisation. The impact of being a bystander to bullying needs to be highlighted and included in intervention development.

INTRODUCTION

Background

Research recently conducted in Ireland suggests that bullying and victimisation remain frequent occurrences in Irish schools. In a survey led by the Irish Health Behaviour in School-aged Children (HBSC) study of children aged 10–17 years in 2014, 13% of adolescents reported that they had bullied another student and 25% reported that they had been bullied by another student at school.[1] Bullying is a critical health and social issue affecting many children and adolescents worldwide[2 3] and is characterised as repeated negative behaviour with the intent to cause harm through an imbalanced power relationship.[4]

The impact of bullying perpetration and victimisation on adolescents has been extensively documented, and the negative outcomes well publicised.[5–7] Bullying is associated with a range of negative outcomes including increased risk of physical and psychological health problems,[5] engaging in health risk behaviours[6] and suicide ideation.[7] The nature of bullying, in its repetition and intent to harm, has continuing and lasting impacts on the mental health of victims, which can also track into adulthood.[8] Victims tend to have lower self-esteem[9] and are more likely to be rejected at school,[10] which can impact on their ability to make and maintain positive social connections, thus contributing to worse mental health indicators.

Bullying can occur in a variety of places including in schools, on the way to and from school and in neighbourhoods. When bullying occurs within a school setting, it has the potential to negatively impact the entire school population, and not only those directly involved in bullying, making this a school community issue. Typically, bullying occurs in public spaces with peers present and some studies estimate that at 88% of bullying incidents, there are witnesses present.[11] Furthermore, research suggests that for every bullying event there are four witnesses.[12]

In recent years, the perspective of the bullying relationship has evolved from a focus on bullies and victims, to the group, including individuals that witness or are bystanders to bullying.[10 13] Compared with bullying perpetration and victimisation, there have been fewer studies focused on bystanders and their behaviour with inconsistent findings between studies.[14]

How bystanders react when they see bullying can have an important impact. Encouraging bystanders to stand up for victims has been an effective method of stopping or deterring bullying within schools and has historically been included as an intervention in antibullying programmes.[15] However, research has demonstrated that witnesses rarely intervene,[11] and where they do, they often exhibit behaviours, actively or passively, that support or encourage bullying.[16] Active bystander behaviours range from encouraging the bully; to defending the victim and furthermore, bystanders that do nothing or walk away, while passively involved, may facilitate the bully to feel that their behaviour is acceptable.[17]

It is not clear if the course of action taken by bystanders differentially impacts their health and well-being. Indeed, some research suggests that bystanders are more impacted by bullying than the bully or victim, although further research is required in this area.[14] Regarding health consequences for

bystanders, a recent study has shown that witnessing bullying was positively associated with poor mental health, including social anxiety and depressive symptoms.[18] Bystanders who reported defending the victim were at an increased risk of psychosomatic difficulties[19] and internalising problems.[20] When defending victims, bystanders experience enormous peer pressure, as well as risking becoming a victim of bullying themselves;[18] they may even encourage or join the bully in order to avoid becoming a victim themselves, which has its own health implications. To date, research on bystanders has focused on behaviours, which include doing nothing, defending the victim and supporting or encouraging the bullying.[16–22]

The majority of students within a school typically do not bully their peers, making it important to understand the role played by bystanders in bullying events, particularly in Ireland, where there is a dearth of information on this group. This is important to consider if we are to continue to encourage witnesses to intervene in bullying events, and this study will contribute to a better understanding of the outcomes associated with being a bystander which could in turn help inform bullying prevention programmes. Therefore, the aims of this paper are (i) to explore what adolescents report doing when they witness bullying, (ii) to analyse the associations between different bullying behaviours and health and life satisfaction and (iii) to examine health outcomes by reported bystander behaviour.

METHODS

Study population

This study uses data collected in the 2013/2014 Irish HBSC survey, a cross-national research study conducted in collaboration with the WHO Regional Office for Europe. This study focuses on 7522 adolescents aged 12–18 years attending second level education in Ireland. Consent was sought from school principals, parents and participants. Participation was voluntary, anonymous and confidential.

Questionnaire

Data were collected using self-completion questionnaires in classrooms. Participating adolescents were presented with a definition of bullying, adapted from the Olweus definition[4]: We say a student is BEING BULLIED when another student, or group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things. But it is NOT BULLYING when two students of about the same strength or power argue or fight. It is also not bullying when a student is teased in a friendly and playful way.

