

Victimisation in urban disadvantaged primary schools: Associations with health-related quality of life, depression and social support.

John M Hyland¹, Pauline K Hyland¹ and Catherine M Comiskey²

RUNNING HEAD: Victimisation in disadvantaged primary schools

¹Department of Psychology, Dublin Business School,
Ireland

²School of Nursing and Midwifery, Trinity College
Dublin, Ireland

Corresponding author:

John M Hyland, Department of Psychology, School of
Arts, Dublin Business School, 13-14 Aungier Street,
Dublin 2, Ireland.

Email: john.hyland@dbs.ie

Abstract

Background: Although a widespread problem, victimisation research on primary school children is limited, especially in disadvantaged regions. The aim of the current research was to address this absence in the literature with the analysis of the first wave data from a longitudinal study as part of the ‘Healthy Schools’ programme in a disadvantaged urban region.

Method: The current study explored victimisation incidences among 458 seven to twelve year old Irish primary school children, and associations with depression, health-related quality of life (HRQoL), and social support.

Results: Victimization frequency (33.8%) was consistent with recent literature, with scores positively correlating with depression levels. On the stand-alone victimisation question, victims scored lower on all HRQoL subscales compared to non-victims. Further categorisation of victimisation behaviours revealed that frequent-victims scored lower on four of these subscales, compared to non-victims.

Conclusion: Although from an area considered to be disadvantaged, rates of victimisation were consistent with data from more affluent areas. Results stress an importance on specific bullying behaviours when measuring victimisation rates, along with corresponding health consequences. Future research should continue to adopt the behaviour based assessment of victimisation to provide an overall picture of the problem.

Key Practitioner Message

- Cross-culturally, bullying behaviour is still an ongoing problem for schools and has received much attention in the literature.
- However in the context of disadvantaged schools, research is still limited.
- Among those that responded, over half felt that their school was not doing enough to combat bullying.
- Frequency of victimisation was positively associated with depressive symptomology.
- Health-related quality of Life was negatively associated with victimisation.
- Consequently, in the treatment of physical and mental health, practitioners should consider the role of school victimisation and its association to such symptomology.

Keywords

Bullying, Mental health, Health-related quality of life, Depression, Child health

Introduction

Bully/victim problems have significant negative effects on young children. A breadth of empirical research has documented incidence rates cross-culturally; the United States (Glew et al., 2005), Australia (Sakellariou, Carroll, & Houghton, 2012), Norway (Ertesvåg & Roland, 2014), Northern Ireland (McGuckin, Cummins, & Lewis, 2010) and the Republic of Ireland (Reulbach et al., 2013). Correlates include lower psychological well-being (Machmutow et al., 2012), physical well-being (Fekkes et al., 2006), negligible social support (Rothson et al., 2011) unsupportive school environment (Strøm et al., 2013) and depression (Hawker & Boulton, 2000). While frequencies of incidence and associated correlates have been well documented, little research investigating these within disadvantaged school contexts exists. This paper examines the first wave data from a longitudinal, comparative study conducted in an Irish urban disadvantaged region (DEIS-Band 1).

Bullying: The primary school context

Nature and incidence. The Department of Education and Skills (2013) define bullying as ‘...unwanted negative behaviour, verbal, psychological or physical, conducted by an individual or group against another person (or persons) and which is repeated over time’ (p. 8). Limitations exist in conceptualising ‘bullying’ globally, with researchers contending that the term does not have identical non-English counterparts (Smorti, Menesini, & Smith, 2003), but do share characteristics (e.g., Kwak & Koo, 2004). In the current study, both incidence of victimisation and specific bullying behaviours (e.g. teasing, email) were measured, to provide a holistic account.

It is well established from three decades of research that children continue to be victimised, with Carney and Merrell (2001) identifying a peak between the ages of nine and 15. As primary school typically includes children up to 12 years, it is important to investigate

within this context. Olweus reported that 15% of approximately 84,000 students in both primary and secondary schools were involved in bully/victim problems regularly, as bullies or victims (Olweus, 1983, 1987). Rigby (1997) reported that 39.5% and 27.9% of nine to 10 year old boys and girls respectively reported bullying others 'sometimes or more often', with Ortega and Lera (2000) reported that 33% of Spanish primary school students identified themselves as occasional victims.