Victim and bully status

Students were asked 'How often have you been bullied at school in the past couple of months?' with response options 'I have not been bullied at school in the past couple of months'; 'only once or twice'; 'two or three times a month'; 'about once a week'; 'several times a week.' In line with previous studies,[3 6] responses were dichotomised into 'more than once' versus 'never'.

Students were then asked 'How often have you taken part in bullying another student(s) at school in the past couple of months?' Response options included 'I have not bullied another student(s) at school in the past couple of months'; 'only once or twice'; 'two or three times a month'; 'about once a week'; 'several times a week.' Comparable to research in the area,[23] responses were dichotomised into 'more than once' versus 'never'

Bystander status

Bystanders were defined as those that saw bullying using the question 'In the last couple of months, what did you do when you saw bullying?'. Response options included 'I didn't see bullying in the last couple of months'; 'I did nothing, I stepped away'; 'I did nothing, I just watched'; 'I helped the victim'; 'I encouraged the attacker(s)'; 'I called an adult'; 'I did something else'. Initially, children that reported having seen bullying were assigned a value of 1, with those reporting not having seen bullying assigned a value of 0. Data were then categorised based on what children reported doing. Two categories were created; 'did nothing, stepped away' and 'did nothing, just watched' were collapsed into the same category and 'helped the victim' and 'called an adult' were assigned to another category. Responses were dichotomised for 'bystander'; 'did nothing'; 'helped victim.' Those that reported that they 'encouraged the attacker(s)' (0.4%) or 'did something else'(3.7%) were excluded, as these numbers were too low to be presented separately.

Psychological and somatic symptoms

Psychological and somatic symptoms were assessed using the HBSC symptom checklist (HBSC-SCL). Subjective complaints have been measured in all HBSC surveys since 1986. The HBSC-SCL was designed as a non-clinical measure of health complaints and has remained unchanged since 1993. Items within the scale have shown adequate content validity and test–retest reliability.[24] Factor analysis of the checklist favours a model of two factors, namely psychological and somatic symptoms, which are both distinct and related.[24 25] The checklist has been used as either a one factor or two factor scale in different studies.[25 26] Psychological symptoms include feeling low, irritable or bad tempered, nervous, dizzy or having difficulties getting to sleep. Participants were asked how often they had experienced these within the last 6 months on the following scale: 'about every day'; 'more than once a week'; 'about every week'; 'about every month'; 'rarely or never.' Participants were classified as having experienced psychological symptoms if they reported two or more psychological symptoms more than once a week. Similarly, participants were asked about their experience of somatic symptoms. Somatic symptoms included having headache, stomach-ache or back ache in the last 6 months. Those that reported two or more somatic symptoms more than once a week in the last 6 months were classified as having experienced somatic symptoms.

General health

General health was measured using the standard question on global health status: 'Would you say your health is excellent, good, fair or poor?', which has been supported by several studies for its validity.[27] Those that reported excellent health were coded as 0; all other values were coded as 1.

Life satisfaction

Life satisfaction was examined using the Cantril Ladder of Life, with observed relationships with quality of life and self-reported health within the expected range, which supports claims about validity.[27] Students were presented with a picture of a ladder with steps numbered 0–10. They were asked what type of life they felt they had at the moment using the question 'Here is a picture of a ladder: The top of the ladder '10' is the best possible life for you and the bottom '0' is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment?'. Responses were collapsed into high life satisfaction

coded as 0, being those that reported 10 through 7 and low life satisfaction coded as 1, being those reporting 6 through 0.

Covariates

Given the evidence for the role of age,[28] gender,[29] social class[30] and involvement in other bullying behaviours,[31] we controlled for these variables. Social class categories are represented by high, middle and low social classes, and determined by highest reported parental occupation. Bully, victim or bystander status was determined using the above categories.

Statistical analysis

Prevalence of the different groups were calculated and compared by health outcome using X^2 test. Table 1 presents prevalence of reported psychological symptoms, somatic symptoms, general health and life satisfaction by bullying status. To test for the possible contribution of the different bullying and bystander behaviours to adolescent psychological symptoms, somatic symptoms, general health and life satisfaction, binary logistic regression analysis were computed. The survey data analysis yields ORs with linearised SEs and CIs were computed at the 95% level. Covariates were entered using the 'enter' method. Analyses were performed using IBM SPSS Statistics V.24 and are presented in table 2.