Since the first Irish account (Byrne, 1987), investigation of incidence has been limited. Among 783 primary school students, O' Moore and Hillery (1989) reported victimisation of over 40% within a particular term. In a study involving 2,312 primary school, Minton and O' Moore (2008) recorded victimisation rates of 28.5% (21.2% = victim; 7.3% = both bullies and victims), with O'Neill, Grehan, and Olafsson (2011) reporting victimisation (on or offline) rates of 23% among 994 nine to 16 year olds.

Within the Irish context, and globally, there has been limited data on victimisation specifically within disadvantaged areas. The first aim of the current study is to provide an overview of incidence rates from an urban disadvantaged Irish region (DEIS-Band 1) as part of an Irish government 'Healthy Schools' promotion (Comiskey et al., 2012), measured with the Health-related Behaviour Questionnaire–Self-report version (HRBQ–S, Balding, 2005).

Victimisation and childhood depression. Research has documented links between victimisation and depression in young children (Arseneault et al., 2008) and how exposure can predict depression in later adulthood (Copeland et al., 2013). Ttofi et al. (2011) conducted a review on victimisation and adult depression research, identifying higher depression levels in those previously victimised. These effects persisted even after other childhood risk factors (e.g., impulsivity) were controlled for. Furthermore, adult depression was greater when victimisation occurred earlier in childhood.

From an Irish context, Mills et al. (2004), among 209 adolescents, reported that victims of bullying demonstrated higher levels of depression and suicidal ideation compared to non-victims. Victims also reported more parasuicidal acts, with higher numbers also presenting for psychiatric support. In the 'My World Survey' (Dooley & Fitzgerald, 2012) of 12-19 year olds, 42% had experienced victimisation at some point, with 30% indicating that they had been victimised yearly, 14% monthly, 7% weekly, and 3% daily. Consequently, these victims were more likely to report symptoms of distress outside of the normal range, coupled with moderate to severe depressive symptoms, anxiety and stress.

These previous section reflects a breadth of research concerning secondary school children, but few have investigated these within primary schools. These relationships are important, considering the link between early victimisation and mental health (e.g. Copeland et al., 2013). Consequently, this research explores this relationship between victimisation and depressive symptoms, measured by the Children's Depression Inventory Short- Self-report version (CDI-S, Kovacs, 1992).

Victimisation and health-related quality of life (HRQoL). In a sample of secondary school children in Australia, Rigby (1998, 1999) reported that victims had poorer levels of physical health compared to non-victims. Victimisation specifically relates to poor appetite (Fekkes et al., 2006), unhealthy eating behaviours (Farrow & Fox, 2011), and breakfast skipping (Sampasa-Kanyinga et al., 2014; Sampasa-Kanyinga & Willmore, 2015). Indeed, Sampasa-Kanyinga and colleagues discussed depression as a mediator between victimisation and breakfast skipping. Generally, there is a lack of research on these health correlates, and a third aim of this research explores victimisation and well-being, as measured through the Physical and Psychological well-being subscales of the KIDSCREEN-27 (KC-27, Kidscreen

Group Europe, 2006), as well as specific meal consumption as measured through questions from the HRBQ-S.

School victimisation and child support. Another important component of HRQoL concerns social supports. The 'My World Survey' discusses 'One good adult' in a child's life which can act as a protective factor for mental health (Dooley & Fitzgerald, 2012). Among the sample, 72% of young people indicated 'high' or 'very high' support from an adult, with 18% indicating 'low' or 'very low' support available. Active coping strategies, feelings of connectedness and belonging with peers, family and school was associated with involvement of adult support, with decreased levels of depression, anxiety and avoidant coping, and increases in the likelihood of self-harm and suicide.

A negative relationship was previously reported between victimisation and peer support (Eliot et al., 2010), with a similar trend with parental support (Fanti, Demetriou, & Hawa, 2012). From an Irish context, O'Neill and Dinh (2013) reported that among cyber-victims, 42% told a friend about the incident, with 36% telling parents. Interestingly, only six percent told a teacher, which is low considering the important role of the teacher in an environment where bullying occurs often. Cortes and Kochenderfer-Ladd (2014) reported, among 278 seven to nine year olds, a relationship between willingness to report classroom bullying and levels of actual victimisation. The importance of such supports is further investigated as a fourth aim of this study, as measured with three subscales of the KC-27, 'Autonomy and Parent Relations', 'Social Support and Peer Relations', and 'School Environment'. In addition, children are asked whether they feel their school is doing enough to combat bullying.

The current study

Few studies have examined victimisation rates among primary school children from disadvantaged areas. The current study explores such incidence rates through data collected as part of the 'Healthy schools' initiative, in a disadvantaged urban region of Ireland (DEIS-Band 1; Comiskey et al., 2012). The study investigates victimisation rates, generally and in terms of specific bullying behaviours. Depression is explored with regard victimisation, as are HRQoL characteristics. Differences are explored between victims and non-victims of bullying regarding HRQoL, with an exploration of morning meal consumption and perceived social support.

Methodology

Participants

Cluster sampling was used with a general sampling frame, consistent with Comiskey et al. (2012). Respondents ranged from first to fifth class, aged seven to 12 years, across seven schools ($N = 458$; Male = 51.3%, $N = 235$; Female = 48.7%, $N = 223$), from an urban disadvantaged area of Dublin, as part of the 2008 Healthy School programme. An opt-in parental consent form process was adopted with right to withdraw.

Design

A quantitative, comparative survey design was adopted for the general study; the larger longitudinal cohort measured over a three-year period. The cross-sectional data presented in this paper formed Wave-1 of the program. Victimisation frequencies were measured using the Health-related Behaviour Questionnaire–Self-report version (HRBQ–S). Consequences of victimisation were assessed across 'HRQoL', 'Diet', 'Worry', 'Social support', and 'Depression'.

Materials

A battery of self-report measures was used, including demographic items measuring sex, age and family information. Standardised measures included the KC-27, the CDI-S and the HRBQ-S.

The KIDSCREEN-27 (KC-27). The KC-27 (Kidscreen Group Europe, 2006) is a 27-item measure of quality of life across Physical well-being, Psychological well-being, Autonomy and Parent relations, Social Support and Peer relations, and School Environment, using a 5-point scale ranging from 'Never' to 'All the time'. Specific items include "Have you or your friends helped each other?" (Q22) and "Have you been able to pay attention?" (Q26). Subscale alpha values range from .8 (Physical well-being) to .84 (Psychological well-being), demonstrating acceptable internal consistency (Ravens-Sieberer et al., 2014).

Children's Depression Inventory-Short (CDI-S). The CDI-S (Kovacs, 1992) is a 10-item instrument determining depressive symptoms in children typically aged seven to 12 years, using a 3-point scale with responses indicating which statement describes those best. An example is Q7, where the specific statements include "I look OK"/"There are some bad things about my look"/"I look ugly". The CDI-S previously demonstrated .86 internal reliability (Ivarsson, Svalander & Litlere, 2006).

Health-Related Behaviour Questionnaire- Short version (HRBQ-S). The HRBQ-S (Balding, 2005), a 31-item instrument, measures health behaviours and attitudes (food, weight and exercise) with various response types.

One item, Q4A, asks “Did you eat or drink anything before school this morning?” Q25 and Q26 measures worry, with questions consisting of several sub-statements, considered across a variety of contexts. Q25 asks “How often do you worry about the problems listed below?” such as “Schoolwork” and “Health problems”, with responses measured on a 3-point scale from ‘never’ to ‘a lot’. Q26 enquires “If you were feeling worried or sad about the things below, who is the first person you would talk to about it?”, with six corresponding options, ‘Mum/Dad’, ‘Sister/Brother’, ‘Friend’, ‘Teacher’, ‘Keep it to myself’, and ‘Other adult’. The latter required stating who this adult was. Questions of particular interest concerned ‘Bullying problems in school’ and ‘Bullying problems outside school’.

Q27a asks “Have you been bullied at or near school in the last year?” with options of “Yes”, “No” and “Don’t know”. Q27b on the HRBQ-S asks “Have any of the following happened to you in this school year?” A ‘Tick all that apply’ response list follows with options including ‘Being teased or made fun of’ (Response 1) and ‘Been ganged up on’ (Response 9). Considering the move in the literature to correlates of victimisation, scores on Q27b were totalled. There were 10 behaviours, with maximum possible scores of 30 and minimum of 10. Internal consistency values were acceptable ($\alpha = .89$).