RESULTS

A total of 7522 students aged 12–18 years were included in the analysis. There were more females (59.3%) in the sample and more families from the high (51.7%) and middle (37.1%) social classes. Overall, 45.8% of students reported involvement in some type of bullying behaviour. The prevalence for being bullied at school among both genders was 25.1%, while 13.3% of adolescents reported that they had bullied another student at school in the past couple of months. The prevalence for being a bystander was 30.5% among both genders, with 11.5% reporting doing nothing and 14.8% reporting helping the victim (table 1).

Health outcomes

Psychological and somatic symptoms

In total, 31.0% of children reported that they had experienced psychological symptoms and 11.2% reported that they experienced somatic symptoms in the last 6 months. Adolescents that reported being a bully were significantly more likely to report experiencing psychological symptoms (OR 1.382, 95% CI 1.156 to 1.652, p<0.001), but not significantly more likely to report having experienced somatic symptoms, than those who did not report being bullied. Those that reported being a victim of bullying were significantly more likely to report experiencing psychological (OR 2.437, 95% CI 2.133 to 2.784, p<0.001) and somatic symptoms (OR 2.364, 95% CI 1.961 to 2.851, p<0.001) than those who did not report being a victim of bullying. Bystanders were significantly more likely to report experiencing psychological symptoms (OR 1.355, 95% CI 1.191 to 1.543, p<0.001) and somatic symptoms (OR 1.392, 95% CI 1.154 to 1.679, p=0.001) than those who were not bystanders.

Binary logistic regression analyses showed that those who reported helping the victim were significantly more likely to report experiencing psychological symptoms (OR 1.240, 95% CI 1.057 to 1.455, p=0.008), but not significantly more likely to report somatic symptoms (OR 1.251, 95% CI 0.999 to 1.565, p=0.051) after controlling for age, gender, social class, being a bully and being a victim. Reporting doing nothing was not significantly associated with psychological (OR 1.126, 95% CI

Table 1 Reported psychological symptoms, somatic symptoms, health and life satisfaction by bullying status % (n=7522)

Bullying status	All		Experiencing psychological symptoms				Experiencing somatic symptoms				Not excellent health				Low life satisfaction			
			Yes		No		Yes		No		Excellent		Not excellent		High		Low	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n
Bully	13.3	971	17.5	393	11.5	572**	16.2	130	12.9	830*	11.4	248	14.2	719**	11.9	594	16.1	336**
Victim	25.1	1844	38.5	871	19.1	958**	41.6	338	23.0	1479**	19.4	428	27.4	1396**	19.3	970	38.1	800**
Witness	30.5	2229	38.3	858	27.0	1349**	40.0	319	29.3	1881**	29.2	644	31.0	1572	27.2	1362	37.5	779**
Did nothing	11.5	843	13.6	305	10.6	528**	14.3	114	11.2	717*	10.7	235	11.9	604	10.7	538	13.2	274*
Helped victim	14.9	1083	18.7	418	13.1	654**	19.6	156	14.2	913**	14.8	325	14.8	751	13.0	653	18.8	390**
Helped bully[a]	0.4	31	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Did something else[a]	3.7	272	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

*p≤0.05, **p≤0.001.
[a]Data excluded from analysis due to small numbers.

Table 2 Models of logistic regression predicting psychological symptoms, somatic symptoms, health and life satisfaction by bullying status (n=7522)

	Experiencing psychological symptoms		Experiencing somatic symptoms		Not excellent health		Low life satisfaction	
	Model 1		Model 2		Model 3		Model 4	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Bully status								
Never	1	–	1	–	1	–	1	–
Bully	1.382**	1.156 to 1.652	0.971 (–)	0.743 to 1.269	1.252	1.038 to 1.510	1.070	0.888 to 1.288
Victim status								
Never	1	–	1	–	1	–	1	–
Victim	2.437**	2.133 to 2.784	2.364**	1.961 to 2.851	1.559**	1.348 to 1.804	2.564**	2.236 to 2.940
Witnessed bullying								
Never	1	–	1	–	1	–	1	–
Bystander	1.355**	1.191 to 1.543	1.392**	1.154 to 1.679	0.992 (–)	0.870 to 1.130	1.268**	1.110 to 1.450
Bystander behaviour								
Never	1	–	1	–	1	–	1	–
Did nothing	1.126	0.936 to 1.354	1.289	0.990 to 1.678	1.098	0.912 to 1.323	1.120	0.927 to 1.354
Helped victim	1.240	1.057 to 1.455	1.251	0.999 to 1.565	0.888 (–)	0.755 to 1.045	1.198	1.017 to 1.411

*p≤0.05, **p≤0.001.
[a]Analyses are controlled for age, gender, social class, being a bully, being a victim and being a bystander.

0.936 to 1.354, p=0.209) or somatic symptoms (OR 1.289, 95% CI 0.990 to 1.678, p=0.059).

General health and life satisfaction

Overall, 69.7% of adolescents reported not having excellent health while 29.4% reported low life satisfaction. Those that reported being a bully were significantly more likely to report not having excellent health (OR 1.252, 95% CI 1.038 to 1.510, p=0.019), but not significantly more likely to low life satisfaction (OR 1.070, 95% CI 0.888 to 1.288, p=0.476) when compared with those who were not bullies. Those that reported being a victim of bullying were significantly more likely to report low life satisfaction (OR 2.564, 95% CI 2.236 to 2.940, p<0.001) and not having excellent health (OR 1.559, 95% CI 1.348 to 1.804, p<0.001) than those that were not victims of bullying. Compared with those that did not witness bullying, bystanders were not significantly more likely to report not having excellent health (OR 0.992, 95% CI 0.870 to 1.130, p=0.900) but were significantly more likely to report low life satisfaction (OR 1.268, 95% CI 1.110 to 1.450, p<0.001). In terms of witness behaviours, helping the victim was significantly associated with a lower life satisfaction (OR 1.198, 95% CI 1.017 to 1.411, p=0.031) but was not significantly associated with not having excellent health (OR 0.888, 95% CI 0.755 to 1.045, p=0.153) (table 2).

DISCUSSION

To our knowledge, this is the first study to give a nationally representative overview of bullying and bystander behaviour in Ireland. Prior research in this area has demonstrated the fickle nature of prevalence rates in Ireland, due to the variance of factors such as data collection methods, answer scales, inclusion of a bullying definition and study time frame.[32] Our results show that bullying behaviours and witnessing bullying are common occurrences in Irish second level schools, with 25.1% of students reporting being bullied, 13.3% of students reporting bullying others and 30.5% of students reporting witnessing bullying in the last couple of months. In relation to observing bullying, a study carried out in the UK, in 2009, found that 30.4% of students reported that they witnessed bullying,[14] which is comparable to our results.

We found that those engaging in bullying and bystander behaviour reported higher levels of psychological and somatic symptoms, low life satisfaction and not having excellent health than those not involved in bullying or bystander behaviour. It is difficult to say for certain why this is the case but one suggestion is that by participating as a bully, victim or bystander, adolescents are taking part in aggressive behaviour either through choice or compulsion. Victims targeted by bullies often lack the self-esteem[9] to defend themselves and witnesses typically do not intervene,[11] which may result in victims feeling rejected by their peers.

We found that those that reported doing nothing or helping the victim reported more psychological and somatic symptoms. This is in line with a study on the mental health implications of observing bullying, which found that witnessing victimisation has a significant negative impact on multiple indicators of mental health.[18] There are several potential explanations for this finding. It is possible that bystanders experience empathy towards the victim,[14] which could in turn manifest as subjective health symptoms. When witnessing bullying, bystanders face peer pressure[18] and risk a decrease in their social standing if they choose to intervene and help the victim. They also risk becoming a victim of bullying themselves. In choosing to do nothing, bystanders may feel guilty that they did not stand up for their peers, which could also account for these differences. However, further investigation into this is needed.

Bystander behaviour differs with 14.8% of students in this study reporting that they helped the victim and 11.5% doing nothing. Doing nothing has the potential to suggest that bullying behaviour is tolerated and may be perceived as encouragement for the bully to continue.[22] Research has found that bystander behaviour is influenced by whether a student has been a bully themselves.[22] Those that have been a bully themselves are more likely to support bullying behaviour, either doing nothing or encouraging the bully. However, there is no evident pattern in

victimisation, in that those that report being victims of bullying, are not more likely to directly intervene on behalf of the victim when they witness bullying, perhaps due to a fear that they will be targeted by the bully.[22] However, when compared with non-victims of bullying, victims are more likely to call a teacher,[22] which would help the victim.