Q28 required participants to identify reasons for victimisation, asking “Do you think you are being ‘picked on’ or bullied for any of the following reasons?”, with ‘Tick all that apply’ options including “Your size or weight” and “The way you look”. Q29 asks students, “Do you think your school tries to stop bullying?”

Procedure

Principals were contacted to arrange a time which would suit for data collection. A block of time was agreed upon for efficient collection. Where data was collected ahead of schedule,

additional time was used for further collection with students who missed the first visit. Ethical approval was obtained from the Faculty of Health Sciences, Trinity College Dublin. All fieldworkers were policed, cleared and trained in child-first guidelines. A protocol and procedure for child disclosures was developed by the research team and approved by school principals and funders. The fieldworkers and members of the research team organised children for data collection, to minimise teacher workload. The self-report surveys were completed by children across first to fifth class.

Results

Victimisation: categories and incidences

A sample of 458 participants were analysed, with 70.1% ($N = 321$) from ‘third class or higher’ (i.e. third/fourth/fifth class), and 29.9% ($N = 137$) from first or second class.

In terms of incidence on the stand-alone bullying question (Q27a), 33.8% ($N = 155$) were identified as victims of bullying and 51.5% ($N = 236$) as non-victims, with 14.6% ($N = 67$) answering ‘Don’t know’. Participants were also assessed on the behaviours associated with bullying in Q27b which are presented in Table 1 below.

Table 1. Percentage of experienced bullying behaviours.

Have any of the following happened to you <u>in this school year?</u>	Never	Sometimes	Always
Been teased/made fun of	53	37.5	9.5
Called nasty names	47.7	39.9	12.4
Bullied through mobile phone	87.8	10.2	2
Bullied through email/internet	92.6	5.4	2.1
Pushed/hit for no reason	57.9	31.3	10.8
Had belongings taken/broken	68.4	25.8	5.7
Been threatened for no reason	72.2	21.6	6.1

Been asked for money	78.2	16.9	4.9
Been ganged up on	75.8	17.3	6.9
Other	70.3	23.1	6.6

From Table 1, name calling was common (52.3%), followed by ‘Teased or made fun of’ (47%), with Cyber forms (‘email/internet’ = 7.5%; ‘mobile phone’ =12.2%) being least frequent. The most frequently reported reason for victimisation was appearance (36.1%, $N = 68$) followed by size or weight (29.3%, $N = 56$), clothes worn (24.5%, $N = 46$), family background, skin colour or religion (16.1%, $N = 30$) and illness or disability (12%, $N = 22$).

Additional victim categories were developed based on responses across these behaviours, with 24.6% ($N = 66$) of individuals identified as non-victims, 48.9% ($N = 131$) as sometimes-victims and 26.5% ($N = 71$) as frequent-victims.

Furthermore, these behaviours were totalled to give victimisation frequencies. The average frequency was low ($M = 13.4$, $SD = 4.11$), considering the possible range of scores from 10 (never victimised) to 30 (victimised across all behaviours).

In terms of whether the school was doing enough to combat bullying 41.7% felt their school was doing enough ($N = 30$), with 58.3% ($N = 42$) feeling not enough was being done.

Victimisation and depression characteristics.

Based on direct experiences of bullying (Q27a), an independent samples t-test confirmed a significant difference on CDI-10 scores between victims ($M = 51.37$, $SD = 11.37$) and non-victims ($M = 45.22$, $SD = 6.41$) of bullying ($t(219) = 6.13$, $p < .001$), indicating higher depression levels among victims. A one-way ANOVA explored differences in depression between non-victims, sometimes-victims and frequent-victims, yielding significant differences ($F(2, 266) = 16.2$, $p < .001$). Bonferroni post-hoc comparisons indicated that non-victims scored lower compared to sometimes-victims (Mean difference = -3.93, $p = .005$, CI

(95%) -6.93 - -.93), and frequent-victims (Mean difference = -7.99, $p < .001$, CI (95%) -11.38 - -4.61). Lower levels were also observed for sometimes-victims compared with frequent-victims (Mean difference = -4.07, $p = .003$, CI (95%) -6.98 - -1.15).

Linear regression was conducted to determine whether total victimisation ($M = 13.4$, $SD = 4.11$) predicted CDI scores, which was confirmed ($F(1, 68) = 7.49$, $p = .008$, adjusted $R^2 = .09$, $\beta = .315$).

Victimisation and subscales of the KIDSCREEN-27.

Independent samples t-tests were conducted for differences between victims and non-victims (Q27a) for the KIDSCREEN subscales. Table 2 below illustrates these findings.

Table 2. T-tests for KIDSCREEN subscales between victims and non-victims.

Variable	Group	Mean	SD	t	df	Sig.
Physical Wellbeing	Victims	53.19	11.4	-2.02*	389	.044
	Non-victims	55.44	10.43			
Psychological Wellbeing	Victims	49.89	11.82	-3.95**	389	.000
	Non-victims	54.31	10.14			
Autonomy & Parent Relations	Victims	48.44	13.53	-2.54*	289	.015
	Non-victims	51.80	11.47			
Social Support & Peer Relations	Victims	49.32	14.13	-5.25**	256	.000
	Non-victims	56.21	10.13			
School Environment	Victims	52.75	12.17	-2.22*	389	.027
	Non-victims	55.34	12.09			

* $p < .05$, ** $p < .001$

Significant differences for all subscales were observed, with victims scoring lower compared to non-victims, consistent with the literature that victimisation predicts lower general health adjustment.

One-way ANOVAs were conducted for differences across victimisation frequency categories and the KC-27 subscales, with differences observed for four of five subscales, ‘Psychological well-being’ ($F(2,265) = 20.22, p < .001$), ‘Autonomy and Parent relations’ ($F(2,265) = 10.59, p < .001$), ‘Social Support & Peer Relations’ ($F(2,265) = 8.21, p < .001$) and ‘School Environment’ ($F(2,265) = 6.08, p = .003$). Table 3 below illustrates significant comparisons for these subscales.

Table 3. Bonferroni post-hoc comparisons for KIDSCREEN subscales across victim categories.

	Group	Group	Mean difference	Sig	95% CI	
					Lower	Upper
Psychological Well-being	Non-victims	Sometimes-victim	6.62***	.000	2.97	10.28
		Frequent-victims	10.83***	.000	6.69	14.97
	Sometimes-victim	Non-victims	-6.62***	.000	-10.28	-2.97
		Frequent-victims	4.21*	.015	.64	7.77
Autonomy	Non-victims	Sometimes-victim	7.67***	.000	3.33	12
		Frequent-victims	7.97***	.000	3.06	12.88
	Sometimes-victim	Non-victims	-7.67***	.000	-12	-3.33
		Frequent-victims	.31	1	-3.93	4.54
Social	Non-victims	Sometimes-victim	6.2**	.002	1.94	10.45
		Frequent-victims	7.4**	.001	2.58	12.22
	Sometimes-victim	Non-victims	-6.2**	.002	-10.45	-1.94
		Frequent-victims	1.2	1	-2.95	5.36
School	Non-victims	Sometimes-victim	4.41*	.025	.41	8.41
		Frequent-victims	6.37**	.002	1.84	10.9
	Sometimes-victim	Non-victims	-4.41*	.025	-8.41	-.41
		Frequent-victims	1.96	.683	-1.95	5.86

* $p < .05$, ** $p < .01$, *** $p < .001$

Note: The four subscales outlined in column one are consistent with Table 2. Autonomy=Autonomy & Parent Relations; Social=Social Support & Peer Relations; School=School Environment

From Table 3, post-hoc comparisons indicate significant differences for four of the HRQoL subscales for non-victims and frequent-victims, and non-victims with sometimes-victims. Frequent-victims scored significantly lower for all subscales compared to the other

categories. Greatest observed differences were between non-victims and frequent-victims for ‘Psychological well-being’ (Mean difference = 10.83, $p < .001$, CI (95%) 6.69 – 14.97) with comparisons between sometimes-victims and frequent-victims only significant for ‘Psychological well-being’ (Mean difference = 4.21, $p = .015$, CI (95%) .64 – 7.77).