A recent study found that victim defending behaviours were associated with more anger, psychosomatic and academic difficulties among bystanders.[19] In our study, helping the victim was associated with increased risk of psychological and somatic symptoms and low life satisfaction. When choosing to help victims, bystanders are taking part in aggressive behaviour that could have implications on their health. We found that reporting doing nothing was not associated with a significant increase in any of the health outcomes examined in this study. This group is made up of those that watched and those that stepped away, which may have impacted on these results since the grouping may have masked some of the health effects. Helping or doing nothing to help the victim could be equally negative. Without further research into this complex relationship, it is difficult to explain which contextual factors are likely at play.

Implications

Our study shows that involvement in bullying and bystander behaviours impacts on the health and life satisfaction of adolescents. Our findings indicate that there is a need for school principals, teachers and parents to be aware of the impact bullying has on bystanders. Bystanders are not as obvious as bullies and victims making them difficult to identify. Results suggest that, depending on the role played by students in bullying, there are differing impacts on health and life satisfaction. Out of all the groups under investigation, victims are significantly more at risk of poorer outcomes than the other groups investigated in this study. In terms of witness behaviours, helping the victim was associated with increased risk of psychological symptoms, lower life satisfaction and not having excellent health. This finding highlights the importance of considering the impact on bystanders when encouraging intervention within schools and suggests that perhaps students should not intervene directly when they witness bullying and that they should be encouraged to do something else, like tell a teacher or call an adult.

Strengths and limitations

Strengths of this study include the use of data from a nationally representative sample of adolescents aged 12–18 years. Limitations include the use of self-report questionnaires where young people tend to underestimate their roles in active bullying. The data used in this survey are also cross-sectional and therefore cannot be used to prove causation.

Conclusion

This study adds to the literature in that it enhances our understanding of the roles played by young people in bullying and describes what bystanders do. This study is the first, to our knowledge, to compare the health outcomes of bystanders, bullies and victims in Ireland and to examine if course of action taken by bystanders is associated with better or worse health outcomes. Further research is required to understand the gender differences in bystander behaviour and what the predictors of bystander behaviour are. Furthermore, examining exposure to bullying in other settings, such as in families, and among siblings, to assess if this increases vulnerability of bystanders in schools is warranted.

What is already known on this subject

- Bystanders are a powerful group in bullying prevention.
- The impacts of witnessing bullying are thought to be worse for bystanders than those directly involved as perpetrators or victims.

What this study adds

- This study explores bystanders using a nationally representative sample in Ireland.
- Bystanders were significantly more likely to report psychological and somatic symptoms and low life satisfaction than those who were not bystanders.
- Victims of bullying were over two times more likely to experience psychological and somatic symptoms, one and a half times more likely to experience not having excellent health and two and half times more likely to experience low life satisfaction than non-victims.

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REFERENCES

1 Gavin A, Keane E, Callaghan M, *et al*. *The Irish Health Behaviour in School-aged Children (HBSC) Study 2014*. Galway: Department of Health and National University of Ireland Galway, 2015.
2 Chester KL, Callaghan M, Cosma A, *et al*. Cross-national time trends in bullying victimization in 33 countries among children aged 11, 13 and 15 from 2002 to 2010. *Eur J Public Health* 2015;25:61–4.
3 Molcho M, Craig W, Due P, *et al*. Cross-national time trends in bullying behaviour 1994-2006: findings from Europe and North America. *Int J Public Health* 2009;54:225–34.
4 Olweus D. Bullying at school: Long-term outcomes for the victims and an effective school-based intervention program. In: Huesmann LR, ed. *Aggressive behavior: current perspectives*. 130. New York: Plenum Press, 1994.
5 Due P, Holstein BE, Lynch J, *et al*. Bullying and symptoms among school-aged children: international comparative cross sectional study in 28 countries. *Eur J Public Health* 2005;15:128–32.
6 Callaghan M, Kelly C, Molcho M. Exploring traditional and cyberbullying among Irish adolescents. *Int J Public Health* 2015;60:199–206.
7 Skapinakis P, Bellos S, Gkatsa T, *et al*. The association between bullying and early stages of suicidal ideation in late adolescents in Greece. *BMC Psychiatry* 2011;11:22.
8 Hager AD, Leadbeater BJ. The longitudinal effects of peer victimization on physical health from adolescence to young adulthood. *J Adolesc Health* 2016;58:330–6.
9 Wilkins-Shurmer A, O'Callaghan MJ, Najman JM, *et al*. Association of bullying with adolescent health-related quality of life. *J Paediatr Child Health* 2003;39:436–41.
10 Salmivalli C, Lagerspetz K, Björkqvist K, *et al*. Bullying as a group process: Participant roles and their relations to social status within the group. *Aggress Behav* 1996;22:1–15.
11 Lynn Hawkins D, Pepler DJ, Craig WM. Naturalistic Observations of Peer Interventions in Bullying. *Soc Dev* 2001;10:512–27.