Pearson’s correlations revealed significant moderate negative correlations for total victimisation frequency scores and ‘Psychological well-being’ ($r(70) = -.39$, $p = .001$), ‘Social Support & Peer Relations’ ($r(70) = -.341$, $p < .001$) and ‘School Environment’ ($r(70) = -.32$, $p = .008$), indicating that frequent victimisation predicted decreased feelings of peer and school support, and psychological well-being.

Victimisation and Health-related behaviour.

In comparisons of victims and non-victims (Q27a) on specific health-related behaviours, a Chi-square found no differences regarding eating before school ($\chi^2(1) = .01$, $p = .91$). A Kruskal-Wallis for victim categories and child worries revealed a difference for ‘Family problems’ ($Z = -2.18$, $p = .029$), but for no other worry (e.g., exams, health). Social support frequencies identified which individuals children would talk to if they had been bullied both inside and outside of school (See Figure 1).

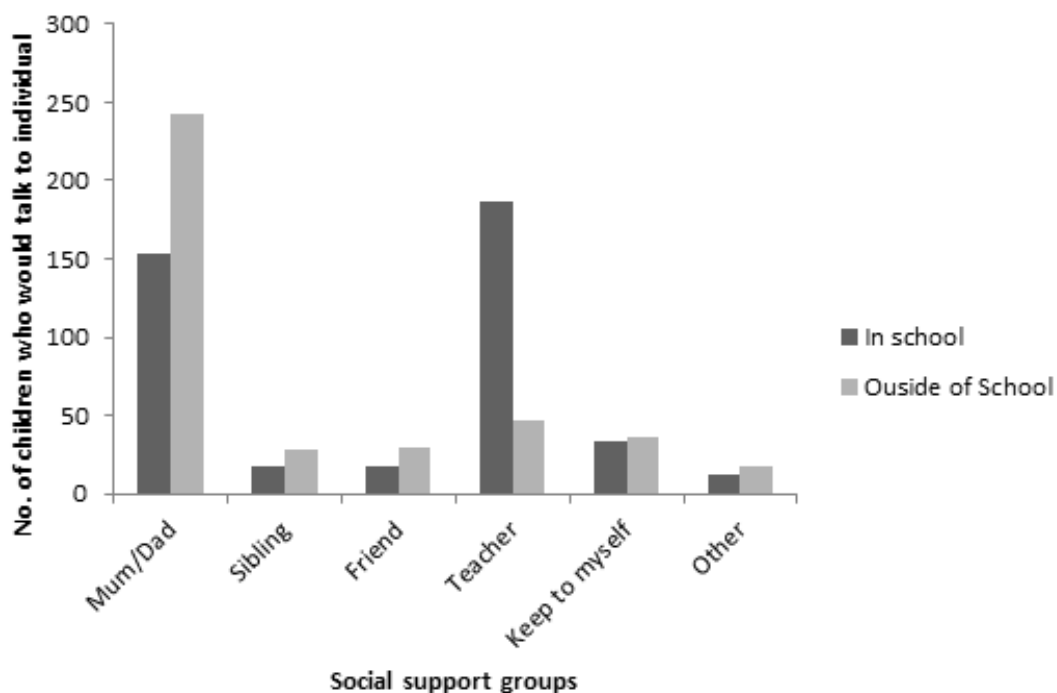


Figure 1. Clustered bar chart illustrating frequency of children for each social support.

Figure 1 above illustrates that both parents and teachers are the two supports which children look to when they are worried about being bullied. Teachers are the most popular for in school victimisation, more so than parents, but this drops when children are victimised outside school. Parents are the second most popular support for school victims, but rises when occurring outside school. A concern is that the third most frequent option was keeping the bullying secret and not informing anyone, which was more popular than telling siblings, friends, or other adults.

Discussion

The aim of this study was fourfold. Firstly to explore victimisation within disadvantaged schools, coupled with specific bullying behaviours, self-perceived reasons for victimisation, and support. Second, to analyse depression in the context of such involvement. Thirdly, to

consider victim group comparisons on HRQoL and morning meal consumption. Finally, to explore differences for children's supports inside and outside school.

The findings associated with the first of these aims presented incidence rates of 33.8% ($N = 155$) for the direct victimisation question. Across specific victimisation behaviours, a larger number (75.4%; $N = 202$) were considered to be victimised sometimes (48.9%; $N = 131$) or frequently (26.5%; $N = 71$). Frequencies from the first question are consistent with rates from Irish research, from 21.2% (Minton & O'Moore, 2008) to 40% (O'Moore & Minton, 1989). However, the second question revealed higher rates, suggesting greater involvement. Commonly reported perceived reasons for victimisation included physical characteristics, clothing and background. Moreover, over half of respondents stated that the school was not doing enough to combat victimisation.

For the second aim, victims' of bullying demonstrated higher depression rates compared to non-victims. When assessed with a victimisation total, a positive relationship emerged, with frequent victimisation predicting pronounced depression levels. These fit with Mills et al. (2004) and Dooley and Fitzgerald (2012), who reported such results from an Irish context. Ttofi et al. (2011) further indicated long-term implications of childhood victimisation to later life depression. This illustrates a need for reduction of victimisation due to associated short-term and long-term mental health effects.

Victims further experienced significant physical and psychological well-being impairment compared to non-victims. This was similar for depression, with frequent-victims displaying greater impairment for psychological well-being compared to non-victims and sometimes-victims. Psychological well-being negatively associated with victimisation, where greater frequency of victimisation associated with psychological well-being impairment. The findings for psychological well-being are similar to depression research, whereas physical well-being has health implications in line with Rigby (1998, 1999).

Victims experienced impairment of physical well-being, but trends did not continue when differences for frequency were examined, or associations of the construct with the victimisation scale. Therefore, differences between victims and non-victims extend Rigby's findings, but the remaining results did not.

When both groups were compared for morning eating, no differences existed, contrary to that discussed by Fekkes et al. (2006), Farrow and Fox (2011), and Sampasa-Kanyinga et al. (2012), who reported differences for appetite and breakfast eating. Worry regarding 'Family problems' was different for both groups, but not for any other aspect of their life. Similar trends to psychological well-being were reported, with victims reporting lower scores on relations and support measures for inside and outside of school ('Autonomy and Parent Relations', 'Social Support and Peer Relations' and 'School Environment'), with this increasing with greater victimisation rates. The 'Social Support and Peer Relations' and 'School Environment' measures negatively related to victimisation, with greater victimisation rates associated with decreases in the aforementioned subscales. In terms of worry about being bullied inside and outside of school, reaching out to teachers and parents were the more popular supports reported. This compliments the 'My World Survey', where the importance of 'One good adult' in an adolescents life was stressed (Dooley & Fitzgerald, 2012), from a primary school context. For support and relations, findings are consistent with previous literature where peer support negatively associated with victimisation (Eliot et al., 2010) and where parental support negatively associated with bully/victim problems (Fanti et al., 2012). The current research reported on decreases in these constructs across the victim categories, with frequent-victims displaying more prominent reduction in supports compared to non-victims.

Conclusion

These findings have implications for both research and school environment. Incidence rates from the current study within a disadvantaged region fit with previous literature. Although an area considered more deprived than more affluent areas, victimisation rates are similar to current trends. Children growing up in such contexts do not appear to be experiencing victimisation more often compared to the general population. Intervention and prevention programmes should not only focus on fostering anti-bullying mindsets in children, but also on developing and maintaining positive mental health, coupled with consideration on social support.

The current perspective adopted a number of methods to establish victimisation. Firstly, the one direct victimisation question, which asked whether the child has been a victim of bullying, but can be problematic if children misunderstand the term. Consequently, some researchers examine victimisation through specific behaviours. This was adopted in the current research, yielding victim categories and a victimisation score. This adds to a traditional stance of one general question, and could be perceived as a more accurate reflection. The victim categories highlighted higher involvement rates, compared with the direct question, but yielded a mean score of 13.4 out of a range from 10 to 30, indicating relatively lower rates of victimisation. Consequently, it is important to consider the specific behaviours when assessing victimisation. A number of studies have employed this approach, but few have done so with primary school children. The current research here provides one snapshot of victimisation in primary school. It is important for future research to track these associations, examining long-term effects of such involvement.

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