12 O'Connell P, Pepler D, Craig W. Peer involvement in bullying: insights and challenges for intervention. *J Adolesc* 1999;22:437–52.
13 Sutton J, Smith PK. Bullying as a group process: An adaptation of the participant role approach. *Aggress Behav* 1999;25:97–111.
14 Rivers I, Poteat VP, Noret N, *et al*. Observing bullying at school: the mental health implications of witness status. *School Psychology Quarterly* 2009;24:211–23.
15 Kärnä A, Voeten M, Little TD, *et al*. A large-scale evaluation of the KiVa antibullying program: grades 4-6. *Child Dev* 2011;82:311–30.
16 Pöyhönen V, Juvonen J, Salmivalli C. Standing up for the victim, siding with the bully or standing by? bystander responses in bullying situations. *Soc Dev* 2012;21:722–41.
17 Trach J, Hymel S, Waterhouse T, *et al*. Bystander responses to school bullying: a cross-sectional investigation of grade and sex differences. *Can J Sch Psychol* 2010;25:114–30.
18 Wu WC, Luu S, Luh DL. Defending behaviors, bullying roles, and their associations with mental health in junior high school students: a population-based study. *BMC Public Health* 2016;16:1066.
19 Lambe LJ, Hudson CC, Craig WM, *et al*. Does defending come with a cost? Examining the psychosocial correlates of defending behaviour among bystanders of bullying in a Canadian sample. *Child Abuse Negl* 2017;65:112–23.
20 Jenkins LN, Fredrick SS. Social capital and bystander behavior in bullying: internalizing problems as a barrier to prosocial intervention. *J Youth Adolesc* 2017;46:757–71.
21 Denny S, Peterson ER, Stuart J, *et al*. Bystander intervention, bullying, and victimization: a multilevel analysis of New Zealand High Schools. *J Sch Violence* 2015;14:245–72.
22 Baldry AC. Bystander behaviour among Italian students. *Pastor Care Educ* 2005;23:30–5.
23 Cho S, Lee JM, Min Lee J. Explaining physical, verbal, and social bullying among bullies, victims of bullying, and bully-victims: Assessing the integrated approach between social control and lifestyles-routine activities theories. *Child Youth Serv Rev* 2018;91:372–82.
24 Haugland S, Wold B. Subjective health complaints in adolescence–reliability and validity of survey methods. *J Adolesc* 2001;24:611–24.
25 Gariepy G, McKinnon B, Sentenac M, *et al*. Validity and reliability of a brief symptom checklist to measure psychological health in school-aged children. *Child Indic Res* 2016;9:471–84.
26 Vieno A, Gini G, Lenzi M, *et al*. Cybervictimization and somatic and psychological symptoms among Italian middle school students. *Eur J Public Health* 2015;25:433–7.
27 Currie C, Inchley J, Molcho M, eds. *Health Behaviour in School-aged Children (HBSC) study protocol: background, methodology and mandatory items for the 2013/14 survey*. St Andrews: CAHRU, 2014.
28 Eisenberg ME, Aalsma MC. Society for Adolescent Medicine. Bullying and peer victimization: position paper of the Society for Adolescent Medicine. *J Adolesc Health* 2005;36:88–91.
29 Craig W, Harel-Fisch Y, Fogel-Grinvald H, *et al*. A cross-national profile of bullying and victimization among adolescents in 40 countries. *Int J Public Health* 2009;54:216–24.
30 Currie C, Zanotti C, Morgan A, eds. *Social determinants of health and well-being among young people. Health Behaviour in School-Aged Children (HBSC) Study: International Report from the 2009/2010 Survey*. Copenhagen, Denmark: WHO Regional Office for Europe, 2012.
31 Wolke D, Lereya ST. Long-term effects of bullying. *Arch Dis Child* 2015;100:879–85.
32 Foody M, Samara M, O'Higgins Norman J. Bullying and cyberbullying studies in the school-aged population on the island of Ireland: A meta-analysis. *Br J Educ Psychol* 2017;87:535–57.